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

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

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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^{®1}. 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.

¹cdma2000[®] 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[®] 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.

NOTES

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

² “cdma2000[®] 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[®] is a registered trademark of the Telecommunications Industry Association (TIA-USA) in the United States.”

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

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

9 11. The following indentation is advised :

10 "No indentation

- 11 • bullet 1
12 - bullet 2
13 + bullet 3.
14 ○ bullet 4.
15 ◇ bullet 5.
16 — bullet 6.
17 + bullet 7.

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REFERENCES

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

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 INCITS 4 1986.01.01 (R 2007) *Information Systems - Coded Character Sets - 7-Bit American National Standard Code for Information Interchange (7-Bit ASCII) - FIPS PUB 1-2.*
10. C.S0010-D, *Recommended Minimum Performance Standards for Base Stations Supporting Dual-Mode Spread Spectrum Mobile Stations.*
11. C.S0011-D, *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. Reserved.
 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-D, 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-D, 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-E 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.S0097, 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.

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1 GENERAL

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

1.1 Terms and Numeric Information

1.1.1 Terms

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

AC. See Authentication Center.

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

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

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

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

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

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

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

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

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

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

Access Overload Class. See Overload Class.

Access Probe. One Access Channel transmission consisting of a preamble and a message. The transmission is an integer number of frames in length and transmits one Access Channel message. See also Access Probe Sequence, Access Sub-attempt, and Access Attempt.

- 1 **Access Probe Handoff.** A handoff that occurs while the mobile station is performing an
2 Access Attempt in the *System Access State*.
- 3 **Access Probe Sequence.** A sequence of one or more access probes on the Access Channel.
4 Other than the reported pilot information, the same Access Channel message content is
5 transmitted in every access probe of an access sub-attempt. See also Access Probe, Access
6 Sub-attempt, and Access Attempt.
- 7 **Access Sub-attempt.** A sequence of one or more access probe sequences on the Access
8 Channel transmitted to one pilot, containing the same message content other than the
9 reported pilot information. See also Access Probe, Access Probe Sequence, and Access
10 Attempt.
- 11 **Acknowledgment.** A Layer 2 response by the mobile station or the base station confirming
12 that a signaling message was received correctly.
- 13 **Action Time.** The time at which the action implied by a message should take effect.
- 14 **Active Set.** The set of pilots associated with the CDMA Channels containing Forward
15 Traffic Channels assigned to a particular mobile station.
- 16 **Active User Zone.** A user zone in which the mobile station makes its presence known via
17 an explicit registration in order to activate tiered service features. See also CDMA Tiered
18 Services, User Zone, and Passive User Zone.
- 19 **Aging.** A mechanism through which the mobile station maintains in its Neighbor Set the
20 pilots that have been recently sent to it from the base station and the pilots whose handoff
21 drop timers have recently expired.
- 22 **AKA.** Authentication and Key Agreement. An authentication procedure that allows mutual
23 authentication of the mobile station and base station.
- 24 **A-key.** A secret, 64-bit pattern stored in the mobile station and HLR/AC. It is used to
25 generate/update the mobile station's Shared Secret Data.
- 26 **Alternate Interleaver Pattern.** An interleaver pattern used for convolutional coded frames
27 for code combining soft handoff for Radio Configuration 12. The alternate interleaver
28 pattern is used by some base stations in the mobile station active set to increase the
29 probability of frame early termination.
- 30 **ARQ.** Automatic Repeat Request. The ARQ is an automatic retransmission protocol that
31 ensures the delivery of encoder packets from the sender to the receiver by retransmission
32 of portions of a turbo encoded packet based on the feedback from the receiver that
33 indicates if the encoder packets have been received and decoded successfully (ACK) or not
34 (NAK).
- 35 **Assured Mode.** Mode of delivery that guarantees that a PDU will be delivered to the peer.
36 A PDU sent in assured mode is retransmitted by the LAC sublayer, up to a maximum
37 number of retransmissions, until the LAC entity at the sender receives an acknowledgment
38 for the PDU. See also Confirmation of Delivery.
- 39 **Authentication.** A procedure used by a base station to validate a mobile station's identity.

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

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

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

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

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

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

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

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

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

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

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

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

27 **CDMA Candidate Frequency.** The Candidate Frequency specified for a search of CDMA
28 pilots.

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

32 **CDMA Channel Number.** An 11-bit number that identifies a CDMA Frequency
33 Assignment.

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

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

- 1 **CDMA Tiered Services.** System features and services that are based on location,
2 potentially including private networks. User zones establish the availability of services. See
3 also User Zone, Broadcast User Zone, Mobile-Specific User Zone, Active User Zone, and
4 Passive User Zone.
- 5 **Center SR3 Frequency.** The Spreading Rate 3 frequency that has the center frequency
6 assignment.
- 7 **Chip.** See PN Chip.
- 8 **CIK.** An integrity key derived from the CMEA key. A 128-bit pattern that is the 64-bit
9 CMEA key concatenated with a copy of itself.
- 10 **CK.** Cipher Key. A 128-bit pattern produced by AKA that is used for encryption.
- 11 **CMEA.** Cellular Message Encryption Algorithm.
- 12 **Code Channel.** A subchannel of a Forward CDMA Channel or Reverse CDMA Channel.
13 Each subchannel uses an orthogonal Walsh function or quasi-orthogonal function.
- 14 **Code Combining Soft Handoff (CCSH).** A Soft Handoff method for Fundamental
15 Channels on the forward link in Radio Configuration 12 and Supplemental Channels on
16 the forward link in Radio Configurations 4, 5, and 12. For Supplemental Channels using
17 Turbo codes in this mode, certain base stations encode and transmit the data with the
18 default Turbo Encoder, whereas others use the complementary Turbo Encoder. Mobile
19 stations in soft handoff can then combine both codes to achieve lower code rate. For
20 Fundamental Channels and Supplemental Channels using Convolutional codes in this
21 mode certain base stations transmit using the default interleaver pattern, whereas others
22 use an alternate interleaver pattern. Mobile stations in handoff combine transmissions
23 from both base stations to decode the frames earlier.
- 24 **Code Division Multiple Access (CDMA).** A technique for spread-spectrum multiple-
25 access digital communications that creates channels through the use of unique code
26 sequences.
- 27 **Code Symbol.** The output of an error-correcting encoder. Information bits are input to
28 the encoder and code symbols are output from the encoder. See Convolutional Code.
- 29 **Configuration Change Indicator.** A one-bit datum, sent on the Quick Paging Channel.
30 Appearance of the Configuration Change Indicator in the Quick Paging Channel serves to
31 alert a slotted mode mobile station, operating in the idle state, that, after performing an idle
32 handoff, it should monitor the Paging Channel, the Forward Common Control Channel, or
33 the Primary Broadcast Control Channel in order to determine if it should update its stored
34 parameters.
- 35 **Confirmation of Delivery.** A notification sent by the LAC sublayer to Layer 3 at the
36 sender, when the LAC entity at the sender receives the acknowledgment for a specific PDU
37 sent in assured mode.
- 38 **Convolutional Code.** A type of error-correcting code. A code symbol can be considered as
39 modulo 2 the convolution of the input data sequence with the impulse response of a
40 generator function.

1 **CRC.** See Cyclic Redundancy Code.

2 **Cyclic Redundancy Code (CRC).** A class of linear error detecting codes that generate
3 parity check bits by finding the remainder of a polynomial division. See also Frame Quality
4 Indicator.

5 **dBm.** A measure of power expressed in terms of its ratio (in dB) to one milliwatt.

6 **dBm/Hz.** A measure of power spectral density. The ratio, dBm/Hz, is the power in one
7 Hertz of bandwidth, where power is expressed in units of dBm.

8 **dBW.** A measure of power expressed in terms of its ratio (in dB) to one Watt.

9 **Dedicated Control Channel.** A portion of a Traffic Channel (Forward or Reverse) that
10 carries a combination of user data, signaling, and power control information.

11 **Deinterleaving.** The process of unpermuting the symbols that were permuted by the
12 interleaver. Deinterleaving is performed on received symbols prior to decoding.

13 **Direct Channel Assignment.** A MS-terminated call set-up procedure where the channel
14 assignment can be sent directly to a mobile station without receiving a page response
15 message from the mobile station.

16 **Discontinuous Transmission (DTX).** A mode of operation in which a base station or a
17 mobile station switches its transmitter on and off on a particular code channel
18 autonomously. For the case of DTX operation on the Forward Dedicated Control Channel,
19 the Forward Power Control Subchannel is still transmitted.

20 **Distance-Based Registration.** An autonomous registration method in which the mobile
21 station registers whenever it enters a cell whose distance from the cell in which the mobile
22 station last registered exceeds a given threshold.

23 **DTMF.** See Dual-Tone Multifrequency.

24 **Dual-Tone Multifrequency (DTMF).** Signaling by the simultaneous transmission of two
25 tones, one from a group of low frequencies and another from a group of high frequencies.
26 Each group of frequencies consists of four frequencies.

27 **E_b .** A measure of the energy in a signal, at some point in a communication system, per
28 information bit conveyed by that signal, or an average value of such energies. Its relevance
29 to system performance is most often expressed by its ratio to additive noise and
30 interference, such as in E_b/N_0 or E_b/I_0 . Such ratios are dimensionless, and are usually
31 expressed in dB units.

32 **E_c/I_0 .** A notation used to represent a dimensionless ratio of the average power of some
33 code-distinguished CDMA signal channel, typically a pilot, to the total power comprised of
34 signal plus interference, within the signal bandwidth. It is usually expressed in dB units.

35 **Effective Radiated Power (ERP).** The product of the power supplied to the antenna and
36 its gain relative to a half-wave dipole in a given direction.

37 **EIRP.** See Equivalent Isotropic Radiated Power.

38 **Electronic Serial Number (ESN).** A 32-bit number assigned by the mobile station
39 manufacturer, uniquely identifying the mobile station equipment.

1 **Encoder Tail Bits.** A fixed sequence of bits added to the end of a block of data to reset the
2 convolutional encoder to a known state.

3 **Enhanced Access Channel.** A reverse channel used by mobile station for communicating
4 to the base station. The Enhanced Access Channel operates in the Basic Access Mode, and
5 Reservation Access Mode. It is used for transmission of short messages, such as signaling,
6 MAC messages, response to pages, and call originations. It can also be used to transmit
7 moderate-sized data packets.

8 **Enhanced Access Channel Preamble.** A non-data bearing portion of the Enhanced
9 Access probe sent by the mobile station to assist the base station in initial acquisition and
10 channel estimation.

11 **Enhanced Access Channel Slot.** The assigned time interval for an enhanced access
12 probe. The transmission of an enhanced access probe is performed within the boundaries
13 of an Enhanced Access Channel slot.

14 **Enhanced Access Data.** The data transmitted while in the Basic Access Mode on the
15 Enhanced Access Channel or while in the Reservation Access Mode on a Reverse Common
16 Control Channel.

17 **Enhanced Access Header.** A frame containing access origination information transmitted
18 immediately after the Enhanced Access Channel Preamble while in the Reservation Access
19 Mode.

20 **Enhanced Access Probe.** One Enhanced Access Channel transmission consisting of an
21 Enhanced Access Channel preamble, optionally an Enhanced Access header, and
22 optionally Enhanced Access data. See also Enhanced Access Probe Sequence.

23 **Enhanced Access Probe Sequence.** A sequence of one or more Enhanced Access probes
24 on the Enhanced Access Channel. See also Enhanced Access Probe.

25 **Enhanced Rate Adaptation Mode (ERAM).** A flexible and variable data rate mode for the
26 Supplemental Channel operation with turbo codes. ERAM is defined on forward link for
27 Radio Configurations 4 and 5, and on the reverse link for Radio Configuration 4. In this
28 mode, lower rate turbo codes are used to match the desired channel interleaver block size
29 instead of pure code symbol repetitions.

30 **Equivalent Isotropically Radiated Power (EIRP).** The product of the power supplied to
31 the antenna and the antenna gain in a direction relative to an isotropic antenna.

32 **ERAM.** See Enhanced Rate Adaptation Mode.

33 **Erasur e Indicator Bit.** See [2].

34 **ERP.** See Effective Radiated Power.

35 **ESN.** See Electronic Serial Number.

36 **ESN ME.** ESN associated with the mobile equipment. See Electronic Serial Number (ESN)
37 and ME.

38 **EXT_SSEQ.** Security sequence number. A 32-bit crypto-sync that is used for encryption,
39 message integrity, or both.

- 1 **EXT_UIM_ID.** An extended (length more than 32-bits) electronic identification (ID) number
2 that is unique to the R-UIM. See [40]. EXT_UIM_ID can be either SF_EUIMID or
3 LF_EUIMID. The mobile station uses SF_EUIMID in place of MEID, with the exception of
4 the MEID_ME information record, when configured with a R-UIM which indicates that
5 SF_EUIMID is to be used in place of MEID (see [40]).
- 6 **F-ACKCH.** Forward Acknowledgment Channel. A channel used by the base station to
7 acknowledge the successful receipt and decoding of the encoder packets (ACK) sent by the
8 mobile station on Reverse Packet Data Channel or the failure to do so (NAK).
- 9 **f-csch.** Forward common signaling logical channel.
- 10 **f-dsch.** Forward dedicated signaling logical channel.
- 11 **F-GCH.** Forward Grant Channel. A channel used by the base station to assign or “grant”
12 the mobile station a certain data rate on the Reverse Packet Data Channel.
- 13 **F-RCCH.** Forward Rate Control Channel. A channel used by the base station to modify the
14 transmission data rate used on the Reverse Packet Data Channel by the mobile station.
15 The data rates possible are allocated in advance.
- 16 **Fade Timer.** A timer kept by the mobile station as a measure of Forward Traffic Channel
17 continuity. If the fade timer expires, the mobile station drops the call.
- 18 **Fast Call Setup Mode.** Any operational mode of a mobile station in the *Mobile Station Idle*
19 *State* that can improve setup time for call originations or terminations. See Radio
20 Environment Reporting Mode, Reduced Slot Cycle Mode, and Tracking Zone Mode.
- 21 **Flash.** An indication sent on the Reverse CDMA Channel indicating that the user directed
22 the mobile station to invoke special processing.
- 23 **Foreign NID Roamer.** A mobile station operating in the same system (SID) but in a
24 different network (NID) from the one in which service was subscribed. See also Foreign SID
25 Roamer and Roamer.
- 26 **Foreign SID Roamer.** A mobile station operating in a system (SID) other than the one
27 from which service was subscribed. See also Foreign NID Roamer and Roamer.
- 28 **Forward CDMA Channel.** A CDMA Channel from a base station to mobile stations. The
29 Forward CDMA Channel contains one or more code channels that are transmitted on a
30 CDMA Frequency Assignment using a particular pilot PN offset. The code channels are
31 associated with the Pilot Channel, Sync Channel, Paging Channels, Broadcast Control
32 Channel, Forward Common Control Channels, and Traffic Channels. The Forward CDMA
33 Channel always carries a Pilot Channel and may also carry up to one Sync Channel, up to
34 seven Paging Channels, up to seven Broadcast Control Channels, up to seven Forward
35 Common Control Channels and up to the maximum number of channels allowed for the
36 assigned Radio Configuration minus one Traffic Channels, as long as the total number of
37 channels, including the Pilot Channel, is no greater than the maximum number of
38 channels allowed for the assigned Radio Configuration (see [2] section 3.1.3.1.13).
- 39 **Forward Acknowledgment Channel.** A portion of a Forward CDMA Channel used for the
40 transmission of acknowledgments from a base station to multiple mobile stations in

1 response to the data received on the Reverse Packet Data Channel or the Reverse
2 Fundamental Channel.

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

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

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

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

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

17 **Forward Packet Data Channel.** A portion of a Forward Link channel with Spreading Rate
18 1 used for the transmission of higher-level data from a base station to a mobile station.

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

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

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

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

33 **Forward Traffic Channel.** One or more code channels used to transport user and
34 signaling traffic from the base station to the mobile station. See Forward Fundamental
35 Channel, Forward Dedicated Control Channel, Forward Packet Data Channel, Forward
36 Supplemental Channel, and Forward Supplemental Code Channel.³

³ The Forward Traffic Channel does not include F-PDCCH, F-CPCCH.

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

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

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

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

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

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

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

30 **Full TMSI.** The combination of TMSI_ZONE and TMSI_CODE. The full TMSI is a globally
31 unique address for the mobile station.

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

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

35 **Gating Rate Set.** This specifies the set of supported reverse pilot gating rates. The base
36 station and the mobile station may support one or more gating rates.

37 **GHz.** Gigahertz (10^9 Hertz).

38 **Global Positioning System (GPS).** A US government satellite system that provides
39 location and time information to users. See Navstar GPS Space Segment / Navigation User
40 Interfaces ICD-GPS-200 for specifications.

- 1 **Good Frames.** Frames not classified as bad frames. See also Bad Frames.
- 2 **GPS.** See Global Positioning System.
- 3 **Handoff.** The act of transferring communication with a mobile station from one base
4 station to another.
- 5 **Hard Handoff.** A handoff characterized by a temporary disconnection of the Traffic
6 Channel. Hard handoffs occur when the mobile station is transferred between disjoint
7 Active Sets, when the CDMA Frequency Assignment changes, or when the frame offset
8 changes. See also Soft Handoff.
- 9 **Hash Function.** A function used by the mobile station to select one out of N available
10 resources. The hash function distributes the available resources uniformly among a
11 random sample of mobile stations.
- 12 **HARQ.** Hybrid ARQ (Automatic Repeat Request). A “hybrid ARQ” is a combination of an
13 ARQ with an error correction mechanism to repair some errors in the encoder packet.
- 14 **Highest SR3 Frequency.** The SR3 frequency that has the highest frequency assignment.
- 15 **HLR.** See Home Location Register.
- 16 **Home Location Register (HLR).** The location register to which a MIN/IMSI is assigned for
17 record purposes such as subscriber information.
- 18 **Home System.** The wireless system in which the mobile station subscribes for service.
- 19 **Hopping Pilot Beacon.** A pilot beacon that changes CDMA Frequency periodically to
20 simulate multiple base stations operating on different frequencies. The transmission of the
21 hopping pilot beacon is discontinuous on any CDMA Channel.
- 22 **Idle Handoff.** The act of transferring reception of the Paging Channel, Broadcast Control
23 Channel or the Forward Common Control Channel from one base station to another, when
24 the mobile station is in the *Mobile Station Idle State*.
- 25 **IK.** Integrity Key. A 128-bit pattern produced by AKA that is used for integrity protection.
- 26 **Implicit Registration.** A registration achieved by a successful transmission of an
27 origination or page response on the r-csch.
- 28 **IMSI.** See International Mobile Subscriber Identity.
- 29 **IMSI_M.** MIN-based IMSI using the lower 10 digits to store the MIN.
- 30 **IMSI_O.** Operational value of IMSI used by the mobile station for operation with the base
31 station.
- 32 **IMSI_T.** True IMSI not associated with MIN. This could be 15 digits or fewer.
- 33 **Interleaving.** The process of permuting a sequence of symbols.
- 34 **International Mobile Subscriber Identity (IMSI).** A method of identifying stations in the
35 land mobile service as specified in [18].
- 36 **kHz.** Kilohertz (10^3 Hertz).

1 **ksps.** Kilo-symbols per second (10^3 symbols per second).

2 **LAC.** See Link Access Control.

3 **Layering.** A method of organization for communication protocols in which the transmitted
4 or received information is transferred in pipeline fashion, within each station, in well-
5 defined encapsulated data units between otherwise decoupled processing entities (“layers”).
6 A layer is defined in terms of its communication protocol to a peer layer in another entity
7 and the services it offers to the next higher layer in its own entity.

8 **Layer 1.** Layer 1 provides for the transmission and reception of radio signals between the
9 base station and the mobile station. Also see Physical Layer.

10 **Layer 2.** Layer 2 provides for the correct transmission and reception of signaling
11 messages, including partial duplicate detection. Layer 2 makes use of the services
12 provided by Layer 1. See also Layering and Layer 3.

13 **Layer 3.** Layer 3 provides the control messaging for the wireless telephone system. Layer
14 3 originates and terminates signaling messages according to the semantics and timing of
15 the communication protocol between the base station and the mobile station. Layer 3
16 makes use of the services provided by Layer 2. See also Layering and Layer 2.

17 **Link Access Control.** See LAC. The LAC Sublayer is the upper sublayer of Layer 2. It
18 implements a data link protocol that provides for the correct transport and delivery of
19 signaling messages generated by Layer 3. The LAC Sublayer makes use of the services
20 provided by the Lower Layers (Layer 1 and the MAC Sublayer).

21 **Local Control.** An optional mobile station feature used to perform manufacturer-specific
22 functions.

23 **Logical Channel.** A communication path between the mobile station and the base station,
24 described in terms of the intended use of, and access to, the transferred data, and direction
25 of transfer. A logical channel can be “mapped” to and from one or more physical channels.

26 **Logical-to-physical Mapping.** The technique for forming associations between logical and
27 physical channels.

28 **Long Code.** A PN sequence with period $2^{42} - 1$ that is used for scrambling on the Forward
29 CDMA Channel and spreading on the Reverse CDMA Channel. The long code uniquely
30 identifies a mobile station on both the Reverse Traffic Channel and the Forward Traffic
31 Channel. The long code provides limited privacy. The long code also separates multiple
32 Access Channels and Enhanced Access Channels on the same CDMA Channel. See also
33 Public Long Code and Private Long Code.

34 **Long Code Mask.** A 42-bit binary number that creates the unique identity of the long
35 code. See also Public Long Code, Private Long Code, Public Long Code Mask, and Private
36 Long Code Mask.

37 **Lowest SR3 Frequency.** The SR3 frequency that has the lowest frequency assignment.

38 **LSB.** Least significant bit.

39 **LTU.** Logical Transmission Unit. One of more Type 3 MuxPDUs with a 16-bit CRC.

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

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

- 1 **Multiplex Option.** The ability of the multiplex sublayer and lower layers to be tailored to
2 provide special capabilities. A multiplex option defines such characteristics as the frame
3 format, the maximum number of Supplemental Code Channels supported, and the rate
4 decision rules. See also Multiplex Sublayer.
- 5 **Multiplex Sublayer.** One of the conceptual layers of the system that multiplexes and
6 demultiplexes primary traffic, secondary traffic, and signaling traffic.
- 7 **NAM.** See Number Assignment Module.
- 8 **National Mobile Subscriber Identity (NMSI).** A part of the E.212 IMSI identifying the
9 mobile station within its home country. The NMSI consists of the MNC and the MSIN. See
10 [18].
- 11 **NDSS.** See Network Directed System Selection.
- 12 **Neighbor Set.** The set of pilots associated with the CDMA Channels that are probable
13 candidates for handoff. Normally, the Neighbor Set consists of the pilots associated with
14 CDMA Channels that cover geographical areas near the mobile station. See also Active Set,
15 Candidate Set, Remaining Set, and Private Neighbor Set.
- 16 **Network.** A network is a subset of a wireless system, such as an area-wide cellular
17 network, a private group of base stations, or a group of base stations set up to handle a
18 special requirement. A network can be as small or as large as needed, as long as it is fully
19 contained within a system. See also System.
- 20 **Network Directed System Selection (NDSS).** A feature that allows the mobile station to
21 automatically register with a preferred system while roaming, or to be automatically
22 directed by a service provider, typically the home service provider, to a suggested system,
23 regardless of the frequency band class, cellular band, or PCS frequency block.
- 24 **Network Identification (NID).** A number that uniquely identifies a network within a
25 wireless system. See also System Identification.
- 26 **NEW_KEY_ID.** In *ROP*, this is the index of the pending (CIK, CCK) and NEW_SSEQ_H
27 associated with AUTHR. In *Authentication Response Message*, this is the index of the
28 pending (IK, CK) and NEW_SSEQ_H associated with the (RANDA, AUTHN).
- 29 **NEW_SSEQ_H.** The pending 24-bit security sequence number used for encryption and/or
30 integrity protection.
- 31 **NEW_SSEQ_H_SIG.** An 8-bit digital signature of NEW_SSEQ_H computed by RAND_S,
32 SSD_A, and NEW_SSEQ_H.
- 33 **NID.** See Network Identification.
- 34 **NMSI.** See National Mobile Subscriber Identity.
- 35 **Non-Autonomous Registration.** A registration method in which the base station initiates
36 registration. See also Autonomous Registration.
- 37 **Non-Slotted Mode.** An operation mode of the mobile station in which the mobile station
38 continuously monitors the Paging Channel, or the Forward Common Control Channel/
39 Broadcast Control Channel.

- 1 **ns.** Nanosecond (10^{-9} second).
- 2 **NULL.** Any value that is not in the specified range of a field.
- 3 **Null Traffic Channel Data.** One or more frames of a specified data sequence sent at the
4 lowest agreed-upon rate of the negotiated radio configuration. Null Traffic Channel data
5 may be sent when there is no primary, secondary, or signaling traffic available. Null Traffic
6 Channel data serves to maintain the connectivity between the mobile station and the base
7 station.
- 8 **Number Assignment Module (NAM).** A set of MIN/IMSI-related parameters stored in the
9 mobile station.
- 10 **Numeric Information.** Numeric information consists of parameters that appear as
11 numeric fields in messages exchanged by the base station and the mobile station and
12 information used to describe the operation of the mobile station.
- 13 **Optional Field.** A field defined within a message structure that is optionally transmitted
14 to the message recipient.
- 15 **Order.** A type of message that contains control codes for either the mobile station or the
16 base station.
- 17 **Ordered Registration.** A registration method in which the base station orders the mobile
18 station to send registration related parameters.
- 19 **Orthogonal Transmit Diversity (OTD).** An optional method of transmission of the
20 Forward CDMA Channel that uses two antennas, each transmitting a fraction of the code
21 symbols. It can be used to enhance performance in the presence of multipath fading radio
22 propagation.
- 23 **OTD.** See Orthogonal Transmit Diversity
- 24 **Overhead Message.** A message sent by the base station on the Paging Channel or the
25 Primary Broadcast Control Channel to communicate base-station-specific and system-wide
26 information to mobile stations.
- 27 **Overload Class (OLC).** The means used to control system access by mobile stations,
28 typically in emergency or other overloaded conditions. Mobile stations are assigned one (or
29 more) of sixteen overload classes. Access to the CDMA system can then be controlled on a
30 per class basis by persistence values transmitted by the base station.
- 31 **PACA.** Priority Access and Channel Assignment. See PACA Call.
- 32 **PACA Call.** A priority mobile station originated call for which no traffic channel or voice
33 channel was immediately available, and which has been queued for a priority access
34 channel assignment.
- 35 **Packet.** The unit of information exchanged between the service option applications of the
36 base station and the mobile station.
- 37 **Padding.** A sequence of bits used to fill from the end of a message to the end of a message
38 capsule, typically to the end of the frame or half frame. All bits in the padding are '0'.

- 1 **Paging.** The act of seeking a mobile station when a call has been placed to that mobile
2 station.
- 3 **Paging Channel.** A code channel in a Forward CDMA Channel used for transmission of
4 control information and pages from a base station to a mobile station.
- 5 **Paging Channel Slot.** An 80 ms interval on the Paging Channel. Mobile stations
6 operating in the slotted mode are assigned specific slots in which they monitor messages
7 from the base station.
- 8 **Paging Indicator.** A one-bit datum, sent on the Quick Paging Channel. Quick paging
9 indicators are associated with mobile stations, in pairs, via a hashing algorithm.
10 Appearance of both of its indicators in its assigned Quick Paging Channel slot serves to
11 alert a slotted mode mobile station, operating in the idle state, that it should monitor the
12 Paging Channel or the Forward Common Control Channel starting in the next slot. See
13 also Quick Paging Channel.
- 14 **Parameter-Change Registration.** A registration method in which the mobile station
15 registers when certain of its stored parameters change.
- 16 **Parity Check Bits.** Bits added to a sequence of information bits to provide error detection,
17 correction, or both.
- 18 **Passive User Zone.** A user zone in which the implicit registration that takes place at call
19 set-up is sufficient to trigger a change in tiered service features. See also CDMA Tiered
20 Services, User Zone, and Active User Zone.
- 21 **PCI.** See Protocol Control Information.
- 22 **PCS.** See Personal Communications Services.
- 23 **PCSC.** See Personal Communications Switching Center.
- 24 **PCS System.** See Personal Communications Services System.
- 25 **PDU.** See Protocol Data Unit.
- 26 **Personal Communications Services System.** A configuration of equipment that provides
27 PCS radiotelephone services.
- 28 **Personal Communications Services (PCS).** A family of mobile and portable radio
29 communications services for individuals and businesses that may be integrated with a
30 variety of competing networks. Broadcasting is prohibited and fixed operations are to be
31 ancillary to mobile operations.
- 32 **Personal Communications Switching Center (PCSC).** See Mobile Switching Center
33 (MSC).
- 34 **Physical Channel.** A communication path between stations, described in terms of the RF
35 characteristics such as coding, power control policies, etc.
- 36 **Physical Layer.** The part of the communication protocol between the mobile station and
37 the base station that is responsible for the transmission and reception of data. The
38 physical layer in the transmitting station is presented a frame by the multiplex sublayer
39 and transforms it into an over-the-air waveform. The physical layer in the receiving station

1 transforms the waveform back into a frame and presents it to the multiplex sublayer above
2 it.

3 **Pilot Beacon.** A transmit-only base station that broadcasts a Pilot Channel, a Sync
4 Channel, optionally a Paging Channel or a Primary Broadcast Control Channel, but no
5 Forward Common Control Channels and Forward Traffic Channels. The mobile station
6 measures the pilot beacon to assist in CDMA hard handoffs and inter-frequency idle-mode
7 handoffs.

8 **Pilot Channel.** A non-data-bearing signal transmitted by a CDMA station. See Forward
9 Pilot Channel, Transmit Diversity Pilot Channel, Auxiliary Pilot Channel, Auxiliary
10 Transmit Diversity Pilot Channel, and Reverse Pilot Channel.

11 **Pilot PN Chip.** One bit, or bit pair, of a pilot PN sequence, or the time interval
12 corresponding thereto.

13 **Pilot PN Sequence.** A pair of modified maximal length PN sequences used to spread the
14 quadrature components of a CDMA Channel.

15 **Pilot PN Sequence Offset.** The time offset of a Forward Pilot Channel from CDMA System
16 time, as transmitted by the base station, expressed modulo the pilot period.

17 **Pilot PN Sequence Offset Index.** The pilot PN sequence offset in units of 64 PN chips of a
18 Forward Pilot Channel, relative to the zero offset pilot PN sequence.

19 **Pilot Strength.** The ratio of pilot power to total power in the signal bandwidth of a CDMA
20 Forward or Reverse Channel. See also E_c/I_0 .

21 **Plus Code Dialing.** Plus code dialing relieves the user of the need to dial an international
22 access prefix, which may vary between countries and carriers. This capability allows
23 telephony addresses to be entered, received, displayed, stored and transmitted in an
24 international format (full ITU-T E.164 number, including country code). When addresses
25 are entered by a user, the MS user interface can provide an input aid, such as a key
26 marked with a "+" sign, to indicate that the address is international. When displayed by the
27 MS, they can be identified by a visual device, such as a "+" prefix. When received,
28 transmitted, or stored, an international indicator can be included with the address digits. It
29 will be the responsibility of the network to ignore the international indicator when attached
30 to a national number. This allows users to store and dial all phone numbers in a consistent
31 format, which is particularly useful for international travelers. See [39].

32 **PN.** Pseudonoise.

33 **PN Chip.** One bit in a PN sequence, or the time duration of such a bit. It corresponds to
34 the smallest modulation interval in a CDMA system.

35 **PN Sequence.** Pseudonoise sequence. A deterministic, periodic binary sequence having
36 limited statistical similarity to a Bernoulli (coin-tossing).

37 **Power Control Bit.** A bit sent on the Forward Power Control Subchannel or Reverse Power
38 Control Subchannel to signal the mobile station or base station to increase or decrease its
39 transmit power.

- 1 **Power Control Group.** A 1.25 ms interval on the Forward Traffic Channel and the Reverse
2 Traffic Channel. See also Power Control Bit.
- 3 **Power-Down Registration.** An autonomous registration method in which the mobile
4 station registers on power-down.
- 5 **Power Up Function.** A method by which the mobile station increases its output power to
6 support location services.
- 7 **Power-Up Registration.** An autonomous registration method in which the mobile station
8 registers on power-up.
- 9 **PPM.** Parts per million.
- 10 **Preamble.** See Access Channel Preamble and Traffic Channel Preamble.
- 11 **Primary CDMA Channel.** A pre-assigned channel in a CDMA Cellular System used by the
12 mobile station for initial acquisition. See also Secondary CDMA Channel.
- 13 **Primary Paging Channel (CDMA).** The default code channel (code channel 1) assigned for
14 paging on a CDMA Channel.
- 15 **Primary Pilot.** One of the three pilots on the Spreading Rate 3 Forward Channels. The
16 primary pilot may be on any one of the SR3 frequencies and may have a higher
17 transmission power comparing to the pilots on the other two SR3 frequencies.
- 18 **Primary Traffic.** The main traffic stream carried between the mobile station and the base
19 station on the Traffic Channel. See also Secondary Traffic and Signaling Traffic.
- 20 **Primitive.** An atomic, well-defined method of transferring data and control information
21 between two adjacent layers and sublayers. Conventionally represented as a function
22 invocation with the data and/or control information as parameters.
- 23 **Private Long Code.** The long code characterized by the private long code mask. See also
24 Long Code.
- 25 **Private Long Code Mask.** The long code mask used to form the private long code. See
26 also Public Long Code Mask and Long Code.
- 27 **Private Neighbor Set.** The set of pilots associated with the private system base stations
28 that are probable candidates for idle handoff. See also Active Set, Neighbor Set, Remaining
29 Set, and CDMA Tiered Services.
- 30 **Protocol Control Information (PCI).** Data passed between adjacent layers in the protocol
31 stack, together with the SDU, to assist a layer to properly encapsulate/decapsulate the
32 SDU. Examples of PCI in this document are the MCSB and the PCSB.
- 33 **Protocol Data Unit.** Encapsulated data communicated between peer layers on the mobile
34 station and base station. Unless specified otherwise, in this document PDU refers to the
35 Layer 3 protocol data unit transferred at the interface between Layer 3 and Layer 2.
- 36 **Protocol Stack.** Conceptual model of the layered architecture for communication
37 protocols (see Layering) in which layers within a station are represented in the order of
38 their numeric designation and requiring that transferred data be processed sequentially by

1 each layer, in the order of their representation. Graphically, the “stack” is drawn vertically,
2 with the layer having the lowest numeric designation at the base.

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

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

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

9 **PUF.** See Power Up Function.

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

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

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

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

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

19 **QoS.** See Quality of Service.

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

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

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

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

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

34 **r-csch.** Reverse common signaling logical channel.

35 **r-dsch.** Reverse dedicated signaling logical channel.

36 **R-PDCCH.** Reverse Packet Data Control Channel. A control channel used for the
37 transmission of control information for the subpacket being transmitted on the Reverse
38 Packet Data Channel and the Mobile Status Indicator Bit.

- 1 **R-PDCH. Reverse** Packet Data Channel. A portion of a Radio Configuration 7 Reverse
2 Traffic Channel which carries higher-level data and control information from a mobile
3 station to a base station.
- 4 **R-REQCH. Reverse** Request Channel. A control channel used by the mobile station to
5 report available power headroom and buffer status.
- 6 **R-SPICH.** Reverse Secondary Pilot Channel. An unmodulated, direct-sequence spread
7 spectrum signal transmitted by a CDMA mobile station in conjunction with certain
8 transmissions on the Reverse Packet Data Channel. The secondary pilot channel provides
9 additional phase reference for the Reverse Packet Data Channel for coherent demodulation
10 and may provide a means for signal strength measurement.
- 11 **Radio Configuration.** A set of Forward Traffic Channel and Reverse Traffic Channel
12 transmission formats that are characterized by physical layer parameters such as
13 transmission rates, modulation characteristics and spreading rate. See [2].
- 14 **Radio Configuration Class.** A group of Radio Configurations. All Radio Configurations,
15 for the Forward Traffic Channel and the Reverse Traffic Channel, are divided into three
16 classes by the types of pre-spreading symbols (BPSK and QPSK) and spreading rates. RC
17 Class 1 consists of RC 1 and RC 2 for the Forward Traffic Channel and the Reverse Traffic
18 Channel. RC Class 2 consists of RC 3, RC 4, and RC 8 of the Reverse Traffic Channel, and
19 RC 3, RC 4, RC 5, RC 11, and RC12 of the Forward Traffic Channel. RC Class 3 consists of
20 RC 5 and RC 6 of the Reverse Traffic Channel, and RC 6, RC 7, RC 8, and RC 9 of the
21 Forward Traffic Channel.
- 22 **Radio Environment Reporting Mode.** A fast call setup mode of the mobile station in the
23 *Mobile Station Idle State*, in which *Radio Environment Messages* are triggered based on a
24 radio environment report pilot list (RER_PILOT_LIST). This mode may be used to assist the
25 base station with direct channel assignment. See also Direct Channel Assignment.
- 26 **RANDA.** The random challenge number contained in an AV.
- 27 **RC.** See Radio Configuration.
- 28 **Reduced Slot Cycle Mode.** A fast call setup mode of the mobile station in which the
29 mobile station operates in the slotted mode with a shorter slot cycle than the registered slot
30 cycle or in the non-slotted mode for the negotiated duration of time. See also Slotted Mode
31 and Non-Slotted Mode.
- 32 **RES.** A *Registration Accepted Order*, *Extended Channel Assignment Message*, or *Security*
33 *Mode Command Message*.
- 34 **Registration.** The process by which a mobile station identifies its location and parameters
35 to a base station.
- 36 **Registration Zone.** A collection of one or more base stations treated as a unit when
37 determining whether a mobile station should perform zone-based registration. See also
38 User Zone, with which it should not be confused.
- 39 **Release.** A process that the mobile station and base station use to inform each other of
40 call disconnect.

- 1 **Remaining Set.** The set of all allowable pilot offsets as determined by PILOT_INC,
2 excluding the pilot offsets of the pilots in the Active Set, Candidate Set, and Neighbor Set.
3 See also Active Set, Candidate Set, and Neighbor Set.
- 4 **Replay Attack.** An attempt by a third party to record an over-the-air message and send it
5 later in time so as to mislead the receiver.
- 6 **Request.** A Layer 3 message generated by either the mobile station or the base station to
7 retrieve information, ask for service, or command an action.
- 8 **Rescue Channel.** A Fundamental Channel used for call rescue soft handoff. The Walsh
9 Code is pre-allocated and advertised to the mobile station. In the event that the mobile
10 station loses the Forward Traffic Channel or declares an acknowledgment failure,
11 communication with a new base station can be established on the Rescue Channel.
- 12 **Response.** A Layer 3 message generated as a result of another message, typically a
13 request.
- 14 **Reverse Acknowledgment Channel.** A portion of Reverse CDMA Channel used for the
15 transmission of acknowledgments from the mobile station to the base station in response
16 to the data transmitted on the Forward Packet Data Channel, the Forward Packet Data
17 Control Channel, the Forward Fundamental Channel and the Forward Supplemental
18 Channel.
- 19 **Reverse Channel Quality Indicator Channel.** A portion of Reverse CDMA Channel used
20 by the mobile station to indicate to the base station the quality of the Forward Link Pilot
21 Channel received at the mobile station.
- 22 **Reverse CDMA Channel.** The CDMA Channel from the mobile station to the base station.
23 From the base station's perspective, the Reverse CDMA Channel is the sum of all mobile
24 station transmissions on a CDMA Frequency Assignment.
- 25 **Reverse Dedicated Control Channel.** A Dedicated Control Channel that is transmitted on
26 the Reverse CDMA Channel.
- 27 **Reverse Fundamental Channel.** A Fundamental Channel that is transmitted on the
28 Reverse CDMA Channel.
- 29 **Reverse Pilot Channel.** A non-data-bearing direct-sequence spread spectrum signal
30 transmitted by each CDMA mobile station whenever the Enhanced Access Channel,
31 Reverse Common Control Channel, or Reverse Traffic Channel is enabled. The Reverse
32 Pilot Channel allows a base station to acquire the timing of the Reverse CDMA Channel and
33 provides a phase reference for coherent demodulation. The Reverse Pilot Channel may be
34 transmitted either continuously or in gated mode.
- 35 **Reverse Supplemental Channel.** A Supplemental Channel that is transmitted on the
36 Reverse CDMA Channel.
- 37 **Reverse Supplemental Code Channel.** A Supplemental Code Channel that is transmitted
38 on the Reverse CDMA Channel.
- 39 **Reverse Traffic Channel.** A Traffic Channel on which data and signaling are transmitted
40 from a mobile station to a base station. The Reverse Traffic Channel is composed of zero or

1 one Reverse Fundamental Channel, zero to seven Reverse Supplemental Code Channels,
 2 zero to two Reverse Supplemental Channels, and zero or one Reverse Dedicated Control
 3 Channel.⁴

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

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

8 **R-UIM.** Removable UIM.

9 **SAP.** See Service Access Point.

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

11 **SDU.** See Service Data Unit.

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

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

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

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

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

24 **Service Configuration.** The common attributes used by the mobile station and the base
 25 station to build and interpret Traffic Channel frames. Service configuration corresponds to
 26 the parameters contained in the Service Configuration information record and the Non-
 27 negotiable Service Configuration information record. Examples of such parameters include
 28 Forward and Reverse Traffic Channel multiplex options, Forward and Reverse Traffic
 29 Channel transmission rates, service option connections, and reverse pilot gating rate.

30 **Service Configuration Synchronization Identifier (SYNC_ID).** An identifier assigned by
 31 the base station that identifies a specific Service Configuration information record and Non-
 32 negotiable Service Configuration information record.

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

⁴ The Reverse Traffic Channel does not include R-CQICH, R-ACKCH.

- 1 **Service Negotiation.** The procedures used by the mobile station and base station to
2 establish a service configuration. See also Service Option Negotiation.
- 3 **Service Option.** A service capability of the system. Service options may be applications
4 such as voice, data, or facsimile. See [30].
- 5 **Service Option Connection.** A particular instance or session in which the service defined
6 by a service option is used. Associated with a service option connection are a reference,
7 which is used for uniquely identifying the service option connection, a service option, which
8 specifies the particular type of service in use, a Forward Traffic Channel traffic type, which
9 specifies what type of Forward Traffic Channel traffic is used to support the service option
10 connection, and a Reverse Traffic Channel traffic type, which specifies what type of Reverse
11 Traffic Channel traffic is used by the service option connection.
- 12 **Service Option Connection Reference.** A designator used by the base station and mobile
13 station to uniquely identify a particular service option connection.
- 14 **Service Option Negotiation.** The procedures used by the mobile station and base station
15 to establish a service configuration. Service option negotiation is similar to service
16 negotiation, but allows less flexibility for specifying the attributes of the service
17 configuration. See also Service Negotiation.
- 18 **Service Redirection.** The process by which the base station alters the system selection
19 made by a mobile station. It can be used temporarily during maintenance and testing to
20 divert subscribers to an alternate system.
- 21 **Serving Frequency.** The CDMA frequency on which a mobile station is currently
22 communicating with one or more base stations.
- 23 **Shared Secret Data (SSD).** A 128-bit pattern stored in the mobile station (in semi-
24 permanent memory) and known by the base station. SSD is a concatenation of two 64-bit
25 subsets: SSD_A, which is used to support the authentication procedures, and SSD_B,
26 which serves as one of the inputs to the process generating the encryption mask and
27 private long code.
- 28 **Short Message Services (SMS).** A suite of services such as SMS Text Delivery, Digital
29 Paging (i.e., Call Back Number - CBN), and Voice Mail Notification (VMN).
- 30 **SID.** See System Identification.
- 31 **Signaling Traffic.** Control messages that are carried between the mobile station and the
32 base station on the Traffic Channel. See also Primary Traffic and Secondary Traffic.
- 33 **Silent Re-origination.** An autonomous attempt to re-originate a call after the mobile
34 station Layer 3 receives an access attempt failure indication from Layer 2 following a user-
35 initiated origination or a re-origination. Silent re-origination does not apply to any user-
36 programmable capabilities or services, e.g. user-programmable automatic redial.
- 37 **Slotted Mode.** An operation mode of the mobile station in which the mobile station
38 monitors only selected slots on the Paging Channel or the Forward Common Control
39 Channel when in the *Mobile Station Idle State*.

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

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

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

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

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

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

15 **sps.** Symbols per second.

16 **SR.** See Spreading Rate.

17 **SR1.** See Spreading Rate 1.

18 **SR3.** See Spreading Rate 3.

19 **SR3 Frequencies.** CDMA frequencies for the three 1.2288 Mcps carriers on the Forward
20 CDMA Channel. SR3 frequencies include the lowest SR3 frequency, the center SR3
21 frequency, and the highest SR3 frequency.

22 **SR3 Primary Pilot.** See Primary Pilot.

23 **SSD.** See Shared Secret Data.

24 **SSEQ.** Security sequence number. The 8 LSB of the EXT_SSEQ used for an input to
25 encryption functions and as an input to MACI calculations.

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

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

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

35 **Supplemental Code Channel.** An optional portion of a Traffic Channel (Forward or
36 Reverse Radio Configurations 1 and 2) that operates in conjunction with a Fundamental
37 Channel in that Traffic Channel, and (optionally) with other Supplemental Code Channels

1 to provide higher data rate services. On this channel a combination of primary data,
2 secondary data, or both (but never signaling information) are transmitted.

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

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

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

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

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

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

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

19 **TD.** See Transmit Diversity.

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

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

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

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

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

33 **TMSI Zone.** The administrative zone that allows the TMSI to be reused. The TMSI_CODE
34 has to be unique within a TMSI zone but may be reused in a different TMSI zone. The
35 TMSI zone is identified by the field TMSI_ZONE.

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

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

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

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

8 **UIM.** User Identity Module.

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

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

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

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

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

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

27 **User Zone.** An area within which CDMA Tiered Services may be provided. It may
28 correspond to an RF coverage area, or it may be established independent of RF topology.
29 User Zones are classified as broadcast versus mobile-specific, and as active versus passive.
30 See Broadcast User Zone, Mobile-Specific User Zone, Active User Zone, and Passive User
31 Zone. See also Registration Zone, with which it should not be confused.

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

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

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

38 **UTC.** Universal Temps Coordiné. See Universal Coordinated Time.

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

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

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

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

9 **WLL.** See Wireless Local Loop.

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

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

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

16 1.1.2 Numeric Information

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

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

27 1.1.2.1 Reserved

28 1.1.2.2 CDMA Numeric Information

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

32 **1XRL_FREQ_OFFSET_s** – Frequency offset of the 1X reverse link.

33 **A41_SYS_PAR_MSG_SEQ_s** – ANSI-41 System Parameters Message sequence number.

34 **ACC_CHAN_s** – Number of Access Channels supported by the current Paging Channel.

35 **ACC_ENT_HO_ORDER_s** – Access entry handoff permitted from the *Mobile Station Order and*
36 *Message Processing Operation of the Mobile Station Idle State.*

- 1 **ACCESS_ENTRY_HO_s** – Idle handoff permitted when entering the *System Access State*.
- 2 **ACCESS_HO_s** – Handoff permitted after performing an access attempt while the mobile
3 station is in the *System Access State*.
- 4 **ACCESS_HO_ALLOWED_s** – Handoff permitted to the corresponding neighbor base station
5 while in the *System Access State*.
- 6 **ACCESS_HO_LIST** – List of pilots to which access handoff or access probe handoff is
7 permitted.
- 8 **ACC_HO_LIST_UPD_s** – Access handoff list update permitted indicator.
- 9 **ACCESS_HO_MSG_RSP_s** – Access handoff permitted in the *System Access State* between
10 the time that the mobile station receives a message and responds to that message.
- 11 **ACCESS_PROBE_HO_s** – Access probe handoff permitted during an access attempt in the
12 *Mobile Station Origination Attempt Substate* or the *Page Response Substate*.
- 13 **ACC_MSG_SEQ_s** – Last received *Access Parameters Message* or *Enhanced Access*
14 *Parameters Message* sequence number.
- 15 **ACC_PROBE_HO_OTHER_MSG_s** – Access probe handoff permitted for Access Channel
16 messages other than the *Origination Message*, *Reconnect Message*, and the *Page Response*
17 *Message*.
- 18 **ACCT_INCL_EMG_s** – Access Control based on Call Type (ACCT) applies to emergency calls
19 indicator.
- 20 **ACCT_SO_GRP_LIST** – List of service option groups that have Access Control based on Call
21 Type (ACCT) enabled.
- 22 **ACCT_SO_LIST** – List of individual service options that have Access Control based on Call
23 Type (ACCT) enabled.
- 24 **ACH_ACC_TMO_s** – Access Channel acknowledgment timeout, in units of 80 ms.
- 25 **ACK_WAITING_s[i]** – Acknowledgment status indicator for message sequence number i. Set
26 to YES if an acknowledgment is pending for the message; otherwise, set to NO.
- 27 **ADD_INTERCEPT_s** – The intercept in the inequality criterion for adding a pilot to the Active
28 Set.
- 29 **ADD_PLCM_FOR_FCH_39_s** – The 39 least significant bits of the additional Public Long
30 Code Mask for the forward Fundamental Channel.
- 31 **ADD_PLCM_FOR_FCH_TYPE_s** – Additional Public Long Code Mask for forward
32 Fundamental Channel type indicator.
- 33 **AGE_s** – Neighbor list age. For each pilot in the Neighbor Set, the mobile station increments
34 this counter each time a *Neighbor List Update Message* or an *Extended Neighbor List Update*
35 *Message* is received. When AGE_s exceeds NGBHR_MAX_AGE, the pilot is deleted from the
36 Neighbor Set.

- 1 **ALIGN_TIMING_USED_s** – Indicates whether the mobile station aligns the times of visits
 2 away from the Serving Frequency, as requested by the base station, in the periodic search
 3 procedures.
- 4 **ASSIGNED_QPAGECH_s** – Assigned Quick Paging Channel number.
- 5 **AUTH_s** – Current authentication mode.
- 6 **AUTO_FCSO_ALLOWED_s** – Base station support of autonomous *Fast Call Setup Order*
 7 indicator.
- 8 **AUTO_MSG_INTERVAL** – Autonomous message interval.
- 9 **AUTO_MSG_SUPPORTED** – Autonomous message supported indicator.
- 10 **BAD_FRAMES_s** – Forward Fundamental Channel bad frames count. The number of
 11 received bad Forward Fundamental Channel frames.
- 12 **BAND_SUBCLASS_IND_REC** – Band subclass indicator record. This record specifies the
 13 band subclasses that the base station requires the mobile station to report whether it
 14 supports.
- 15 **BASE_CLASS_s** – Base station class of the current base station.
- 16 **BASE_ID_s** – Base station identification of the current base station.
- 17 **BASE_LAT_s** – Latitude of the current base station, in units of 0.25 seconds.
- 18 **BASE_LONG_s** – Longitude of the current base station, in units of 0.25 seconds.
- 19 **BCMC_FLOW_LIST_s[i]** – BCMC Flow Information. This is an array that contains
 20 information corresponding to each BCMC flow being transmitted by the base station in this
 21 sector:
- 22 • **BCMC_FLOW_ID** - BCMC flow identifier.
 - 23 • **REGISTRATION_REQ_FLAG** – Registration required flag.
 - 24 • **AUTH_SIGNATURE_REQ_IND** – Authorization signature required indication.
 - 25 • **BCMC_FLOW_ON_TRAFFIC_IND** – BCMC flow on traffic channel supported
 26 indicator.
 - 27 • **BCMC_FLOW_ON_IND** – BCMC flow On indicator.
 - 28 • **LPM_INFO[j]** - For each **BCMC_FLOW_ID**, one or more Logical-to-Physical Mapping
 29 entries:
 - 30 - **FSCH_ID** - Forward Broadcast Supplemental Channel identifier.
 - 31 - **TDM_USED_IND** - TDM used indicator.
 - 32 - **TDM_MASK** - TDM mask.

- 1 - TDM_SUPER_PERIOD_MASK - TDM super period mask.
- 2 - TDM_MEGA_PERIOD_MASK - TDM mega period mask.
- 3 - BSR_ID - BCMC Service Reference identifier.
- 4 - NGHBR_INFO[k] - For each Logical-to-Physical Mapping entries, information on
- 5 one or more neighbor base stations:
- 6 + NGHBR_PN - Neighbor pilot PN sequence offset index.
- 7 + NGHBR_BCMC_CONFIG - Neighbor BCMC Configuration.
- 8 + NGHBR_FSCH_BAND_CLASS - Neighbor band class of the Forward
- 9 Broadcast Supplemental Channel.
- 10 + NGHBR_FSCH_CDMA_FREQ - Neighbor Frequency assignment of the
- 11 Forward Broadcast Supplemental Channel.
- 12 + NGHBR_FSCH_CODE_CHAN - Neighbor Forward Broadcast Supplemental
- 13 Channel Code Channel Index.
- 14 + NGHBR_FSCH_PLCM - Neighbor Public Long Code Mask of the Forward
- 15 Broadcast Supplemental Channel.
- 16 + NGHBR_FSCH_MUX_OPTION - Neighbor Multiplex Option of the Forward
- 17 Broadcast Supplemental Channel.
- 18 + NGHBR_FSCH_RC - Neighbor Radio configuration of the Forward Broadcast
- 19 Supplemental Channel.
- 20 + NGHBR_FSCH_CODING - Neighbor Coding Type of the Forward Broadcast
- 21 Supplemental Channel.
- 22 + NGHBR_FSCH_OUTERCODE_RATE - Neighbor outer code rate of the
- 23 Forward Broadcast Supplemental Channel.
- 24 + NGHBR_FSCH_OUTERCODE_OFFSET - Neighbor outer coding buffer offset
- 25 of the Forward Broadcast Supplemental Channel.
- 26 + NGHBR_FSCH_NUM_BITS_IDX - Neighbor number of information bits index
- 27 of the Forward Broadcast Supplemental Channel.
- 28 + NGHBR_FSCH_FRAME_40_USED - Neighbor Forward Broadcast
- 29 Supplemental Channel 40ms frame used indicator.
- 30 + NGHBR_FSCH_FRAME_80_USED - Neighbor Forward Broadcast
- 31 Supplemental Channel 80ms frame used indicator.

- 1 **BCMC_RETRY_DELAY_LISTs[j]** – BCMC Retry Delay List. This is an array that contains
 2 retry time corresponding to each BCMC flow rejected with BCMC Reason indicating
 3 **RETRY_LATER**:
- 4 • **BCMC_FLOW_ID** - BCMC flow identifier.
 - 5 • **RETRY_DELAY** – Retry time for this BCMC flow.
- 6 **BEGIN_PREAMBLE_s** – A stored variable in the mobile station that contains the size of the
 7 preamble that shall be transmitted on a Reverse Supplemental Code Channel at the
 8 beginning of a Reverse Supplemental Code Channel transmission.
- 9 **BKOFF_s** – Access Channel probe sequence backoff range.
- 10 **BRAT_s** – Data rate of the Primary Broadcast Control Channel.
- 11 **BSPM_MSG_SEQ_s** – *BCMC Service Parameters Message* sequence number.
- 12 **BSPM_WAIT_TIME** – The maximum duration the mobile station waits to receive a BCMC
 13 Service Parameters Message after sending a Registration Message requesting a BCMC flow.
- 14 **BYPASS_ALERT_ANSWER_s** – Mobile station termination bypass indicator. This is set to ‘1’
 15 if the mobile station is to bypass the *Waiting for Order Substate* and the *Waiting for Mobile*
 16 *Station Answer Substate*, and proceed directly to the *Conversation Substate* when Layer 3
 17 receives a *forward dedicated channel-acquired* indication from Layer 2.
- 18 **CAND_BAND_CLASS_REC** – Candidate band class record. This record specifies the band
 19 classes that the base station requires the mobile station to report whether it supports.
- 20 **CCSH_ENCODER_ACTION_TIME_s** - Specifies the time at which Code Combining Soft
 21 Handoff Turbo Encoder swapping takes effect.
- 22 **CDMABAND_s**. CDMA band class. The CDMA band class currently used by the mobile
 23 station.
- 24 **CDMACH_s** – CDMA Channel number. The CDMA Channel number currently used by the
 25 mobile station.
- 26 **CDMA_OFF_TIME_REP_SUP_IND_s** – CDMA off time report supported indicator.
- 27 **CDMA_OFF_TIME_REP_THRESHOLD_s** – CDMA off time report threshold.
- 28 **CF_CDMABAND_s** – Candidate Frequency CDMA band class. The CDMA band class
 29 specified in the *Candidate Frequency Search Request Message*.
- 30 **CF_CDMACH_s** – Candidate Frequency CDMA Channel number. The CDMA Channel
 31 number specified in the *Candidate Frequency Search Request Message*.
- 32 **CF_PILOT_INC_s** – PILOT_INC to be used by the mobile station after an inter-frequency
 33 hard handoff to the CDMA Candidate Frequency is successfully completed.
- 34 **CF_SEARCH_PRIORITY_INCL_s** – Candidate Frequency neighbor pilots’ search priority
 35 included indicator.
- 36 **CF_SRCH_OFFSET_INCL_s** – Candidate Frequency neighbor pilot search window offset
 37 included indicator.

- 1 **CF_SRCH_WIN_NGHR_INCL_s** – Candidate Frequency neighbor pilots’ search window
2 included indicator.
- 3 **CF_SRCH_WIN_N_s** – Search window size for the Candidate Frequency Search Set.
- 4 **CF_SRCH_WIN_R_s** – Search window size to be used for the Remaining Set after an inter-
5 frequency hard handoff to the CDMA Candidate Frequency is successfully completed.
- 6 **CF_T_ADD_s** – Pilot detection threshold to be used on the CDMA Candidate Frequency. The
7 stored value is a positive value in units of 0.5 dB.
- 8 **CH_IND_s** – A two-bit physical channel indicator, based on the currently established
9 physical channels. The least significant bit denotes the Fundamental Channel, and the
10 most significant bit denotes the Dedicated Control Channel.
- 11 **CHAN_LST_MSG_SEQ_s** – *CDMA Channel List Message* sequence number.
- 12 **CHM_SUPPORTED_s** – Indicates whether the base station supports Control Hold Mode
13 operation.
- 14 **CODE_CHAN_LIST** – Code Channel List. A descriptive structure used to manage the
15 Forward Fundamental Channel, and Forward Supplemental Code Channels, if any,
16 associated with the mobile station’s Active Set.
- 17 **COMPLETE_PUF_FRAME_s** – Number of power control groups required to make the PUF
18 probe an integer number of frames.
- 19 **COMPLETE_SEARCH_s** – Flag to indicate if the mobile station is to complete the search of
20 the Candidate Frequency Search Set after it has determined that the inter-frequency
21 handoff attempt to the CDMA Candidate Frequency is unsuccessful.
- 22 **CONFIG_MSG_SEQ_s** – Current message sequence number for the *System Parameters*
23 *Message*, *Neighbor List Message*, *Extended Neighbor List Message*, *General Neighbor List*
24 *Message*, *CDMA Channel List Message*, *Extended System Parameters Message*, *Global*
25 *Service Redirection Message*, *Private Neighbor List Message*, *User Zone Identification*
26 *Message*, *Extended CDMA Channel List Message*, *Extended Global Service Redirection*
27 *Message*, *MC-RR Parameters Message*, *ANSI-41 System Parameters Message*.
- 28 **COUNTER_ENABLED_s** – Timer-based registration indicator. Set to YES if timer-based
29 registration is enabled; otherwise, set to NO.
- 30 **C_SIG_ENCRYPT_MODE_s** – Common Channel signaling message encryption mode.
- 31 **CS_SUPPORTED_s** – Base station Concurrent Services supported indicator. This 1-bit field
32 is set to ‘1’ if the base station supports concurrent connection of at least two services that
33 use either Primary or Secondary traffic type.
- 34 **CURR_ACC_MSG_SEQ** – Current *Access Parameters Message* or *Enhanced Access*
35 *Parameters Message* sequence number.
- 36 **CURRENT_ACTIVE_PILOT_s** – Identifies the current pilot in the Active Set during an access
37 attempt.
- 38 **CURRENT_PUF_PROBE_s** – Number of the next PUF probe to be transmitted within the PUF
39 attempt.

- 1 **DAYLT_s** – Daylight Savings Time indicator.
- 2 **DCCH_BAD_FRAMES_s** – Forward Dedicated Control Channel bad frames count. The
3 number of received bad Forward Dedicated Control Channel frames.
- 4 **DCCH_TOT_FRAMES_s** – Total Forward Dedicated Control Channel frames received. The
5 total number of received Forward Dedicated Control Channel frames, counted for Forward
6 Traffic Channel power control.
- 7 **DECORR** – Hashing function input used to decorrelate hashing function applications for
8 the same mobile station.
- 9 **DEFAULT_CONFIG_s** – Mobile station current default configuration.
- 10 **DELETE_FOR_TMSI_s** – A storage variable in the mobile station that indicates whether the
11 mobile station should delete its current TMSI if the TMSI was assigned in a different TMSI
12 zone.
- 13 **DIFF_RX_PWR_THRESH_s** – Threshold for the difference between the received power on the
14 Serving Frequency and the received power on the CDMA Candidate Frequency for the
15 mobile station to search for pilots on the CDMA Candidate Frequency.
- 16 **DIRECT_CH_ASSIGN_RECOVER_IND_s** – Direct Channel Assignment Recover Indicator.
- 17 **DISTANCE** – Distance from registered base station to current base station, used for
18 distance-based registration.
- 19 **DROP_INTERCEPT_s** – The intercept in the inequality criterion for dropping a pilot from the
20 Active Set.
- 21 **D_SIG_ENCRYPT_MODE_s** – Dedicated Channel signaling message encryption mode.
- 22 **EACH_ACC_TMO_s** – Enhanced Access Channel acknowledgment timeout, in units of 20
23 ms.
- 24 **EACH_SLOT_s** – See [2].
- 25 **EACH_SLOT_OFFSET1_s** – See [2].
- 26 **EACH_SLOT_OFFSET2_s** – See [2].
- 27 **EARLY_RL_TRANSMIT_IND_s** – The early reverse link transmission flag indicates whether,
28 upon channel assignment, the mobile station is allowed to enable its transmitter and
29 transmit the preamble prior to receiving sufficient energy on the forward link.
- 30 **EC_IO_THRESH_s** – Pilot E_c/I_0 threshold used for system reselection.
- 31 **EC_THRESH_s** – Pilot power threshold used for system reselection.
- 32 **ENC_KEY_SIZE_s** – The key size used for signaling and user information encryption on
33 common channel and dedicated channel.

- 1 **ENC_KEY[j]** – An array of encryption keys for signaling and user information encryption on
 2 common channel and dedicated channel, where *j* is the key identifier that ranges from ‘00’
 3 to ‘11’.
- 4 **SSEQ⁵** – An 8-bit temporary variable for encryption/decryption and message integrity.
- 5 **ENCRYPT_MODE_s** – Current message encryption mode.
- 6 **EXCL_P_REV_MS** – Exclude from redirection by MOB_P_REV indicator.
- 7 **EXT_CHAN_LST_s** – *Extended CDMA Channel List Message* sent indicator.
- 8 **EXT_CHAN_LST_MSG_SEQ_s** – *Extended CDMA Channel List Message* sequence number.
- 9 **EXT_NGHR_LST_MSG_SEQ_s** – *Extended Neighbor List Message* sequence number.
- 10 **EXT_PREF_MSID_TYPE_s** – Extended preferred mobile station identifier field type.
- 11 **RX_EXT_SSEQ[i][j]⁶** – An array of 32-bit crypto-sync counters used for encryption and
 12 message integrity, where *i* = 0 is for unassured messages and *i* = 1 is for assured messages,
 13 where *j* is the key identifier that ranges from ‘00’ to ‘11’.
- 14 **TX_EXT_SSEQ[i][j]⁷** – An array of 32-bit crypto-sync counters used for encryption and
 15 message integrity, where *i* = 0 is for unassured messages and *i* = 1 is for assured messages,
 16 where *j* is the key identifier that ranges from ‘00’ to ‘11’.
- 17 **EXT_SSEQ⁸** – A 32-bit temporary variable for encryption and message integrity.
- 18 **INT_KEY[j]** – An array of 128-bit integrity keys for message integrity, where *j* is the key
 19 identifier that ranges from ‘00’ to ‘11’.
- 20 **KEY_ID** – A 2-bit index of INT_KEY[.], ENC_KEY[.], TX_EXT_SSEQ[.][.], and
 21 RX_EXT_SSEQ[.][.] that are “in use”. The values ‘00’ to ‘01’ are used to index 2G keys and
 22 security sequence numbers. The values ‘10’ to ‘11’ are used to index 3G keys and security
 23 sequence numbers.
- 24 **EXT_GLOBAL_REDIRECT_s** – *Extended Global Service Redirection Message* sent indicator.
- 25 **EXT_GLOB_SERV_REDIR_MSG_SEQ_s** – *Extended Global Service Redirection Message*
 26 sequence number.
- 27 **EXT_SYS_PARAMETER_s** – *Extended System Parameters Message* sent indicator.
- 28 **EXT_SYS_PAR_MSG_SEQ_s** – *Extended System Parameters Message* sequence number.

⁵ Formerly called ENC_SEQ.

⁶ Formerly called EXT_DECRYPT_SEQ[i].

⁷ Formerly called EXT_ENCRYPT_SEQ[i].

⁸ Formerly called EXT_ENC_SEQ[i].

1 **FSCH_LIST_s[i]** – Forward Broadcast Supplemental Channel information. This is an array
 2 that contains information corresponding to each Forward Supplemental Channel
 3 transmitted by the base station:

- 4 • FSCH_ID - Forward Broadcast Supplemental Channel identifier.
- 5 • FSCH_BAND_CLASS - Band class of the Forward Broadcast Supplemental Channel.
- 6 • FSCH_FREQ - Frequency assignment of the Forward Broadcast Supplemental
 7 Channel.
- 8 • FSCH_CODE_CHAN - Code Channel index of the Forward Broadcast Supplemental
 9 Channel.
- 10 • FSCH_PLCM – Public Long Code Mask of the Forward Broadcast Supplemental
 11 Channel
- 12 • FSCH_MUX_OPTION - Multiplex Option of the Forward Broadcast Supplemental
 13 Channel
- 14 • FSCH_RC - Radio configuration of the Forward Broadcast Supplemental Channel.
- 15 • FSCH_CODING - Coding Type of the Forward Broadcast Supplemental Channel.
- 16 • FSCH_OUTERCODE_RATE - Outer code rate of the Forward Broadcast
 17 Supplemental Channel.
- 18 • FSCH_OUTERCODE_OFFSET - Outer coding buffer offset of the Forward Broadcast
 19 Supplemental Channel.
- 20 • FSCH_NUM_BITS_IDX - Number of information bits index of the Forward Broadcast
 21 Supplemental Channel.
- 22 • FSCH_FRAME_40_USED - Forward Broadcast Supplemental Channel 40ms frame
 23 used indicator.
- 24 • FSCH_FRAME_80_USED - Forward Broadcast Supplemental Channel 80ms frame
 25 used indicator.
- 26 • TDM_STRUCTURE_IND - Forward Broadcast Supplemental Channel TDM structure
 27 used indicator.
- 28 • TDM_SLOT_LENGTH - Forward Broadcast Supplemental Channel TDM slot length
- 29 • TDM_SUPER_PERIOD_MASK_LEN - TDM super period mask length indicator.
- 30 • TDM_MEGA_PERIOD_MASK_LEN - TDM mega period mask length indicator.

31 **FCCCH_s** – Current Forward Common Control Channel number.

- 1 **FIRST_ACTIVE_PILOT_s** – While the mobile station is in the *System Access State*, identifies
2 the pilot to which the first access probe was transmitted, upon entering the *System Access*
3 *State*.
- 4 **FIXED_NUM_PREAMBLE_s** – Traffic Channel preamble length for fixed preamble
5 transmission.
- 6 **FIXED_PREAMBLE_TRANSMIT_IND_s** – The fixed preamble transmission flag indicates
7 whether the mobile station is allowed to enter the *Traffic Channel Substate* of the *Mobile*
8 *Station Control on the Traffic Channel State*, after sending the number of preambles specified
9 in *Extended Channel Assignment Message*.
- 10 **FOR_ACKCH_ASSIGNED_s** – Forward Acknowledgment Channel assignment
11 indicator.
- 12 **FOR_ACKCH_COMB_SEL_s** – Forward Acknowledgment Channel combining method
13 selector.
- 14 **FOR_ACKCH_MODE_s** – Forward Acknowledgment Channel Mode.
- 15 **FOR_ACKCH_WALSH_INDEX_s** – Forward Acknowledgment Channel Walsh Code index.
- 16 **FOR_ACKSCH_INDEX_s** – Forward Acknowledgment Channel subchannel index.
- 17 **FOR_CPCCH_RATE_s** – Forward Common Power Control Channel Rate.
- 18 **FOR_DCCH_MUX_OPTION_s** – Forward Dedicated Control Channel Multiplex Option.
- 19 **FOR_DURATION_s** – A stored variable in the mobile station that contains the duration (in
20 units of 80 ms) of a forward Supplemental Code Channel transmission that begins at time
21 FOR_START_TIME_s.
- 22 **FOR_FCH_MUX_OPTION_s** – Forward Fundamental Channel Multiplex Option.
- 23 **FOR_FCH_RC_s** – Forward Fundamental Channel Radio Configuration.
- 24 **FOR_FRAME_40_MAX_RATE_s** – The maximum data rate for the mobile station's
25 transmission at 40 ms frame length on the Forward Supplemental Channel.
- 26 **FOR_FRAME_80_MAX_RATE_s** – The maximum data rate for the mobile station's
27 transmission at 80 ms frame length on the Forward Supplemental Channel.
- 28 **FOR_GCH_ASSIGNED_s** – Forward Grant Channel assigned indicator.
- 29 **FOR_GCH_WALSH_INDEX_s** – Forward Grant Channel Walsh Index. The Walsh index of
30 the Forward Grant Channel assigned to a mobile station.
- 31 **FOR_LINKED_HDM_SEQ_s** – Storage variable containing the most recent forward sequence
32 number of the *General Handoff Direction Message* to which a *Supplemental Channel*
33 *Assignment Message* forward assignment was linked.
- 34 **FOR_NID_REG_s** – Foreign NID roamer autonomous registration enable.
- 35 **FOR_RCCH_ASSIGNED_s** – Assigned Forward Rate Control Channel. An on or off indicator
36 used to determine if Forward Rate Control Channel is assigned or not.
- 37 **FOR_RCCH_MODE_s** – Forward Rate Control Channel mode.

- 1 **FOR_RCCH_REPETITION_s** – Forward Rate Control Channel Subchannel repetition factor.
- 2 **FOR_RCCH_WALSH_INDEX_s** – Forward Rate Control Channel Walsh code.
- 3 **FOR_RCSCH_INDEX_s** – Forward Rate Control Channel subchannel index.
- 4 **FOR_PDCH_SUPPORTED_s** – Forward Packet Data Channel supported indicator.
- 5 **FOR_PDCH_INCL_s** – Forward Packet Data Channel assigned indicator for each pilot in the
- 6 active set.
- 7 **FOR_RC_s** – Forward Channel Radio Configuration.
- 8 **FOR_SCH_CC_INDEX_s** – Supplemental code channel index used on the Supplemental
- 9 Channel.
- 10 **FOR_SCH_DURATION_s** – A stored variable in the mobile station, which contains the
- 11 duration of a forward Supplemental Channel transmission, which begins at time
- 12 FOR_SCH_START_TIME_s.
- 13 **FOR_SCH_FRAME_LENGTH_s** – The Forward Supplemental Channel frame length.
- 14 **FOR_SCH_RATE_s** – The rate of the Forward Supplemental Channel.
- 15 **FOR_SCH_START_TIME_s** – A stored variable in the mobile station which contains the
- 16 System Time, in units of time specified by START_TIME_UNIT_s, (modulo 32) at which the
- 17 mobile station shall start (or resume) processing Forward Supplemental Channels.
- 18 **FOR_SID_REG_s** – Foreign SID roamer autonomous registration enable.
- 19 **FOR_START_TIME_s** – A stored variable in the mobile station that contains the System
- 20 Time, in units of 80 ms, (modulo 64) at which the mobile station shall start (or resume)
- 21 processing Forward Supplemental Code Channels.
- 22 **FPC_DCCH_CURR_SETPT_s** – Current power control subchannel outer loop setpoint for the
- 23 Forward Dedicated Control Channel.
- 24 **FPC_DCCH_FER_s** – Target frame error rate for the Forward Dedicated Control Channel.
- 25 **FPC_DCCH_MAX_SETPT_s** – Maximum value of the power control subchannel outer loop
- 26 setpoint for the Forward Dedicated Control Channel.
- 27 **FPC_DCCH_MIN_SETPT_s** – Minimum value of the power control subchannel outer loop
- 28 setpoint for the Forward Dedicated Control Channel.
- 29 **FPC_DELTA_SCH_SETPT_s** – The difference between the Fundamental Channel current
- 30 power control subchannel outer loop setpoint and the Supplemental Channel current
- 31 power control subchannel outer loop setpoint.
- 32 **FPC_DELTA_SETPT_s** – The difference between the Fundamental Channel current power
- 33 control subchannel outer loop setpoint and the Dedicated Control Channel current power
- 34 control subchannel outer loop setpoint.
- 35 **FPC_FCH_CURR_SETPT_s** – Current power control subchannel outer loop setpoint for the
- 36 Forward Fundamental Channel.
- 37 **FPC_FCH_FER_s** – Target frame error rate for the Forward Fundamental Channel.

- 1 **FPC_FCH_MAX_SETPT_s** – Maximum value of the power control subchannel outer loop
2 setpoint for the Forward Fundamental Channel.
- 3 **FPC_FCH_MIN_SETPT_s** – Minimum value of the power control subchannel outer loop
4 setpoint for the Forward Fundamental Channel.
- 5 **FPC_MODE_s** – Forward power control operating mode.
- 6 **FPC_MODE_NO_SCH_s** – Forward power control operating mode except during the forward
7 Supplemental Channel assignment interval.
- 8 **FPC_MODE_SCH_s** – Forward power control operating mode during the forward
9 Supplemental Channel assignment interval.
- 10 **FPC_PRI_CHAN_s** – Primary power control subchannel measured channel.
- 11 **FPC_SEC_CHAN_s** – Index of Forward Supplemental Channel to be measured by the
12 secondary power control subchannel.
- 13 **FPC_SCH_CURR_SETPT_s[i]** – Current power control subchannel outer loop setpoint for
14 Forward Supplemental Channel i.
- 15 **FPC_SCH_FER_s[i]** – Target frame error rate for Forward Supplemental Channel i.
- 16 **FPC_SCH_MAX_SETPT_s[i]** – Maximum value of the power control subchannel outer loop
17 setpoint for Forward Supplemental Channel i.
- 18 **FPC_SCH_MIN_SETPT_s[i]** – Minimum value of the power control subchannel outer loop
19 setpoint for Forward Supplemental Channel i.
- 20 **FPC_SETPT_THRESH_s** – Power control subchannel outer loop setpoint report threshold for
21 the Dedicated Control Channel.
- 22 **FPC_SETPT_THRESH_SCH_s** – Power control subchannel outer loop setpoint report
23 threshold for the Supplemental Channel.
- 24 **FRAME_OFFSET_s** – Current Traffic Channel frame offset, in units of 1.25 ms.
- 25 **FULL_BSPM_IND** – Indicates whether mobile station had the complete BSPM information
26 at the time it received the last Full or Differential *BCMC Service Parameters Message*.
- 27 **FUNDICATED_BCMC_IND_s** – Broadcast-Multicast services on Fundicated Channel
28 Indicator.
- 29 **GEN_NGHBR_LST_MSG_SEQ_s** – General Neighbor List Message sequence number.
- 30 **GLOBAL_REDIRECT_s** – *Global Service Redirection Message* sent indicator.
- 31 **GLOB_SERV_REDIR_MSG_SEQ_s** – Global Service Redirection Message sequence number.
- 32 **GRANTED_MODE_s** – Mobile station current granted mode.
- 33 **HASH_KEY** – Hashing function input that determines the return value. Derived from
34 IMSI_O.
- 35 **HDM_SEQ_s** – Last received *Extended Handoff Direction Message*, *General Handoff Direction*
36 *Message*, or *Universal Handoff Direction Message* sequence number.

- 1 **HOME_REG_s** – Home (non-roaming) autonomous registration enable.
- 2 **IGNORE_ESCAM_s** – Identifies whether a mobile station will process the reverse
3 supplemental channel assignment portion of the subsequent *Supplemental Channel*
4 *Assignment Message* or *Reverse Supplemental Channel Assignment Mini Message*.
- 5 **IGNORE_QPCH_s** – Ignore QPCH indicators flag. Indicates whether the mobile station is to
6 ignore its assigned paging indicators on the QPCH while operating in the reduced slot cycle
7 mode if the reduced slot cycle index is -3 or -4.
- 8 **IGNORE_SCAM_s** – Identifies whether a mobile station will process the reverse
9 supplemental code channel assignment portion of the subsequent *Supplemental Channel*
10 *Assignment Message*.
- 11 **IMSI_10_s** – The least significant digit of MNC when the MNC is 3-digit.
- 12 **IMSI_11_12_s** – The 11th and 12th digits of the IMSI used for address matching.
- 13 **IMSI_O_ADDR_NUM_s** – The number of digits in the NMSI of the Operational IMSI (IMSI_O)
14 minus four.
- 15 **IMSI_O_S_s** – The last 10-digits of Operational IMSI (IMSI_O).
- 16 **IMSI_O_11_12_s** – The 11th and 12th digits of the Operational IMSI (IMSI_O).
- 17 **INIT_PWR_s** – Initial power offset for Access Channel probes.
- 18 **LC_STATE_s** – Long code state obtained from the *Sync Channel Message*.
- 19 **LOGICAL_TO_PHYSICAL_MAPPING_TABLE** – This table contains the logical to physical
20 mapping for signaling and user traffic.
- 21 **LP_SEC_s** – Leap seconds count (offset of CDMA system time from UTC).
- 22 **LTM_OFF_s** – Local time offset from UTC, in units of 30 minutes.
- 23 **MAX_ADD_SERV_INSTANCE_s** – Maximum number of additional service reference
24 identifiers allowed in origination.
- 25 **MAX_CAP_SZ_s** – Maximum number of Access Channel frames in an Access Channel
26 message capsule, less 3.
- 27 **MAX_NUM_ALT_SO_s** – The maximum number of alternative service option numbers that
28 the mobile station is allowed to include in the *Origination Message* or in the *Page Response*
29 *Message*.
- 30 **MAX_NUM_PROBE_HO_s** – The maximum number of times that a mobile station is
31 permitted to perform an access probe handoff.
- 32 **MAX_PWR_PUF_s** – Maximum number of PUF probes to be transmitted at maximum mobile
33 station output power during a PUF attempt.
- 34 **MAX_REQ_SEQ_s** – Maximum number of access probe sequences for an Access Channel or
35 Enhanced Access Channel request.
- 36 **MAX_RER_PILOT_LIST_SIZE_s** – Maximum number of pilots to be maintained in the radio
37 environment report pilot list while in the radio environment reporting mode.

- 1 **MAX_RSP_SEQ_s** – Maximum number of access probe sequences for an Access Channel or
 2 Enhanced Access Channel response.
- 3 **MAX_SLOT_CYCLE_INDEX_s** – Maximum value of the slot cycle index allowed by the
 4 current base station. This parameter can take values between 0 and 7, inclusive.
- 5 **MCC_s** – The Mobile Country Code used for address matching.
- 6 **MCC_O_s** – The Mobile Country Code of IMSI_O.
- 7 **MC_RR_PAR_MSG_SEQ_s** – *MC-RR Parameters Message* sequence number.
- 8 **MIN_PILOT_EC_IO_THRESH_s** – Threshold for total E_c/I_o of pilots in the Serving Frequency
 9 Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- 10 **MIN_PILOT_PWR_THRESH_s** – Threshold for total E_c of pilots in the Serving Frequency
 11 Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- 12 **MIN_P_REV_s** – Minimum mobile station protocol revision level required for access to the
 13 CDMA system.
- 14 **MIN_SLOT_CYCLE_INDEX** – Minimum value of the slot cycle index allowed by the current
 15 base station. This parameter can take the values -4 or 0.
- 16 **MIN_TOTAL_PILOT_EC_IO_s** – Total pilot strength threshold for the mobile station to
 17 attempt to demodulate the Forward Traffic Channel on the CDMA Candidate Frequency.
- 18 **MOB_QOS_s** – Indicator of whether the mobile station is allowed to request QoS settings in
 19 the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination*
 20 *Message*.
- 21 **MOB_TERM_s** – Mobile station termination indicator. Set to ‘1’ if the mobile station will
 22 accept mobile station terminated calls in its current roaming status.
- 23 **MSG_PERSIST_s** – Persistence modifier for Access Channel message and Enhanced Access
 24 data transmissions.
- 25 **MS_LAT_s** – The latitude of the mobile station as estimated by the base station.
- 26 **MS_LOC_TSTAMP_s** – The time corresponding to the estimate of mobile station’s latitude
 27 and longitude.
- 28 **MS_LONG_s** – The longitude of the mobile station as estimated by the base station.
- 29 **MS_INIT_POS_LOC_SUP_IND_s** – Mobile station initiated position location determination
 30 supported indicator.
- 31 **MULT_NIDS_s** – Multiple NID storage indicator. Set to ‘1’ if the mobile station may store
 32 more than one entry in SID_NID_LIST_s for each SID.
- 33 **MULT_SIDS_s** – Multiple SID storage indicator. Set to ‘1’ if the mobile station may store
 34 entries in SID_NID_LIST_s having different SIDs.
- 35 **NDSS_ORIG_s** – NDSS Origination Indicator. Indicator used when the mobile station is
 36 NDSS-redirected while originating a call.

- 1 **NEW_BAND_RECORD** – Record carrying information pertaining to a channel on a new
2 band to which the mobile station has hashed. The record includes the following fields:
- 3 • **NEW_BAND_CLASS** – The new band class.
 - 4 • **NEW_FREQ** – The new frequency in the new band class.
- 5 **NGHBR_BAND_s** – Neighbor band class.
- 6 **NGHBR_CONFIG_s** – Neighbor base station channel allocation configuration.
- 7 **NGHBR_FREQ_s** – Neighbor CDMA channel number.
- 8 **NGHBR_LST_MSG_SEQ_s** – *Neighbor List Message* sequence number.
- 9 **NGHBR_MAX_AGE_s** – Neighbor set maximum age for retention in the set.
- 10 **NGHBR_PN_s** – Neighbor base station Pilot Channel PN sequence offset in units of 64 PN
11 chips.
- 12 **NGHBR_REC** – Record containing information about a neighbor base station (see also
13 **NGHBR_REC_LIST**).
- 14 **NGHBR_REC_LIST** – Neighbor base station record list. A descriptive structure used to
15 manage the base station’s information records about neighbor base stations (see also
16 **NGHBR_REC**).
- 17 **NGHBR_SET_ACCESS_INFO_s** – Neighbor Set access handoff or access probe handoff
18 information included indicator.
- 19 **NGHBR_SET_ENTRY_INFO_s** – Neighbor Set access entry handoff information included
20 indicator.
- 21 **NGHBR_SET_SIZE_s** – Size of the Neighbor Set.
- 22 **NGHBR_TIMING_INCL_s** – Indicates that hopping pilot beacon timing information is
23 included.
- 24 **NGHBR_TX_DURATION_s** – Hopping pilot beacon transmit time duration.
- 25 **NGHBR_TX_OFFSET_s** – Hopping pilot beacon transmit time offset.
- 26 **NGHBR_TX_PERIOD_s** – Hopping pilot beacon transmit time period.
- 27 **NID_s** – Network identification. A network is a subset of the base stations within a wireless
28 system.
- 29 **NOM_PWR_s** – Nominal transmit power offset. A correction factor to be used by mobile
30 stations in the open loop power estimate.
- 31 **NUM_FCCCH_s** – Number of Forward Common Control Channels supported on the current
32 CDMA channel.
- 33 **NUM_PREAMBLE_s** – Traffic Channel preamble length for hard handoff.
- 34 **NUM_QPCH_s** – Number of Quick Paging Channels supported on the current CDMA
35 channel.

- 1 **NUM_REV_CODES_s** – A storage variable in the mobile station that contains the number of
 2 Reverse Supplemental Code Channels that will be utilized in the next Reverse
 3 Supplemental Code Channel transmission beginning at time REV_START_TIME_s. A value
 4 of 0 indicates no Reverse Supplemental Code Channel transmission will be permitted (i.e.,
 5 there is no pending Reverse Supplemental Code Channel transmission).
- 6 **NUM_SOFT_SWITCHING_FRAMES_s** – Number of frames for R-CQICH soft switching. The
 7 duration of the cell switching period, during which the mobile station is to transmit the cell
 8 switch sequence on the R-CQICH channel when it switches between two pilots which are in
 9 different groups.
- 10 **NUM_SOFT_SWITCHING_FRAMES_CHM_s** – Number of frames for R-CQICH soft switching
 11 while in Control Hold. The duration of the cell switching period, during which the mobile
 12 station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH
 13 channel when it switches between two pilots which are in different groups.
- 14 **NUM_SOFT_SWITCHING_SLOTS_s** – Number of slots per frame for R-CQICH soft switching.
 15 The duration of the cell switching slots within a switching frame, during which the mobile
 16 station is to transmit the cell switch indication by using Walsh cover of target on the R-
 17 CQICH channel when it switches between two pilots which are in different groups.
- 18 **NUM_SOFT_SWITCHING_SLOTS_CHM_s** – Number of slots per frame for R-CQICH soft
 19 switching while in Control Hold. The duration of the cell switching slots within a switching
 20 frame, during which the mobile station, while in Control Hold, is to transmit the cell switch
 21 indication by using Walsh cover of target on the R-CQICH channel when it switches
 22 between two pilots which are in different groups.
- 23 **NUM_SOFTER_SWITCHING_FRAMES_s** – Number of frames for R-CQICH softer switching.
 24 The duration of the cell switching period, during which the mobile station is to transmit the
 25 cell switch sequence on the R-CQICH channel when it switches between two pilots which
 26 are in the same group.
- 27 **NUM_SOFTER_SWITCHING_FRAMES_CHM_s** – Number of frames for R-CQICH softer
 28 switching while in Control Hold. The duration of the cell switching period, during which the
 29 mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-
 30 CQICH channel when it switches between two pilots which are in the same group.
- 31 **NUM_SOFTER_SWITCHING_SLOTS_s** – Number of slots per frame for R-CQICH softer
 32 switching. The duration of the cell switching slots within a switching frame. During this
 33 time the mobile station is to transmit the cell switch indication by using the Walsh cover of
 34 the target sector in the cell switch sequence on the R-CQICH channel when it switches
 35 between two pilots which are in the same group.
- 36 **NUM_SOFTER_SWITCHING_SLOTS_CHM_s** – Number of slots per frame for R-CQICH softer
 37 switching while in Control Hold. The duration of the cell switching slots within a switching
 38 frame. During this time the mobile station, while in Control Hold, is to transmit the cell
 39 switch indication by using the Walsh cover of the target sector in the cell switch sequence
 40 on the R-CQICH channel when it switches between two pilots which are in the same group.
- 41 **NUM_STEP_s** – Number of access probes or enhanced access probes in a single access
 42 probe sequence or enhanced access probe sequence.

- 1 **NUM_SYNC_ID_SUPPORTED** – Number of SYNC_IDs supported by the mobile station.
- 2 **OTHER_REPORTED_LIST** – List of other pilots that have pilot strengths exceeding T_ADD
3 and that are not included in ACCESS_HO_LIST.
- 4 **PACA_s** – PACA call indicator. Set to enabled to indicate that the mobile station is waiting
5 for a priority access channel assignment; otherwise, set to disabled. In Sections 2 and 3,
6 PACA_s = 0 is equivalent to setting PACA_s to disabled and PACA_s = 1 is equivalent to setting
7 PACA_s to enabled.
- 8 **PACA_CANCEL** – PACA call cancel indicator. Set to ‘1’ when the mobile station is directed
9 by the user to cancel the PACA call; otherwise, set to ‘0’.
- 10 **PACA_SID_s** – PACA system identifier. Equal to the SID of the system on which the mobile
11 station originated a PACA call.
- 12 **PACA_TIMEOUT_s** – PACA state timer duration. Specifies how long the mobile station
13 should wait for a *PACA Message* from the base station.
- 14 **PACKET_ZONE_ID_s** – Packet data services zone identifier of the base station.
- 15 **PAGECH_s** – Current CDMA Paging Channel number.
- 16 **PAGED** – Indicator for a page match detected while the mobile station is in the *System*
17 *Access State*.
- 18 **PAGE_CHAN_s** – Number of Paging Channels supported on the current CDMA channel.
- 19 **PAM_SZ_s** – Number of frames in the Access Channel or Enhanced Access Channel
20 preamble, less 1.
- 21 **PARAMETER_REG_s** – Parameter-change registration enable.
- 22 **PDCH_CHM_SUPPORTED_s** – Indicates whether the base station supports PDCH Control
23 Hold Mode operation.
- 24 **PDCH_GROUP_IDENTIFIER_s** – A three-bit Packet Data Channel group identifier. It is used
25 to determine whether the mobile station should use the softer or soft reselection
26 parameters when repointing between pilots in its Active Set (See [3]).
- 27 **PDCH_SOFT_SWITCHING_DELAY_s** – PDCH soft switching delay. The minimum
28 interruption seen by the mobile station when the mobile station is to transmit the cell
29 switch sequence on the R-CQICH channel when it switches between two pilots which are in
30 different groups.
- 31 **PDCH_SOFTSWITCHING_DELAY_s** – PDCH softer switching delay. The minimum
32 interruption seen by the mobile station when the mobile station is to transmit the cell
33 switch sequence on the R-CQICH channel when it switches between two pilots which are in
34 the same group.
- 35 **PERIODIC_SEARCH_s** – Flag to indicate if the mobile station is to perform a periodic search
36 on the Candidate Frequency.
- 37 **PGSLOT** – Value obtained from the hashing function, used to determine the mobile
38 station’s assigned Paging Channel slots.

- 1 **PILOT_ARRIVAL** – Time of occurrence, as measured at the mobile station antenna
2 connector, of the earliest arriving usable multipath component of the pilot. The arrival time
3 is measured relative to the mobile station's time reference.
- 4 **PILOT_INFO_REQ_SUPPORTED_s** – Pilot information request supported indicator.
- 5 **PILOT_GATING_RATE_s** – Reverse pilot gating rate on the Reverse Pilot Channel.
- 6 **PILOT_GATING_USE_RATE** – Reverse pilot gating rate enable indicator. It indicates
7 whether or not the Reverse Pilot Channel is gated.
- 8 **PILOT_INC_s** – Pilot PN sequence offset index increment. The interval between pilots, in
9 units of 64 PN chips, for base stations in a system.
- 10 **PILOT_PN_s** – Pilot Channel PN sequence offset, in units of 64 PN chips, for a base station.
- 11 **PILOT_PN_PHASE** – Calculated Pilot Channel PN phase, in chips, including the PN
12 sequence offset and the arrival time relative to the mobile station's time reference.
- 13 **PILOT_REPORT_s** – Pilot reporting indicator.
- 14 **PLCM_TYPE_s** – Public long code mask type. Indicates the long code mask generation
15 algorithm when Public Long Code Mask is in use. See 2.3.6.
- 16 **POTENTIAL_CDMACH_s** – The CDMA Channel number that could potentially be used by
17 the mobile station.
- 18 **POWER_DOWN_REG_s** – Power down registration enable indicator.
- 19 **POWER_UP_REG_s** – Power up registration enable indicator.
- 20 **PPSMM_PERIOD_s** – The period used in the Periodic Serving Frequency Pilot Report
21 Procedure.
- 22 **PRAT_s** – Data rate of the Paging Channels.
- 23 **P_REV_s** – Protocol revision level supported by a base station.
- 24 **P_REV_IN_USE_s** – Protocol revision level currently in use by a mobile station.
- 25 **PREF_MSID_TYPE_s** – Preferred mobile station identifier field type.
- 26 **PREVIOUS_ACTIVE_PILOT_s** – Identifies the pilot, if any, which was in the Active Set
27 immediately prior to the current pilot in the Active Set, during the current access attempt.
- 28 **PRI_NGHBR_LST_s** – *Private Neighbor List Message* sent indicator.
- 29 **PRI_NGHBR_PN** – Private Neighbor base station Pilot Channel PN sequence offset in units
30 of 64 PN chips.
- 31 **PRI_NGHBR_REC** – Record containing information about a private neighbor base station
32 (see also PRI_NGHBR_REC_LIST).
- 33 **PRI_NGHBR_REC_LIST** – Private neighbor base station record list. A descriptive structure
34 used to manage the base station's information records about private neighbor base stations
35 (see also PRI_NGHBR_REC).
- 36 **PRI_NGHBR_LST_MSG_SEQ_s** – Private Neighbor List Message sequence number.

- 1 **PROBE_BKOFF_s** – Access Channel probe backoff range, in slots.
- 2 **PROBE_PN_RAN_s** – Range for hashing function selection of the delay prior to transmission
3 of Access Channel probes. Value is $\log_2(\text{range} + 1)$.
- 4 **PSIST_s** – Persistence value for the mobile station's overload class.
- 5 **PUF_FREQ_INCL_s** – Flag to indicate whether the mobile station is to transmit a PUF probe
6 on the serving frequency or on a target frequency.
- 7 **PUF_INIT_PWR_s** – Power increase (in dB) of the first PUF pulse in a PUF attempt.
- 8 **PUF_INTERVAL_s** – Number of frames between the start of each PUF probe.
- 9 **PUF_PULSE_SIZE_s** – Duration of a PUF pulse in power control groups.
- 10 **PUF_PWR_STEP_s** – Amount (in dB) by which the mobile station is to increment the power
11 of a PUF pulse above nominal power from one PUF pulse to the next.
- 12 **PUF_SETUP_SIZE_s** – Number of power control groups within a PUF probe before the
13 transmission of the PUF pulse.
- 14 **PUF_SF_CDMABAND_s** – Serving Frequency CDMA band class.
- 15 **PUF_SF_CDMACH_s** – Serving Frequency CDMA Channel number.
- 16 **PUF_TF_CDMABAND_s** – Target Frequency CDMA band class.
- 17 **PUF_TF_CDMACH_s** – Target Frequency CDMA Channel number.
- 18 **PUF_TX_PWR_s** – Mobile station's output power for the PUF pulse.
- 19 **PWR_CNTL_STEP_s** – Power control step size assigned by the base station that the mobile
20 station is to use for closed loop power control.
- 21 **PWR_PERIOD_ENABLE_s** – Forward power control periodic reporting enabled indicator.
- 22 **PWR_REP_DELAY_s** – Power report delay. The period that the mobile station waits following
23 an autonomous *Power Measurement Report* before restarting frame counting for power
24 control purposes.
- 25 **PWR_REP_FRAMES_s** – Power control reporting frame count. The number of frames over
26 which the mobile station is to count frame errors. Value is $2 \times \log_2(\text{frames} / 5)$.
- 27 **PWR_REP_THRESH_s** – Power control reporting threshold. The number of bad frames to be
28 received in a measurement period before the mobile station is to generate a *Power*
29 *Measurement Report Message*.
- 30 **PWR_STEP_s** – Power increment for successive access probes, in units of 1.0 dB.
- 31 **PWR_THRESH_ENABLE_s** – Forward power control threshold reporting enabled indicator.
- 32 **QOF_ID_s** – Quasi-orthogonal function index on the Supplemental Channel.
- 33 **QoF Set** – QoF Set is a set of Quasi-orthogonal functions generated by applying the same
34 quasi-orthogonal masking function to the set of all Walsh functions.
- 35 **QPAGECH_s** – Current Quick Paging Channel number.

- 1 **QPCH_CCI_SUPPORTED_s** – Flag to indicate if configuration change indicators are
2 supported on the Quick Paging Channel.
- 3 **QPCH_POWER_LEVEL_PAGE_s** – Relative power level of the transmitted Quick Paging
4 Channel Paging Indicator modulation symbols, relative to the Forward Pilot Channel.
- 5 **QPCH_POWER_LEVEL_CONFIG_s** – Relative power level of the transmitted Quick Paging
6 Channel Configuration Change Indicator modulation symbols, relative to the Forward Pilot
7 Channel.
- 8 **QPCH_RATE_s** – Indicator rate of the current Quick Paging Channel(s).
- 9 **QPCH_SUPPORTED_s** – Flag to indicate if the Quick Paging Channel is supported by the
10 base station.
- 11 **RA** – Random access channel number. The Access Channel number generated (pseudo-
12 randomly) by the mobile station.
- 13 **RAND_s** – Authentication random challenge value.
- 14 **RANDC** – The eight most-significant bits of the random challenge value used by the mobile
15 station.
- 16 **RANDOM_TIME** – Random time. A portion of SYS_TIME used to seed the random number
17 generator.
- 18 **RC_CAP_REQUESTED_s** – Radio Configuration Capability indicator. When set to “1” the
19 mobile station shall include the Radio Configuration capabilities that it supports in the
20 *Origination Message and Page Response Message*.
- 21 **RCCCH_SLOT_s** – See [2].
- 22 **RCCCH_SLOT_OFFSET1_s** – See [2].
- 23 **RCCCH_SLOT_OFFSET2_s** – See [2].
- 24 **REDIRECTION_s** – Service redirection indicator. Set to enabled to indicate that service
25 redirection is currently in effect; otherwise, set to disabled.
- 26 **REDIRECT_REC_s** – Holds the service redirection criteria specified in the redirection record
27 of the most recently received *Extended Global Service Redirection Message, Global Service*
28 *Redirection Message* or *Service Redirection Message*.
- 29 **REDIRECT_REC_LIST** – An array of redirection records selected from the most recently
30 received *Extended Global Service Redirection Message*. Each redirection record in this array
31 specifies a redirection criteria. See REDIRECT_REC_s.
- 32 **REG_COUNT_s** – The timer-based registration counter.
- 33 **REG_COUNT_MAX_s** – Timer-based registration count limit. The timer-based registration
34 counter expiration value computed from REG_PRD_r.
- 35 **REG_DIST_s** – Registration distance. Distance from last registration that causes a distance-
36 based registration to occur.
- 37 **REG_ENABLED_s** – Autonomous registrations enabled indicator.

- 1 **REG_NID_s** – Network identification corresponding to the base station where the mobile
2 station is considered registered upon receiving confirmation of delivery of *Registration*
3 *Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 4 **REG_REG_ZONE_s** – Registration zone number corresponding to the base station where the
5 mobile station is considered registered upon receiving confirmation of delivery of
6 *Registration Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 7 **REG_SECURITY_RESYNC** – Security re-sync required registration indicator.
- 8 **REG_SID_s** – System identification corresponding to the base station where the mobile
9 station is considered registered upon receiving confirmation of delivery of *Registration*
10 *Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 11 **REGISTERED_s** – Mobile station registered indicator.
- 12 **REG_PRD_s** – Registration period. The time interval between timer-based registrations.
13 Value is $4 \times \log_2(\text{time} / 0.08 \text{ s})$.
- 14 **REG_PERSIST_s** – Persistence modifier for registration accesses (except ordered registrations).
- 15 **REG_ZONE_s** – Registration zone number of the base station.
- 16 **REG_ZONE_TIMER_s** – Zone timer length corresponding to the base station where the
17 mobile station is considered registered upon receiving confirmation of delivery of
18 *Registration Message*, *Origination Message*, *Page Response Message*, or *Reconnect Message*.
- 19 **REJECT_UZID_s** – User Zone identifier of the User Zone rejected by the base station.
- 20 **RELEASE_TO_IDLE_IND_s** – Indicator of whether the mobile station is allowed to transition
21 directly to the *Mobile Station Idle State* upon releasing all the dedicated channels.
- 22 **RER_MAX_NUM_MSG_s** – The maximum number of Radio Environment Messages that the
23 mobile station is permitted to transmit while in the radio environment reporting mode.
- 24 **RER_MODE_ENABLED** – Flag that indicates whether the radio environment reporting
25 mode is currently enabled at the mobile station.
- 26 **RER_PILOT_LIST** – Radio environment report pilot list used while in the radio environment
27 reporting mode.
- 28 **RER_MODE_SUPPORTED_s** – Base station support of radio environment reporting mode
29 indicator.
- 30 **RESELECT_INCLUDED_s** – System reselection information included indicator. When this is
31 set to ‘1’, the system reselection procedure is enabled.
- 32 **RESPOND_IND_s** – Respond Requested Indicator. Indicates if the mobile station is to
33 acknowledge direct channel assignment by sending a page response message or a
34 reconnect message in unassured mode.
- 35 **RESQ_ENABLED_s** – Call rescue feature enabled indicator. Flag to indicate if the call
36 rescue feature is enabled in the network.

1 **RESQ_ALLOWED_TIME_s** – Call rescue allowed timer. Specifies the maximum interval that
 2 the mobile station has to begin a call rescue soft handoff attempt, after the call rescue
 3 delay timer expires.

4 **RESQ_ATTEMPT_TIME_s** – Call rescue attempt timer. Specifies the maximum time a
 5 mobile station is allowed to keep its transmitter re-enabled while waiting to receive N_{3m}
 6 consecutive good frames during a call rescue soft handoff attempt.

7 **RESQ_CODE_CHAN_s** – The code channel index of the Rescue Channel for neighbor base
 8 stations that are configured with a Rescue Channel.

9 **RESQ_DELAY_TIME_s** – Call rescue delay timer. Specifies the minimum delay before the
 10 mobile station can attempt call rescue soft handoff, after the mobile station disables its
 11 transmitter due to receiving N_{2m} consecutive bad frames or declaring an acknowledgment
 12 failure.

13 **RESQ_MIN_PERIOD_s** – Minimum time between consecutive call rescues. Specifies the
 14 minimum time after a successful call rescue (i.e. receipt of N_{3m} consecutive good frames
 15 by the mobile station after the rescue attempt timer is enabled) before any subsequent call
 16 rescue attempts can be initiated.

17 **RESQ_NUM_PREAMBLE_RC1_RC2_s** – The Traffic Channel preamble length for Call Rescue
 18 Soft Handoff when operating in Radio Configuration 1 or 2.

19 **RESQ_NUM_PREAMBLE_s** – The Traffic Channel preamble length for Call Rescue Soft
 20 Handoff when operating in Radio Configuration greater than 2.

21 **RESQ_NUM_TOT_TRANS_20MS_s** – The required number of transmissions of a regular
 22 PDU before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.

23 **RESQ_NUM_TOT_TRANS_5MS_s** – The required number of transmissions of a mini PDU
 24 before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.

25 **RESQ_POWER_DELTA_s** – The power level adjustment to be applied to the last closed-loop
 26 power level when re-enabling the transmitter for call rescue soft handoff.

27 **RESQ_QOF_s** – The Quasi-Orthogonal Function mask identifier of the Rescue Channel for
 28 neighbor base stations that are configured with a Rescue Channel.

29 **RESUME_PREAMBLE_s** – A storage variable in the mobile station that contains the size of
 30 the preamble that shall be transmitted on a Reverse Supplemental Code Channel at the
 31 beginning of transmission on a Reverse Supplemental Code Channel when resuming
 32 transmission following an interruption when discontinuous transmission is occurring.

33 **RETRY_DELAY_s[i]** – A storage variable in the mobile station that contains the system time
 34 before which the mobile station may not transmit a specific message. The type of message
 35 that cannot be transmitted is specified by **RETRY_TYPE**, represented here by *i*. A
 36 **RETRY_DELAY_s[i]** value of 0 indicates no retry delay is in effect, and a value of ‘1111111’
 37 indicates an infinite retry delay.

38 **RETRY_DELAY_UNIT_s** – The units for the value of **RETRY_DELAY_s**. Possible values are
 39 1000ms and 60000ms.

40 **RETRY_DELAY_VALUE_s** – The unitless value of the retry delay.

- 1 **RETRY_TYPE_s** – The retry delay type. It specifies the type of message to which the retry
2 delay value applies. If set to a value of 0, it indicates that all retry delay values should be
3 cleared.
- 4 **RETURN_CAUSE_s** – Reason for the mobile station registering or accessing the system.
- 5 **RETURN_IF_FAIL_s** – Return if fail indicator. Set to ‘1’ to indicate that mobile station is to
6 return to the system from which it was redirected if it fails to acquire service on a system
7 using specified redirection criteria. Otherwise, set to ‘0’.
- 8 **RETURN_IF_HANDOFF_FAIL_s** – Return if handoff fail indicator. Indicates if the mobile
9 station is to resume using the Active Set on the Serving Frequency following an
10 unsuccessful hard handoff attempt.
- 11 **REV_DCCH_MUX_OPTION_s** – Reverse Dedicated Control Channel Multiplex Option.
- 12 **REV_DTX_DURATION_s** – Maximum duration of time in units of 20 ms that the mobile
13 station is allowed to stop transmitting on a Reverse Supplemental Code Channel within the
14 reverse assignment duration.
- 15 **REV_DURATION_s** – A stored variable in the mobile station that contains the duration (in
16 units of 80 ms) of the Reverse Supplemental Code Channel transmission that will begin at
17 time REV_START_TIME_s.
- 18 **REV_FCH_GATING_MODE_s** – The reverse Fundamental Traffic Channel gating mode in
19 Radio Configurations 3, 4, 5, and 6 where 50% of the PCGs in the 1500 bps and 1800 bps
20 frames are gated off (see [2]). Set to ‘1’ if the mobile station is operating in the reverse
21 fundamental channel gating mode.
- 22 **REV_FCH_MUX_OPTION_s** – Reverse Fundamental Channel Multiplex Option.
- 23 **REV_FCH_RC_s** – Reverse Fundamental Channel Radio Configuration.
- 24 **REV_FRAME_40_MAX_RATE_s** – The maximum data rate for the mobile station's
25 transmission at 40 ms frame length on the Reverse Supplemental Channel.
- 26 **REV_FRAME_80_MAX_RATE_s** – The maximum data rate for the mobile station's
27 transmission at 80 ms frame length on the Reverse Supplemental Channel.
- 28 **REV_LINKED_HDM_SEQ_s** – Storage variable containing the most recent reverse sequence
29 number of the *General Handoff Direction Message* to which a *Supplemental Channel*
30 *Assignment Message* reverse assignment was linked.
- 31 **REV_PDCH_AUTO_ALLOWED_s[i]** – Reverse Packet Data Channel Autonomous
32 Transmission allowed indicator. An on or off indicator used to identify whether
33 autonomous transmission is allowed or not allowed for each SR_ID.
- 34 **REV_PDCH_BOOST_ALLOWED_s[i]** – Reverse Packet Data Channel boost allowed indicator.
35 An on or off indicator that identifies whether traffic to pilot ratio boosting is allowed or not
36 allowed for each SR_ID.
- 37 **REV_PDCH_BOOST_OVERSHOOT_s** – Reverse Packet Data Channel Boost Overshoot.
- 38 **REV_PDCH_BUFFER_SIZE_s[i]** – Reverse Packet Data Buffer size. An array of buffer sizes
39 that correspond to the buffer status.

- 1 **REV_PDCH_DEFAULT_PERSISTENCE_s** – Reverse Packet Data Default Persistence. The
2 initial default persistence value.
- 3 **REV_PDCH_GRANT_PRECEDENCE_s** – Reverse Packet Data Channel Grant
4 Precedence Indicator.
- 5 **REV_PDCH_INIT_TARGET_TPR_s** – Reverse Packet Data Channel Initial Target for Traffic
6 to pilot ratio. The initial target traffic to pilot ratio.
- 7 **REV_PDCH_MAX_AUTO_TPR_s** – The maximum traffic to pilot ratio for autonomous
8 transmission.
- 9 **REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s** – Maximum Allowed Reverse
10 Packet Data Channel encoder packet size.
- 11 **REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET** – Maximum supported
12 Reverse Packet Data Channel encoder packet size by the mobile station.
- 13 **REV_PDCH_MAX_TARGET_TPR_s** – Reverse Packet Data Maximum Target Traffic to Pilot
14 Ratio. The maximum target traffic to pilot ratio that is allowed.
- 15 **REV_PDCH_MSIB_SUPPORTED_s** – Reverse Packet Data Channel Mobile Station Indicator
16 Supported Bit.
- 17 **REV_PDCH_MUX_OPTION_HIGH_RATE_s** – Reverse Packet Data Channel Multiplex
18 Option for higher data rates indicator.
- 19 **REV_PDCH_MUX_OPTION_LOW_RATE_s** – Reverse Packet Data Channel Multiplex Option
20 for lower data rates indicator.
- 21 **REV_PDCH_NUM_ARQ_ROUNDS_BOOST_s** – The maximum number of ARQ rounds for
22 boosted transmission that can be performed on the Reverse Packet Data Channel.
- 23 **REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s** – The maximum number of ARQ rounds for
24 non-boosted transmission that can be performed on the Reverse Packet Data Channel.
- 25 **REV_PDCH_QUICK_START_THRESH_s** – Reverse Packet Data Quick Start Threshold. The
26 Quick start threshold for the Reverse Packet Data Control Channel.
- 27 **REV_PDCH_RC** – Reverse Packet Data Channel radio configuration.
- 28 **REV_PDCH_RESET_PERSISTENCE_s** – Reverse Packet Data Channel Reset Persistence.
29 Determines the value of current persistence [3] at the end of a non-persistent grant for the
30 Reverse Packet Data Channel.
- 31 **REV_PDCH_REQCH_TRIGGER_s[i]** – Reverse Packet Data Request Channel Trigger. The
32 following parameters are contained in this array and will be triggered for the REQCH.
- 33 • REV_REQCH_MIN_DURATION – Minimum duration between REQCH messages for
34 this SR_ID.
 - 35 • REV_REQCH_USE_BUFFER_REPORTS – An on or off indicator used to allow buffer
36 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 reporting.
- 10 **REV_PDCH_SOFT_HANDOFF_RESET_IND_s** – Reverse Packet Data Channel Soft Handoff
11 Reset Indicator. An indicator used to determine whether the Reverse Packet Data Channel
12 control function must be initialized when soft selection is to occur or not.
- 13 **REV_PDCH_STEP_DOWN_s[i]** – Reverse Packet Data Channel Step “down” for rate
14 control.
- 15 **REV_PDCH_STEP_UP_s[i]** – Reverse Packet Data Channel Step “up” for rate
16 control.
- 17 **REV_PDCH_TABLE_SEL_s** – Reverse Packet Data Channel Table selector.
- 18 **REV_PDCH_TPR_BOOSTED_s[i]** – Reverse Packet Data Traffic to Pilot Ratio Boosted. An
19 array indicating the traffic to pilot ratio for boosted traffic.
- 20 **REV_PDCH_TPR_NORMAL_s[i]** – Reverse Packet Data Channel Traffic to Pilot Normal. An
21 array indicating the traffic to pilot ratio for non-boosted traffic.
- 22 **REV_PWR_CNTL_DELAY_s** – The reverse link power control delay for the reverse
23 fundamental channel gating mode in Radio Configurations 3, 4, 5, and 6 and the gated
24 preamble transmission on the Enhanced Access Channel or the Reverse Common Control
25 Channel. The delay is the time between the end of the reverse link PCG and the beginning
26 of the forward link PCG minus one, when the round trip delay is zero.
- 27 **REV_RC_s** – Reverse Channel Radio Configuration.
- 28 **REV_REQCH_ADJ_GAIN_s** – Reverse Request Channel Adjustment Gain.
- 29 **REV_REQCH_HEADROOM_DURATION_s** – Reverse Request Channel minimum power
30 headroom update trigger interval.
- 31 **REV_REQCH_MAX_POWER_UPDATE_DURATION_s** – Reverse Request Channel
32 maximum power headroom update trigger interval.
- 33 **REV_REQCH_POWER_HEADROOM_DECREASE_s** – Reverse Request Channel Power
34 headroom decrease delta to trigger power report.
- 35 **REV_REQCH_POWER_HEADROOM_INCREASE_s** – Reverse Request Channel Power
36 headroom increase delta to trigger power report.

- 1 **REV_REQCH_QUICK_REPEAT_ALLOWED_s** – Reverse Request Channel Quick Repeat
2 Allowed indicator.
- 3 **REV_SCH_DTX_DURATION_s** – Maximum duration of time in units of 20 ms that the
4 mobile station is allowed to stop transmitting on a Reverse Supplemental Channel within
5 the reverse assignment duration.
- 6 **REV_SCH_DURATION_s** – A stored variable in the mobile station which contains the
7 duration of the Reverse Supplemental Channel transmission which will begin at time
8 REV_SCH_START_TIME_s.
- 9 **REV_SCH_FRAME_LENGTH_s** – The Reverse Supplemental Channel frame length.
- 10 **REV_SCH_RATE_s** – The rate of the Reverse Supplemental Channel.
- 11 **REV_SCH_START_TIME_s** – A stored variable in the mobile station which contains the
12 System Time, in units of time specified by START_TIME_UNIT_s, (modulo 32) at which the
13 mobile station shall start (or resume) processing Reverse Supplemental Channels.
- 14 **REV_SPICH_ADJ_GAIN_s** – Reverse Secondary Pilot Channel Adjustment Gain.
- 15 **REV_SPICH_EP_SIZE_s** – Minimum Encoder Packet Size for which the Reverse
16 Secondary Pilot Channel is used.
- 17 **REV_START_TIME_s** – A stored variable in the mobile station that contains the next 80 ms
18 frame boundary (modulo 64) on which the mobile station is assigned to start Reverse
19 Supplemental Code Channel transmission.
- 20 **REV_WALSH_ID_s** – Reverse Supplemental Channel Walsh cover Identifier.
- 21 **RLGAIN_ACKCH_PILOT_s** – Reverse Acknowledgment Channel to pilot adjustment
22 gain.
- 23 **RLGAIN_CQICH_PILOT_s** – Reverse Channel Quality Indicator Channel to pilot
24 adjustment gain.
- 25 **RLGAIN_PDCCH_PILOT_s** – Reverse Packet Data Channel to pilot adjustment gain.
- 26 **RLGAIN_REQCH_PILOT_s** – Reverse Request Channel to pilot adjustment gain.
- 27 **RLGAIN_SPICH_PILOT_s** – Reverse Secondary Pilot Channel to pilot adjustment
28 gain.
- 29 **RN_HASH_KEY_s** – Name of an internal variable having the same value as the mobile
30 station's ESN. This variable is used by procedures defined in [3].
- 31 **ROAM_INDI_s** – Enhanced roaming indicator used for mobile station roaming condition
32 display.
- 33 **RS** – Inter-probe sequence backoff. The delay in slots generated (pseudorandomly) by the
34 mobile station following an unsuccessful access probe sequence or prior to the first access
35 probe in a response attempt.
- 36 **RSC_END_TIME** – Reduced slot cycle mode end time. The system time at which a mobile
37 station operating in the reduced slot cycle mode will exit the mode.

- 1 **RSC_MODE_ENABLED** – Mobile Station flag that indicates whether reduced slot cycle
2 mode is enabled.
- 3 **RSCI_s** – Reduced slot cycle index.
- 4 **RT** – Inter-probe backoff. The delay in slots generated (pseudorandomly) by the mobile
5 station following an unacknowledged access probe.
- 6 **RTC_NOM_PWR_s** – Reverse Traffic Channel Nominal Power. The nominal power to be used
7 by the mobile station for its initial transmission on the Reverse Traffic Channel when Direct
8 Channel Assignment is used.
- 9 **RTC_NOM_PWR_USE_IND** – Reverse Traffic Channel Nominal Power Used Indicator.
10 Indicates if the mobile station uses RTC_NOM_PWR_s. See RTC_NOM_PWR_s.
- 11 **SCAM_FOR_DURATION_MODE_s** – Indicator for a specific or an indefinite Forward
12 Supplemental Code Channel assignment duration.
- 13 **SCAM_FOR_ORDER_s** – The stop or start command set by a *Supplemental Channel*
14 *Assignment Message* that is linked to a *General Handoff Direction Message*.
- 15 **SCAM_REV_DURATION_MODE_s** – Indicator for a specific or an indefinite Reverse
16 Supplemental Code Channel assignment duration.
- 17 **SCH_BAD_FRAMES_s** – Forward Supplemental Channel bad frames count. The number of
18 received bad Forward Supplemental Channel frames.
- 19 **SCH_TOT_FRAMES_s** – Total Forward Supplemental Channel frames received. The total
20 number of received Forward Supplemental Channel frames, counted for Forward Traffic
21 Channel power control.
- 22 **SCRM_SEQ_NUM_s** – Storage variable containing the most recently transmitted
23 *Supplemental Channel Request Message* sequence number.
- 24 **SEARCH_MODE_s** – Search mode to be used in a search on the Candidate Frequency.
- 25 **SEARCH_OFFSET_s** – Time offset of the start of the first search from the action time of the
26 *Candidate Frequency Search Request Message* or the *Candidate Frequency Search Control*
27 *Message* that starts a search.
- 28 **SEARCH_PERIOD_s** – Period for search on the Candidate Frequency.
- 29 **SEARCH_PRIORITY_s** – Neighbor Pilot Channel search priority.
- 30 **SEARCH_PRIORITY_INCL_s** – Search priorities included indicator.
- 31 **SEARCH_TIME_RESOLUTION_s** – Unit of delay used in the *Candidate Frequency Search*
32 *Report Message* to report the total and maximum times away from the Serving Frequency.
- 33 **SENDING_BSPM_s** – *BCMC Service Parameters Message* is being transmitted indicator.
- 34 **SENDING_RAND_s** – *ANSI-41 RAND Message* sent indicator.
- 35 **SERV_NEG_s** – Service negotiation indicator. Indicates whether the mobile station is to use
36 service negotiation or service option negotiation.

- 1 **SERV_REQ_NUM_s** – Service request sequence number. Sequence number to use when
2 requesting a new service configuration.
- 3 **SERVSYS_s** – Selected serving system indicator for Band Class 0. Set to SYS_A if the mobile
4 station operates in system A; otherwise, set to SYS_B.
- 5 **SETTING_SEARCH_WIN** – SRCH_WIN_NGHBR Setting flag. Set to ‘1’ if the mobile station
6 shall set the SRCH_WIN_NGHBR field of each NGHBR_REC to SEARCH_WIN_N_s for all
7 NGHBR_SET_SIZE_s entries upon receiving the *System Parameters Message*.
- 8 **SF_ADD_INTERCEPT_s** – Intercept of the handoff add criterion for the Serving Frequency,
9 stored during hard handoff.
- 10 **SF_CDMABAND_s** – Serving Frequency CDMA band class, stored during hard handoff.
- 11 **SF_CDMACH_s** – Serving Frequency CDMA Channel number, stored during hard handoff.
- 12 **SF_CODE_CHAN_LIST_s** – Serving Frequency Code Channel List, stored during hard
13 handoff.
- 14 **SF_DROP_INTERCEPT_s** – Intercept of the handoff drop criterion for the Serving Frequency,
15 stored during hard handoff.
- 16 **SF_ENCRYPT_MODE_s** – Message encryption indicator for the Serving Frequency, stored
17 during hard handoff.
- 18 **SF_FRAME_OFFSET_s** – Traffic Channel frame offset used on the Serving Frequency, stored
19 during hard handoff.
- 20 **SF_NOM_PWR_s** – Nominal transmit power offset used on the Serving Frequency, stored
21 during hard handoff.
- 22 **SF_NOM_PWR_EXT_s** – Extended nominal transmit power offset indicator for the Serving
23 Frequency, stored during hard handoff.
- 24 **SF_P_REV_s** – Protocol revision level supported by the base station on the Serving
25 Frequency.
- 26 **SF_P_REV_IN_USE_s** – Protocol revision level currently used by the mobile station on the
27 Serving Frequency.
- 28 **SF_PLCM_TYPE_s** – Public long code mask type for the Serving Frequency, stored during
29 hard handoff.
- 30 **SF_PLCM_39_s** – 39-bit public long code mask specified by the base station for the Serving
31 Frequency, stored during hard handoff.
- 32 **SF_PRIVATE_LCM_s** – Private long code mask indicator for the Serving Frequency, stored
33 during hard handoff.
- 34 **SF_PVTLCM_42_s** – Private long code mask for the Serving Frequency, stored during hard
35 handoff.
- 36 **SF_SERV_NEG_s** – Service negotiation indicator for the Serving Frequency, stored during
37 hard handoff.

- 1 **SF_SERVICE_CONFIG_s** – Service configuration (service configuration record and non-
2 negotiable service configuration record) for the Serving Frequency.
- 3 **SF_SOFT_SLOPE_s** – Slope of the handoff add/drop criterion for the Serving Frequency,
4 stored during hard handoff.
- 5 **SF_SRCH_WIN_A_s** – Search window size for the Active Set and Candidate Set used on the
6 Serving Frequency, stored during hard handoff.
- 7 **SF_SRCH_WIN_N_s** – Search window size for the Neighbor Set used on the Serving
8 Frequency, stored during hard handoff.
- 9 **SF_SRCH_WIN_R_s** – Search window size for the Remaining Set used on the Serving
10 Frequency, stored during hard handoff.
- 11 **SF_T_ADD_s** – Pilot detection threshold used on the Serving Frequency, stored during hard
12 handoff.
- 13 **SF_T_COMP_s** – Active Set versus Candidate Set comparison threshold used on the Serving
14 Frequency, stored during hard handoff.
- 15 **SF_T_DROP_s** – Pilot drop threshold used on the Serving Frequency, stored during hard
16 handoff.
- 17 **SF_T_TDROPS_s** – Pilot drop timer value used on the Serving Frequency, stored during hard
18 handoff.
- 19 **SF_T_TDROPS_RANGE_s** – Pilot drop timer range value used on the Serving Frequency,
20 stored during hard handoff.
- 21 **SF_TOTAL_EC_THRESH_s** – Threshold for total E_c of pilots in the Serving Frequency Active
22 Set used in the Candidate Frequency periodic search procedures.
- 23 **SF_TOTAL_EC_IO_THRESH_s** – Threshold for total E_c/I_o of pilots in the Serving Frequency
24 Active Set used in the Candidate Frequency periodic search procedures.
- 25 **SID_s** – System identifier.
- 26 **SID_NID_LIST_s** – Registration SID, NID list. The SID, NID pairs in which the mobile
27 station has registered.
- 28 **SLOT_CYCLE_INDEX_s** – Slot cycle index. This is a signed parameter that can take values
29 between -4 and +7, inclusive. It is computed from the SLOT_CYCLE_INDEX_REG, and
30 bounded by the minimum and maximum slot cycle indices allowed by the current base
31 station.
- 32 **SLOT_CYCLE_INDEX_REG** – Slot cycle index registered. This is a signed parameter that
33 can take values between -4 and +7, inclusive. It is computed based on the slot cycle index
34 value included in the last registration attempt.
- 35 **SLOT_NUM** – Paging Channel or Forward Common Control Channel slot number.
- 36 **SOFT_SLOPE_s** – The slope in the inequality criterion for adding a pilot to the Active Set, or
37 dropping a pilot from the Active Set.

- 1 **SO_REQ_s** – Service option request number. The number of the service option requested by
 2 the mobile station during service option negotiation.
- 3 **SR1_BRAT_NON_TD_s** – Spreading Rate 1 Primary Broadcast Control Channel data rate
 4 with no transmit diversity.
- 5 **SR1_BRAT_TD_s** – Spreading Rate 1 Primary Broadcast Control Channel data rate with
 6 transmit diversity.
- 7 **SR1_CRAT_NON_TD_s** – Spreading Rate 1 coding rate with no transmit diversity.
- 8 **SR1_CRAT_TD_s** – Spreading Rate 1 coding rate with transmit diversity.
- 9 **SR1_TD_MODE_s** – Spreading Rate 1 transmit diversity mode in support of OTD or STS.
- 10 **SR1_TD_LEVEL_s** – Spreading Rate 1 transmit diversity power level.
- 11 **SR3_BRAT_s** – Data rate of the Broadcast Control Channel on SR3 frequencies.
- 12 **SR3_PRIMARY_PILOT_s** – Frequency offset of the primary SR3 pilot.
- 13 **SR3_PILOT_POWER1_s** – The power level of the primary pilot with respect to the pilot on
 14 the lower frequency of the two remaining SR3 frequencies.
- 15 **SR3_PILOT_POWER2_s** – The power level of the primary pilot with respect to the pilot on
 16 the higher frequency of the two remaining SR3 frequencies.
- 17 **SRCH_OFFSET_INCL_s** – Neighbor pilot search window offset included indicator.
- 18 **SRCH_OFFSET_NGHBR_s** – Neighbor pilot search window offset.
- 19 **SRCH_WIN_A_s** – Search window size for the Active Set and Candidate Set.
- 20 **SRCH_WIN_NGHBR_s** – Neighbor Pilot Channel search window size.
- 21 **SRCH_WIN_NGHBR_INCL_s** – Neighbor Pilot Channel search window size included
 22 indicator.
- 23 **SRCH_WIN_N_s** – Search window size for the Neighbor Set.
- 24 **SRCH_WIN_R_s** – Search window size for the Remaining Set.
- 25 **START_TIME_UNIT_s** – A stored variable in the mobile station which contains the time unit
 26 used for determining FOR_SCH_START_TIME and REV_SCH_START_TIME on
 27 Supplemental Channels.
- 28 **SYNC_ID_s** – Service Configuration Synchronization Identifier identifying the service
 29 configuration currently in use (i.e. Service Configuration information record and Non-
 30 negotiable Service Configuration information record).
- 31 **SYS_PAR_MSG_SEQ_s** – *System Parameters Message* sequence number.
- 32 **SYS_TIME_s** – Current value of CDMA system time as received in the *Sync Channel*
 33 *Message*.
- 34 **TA** – Acknowledgment response timeout.
- 35 **T_ADD_s** – Pilot detection threshold. The stored value is a positive value in units of 0.5 dB.

- 1 **T_COMP_s** – Active Set versus Candidate Set comparison threshold. The stored value is a
2 positive value in units of 0.5 dB.
- 3 **T_DROP_s** – Pilot drop threshold. The stored value is a positive value in units of 0.5 dB.
- 4 **T_TDROP_RANGE_s** – Pilot drop timer range value.
- 5 **T_SLOTTED_s** – Slotted timer, used for the slotted timer feature.
- 6 **TAG_s** – Transaction identifier. This is a 4-bit parameter maintained by the mobile station
7 which is used to uniquely identify a new call origination (via an *Enhanced Origination*
8 *Message*) by the mobile station. When the mobile station is to send an *Enhanced*
9 *Origination Message*, the mobile station increments the stored value of TAG and includes it
10 in the message.
- 11 **TAG_OUTSTANDING_LIST** – List of outstanding TAG values. This corresponds to those
12 values of TAG sent in the *Enhanced Origination Message* which have neither been accepted
13 by the base station (by assigning the requested call) nor rejected by the base station.
- 14 **TBR_RAND_SUPPR_ENABLE_s** – Flag to indicate if suppression of timer-based registration
15 randomization based upon frequent implicit registrations is enabled.
- 16 **TBR_RAND_WINDOW_s** – Indicates the window over which the next timer-based registration
17 following call release is randomized.
- 18 **TEMP_SUB_s** – User Zone temporary subscription flag.
- 19 **TF_CDMABAND_s** – Target Frequency CDMA band class. The CDMA band class specified in
20 the *Extended Handoff Direction Message* or the *General Handoff Direction Message*.
- 21 **TF_CDMACH_s** – Target Frequency CDMA Channel number. The CDMA Channel number
22 specified in the *Extended Handoff Direction Message* or the *General Handoff Direction*
23 *Message*.
- 24 **TF_RESET_FPC_s** – Flag to initialize the Forward Traffic Channel power control counters on
25 the Target Frequency.
- 26 **TF_RESET_L2_s** – Flag to reset acknowledgment procedures on the Target Frequency.
- 27 **TF_T_ADD_s** – Pilot detection threshold to be used on the Target Frequency. The stored
28 value is a positive value in units of 0.5 dB.
- 29 **TF_WAIT_TIME_s** – Maximum time that the mobile station may wait to receive a period of
30 $(N_{11m} \times 20)$ ms with sufficient signal quality on the CDMA Target Frequency.
- 31 **TKZ_ID_s** – Tracking zone identifier used while in tracking zone mode.
- 32 **TKZ_LIST_LEN_s** – Number of tracking zone identifiers to be maintained in the tracking
33 zone list while in tracking zone mode.
- 34 **TKZ_MAX_NUM_MSG_s** – The maximum number of *Radio Environment Messages* that the
35 mobile station is permitted to transmit while in the tracking zone mode.
- 36 **TKZ_MODE_ENABLED** – Flag that indicates whether the tracking zone mode is currently
37 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_s** – 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_s** – TMSI zone number of the base station.
- 8 **TMSI_ZONE_LEN_s** – The number of octets in TMSI zone.
- 9 **T_MULCHAN_s** – 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_s** – Maximum number of PUF probes transmitted in a PUF attempt.
- 13 **TOTAL_ZONES_s** – Number of registration zones to be retained in ZONE_LIST_s.
- 14 **TOT_FRAMES_s** – 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_s** – Transmit Power Limit. If the mobile station is operating in the 1915MHz
18 – 1920MHz block of the PCS band, the mobile station is to limit its transmission power to
19 no more than the value indicated by this field.
- 20 **T_TDROPS_s** – Pilot drop timer value.
- 21 **USE_ERAM_s** – 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_s** – 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_s** – 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_s** – A storage variable in the mobile station that contains the Reverse
31 Supplement Code Channel assignment T_ADD abort indicator.
- 32 **USE_TMSI_s** – Base station's preference of the use of TMSI.
- 33 **USER_ZONE_ID_s** – *User Zone Identification Message* sent indicator.
- 34 **USER_ZONE_ID_MSG_SEQ_s** – *User Zone Identification Message* sequence number.
- 35 **UZ_EXIT_IN_USE_s** – 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 zone.
- 37 **UZ_EXIT_RCVD_s** – The User Zone Exit parameter that the mobile station just received from
38 the *User Zone Identification Message* broadcast by the currently serving base station.

- 1 **UZID_s** – User Zone identifier.
- 2 **UZ_REC** – Record containing information about a User Zone broadcast by the base station
3 (see also UZ_REC_LIST).
- 4 **UZ_REC_LIST** – Broadcast User Zone record list. A descriptive structure used to manage
5 the base station’s information records about broadcast User Zones (see also UZ_REC).
- 6 **UZ_REV_s** – User Zone update revision number.
- 7 **ZONE_LIST_s** – Registration zone list. List of zones in which the mobile station has
8 registered.
- 9 **ZONE_TIMER_s** – Zone timer length.

10

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.

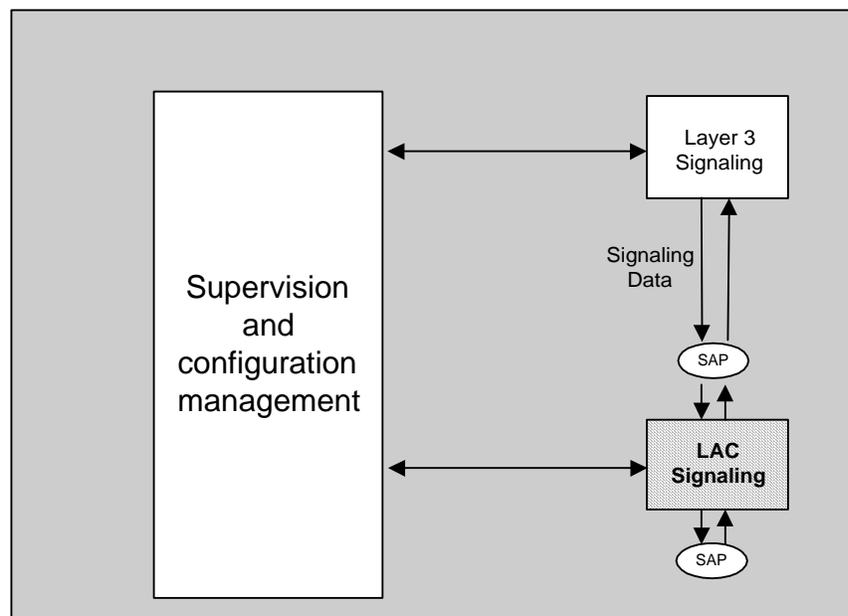


Figure 1.3.1-1. cdma2000 Signaling – General Architecture

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 1.3.2.2 Interface Primitives

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

3

4 Name: **L2-Data.Request**

5 Type: Request

6 Direction: Layer 3 to Layer 2

7 Parameters: PDU, MCSB

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

9

10 Name: **L2-Data.Confirm**

11 Type: Confirm

12 Direction: Layer 2 to Layer 3

13 Parameters: MCSB

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

16

17 Name: **L2-Data.Indication**

18 Type: Indication

19 Direction: Layer 2 to Layer 3

20 Parameters: PDU, MCSB

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

22

23 Name: **L2-Condition.Notification**

24 Type: Indication

25 Direction: Layer 2 to Layer 3

26 Parameters: MCSB

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

29

30 Name: **L2-Supervision.Request**

31 Type: Request

32 Direction: Layer 3 to Layer 2

33 Parameters: MCSB

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

5 1.3.3 Reserved

7 1.3.4 Functional Description

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

15 1.3.5 PDU Transmission and Reception

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

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

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

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

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

39

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2 REQUIREMENTS FOR MOBILE STATION CDMA OPERATION

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

2.1 Reserved

2.2 Reserved

2.3 Security and Identification

2.3.1 Mobile Station Identification Number

Mobile stations operating in the CDMA mode are identified by the International Mobile Subscriber Identity (IMSI).⁹ Mobile Stations shall have two different identifiers, IMSI_T and IMSI_M. The IMSI consists of up to 15 numerical characters (0-9). The first three digits of the IMSI are the Mobile Country Code (MCC), and the remaining digits are the National Mobile Subscriber Identity (NMSI). The NMSI consists of the Mobile Network Code (MNC) and the Mobile Station Identification Number (MSIN). The IMSI structure is shown in Figure 2.3.1-1.

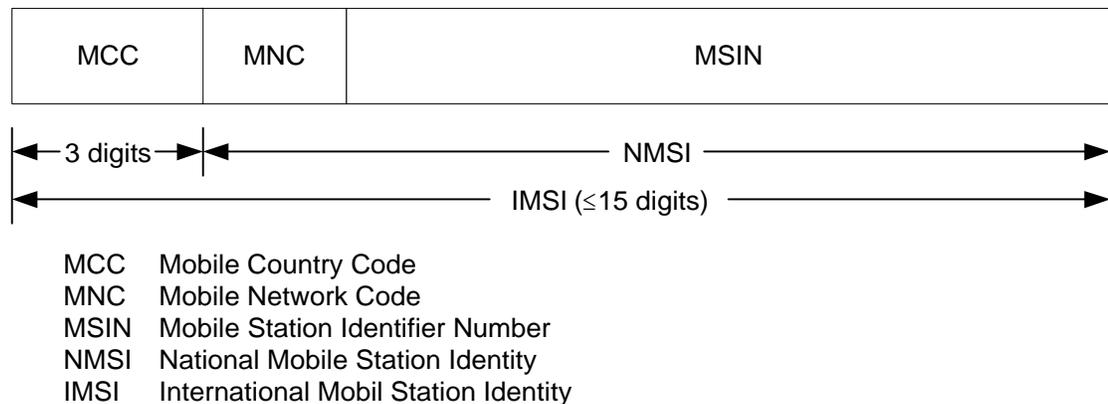


Figure 2.3.1-1. IMSI Structure

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

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

⁹ See [18].

1 four least-significant digits of the IMSI_M to the value of the ESN_p, converted directly from
 2 binary to decimal, modulo 10000, and the mobile station shall set the other digits to 0.

3 IMSI_T is an IMSI that is not associated with the MIN assigned to the mobile station. An
 4 IMSI_T can be a class 0 or class 1 IMSI. If the IMSI_T is not programmed, the mobile
 5 station shall set the four least-significant digits of the IMSI_T to the value of the ESN_p,
 6 converted directly from binary to decimal, modulo 10000, and the mobile station shall set
 7 the other digits to 0.

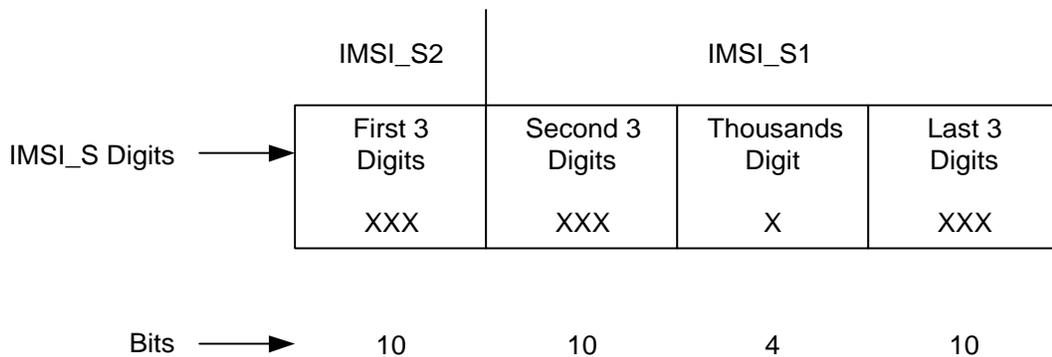
8 When operating in the CDMA mode the mobile station shall set its operational IMSI value,
 9 IMSI_O, to either the IMSI_M or the IMSI_T depending on the capabilities of the base
 10 station (See 2.6.2.2.5).

11 An IMSI_S is a 10-digit (34-bit) number derived from the IMSI. When an IMSI has 15
 12 digits, IMSI_S is equal to the least significant ten digits of the IMSI. When an IMSI has
 13 fewer than fifteen digits, zeros are added to the most significant side of MSIN to obtain a
 14 15-digit padded IMSI; IMSI_S is equal to the last 10-digit of the padded IMSI.

15 A 10-digit IMSI_S consists of 3- and 7-digit parts, called IMSI_S2 and IMSI_S1,
 16 respectively, as illustrated in Figure 2.3.1-2. IMSI_S is mapped into a 34-bit number (see
 17 2.3.1.1). The IMSI_S derived from IMSI_M is designated IMSI_M_S. The IMSI_S derived
 18 from IMSI_T is designated IMSI_T_S. The IMSI_S derived from IMSI_O is designated
 19 IMSI_O_S.

20 The mobile station shall have memory to store the 34-bit IMSI_M_S_p and the 34-bit
 21 IMSI_T_S_p. IMSI_M_S_p is represented by the 10-bit IMSI_M_S2_p and the 24 bit
 22 IMSI_M_S1_p. IMSI_T_S_p is represented by the 10-bit IMSI_T_S2_p and the 24 bit
 23 IMSI_T_S1_p.

24



25

26

27

Figure 2.3.1-2. IMSI_S Binary Mapping

28

29 When an IMSI has 15 digits, IMSI_{11_12} is equal to the 11th and 12th digits of the IMSI.
 30 When an IMSI has fewer than 15 digits, zeros are added to the most significant side of
 31 MSIN to obtain a 15-digit padded IMSI; the IMSI_{11_12} is equal to the 11th and 12th digits
 32 of the resulting number.

1 IMSI_11_12 is encoded as described in 2.3.1.2. The mobile station shall have memory to
2 store the 7-bit IMSI_M_11_12_p and the 7-bit IMSI_T_11_12_p.

3 The 3-digit MCC is encoded as described in 2.3.1.3. The mobile station shall have memory
4 to store the 10-bit MCC_M_p and the 10-bit MCC_T_p.

5 If the mobile station has a class 1 IMSI_T, it shall have memory to store
6 IMSI_T_ADDR_NUM_p. IMSI_T_ADDR_NUM_p is equal to the number of digits in the NMSI¹⁰
7 minus four.

8 2.3.1.1 Encoding of IMSI_M_S and IMSI_T_S

9 The IMSI_M_S and IMSI_T_S binary mapping is defined as follows:

- 10 1. The first three digits of the IMSI_M_S and the first three digits of the IMSI_T_S are
11 mapped into ten bits (corresponding to IMSI_M_S2_p and IMSI_T_S2_p, respectively)
12 by the following coding algorithm:
 - 13 a. Represent these three digits as D₁ D₂ D₃ with the digit equal to zero being given
14 the value of ten.
 - 15 b. Compute $100 \times D_1 + 10 \times D_2 + D_3 - 111$.
 - 16 c. Convert the result in step b to binary by the standard decimal-to-binary
17 conversion as shown in Table 2.3.1.1-1.

18

19

Table 2.3.1.1-1. Decimal to Binary Conversion Table

Decimal Number	Binary Number
0	0000000000
1	0000000001
2	0000000010
3	0000000011
4	0000000100
•	•
•	•
•	•
998	1111100110
999	1111100111

20

¹⁰ It is assumed that the number of digits in NMSI is greater than three.

- 1 a. $D_1 = 3; D_2 = 4; D_3 = 5$.
- 2 b. $100 \times D_1 + 10 \times D_2 + D_3 - 111 = 100 \times 3 + 10 \times 4 + 5 - 111 = 234$.
- 3 c. 234 in binary is '0011 1010 10'.

4 The next four most significant bits of IMSI_T_S1_p are derived from the thousands digit of
5 the IMSI_T_S (i.e., 6) by BCD conversion: 6 in BCD is '0110'.

6 The ten least significant bits of IMSI_T_S1_p are derived from the last three digits of the
7 IMSI_T_S (i.e., 789):

- 8 a. $D_1 = 7; D_2 = 8; D_3 = 9$.
- 9 b. $100 \times D_1 + 10 \times D_2 + D_3 - 111 = 100 \times 7 + 10 \times 8 + 9 - 111 = 678$.
- 10 c. 678 in binary is '10 1010 0110'.

11 Therefore, IMSI_T_S1_p is '0011 1010 1001 1010 1010 0110'.

12 2.3.1.2 Encoding of IMSI_M_11_12 and IMSI_T_11_12

13 The IMSI_M_11_12 and IMSI_T_11_12 binary mapping is defined as follows:

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

20 2.3.1.3 Encoding of the MCC_M and MCC_T

21 The MCC_M and MCC_T binary mapping is defined as follows:

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

27 2.3.1.4 Mobile Directory Number

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

33 2.3.2 Electronic Serial Number (ESN), R-UIM Identifier (UIM_ID), and Mobile Equipment 34 Identifier (MEID)

35 The mobile station shall be configured with 32-bit ESN or 56-bit MEID, but not both. All
36 mobile stations with MOB_P_REV_p less than 11 shall be configured with ESN. All mobile

1 stations with MOB_P_REV_p greater than or equal to 11 shall be configured with MEID. The
2 ESN or MEID is used to uniquely identify a mobile station in a wireless system.

3 2.3.2.1 Electronic Serial Number (ESN)

4 The ESN value is available to procedures in the mobile station as the value of the variable
5 ESN_p. The value of the variable RN_HASH_KEY_s is the same as the value of the variable
6 ESN_p, and need not be stored separately.

7 2.3.2.2 Mobile Equipment Identifier (MEID)

8 The MEID value is available to procedures in the mobile station as the value of the variable
9 MEID_p. If the mobile station is configured with MEID, ESN_p stores 32-bit pseudo-ESN
10 value derived from MEID as defined in 2.3.2.2.1.

11 2.3.2.2.1 Pseudo-ESN

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

13 Mobile station shall use the following procedure to derive pseudo-ESN from MEID¹¹:

- 14 1. The upper 8 bits of pseudo-ESN shall be set to 0x80.
- 15 2. The lower 24 bits of pseudo-ESN shall be the 24 least significant bits of the SHA-
16 1 digest of the MEID. See [41] for the specification of the SHA-1 algorithm.

17 2.3.2.3 R-UIM Identifier (UIM_ID, EXT_UIM_ID)

18 If the mobile station has a R-UIM which indicates that UIM ID is to be used, then the mobile
19 station shall use UIM_ID instead of ESN in every place where ESN is used in this document
20 with the exception of the ESN_ME information record (see [40]).

21 If the mobile station has a R-UIM which indicates that SF_EUIMID is to be used in place of
22 MEID, then the mobile station shall use SF_EUIMID instead of MEID in every place where
23 MEID is used in this document with the exception of the MEID_ME information record (see
24 [40]).

25 2.3.3 Station Class Mark

26 Class-of-station information referred to as the station class mark (SCM_p) must be stored in
27 a mobile station. The digital representation of this class mark is specified in Table 2.3.3-1.

28

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

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 ¹² (CDMA Only) X0XXXXXX
Slotted Class	5	Non-Slotted XX0XXXXX Slotted XX1XXXXX
MEID support indicator ¹³	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 ¹⁴ XXXXXXX00

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

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

2.3.4 Registration Memory

The mobile station shall have memory to store one element in the zone-based registration list ZONE_LIST_{s-p} (see 2.6.5.1.5 and 2.6.5.5). This stored element shall include both REG_ZONE and the corresponding (SID, NID) pair. The data retention time under power-off conditions shall be at least 48 hours. If, after 48 hours, the data integrity cannot be guaranteed, then the entry in ZONE_LIST_{s-p} shall be deleted upon power-on.

The mobile station shall have memory to store one element in the system/network registration list SID_NID_LIST_{s-p} (see 2.6.5.1.5 and 2.6.5.5). The data retention time under

¹² 'Dual Mode' bit is always set to '0' to indicate 'CDMA only' mode.

¹³ 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].

¹⁴ '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 power-off conditions shall be at least 48 hours. If, after 48 hours, the data integrity cannot
2 be guaranteed, then the entry in SID_NID_LIST_{s-p} shall be deleted upon power-on.

3 The mobile station shall have memory to store the distance-based registration variables
4 BASE_LAT_REG_{s-p}, BASE_LONG_REG_{s-p}, and REG_DIST_REG_{s-p} (see 2.6.5.1.4 and
5 2.6.5.5). The data retention time under power-off conditions shall be at least 48 hours. If,
6 after 48 hours, the data integrity cannot be guaranteed, then REG_DIST_REG_{s-p} shall be
7 set to zero upon power-on.

8 2.3.5 Access Overload Class

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

12 The mobile station shall store 4-bit access overload class (ACCOLC_p). Mobile stations that
13 are not for test or emergency use should be assigned to overload classes ACCOLC 0
14 through ACCOLC 9. For mobile stations that are classified as overload classes ACCOLC 0
15 through ACCOLC 9, the mobile station's 4-bit access overload class indicator (ACCOLC_p)
16 shall be automatically derived from the last digit of the associated decimal representation of
17 the IMSI_M by a decimal to binary conversion as specified in Table 2.3.5-1. When a mobile
18 station's IMSI_M is updated, the mobile station shall re-calculate the ACCOLC_p as
19 indicated above. Mobile stations designated for test use should be assigned to ACCOLC
20 10; mobile stations designated for emergency use should be assigned to ACCOLC 11.

21 [Mobile stations designated for National Security/Emergency Preparedness should be](#)
22 [assigned to ACCOLC 12.](#) ACCOLC 13~~2~~ through ACCOLC 15 are reserved.¹⁵ Programming
23 the 4-bit ACCOLC_p for overload classes ACCOLC 10 through ACCOLC 15 as specified in
24 Table 2.3.5-2 shall require a special facility only available to equipment manufacturers and
25 system operators.

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

27

¹⁵ For more information, refer to [28].

Table 2.3.5-1. ACCOLC_p Mapping for ACCOLC 0 through ACCOLC 9

Last Digit of the Decimal Representation of the IMSI (decimal)	ACCOLC_p
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. ACCOLC_p Mapping for ACCOLC 10 through ACCOLC 15

Overload Class (decimal)	ACCOLC_p
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_TYPE_S. When using the Private Long Code Mask, the value of PLCM_TYPE_S is maintained unless updated by the base station.

2.3.6.1 Public Long Code Mask Formats

The 42 bit Public Long Code Mask PLCM₄₂ is generated using PLCM₃₇ or PLCM₄₀ as defined in section 2.3.6.1.1, where the least significant bits PLCM₃₇ or PLCM₄₀ are set as defined in this section below.

1 The 42 bit Public Long Code Mask ADD_PLCM_FOR_FCH_42 is generated using
 2 ADD_PLCM_FOR_FCH_40 as defined in section 2.3.6.1.1, where the least significant bits
 3 ADD_PLCM_FOR_FCH_40 are set as defined in this section below.

4 The 42 bit Public Long Code Mask ADD_PLCM_FOR_SCH_42 is generated using
 5 ADD_PLCM_FOR_SCH_35 as defined in section 2.3.6.1.1, where the least significant bits
 6 ADD_PLCM_FOR_SCH_35 are set as defined in this section below.

7 If $PLCM_TYPE_s$ is equal to '0000', the 37 least significant bits (PLCM_37) are set as follows:

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

$$11 \quad ESN = (E_{31}, E_{30}, E_{29}, E_{28}, E_{27}, E_{26}, E_{25}, \dots, E_2, E_1, E_0)$$

$$12 \quad \text{Permuted ESN} = (E_0, E_{31}, E_{22}, E_{13}, E_4, E_{26}, E_{17}, E_8, E_{30}, E_{21}, E_{12}, E_3, E_{25}, E_{16},$$

$$13 \quad E_7, E_{29}, E_{20}, E_{11}, E_2, E_{24}, E_{15}, E_6, E_{28}, E_{19}, E_{10}, E_1, E_{23}, E_{14},$$

$$14 \quad E_5, E_{27}, E_{18}, E_9).$$

15 If $PLCM_TYPE_s$ is equal to '0001', the 40 least significant bits (PLCM_40) are set as follows:

- 16 • Bit M_{39} shall be set to '1';
- 17 • Bits M_{38} through M_0 of the public long code mask shall be specified by $PLCM_39_s$
 18 and shall be set as follows:

$$19 \quad PLCM_39_s = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \dots, P_2, P_1, P_0)$$

20 If $ADD_PLCM_FOR_FCH_TYPE_s$ is equal to '1', the 40 least significant bits
 21 ($ADD_PLCM_FOR_FCH_40$) are set as follows:

- 22 • Bit M_{39} shall be set to '1';
- 23 • Bits M_{38} through M_0 of the public long code mask shall be specified by
 24 $ADD_PLCM_FOR_FCH_39_s$ and shall be set as follows:

$$25 \quad ADD_PLCM_FOR_FCH_39_s = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \dots, P_2, P_1, P_0)$$

26 If $ADD_PLCM_FOR_SCH_TYPE_s$ is equal to '1', the 35 least significant bits
 27 ($ADD_PLCM_FOR_SCH_35$) are set as follows:

- 28 • Bits M_{34} through M_0 of the public long code mask shall be specified by
 29 $ADD_PLCM_FOR_SCH_35_s$ and shall be set as follows:

$$30 \quad ADD_PLCM_FOR_SCH_35_s = (P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, \dots, P_2, P_1, P_0)$$

31 If $PLCM_TYPE_s$ is equal to '0010', the 37 least significant bits (PLCM_37) are set as follows:

- 32 • Bits M_{36} through M_{34} shall be set to '001';
- 33 • Bits M_{33} through M_0 shall be set to IMSI_O_S.

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

- 35 • Bits M_{36} through M_{34} shall be set to '000';
- 36 • Bits M_{33} through M_0 shall be set to IMSI_O_S.

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

- 2 • Bit M_{39} shall be set to '0';
- 3 • Bits M_{38} through M_0 shall be set as follows:
 - 4 • The 39 least significant bits of the SHA-1 digest of the MEID¹⁶. See [41] for the
 - 5 specification of the SHA-1 algorithm.

6 2.3.6.1.1 Public Long Code Mask $PLCM_42$, $ADD_PLCM_FOR_FCH_42$ and
7 $ADD_PLCM_FOR_SCH_42$

8 If $PLCM_37$ is defined, the public long code mask $PLCM_42$ shall be as follows: bits M_{36}
9 through M_0 of the public long code mask shall be specified by $PLCM_37$ (see 2.3.6). Bits
10 M_{41} through M_{37} shall be set to '11000'. The resulting public long code mask $PLCM_42$ is
11 shown in Figure 2.3.6.1-1 (a).

12 If $PLCM_40$ is defined, the public long code mask $PLCM_42$ shall be as follows: bits M_{39}
13 through M_0 of the public long code mask shall be specified by $PLCM_40$ (see 2.3.6.1). Bits
14 M_{41} through M_{40} shall be set to '10'. The resulting public long code mask $PLCM_42$ is
15 shown in Figure 2.3.6.1-1 (b).

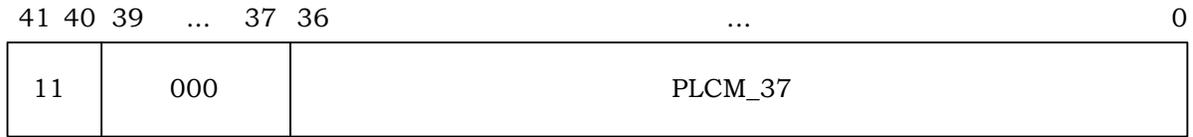
16 If $ADD_PLCM_FOR_FCH_40$ is defined, the public long code mask
17 $ADD_PLCM_FOR_FCH_42$ shall be as follows: bits M_{39} through M_0 of the public long code
18 mask shall be specified by $ADD_PLCM_FOR_FCH_40$ (see 2.3.6.1). Bits M_{41} through M_{40}
19 shall be set to '10'. The resulting public long code mask $ADD_PLCM_FOR_FCH_42$ is
20 shown in Figure 2.3.6.1-1 (c).

21 If $ADD_PLCM_FOR_SCH_35$ is defined, the public long code mask
22 $ADD_PLCM_FOR_SCH_42$ shall be as follows: bits M_{34} through M_0 of the public long code
23 mask shall be specified by $ADD_PLCM_FOR_SCH_35$ (see 2.3.6.1). Bits M_{41} through M_{35}
24 shall be set to '1100111'. The resulting public long code mask $ADD_PLCM_FOR_SCH_42$ is
25 shown in Figure 2.3.6.1-1 (d).

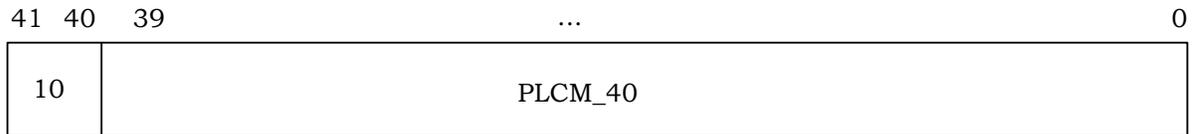
26

¹⁶ Example: if the 56-bit MEID is (hexadecimal) FF 00 00 01 12 34 56, the bits M_{38} through M_0 of $PLCM$ are (hexadecimal) 1A 0E 07 37 E1, and (binary) '001 1010 0000 1110 0000 0111 0011 0111 1110 0001'.

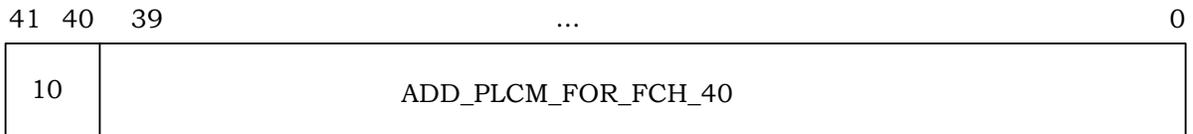
1



a) Public Long Code Mask PLCM_42 given PLCM_37



b) Public Long Code Mask PLCM_42 given PLCM_40



c) Public Long Code Mask ADD_PLCM_FOR_FCH_42 given ADD_PLCM_FOR_FCH_40



d) Public Long Code Mask ADD_PLCM_FOR_SCH_42 given ADD_PLCM_FOR_SCH_35

2

3

4

5

Figure 2.3.6.1-1. Public Long Code Mask PLCM_42, ADD_PLCM_FOR_FCH_42, or 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 M₄₁ through M₄₀ shall be set to '01'. Bits M₃₉ through M₀ shall be the 40 least significant bits of the Voice Privacy Mask (VPM) generated by the Key_VPM_Generation procedure or CDMA_3G_2G_Conversion procedure. M₀ of the private long code mask shall be the least significant bit of the VPM. See [15] for details of the Key_VPM_Generation procedure and see [44] for details of the CDMA_3G_2G_Conversion procedure. The resulting private long code mask PVTLCM_42 is shown in Figure 2.3.6.2-1.

9

10

11

12

13

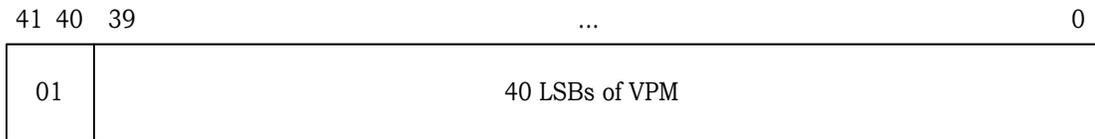


Figure 2.3.6.2-1 Private Long Code Mask PVTLCM_42 Format

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_p, NID_p) pair. The mobile station shall also provide memory to store the 1-bit parameters MOB_TERM_HOME_p, MOB_TERM_FOR_SID_p, and MOB_TERM_FOR_NID_p (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_p (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 _p	IMSI_S1	SSD_A	TRUE if GEN_CMEKEY 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_s 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_{s-p})

COUNT_{s-p} is a modulo-64 count held in the mobile station. COUNT_{s-p} 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

1 *Authentication Challenge Message*, the mobile station shall set the input parameters of the
 2 Auth_Signature procedure (see [23] section 2.3) as illustrated in Figure 2.3.12.1.5-3. The
 3 24 most significant bits of the RAND_CHALLENGE input parameter shall be filled with
 4 RANDU, and the 8 least significant bits of RAND_CHALLENGE shall be filled with the 8
 5 least significant bits of IMSI_S2.

6 The mobile station shall set the SAVE_REGISTERS input parameter to TRUE if the
 7 GEN_CMEAKEKEY field is set to '1' and FALSE if the GEN_CMEAKEKEY is set to '0'.

8 The mobile station shall then execute the Auth_Signature procedure. The 18-bit output
 9 AUTH_SIGNATURE shall be used to fill the AUTHU field of the *Authentication Challenge*
 10 *Response Message*, which shall be sent to the base station.

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

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

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

24 the mobile station shall perform the following procedures:

- 25 • If MSG_INTEGRITY_SUPs is equal to '1', the mobile station then associates a
 26 pending key id NEW_KEY_ID with the pending CMEAKEKEY.
- 27 • The mobile station shall send a *Security Mode Request Message*. If
 28 MSG_INTEGRITY_SUPs is equal to '0', the mobile station shall select a 24-bit
 29 number and include this number in the NEW_SSEQ_H field in the *Security Mode*
 30 *Request Message*; otherwise, the mobile station shall select a 24-bit number and
 31 deliver this number to the LAC Layer along with the *Security Mode Request Message*.
- 32 • Upon reception of the *Security Mode Request Message*, the base station validates the
 33 NEW_SSEQ_H_SIG field in the message. If validation returns success, then the
 34 CMEAKEKEY associated with the AUTHU generated during Unique Challenge-
 35 Response procedure and the pending NEW_SSEQ_H can become "in use" in the
 36 base station. If Voice Privacy was enabled during this procedure, the base station
 37 shall indicate to the mobile station to disable Voice Privacy. The base station then
 38 confirms the key set-up by sending the *Security Mode Command Message* to the
 39 mobile station. Upon reception of *Security Mode Command Message*, the CMEAKEKEY
 40 associated with the AUTHU generated during Unique Challenge-Response
 41 procedure, the pending NEW_SSEQ_H and key id become "in use" for the mobile
 42 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.

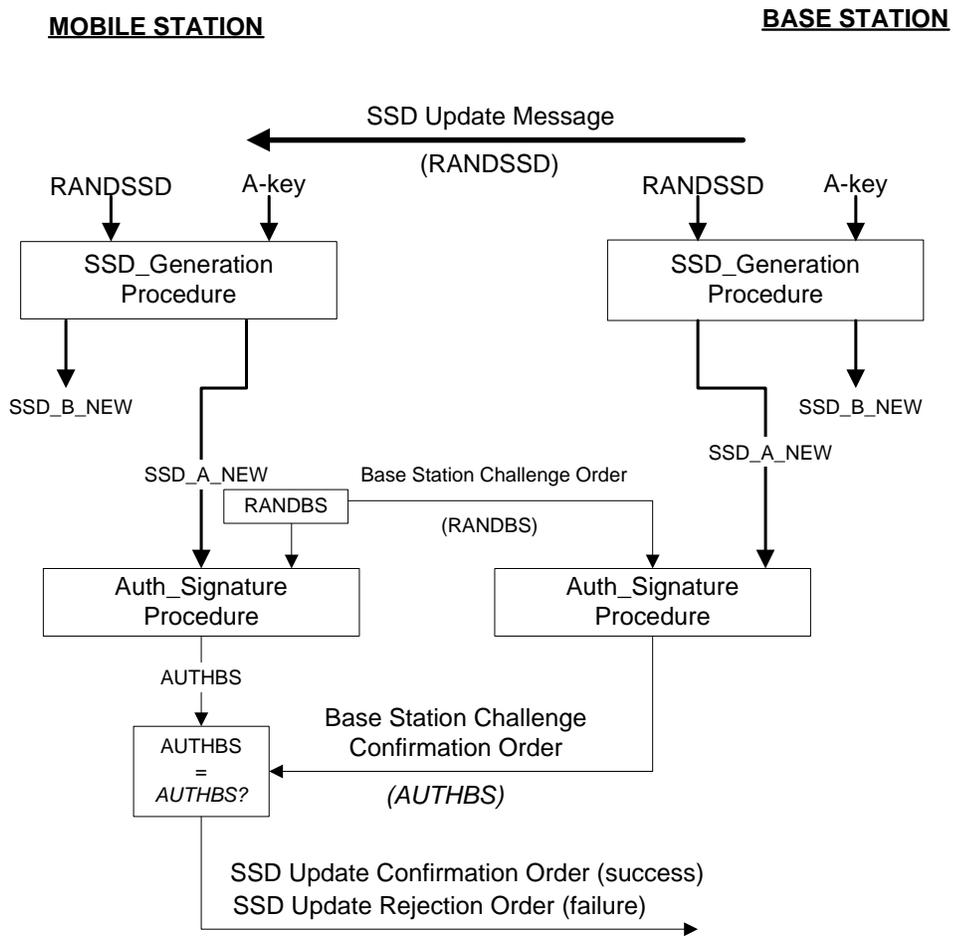
Upon receipt of the *Base Station Challenge Confirmation Order* the mobile station shall compare the received value of AUTHBS to its internally computed value. (If the mobile station receives a *Base Station Challenge Confirmation Order* when an SSD update is not in progress, the mobile station shall respond with an *SSD Update Rejection Order*.)

If the comparison is successful, the mobile station shall execute the SSD_Update procedure (see [23], section 2.2.2) to set SSD_A and SSD_B to SSD_A_NEW and SSD_B_NEW, respectively. The mobile station shall then send an *SSD Update Confirmation Order* to the base station, indicating successful completion of the SSD update.

If the comparison is not successful, the mobile station shall discard SSD_A_NEW and SSD_B_NEW. The mobile station shall then send an *SSD Update Rejection Order* to the base station, indicating unsuccessful completion of the SSD update.

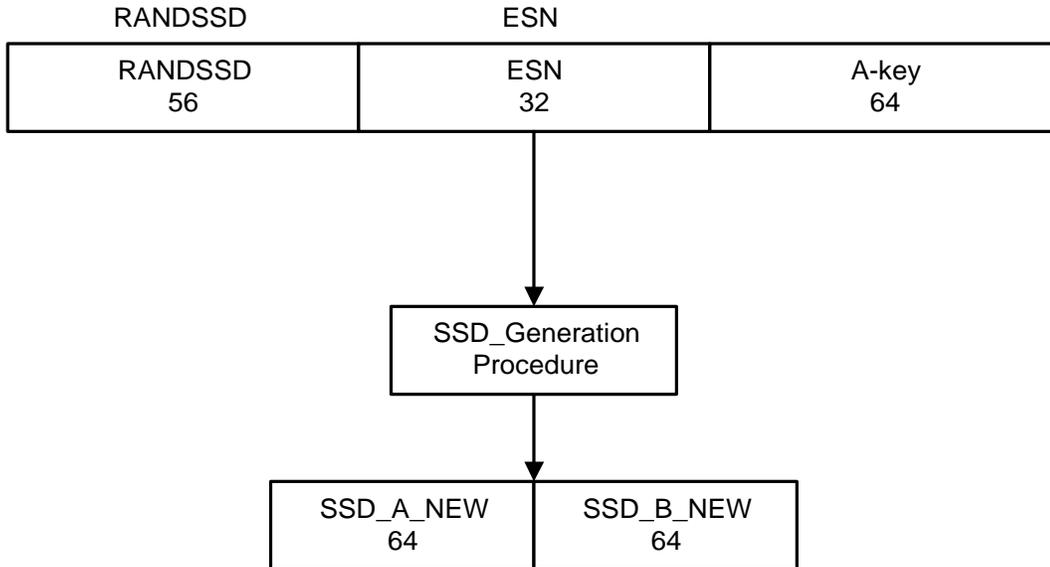
1 Upon receipt of the *SSD Update Confirmation Order*, the base station sets SSD_A and
 2 SSD_B to the values received from the HLR/AC (see [13]).
 3 If the mobile station fails to receive the *Base Station Challenge Confirmation Order* within
 4 T_{64m} seconds of when the acknowledgment to the *Base Station Challenge Order* was
 5 received, the mobile station shall discard SSD_A_NEW and SSD_B_NEW. The mobile
 6 station shall then terminate the SSD update process.

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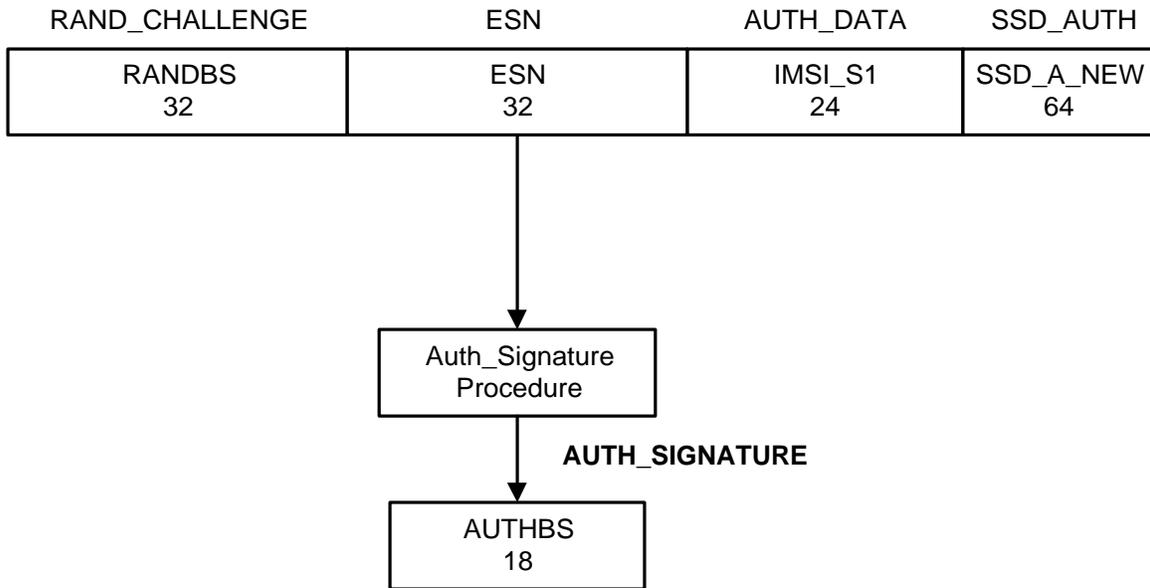
11
 12
 13

Figure 2.3.12.1.5-1. SSD Update Message Flow



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



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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_s 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_s 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_s 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_s 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.

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

3 When additional octets are inserted, the overall Lower Layers message length is updated to
4 reflect the addition. Specific Layer 3 record length fields (e.g., RECORD_LEN,
5 NUM_FIELDS, or NUM_DIGITS) shall not be affected by the insertion of additional bits.

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

- 8 • The mobile station and base station shall each maintain an 8-bit encryption
9 sequence counter. The encryption sequence counter shall be incremented modulo
10 256 for each new encryption. The counter value, hereafter called ES_COUNT, shall
11 be used to form the SYNC parameter of the Enhanced Cellular Message Encryption
12 Algorithm as described below.
- 13 • As part of each encryption, an additional octet of value ES_COUNT shall be inserted
14 immediately following the encrypted part of the message. This additional octet shall
15 not be encrypted. The additional octet shall be removed from the message after
16 decryption.

17 2.3.12.2.1 Encrypted Messages on the f-dsch

18 When encryption is on (ENCRYPT_MODE_s equal to binary '01' or '10'), the encryptable
19 fields of the following messages sent on f-dsch, as listed below, shall be encrypted. All other
20 messages sent on f-dsch shall be unencrypted.

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

23 The type-specific fields of all information records (see 3.7.5) shall be encrypted. For
24 each 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 No other fields in the *Alert With Information Message* and *Extended Alert With*
31 *Information Message* are encrypted.

32 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
33 equal to binary '10'), the following requirements apply for each information record:

- 34 • The DATA_TYPE parameter shall be set to '0'.
- 35 • The SYNC parameter shall be set as follows:
 - 36 - SYNC[0] = ES_COUNT
 - 37 - SYNC[1] = RECORD_TYPE

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

1 The type-specific fields of all information records (see 3.7.5) shall be encrypted. For
 2 each information record, the type-specific fields shall be treated by the encryption
 3 procedure as a new single message. If the type-specific fields of an information record
 4 consist of a single octet (RECORD_LEN field equal to 1), an additional octet of value
 5 '00000000' shall be inserted following the information record and shall be encrypted as
 6 if part of the record. (If the RECORD_LEN field is 0, the information record contains no
 7 type-specific fields, and the record contains no encrypted data.)

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

10 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 11 equal to binary '10'), the following requirements apply for each information record:

- 12 • The DATA_TYPE parameter shall be set to '0'.
- 13 • The SYNC parameter shall be set as follows:
 - 14 - SYNC[0] = ES_COUNT
 - 15 - SYNC[1] = RECORD_TYPE

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

17 The DIGIT_i fields of the *Send Burst DTMF Message* shall be encrypted. These fields are
 18 treated by the encryption procedure as a new single message, with the 4-bit digit codes
 19 packed into consecutive octets. If the NUM_DIGITS field contains an odd number, four
 20 bits of value '0000' shall follow the last digit and shall be included in the encrypted
 21 message. If NUM_DIGITS is less than 3, an additional eight bits of value '00000000'
 22 shall follow the DIGIT_i fields and shall be included in the encrypted part of the
 23 message.

24 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 25 equal to binary '10'), the following requirements apply:

- 26 • The DATA_TYPE parameter shall be set to '0'.
- 27 • The SYNC parameter shall be set as follows:
 - 28 - SYNC[0] = ES_COUNT
 - 29 - SYNC[1] = MSG_TYPE = '00001001'

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

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

34 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 35 equal to binary '10'), the following requirements apply:

- 36 • The DATA_TYPE parameter shall be set to '0'.
- 37 • The SYNC parameter shall be set as follows:
 - 38 - 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_i fields after the first two shall
4 be encrypted; otherwise, all CHAR_i fields shall be encrypted.

5 If the CHAR_i 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_s equal to
11 binary '01'), the following requirements apply:

- 12 • If BURST_TYPE is equal to '000011' (SMS) or '000100' (OTASP), the message shall
13 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_s
18 equal to binary '10'), the following requirements apply:

- 19 • If BURST_TYPE is equal to '000100' (OTASP), the DATA_TYPE parameter shall be
20 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 be
27 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_s
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'

1 2.3.12.2 Encrypted Messages on the r-dsch

2 When encryption is on (ENCRYPT_MODE_s equal to binary '01' or '10') the encryptable fields
3 of the following r-dsch Layer 3 messages, as listed below, shall be encrypted. All other r-
4 dsch messages shall be unencrypted.

5 1. Origination Continuation Message (see 2.7.2.3.2.9) and Enhanced Origination Message
6 are encrypted.

7 The CHARi fields of the *Origination Continuation Message* and *Enhanced Origination*
8 *Message* shall be encrypted. These fields shall be treated by the encryption procedure
9 as a new single message, with the character codes packed into consecutive octets. If
10 DIGIT_MODE is '0' and the NUM_FIELDS field contains an odd number, four bits of
11 value '0000' shall follow the last digit and shall be included in the encrypted part of the
12 message. In addition, if ENCRYPT_MODE_s is equal to '01', the following requirement
13 applies

- 14 • If DIGIT_MODE is '0' and NUM_FIELDS is less than 3, or if DIGIT_MODE is '1' and
15 NUM_FIELDS is less than 2, an additional eight bits of value '00000000' shall follow
16 the CHARi fields and shall be included in the encrypted part of the message.

17 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
18 equal to binary '10'), the following requirements apply:

- 19 • The DATA_TYPE parameter shall be set to '0'.
- 20 • The SYNC parameter shall be set as follows:
 - 21 - SYNC[0] = ES_COUNT
 - 22 - SYNC[1] = MSG_TYPE = '00001001' for *Origination Continuation Message*
 - 23 - SYNC[1] = MSG_TYPE = '00011010' for *Enhanced Origination Message*

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

32 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
33 equal to binary '10'), the following requirements apply for each information record:

- 34 • The DATA_TYPE parameter shall be set to '0'.
- 35 • The SYNC parameter shall be set as follows:
 - 36 - SYNC[0] = ES_COUNT
 - 37 - SYNC[1] = RECORD_TYPE

38 2. Flash With Information Message (see 2.7.2.3.2.3) and Extended Flash With Information

1 Message (see 2.7.2.3.2.32) are encrypted.

2 The type-specific fields of all information records (see 2.7.4) shall be encrypted. For
 3 each information record, the type-specific fields shall be treated by the encryption
 4 procedure as a new single message. If the type-specific fields of an information record
 5 consist of a single octet (RECORD_LEN field equal to 1), an additional octet of value
 6 '00000000' shall be inserted following the information record and shall be encrypted as
 7 if part of the record. (If the RECORD_LEN field is 0, the information record contains no
 8 type-specific fields, and the record contains no encrypted data.)

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

11 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 12 equal to binary '10'), the following requirements apply for each information record:

- 13 • The DATA_TYPE parameter shall be set to '0'.
- 14 • The SYNC parameter shall be set as follows:
 - 15 - SYNC[0] = ES_COUNT
 - 16 - SYNC[1] = RECORD_TYPE

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

18 The DIGIT_i fields of the *Send Burst DTMF Message* shall be encrypted. These fields
 19 shall be treated by the encryption procedure as a new single message, with the 4-bit
 20 digit codes packed into consecutive octets. If the NUM_DIGITS field contains an odd
 21 number, four bits of value '0000' shall follow the last digit and shall be included in the
 22 encrypted message. If NUM_DIGITS is less than 3, an additional eight bits of value
 23 '00000000' shall follow the DIGIT_i fields and shall be included in the encrypted part of
 24 the message.

25 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 26 equal to binary '10'), the following requirements apply:

- 27 • The DATA_TYPE parameter shall be set to '0'.
- 28 • The SYNC parameter shall be set as follows:
 - 29 - SYNC[0] = ES_COUNT
 - 30 - SYNC[1] = MSG_TYPE = '00000111'

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

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

35 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_s
 36 equal to binary '10'), the following requirements apply:

- 37 • The DATA_TYPE parameter shall be set to '0'.
- 38 • The SYNC parameter shall be set as follows:

- 1 - SYNC[0] = ES_COUNT
2 - SYNC[1] = MSG_TYPE = '00000001'

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

4 If BURST_TYPE is equal to '111110' or '111111', all CHAR_i fields after the first two shall
5 be encrypted; otherwise, all CHAR_i fields shall be encrypted.

6 If the CHAR_i field consists of a single octet (NUM_FIELDS field equal to 1), an
7 additional octet of value '00000000' shall be inserted following the information record
8 and shall be encrypted as if part of the record. (If the NUM_FIELDS field is 0, the
9 information record contains no type-specific fields, and the record contains no
10 encrypted data).

11 If the Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_S equal to
12 binary '01'), the following requirements apply:

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

18 If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE_S
19 equal to binary '10'), the following requirements apply:

- 20 • If BURST_TYPE is equal to '000100' (OTASP), the DATA_TYPE parameter shall be
21 set to '0'. Otherwise, the DATA_TYPE parameter shall be set to '1'.
- 22 • The SYNC parameter shall be set as follows:

- 23 - SYNC[0] = ES_COUNT
- 24 - SYNC[1] = MSG_TYPE = '00000100'

25 2.3.12.3 Voice Privacy

26 Also see [2].

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

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

33 The transition to private long code mask shall not be performed if authentication is not
34 performed (AUTH_S is set to '00' or mobile station unable to perform authentication).

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

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

4 2.3.12.4 Extended Encryption for Signaling Message and User Information

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

9 Signaling messages or user information shall not be encrypted if authentication is not
 10 performed (i.e., when MSG_INTEGRITY_SUP_s is equal to '0' and AUTH_s is set to '00' (see
 11 2.3.12.1)) or authentication has not been performed (i.e., when MSG_INTEGRITY_SUP_s
 12 is equal to '1' and the INT_KEY[KEY_ID] is equal to NULL (see 2.3.12.5)).

13 2.3.12.4.1 Extended Encryption for Signaling Messages

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

16 All mini messages shall be sent un-encrypted.

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

19 2.3.12.4.1.1 Extended Encryption for Signaling on f/r-csch

20 To turn f/r-csch signaling encryption on or off, the base station sends a *Registration*
 21 *Accepted Order* or *Security Mode Command Message* on f-csch, with the
 22 C_SIG_ENCRYPT_MODE field set to one of the values specified in Table 3.7.4.5-1. The
 23 value of C_SIG_ENCRYPT_MODE_r is then stored in C_SIG_ENCRYPT_MODE_s.

24 If C_SIG_ENCRYPT_MODE_s is not equal to '000' and ENC_KEY[KEY_ID] is not equal to
 25 NULL, all f/r-csch signaling messages shall be encrypted based on the value of
 26 C_SIG_ENCRYPT_MODE_s using the procedures specified in 2.3.12.4.1.3; except for the
 27 exceptions listed below in the rest of this section.

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

34 On the r-csch, *Registration Message*, *Page Response Message*, *Reconnect Message* (if sent
 35 in response to a *General Page Message* or a *Universal Page Message*), *Authentication*
 36 *Challenge Response Message*, *Security Mode Request Message*, *Authentication Response*
 37 *Message*, *Mobile Station Reject Order* (ORDQ = '00010110', '00011000', '00011001' or
 38 '00011010') and *Authentication Resynchronization Message* shall be sent un-encrypted.

39 When sending an *Origination Message*, if all of the following conditions are true, the mobile

1 station shall not include the dialed digits in the *Origination Message*, and the mobile station
2 shall include the dialed digits in the *Origination Continuation Message*:

- 3 • The base station supports extended encryption;
- 4 • C_SIG_ENCRYPT_MODE_s is equal to '000' or ENC_KEY[KEY_ID] is equal to NULL;
- 5 • C_SIG_ENCRYPT_REQ is set to '1' or D_SIG_ENCRYPT_REQ is set to '1' in the
6 *Origination Message*;
- 7 • The mobile station does not recognize that this is an emergency call.

8 2.3.12.4.1.2 Extended Encryption for Signaling on f/r-dsch

9 The initial mode of extended encryption for f/r-dsch signaling messages is established by
10 sending a *Channel Assignment Message* or *Extended Channel Assignment Message* with the
11 ENCRYPT_MODE field set to '11'¹⁷ and the D_SIG_ENCRYPT_MODE field set to one of the
12 values specified in Table 3.7.4.5-1. The value of D_SIG_ENCRYPT_MODE_r is then stored in
13 D_SIG_ENCRYPT_MODE_s.

14 To turn f/r-dsch signaling encryption on or off after channel assignment, the base station
15 sends a *General Handoff Direction Message* or *Universal Handoff Direction Message* with the
16 ENCRYPT_MODE field and the D_SIG_ENCRYPT_MODE field set accordingly. Alternatively,
17 the base station may send a *Security Mode Command Message* on f-dsch with the
18 D_SIG_ENCRYPT_MODE field set accordingly.

19 If D_SIG_ENCRYPT_MODE_s is not equal to '000' and ENC_KEY[KEY_ID] is not equal to
20 NULL, all f/r-dsch signaling messages shall be encrypted based on the value of
21 D_SIG_ENCRYPT_MODE_s using the procedures specified in 2.3.12.4.1.3, except for the
22 exceptions listed below in the rest of this section.

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

26 On the r-dsch, the *Security Mode Request Message*, *Authentication Challenge Response*
27 *Message*, *Authentication Response Message*, *Mobile Station Reject Order* (ORDQ =
28 '00010110', '00011000', '00011001' or '00011010') and *Authentication Resynchronization*
29 *Message* shall be sent un-encrypted.

30 2.3.12.4.1.3 Signaling Encryption/Decryption Procedures

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

- 34 • TX_EXT_SSEQ[i][j] (the 32-bit crypto-sync for encryption and message integrity. $i =$
35 0 and 1, $j =$ '00' to '11')

¹⁷ If ENCRYPT_MODE is set to a value other than '11', see section 2.3.12.2.1.

- 1 • RX_EXT_SEQ[*i*][*j*] (the 32-bit crypto-sync for decryption and message integrity. *i* = 0
2 and 1, *j* = '00' to '11')

3 The above counters in the base station and the mobile station shall only be initialized by a
4 *Registration Accepted Order*, *Channel Assignment Message*, *Extended Channel Assignment*
5 *Message*, or *Security Mode Command Message* in response to a *Registration Message*,
6 *Origination Message*, *Page Response Message*, or *Security Mode Request Message* that
7 carries a NEW_SSEQ_H field with a valid NEW_SSEQ_H_SIG field.¹⁸ The response to a
8 *Registration Message* is a *Registration Accepted Order*. The response to an *Origination*
9 *Message* or *Page Response Message* is a *Channel Assignment Message* or *Extended Channel*
10 *Assignment Message*. The response to a *Security Mode Request Message* is a *Security Mode*
11 *Command Message*.

12 Upon initialization of the crypto-sync counters, the following initialization shall be
13 performed at the mobile station: the 24 most significant bits of TX_EXT_SSEQ[*i*][KEY_ID]
14 and RX_EXT_SSEQ[*i*][KEY_ID] shall be initialized by the value of the NEW_SSEQ_H field
15 included in the message for *i* = 0 and 1.

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

- 18 1. Append between 0 and 7 inclusive padding bits (set to any random combination of
19 '0's and '1's) to the Layer 3 PDU such that the padded Layer 3 PDU in bits is an
20 integer multiple of eight (the padding bits become part of the L3 PDU).
- 21 2. Compute an 8-bit Layer 3 PDU CRC as specified in 2.3.12.1.4 over the un-
22 encrypted Layer 3 PDU (including the padding bits, if any).
- 23 3. Append the 8-bit CRC to the end of the Layer 3 PDU.
- 24 4. If the PDU is to be transmitted on f/r-csch, let SDU_ENCRYPT_MODE equal
25 C_SIG_ENCRYPT_MODE_s. If the PDU is to be transmitted on f/r-dsch, let
26 SDU_ENCRYPT_MODE equal D_SIG_ENCRYPT_MODE_s. If the Layer 3 PDU uses
27 unassured mode, let *i* = 0; otherwise, let *i* = 1.
- 28 5. Let EXT_SSEQ equal TX_EXT_SSEQ[*i*][KEY_ID]. Encrypt the concatenated Layer 3
29 PDU and the 8-bit CRC by using EXT_SSEQ and the encryption algorithm specified
30 by SDU_ENCRYPT_MODE, in accordance with 2.3.12.4.3.
- 31 6. The sender shall pass the encrypted concatenated Layer 3 PDU, the 8-bit Layer 3
32 CRC, the 32-bit EXT_SSEQ, SDU_ENCRYPT_MODE, and an indication whether the
33 Layer 3 PDU shall be integrity-protected to the LAC layer.
- 34 7. Set TX_EXT_SSEQ[*i*][KEY_ID] to (TX_EXT_SSEQ[*i*][KEY_ID] + 1) mod 2³².

¹⁸ 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 The receiver shall perform the following procedures upon reception of an encrypted
 2 signaling message with an 8-bit SDU_SSEQ field or a 32-bit EXT_SSEQ passed by the LAC
 3 Layer (e.g., if SDU_ENCRYPT_MODE indicated by LAC Layer is not equal to '000'):

- 4 1. If the Layer 3 PDU uses unassured mode, let $i = 0$ and $N = 8$; otherwise, let $i = 1$ and
 5 $N = 4$. Let V be the 8 least significant bits of $RX_EXT_SSEQ[i][SDU_KEY_ID]$.
 6 Perform the duplicate detection procedures in accordance with 2.3.12.4.1.5 using N
 7 and V , before proceeding further.
- 8 2. If SDU_SSEQ is supplied by the LAC Layer, the mobile station shall construct
 9 EXT_SSEQ as follows:
 10 If $(SDU_SSEQ - V) \bmod 256 < 128$:
 11 $EXT_SSEQ = (RX_EXT_SSEQ[i][SDU_KEY_ID] + (SDU_SSEQ - V) \bmod 256) \bmod 2^{32}$
 12 Else:
 13 $EXT_SSEQ = (RX_EXT_SSEQ[i][SDU_KEY_ID] - (V - SDU_SSEQ) \bmod 256) \bmod 2^{32}$
- 14 3. Remove the LAC Layer padding, at the end of the Layer 3 PDU, if any, such that the
 15 Layer 3 PDU is octet aligned.
- 16 4. Decrypt the concatenated Layer 3 PDU and the 8-bit Layer 3 CRC using EXT_SSEQ
 17 and the encryption algorithm specified by SDU_ENCRYPT_MODE, in accordance
 18 with 2.3.12.4.3.
- 19 5. Compute an 8-bit CRC as specified in 2.3.12.4.1.4 over the un-encrypted Layer 3
 20 PDU (excluding the received 8-bit CRC).
- 21 6. Compare the value of the computed CRC with the decrypted 8-bit CRC. If the two
 22 CRCs are equal, the decryption is defined to be successful; otherwise the decryption
 23 is defined to be unsuccessful.
- 24 7. If the decryption was unsuccessful, the message shall be discarded; otherwise, if
 25 SDU_SSEQ is supplied by the LAC Layer and $((SDU_SSEQ - V) \bmod 256) < 128$, the
 26 receiver shall set $RX_EXT_SEQ[i]$ to EXT_SSEQ constructed in step 2 above.
- 27 8. If the base station can not decrypt an *Origination Message* or the LAC Layer
 28 indicates that the MACI is not valid in an *Origination Message*, the base station
 29 should send a *Base Station Reject Order* (ORDQ = '00000000'). If the base station
 30 can not decrypt any other message or the LAC Layer indicates that the MACI is not
 31 valid for other message, the base station should send a *Base Station Reject Order*
 32 (ORDQ = '00000001').

33 2.3.12.4.1.4 Computation of the 8-bit Layer 3 PDU CRC Field

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

$$35 \quad g(x) = x^8 + x^7 + x^4 + x^3 + x + 1$$

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

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

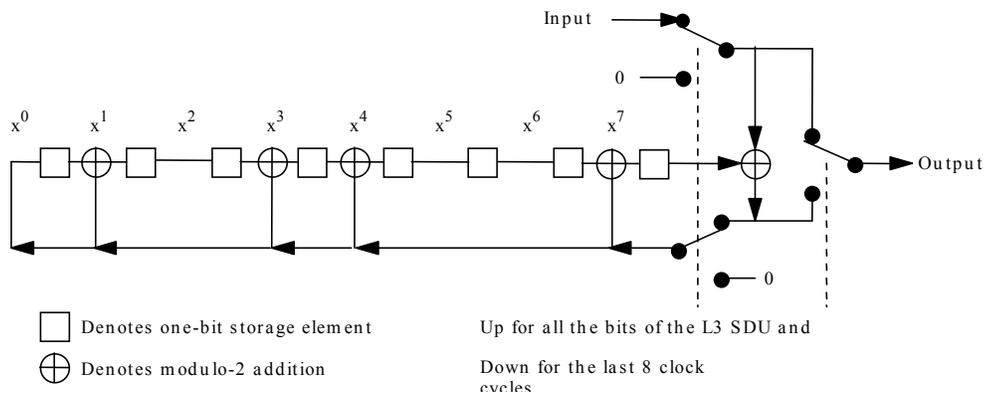


Figure 2.3.12.4.1.4-1. 8-Bit Layer 3 SDU CRC Field Calculation

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)

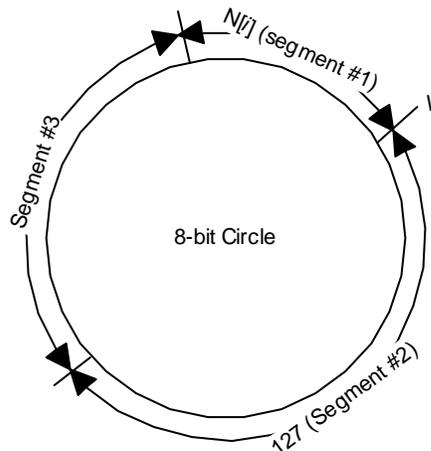


Figure 2.3.12.4.1.5-1 An 8-bit Encryption Sequence Number Space Divided into 3 Segments

If the received sequence number, SDU_SSEQ, belongs to segment #1, the receiver shall check whether SDU_SSEQ has already been received.¹⁹ 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.

¹⁹ 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., $w[N-1], w[N-2], \dots, w[1], w[0]$). 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'.

1 The initial encryption mode of user information of a service is established by sending a
2 *Security Mode Command Message* on f-csch or by setting the UI_ENCRYPT_MODE field in
3 the Service Configuration information record, with the UI_ENCRYPT_MODE field set to one
4 of the values specified in 3.7.5.7-3. The value of the UI_ENCRYPT_MODE field is then
5 stored in SO_CON_REC_s[j].UI_ENCRYPT_MODE, where SO_CON_REC_s[j] is the service
6 option connection record (see 2.6.4.1.12) corresponding to the service.

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

11 User information shall be encrypted based on the value of
12 SO_CON_REC_s[j].UI_ENCRYPT_MODE, where SO_CON_REC_s[j] is the service option
13 connection record (see 2.6.4.1.12) corresponding to the service.

14 2.3.12.4.2.1 User Information Encryption/Decryption Procedures

15 If P_REV_IN_USE_s is less than nine and extended encryption for user information is turned
16 on for a service, the sender shall encrypt each data block (see [3]) from that service, in
17 accordance with 2.3.12.4.3, before passing the data blocks to MAC Layer. On the receiver
18 side, the receiver shall decrypt each data block for that service from MAC Layer, in
19 accordance with 2.3.12.4.3, before passing them to that service.

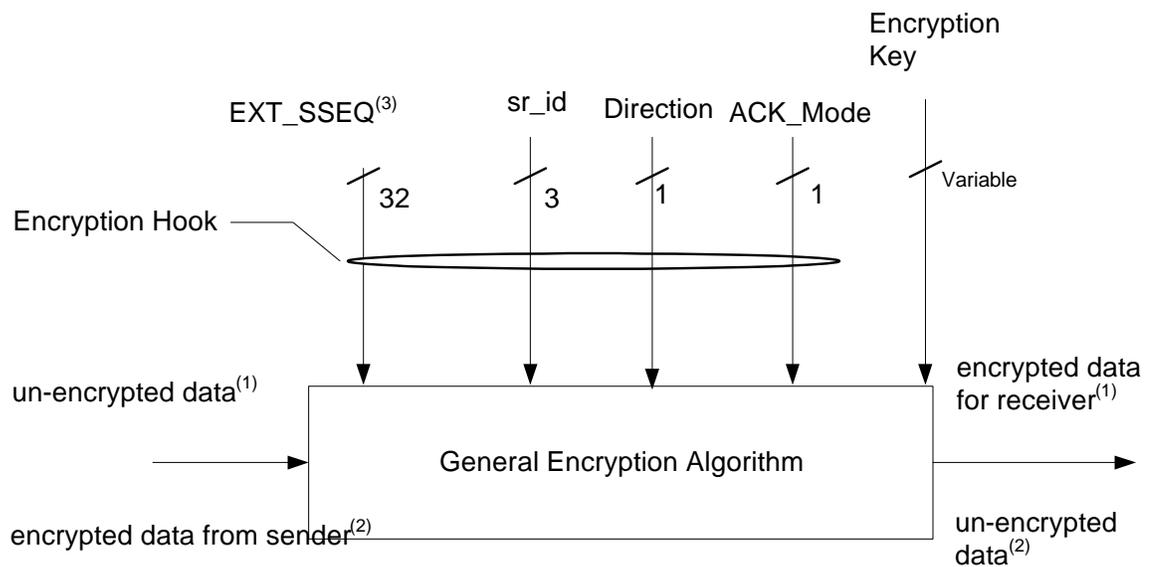
20 If P_REV_IN_USE_s is greater than or equal to nine and extended encryption for user
21 information is turned on for a service, the sender shall encrypt the user data in the service
22 layer before passing it to the MAC Layer. On the receiver side, the receiver shall pass each
23 data block from MAC Layer to that service. Details of encryption are specified in the
24 corresponding service option specification (see [30]).

25 If P_REV_IN_USE_s is greater than or equal to nine and extended encryption for user
26 information is turned on for a voice service option²⁰, the sender shall encrypt each data
27 block from the voice service, in accordance with 2.3.12.4.3, before passing the data blocks
28 to MAC Layer. On the receiver side, the receiver shall decrypt each data block for the voice
29 service from MAC Layer, in accordance with 2.3.12.4.3, before passing them to that service.

30 2.3.12.4.3 Interface to the Encryption Algorithms

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

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



Notes:

(1) For encryption only

(2) For decryption only

(3) The following value shall be used instead of EXT_SSEQ for user information: $\lfloor \text{sys_time}/20 \rfloor \bmod 2^{32}$, where sys_time is the system time, in units of ms, corresponding to the start of the frame that carries the user information bits.

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3 **Figure 2.3.12.4.3-1. Encryption Input Parameters**
4

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

- 6
- 7 • EXT_SSEQ - A 32-bit Security Encryption Sequence Number for encryption/decryption.
 - 8 • sr_id - Service Reference Identifier (see [3]), which identifies the associated service option instance.
 - 9
 - 10 • Direction - The direction of the data being encrypted/decrypted. This shall be set to
 - 11 '0' if the data is transmitted on or received on a forward link. Otherwise, it shall be
 - 12 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.

- 1 • ACK_Mode – The delivery mode (unassured or assured) of the signaling message.
 2 This shall be set to ‘0’ if the message is delivered using unassured mode; otherwise,
 3 this shall be set to ‘1’.

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

- 7 • The DATA_TYPE parameter shall be set to ‘0’.
 8 • The SYNC parameter shall be set as follows:
 9 - SYNC[0] = EXT_SSEQ [7:0]²¹.
 10 - SYNC[1] = (ACK_Mode | Direction | EXT_SSEQ [13:8]), where “|” denotes
 11 concatenation and EXT_SSEQ_s [13:8] is bits 8 through 13 of EXT_SSEQ (with
 12 the LSB being bit 0).
 13 • The CMEAKEY[0-7] parameter shall be set to the first 64 bits of ENC_KEY[KEY_ID].

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

- 16 • The encryption key parameter shall be set to ENC_KEY[KEY_ID].
 17 • The FRESH parameter shall be set to (ACK_Mode | sr_id [2:0] | Direction |
 18 EXT_SSEQ [31:0] | ‘000’).
 19 • The FRESHSIZE parameter shall be set to 5.
 20 • The BUF parameter shall be set to the pointer of the most significant bit of the
 21 buffer²² that contains the data to be encrypted or decrypted.
 22 • The BIT_OFFSET parameter shall be set to the offset between the bit position of the
 23 most significant bit of the data to be encrypted/decrypted and the bit position of the
 24 most significant bit of the buffer (e.g., if the bit position of the most significant bit of
 25 the data to be encrypted/decrypted and the bit position of the most significant bit of
 26 the buffer are equal, BIT_OFFSET = 0).
 27 • The BIT_COUNT parameter shall be set to the number of bits of the data to be
 28 encrypted/decrypted.
 29 • The full 128 bits of ENC_KEY[KEY_ID] shall be used.

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

²¹ $Z [y:x]$ denotes bit x to bit y of the binary value Z with bit 0 the least significant bit of Z .

²² “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 encryption key parameter shall be set to ENC_KEY[KEY_ID].
- 2 • The FRESH parameter shall be set to $(sr_id [2:0] \mid Direction \mid (\lfloor sys_time/20 \rfloor \bmod$
3 $2^{32}) [31:0] \mid Channel_id [2:0] \mid '0')$, where sys_time is the system time, in units of
4 ms, corresponding to the start of the physical layer frame that carries the data
5 block(s).
- 6 • The FRESHSIZE parameter shall be set to 5.
- 7 • The BUF parameter shall be set to the pointer of the most significant bit of the
8 buffer²³ that contains the data to be encrypted or decrypted.
- 9 • The BIT_OFFSET parameter shall be set to the offset between the bit position of the
10 most significant bit of the data to be encrypted/decrypted and the bit position of the
11 most significant bit of the buffer (e.g., if the bit position of the most significant bit of
12 the data to be encrypted/decrypted and the bit position of the most significant bit of
13 the buffer are equal, BIT_OFFSET = 0).
- 14 • The BIT_COUNT parameter shall be set to the number of bits of the data to be
15 encrypted/decrypted.
- 16 • The full 128 bits of ENC_KEY[KEY_ID] shall be used.

17 2.3.12.4.4 Encryption Negotiation

18 The mobile station shall indicate to the base station the encryption algorithms supported
19 by using SIG_ENCRYPT_SUP and UI_ENCRYPT_SUP in one of the following messages:

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

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

32

²³ “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.

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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.

MSB		LSB
SSD_A (64 bits)	X (32 bits)	ENC_SEQ_H (24 bits)

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_s >= 10

If P_REV_IN_USE_s is equal to or greater than ten and MSG_INTEGRITY_SUP_s 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) associated
14 with the AUTHR (see [4]) of the message. The mobile station also starts a Key Set-Up timer.
15 24

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 starts
19 with performing the 2G authentication by including an AUTHR (see [4]) in the message. If
20 an AKA is performed during a 2G authentication, the mobile station will abort the 2G
21 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.

24 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* may
6 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 2.3.12.5.12G Authentication when P_REV_IN_USE_s >= 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 validation
31 is successful, the pending (CIK, CCK) and NEW_SSEQ_H can become "in use" in the mobile
32 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 procedures,
7 not to retry key set-up, and not to perform message integrity in both directions²⁵. If the
8 mobile station retries key set-up but still cannot establish the keys after an implementation
9 dependent number of retries, the mobile station may reject the serving base station.

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

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

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

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

30 2.3.12.5.23G Authentication (AKA) when $P_REV_IN_USE_s \geq 10$

31 This section applies to a base station that performs 3G authentication (AKA) with the
32 mobile station. The AKA procedure and related algorithms take mobile station specific
33 information, data received from base station and the mobile station's subscriber
34 authentication key as inputs. The subscriber authentication key is 128-bits long. It is
35 assigned to the mobile station and is stored in the mobile station's permanent security and
36 identification memory. The subscriber authentication key is known only to the mobile
37 station and to its associated Authentication Center (AC) (see [13]). Refer to Figures

²⁵ 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).

1 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
2 the mobile station's subscriber authentication key.

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

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

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

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

- 23 • Authentication Random Challenge Number (RANDA)
- 24 • Expected Result (XRES)
- 25 • Encryption Key (CK)
- 26 • Integrity Key (IK)
- 27 • UIM Authentication Key (UAK) (support of this field is optional)
- 28 • Authentication Token (AUTN), which consists of the Concealed Sequence Number
29 (CON_SQN), the Authentication Management Function (AMF), and the Message
30 Authentication Code (MAC-A).

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

38 If the UIM determines that the received SQN is not in the correct range (see [46]), the
39 mobile station sends an *Authentication Resync Message* to the base station that includes
40 the concealed value of the sequence number stored in the UIM (CON_MS_SQN). If the SQN
41 is in the correct range, the UIM computes the (IK, CK) pair and the RES and passes the (IK,

1 CK) pair and RES to the mobile station. The mobile station then associates a pending key
2 id NEW_KEY_ID and a pending NEW_SSEQ_H with the pending (IK, CK) pair and sends an
3 *Authentication Response Message* containing RES to the base station. The *Authentication*
4 *Response Message* shall contain a Message Authentication Code that is computed based on
5 the pending NEW_SSEQ_H and the pending IK.

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

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

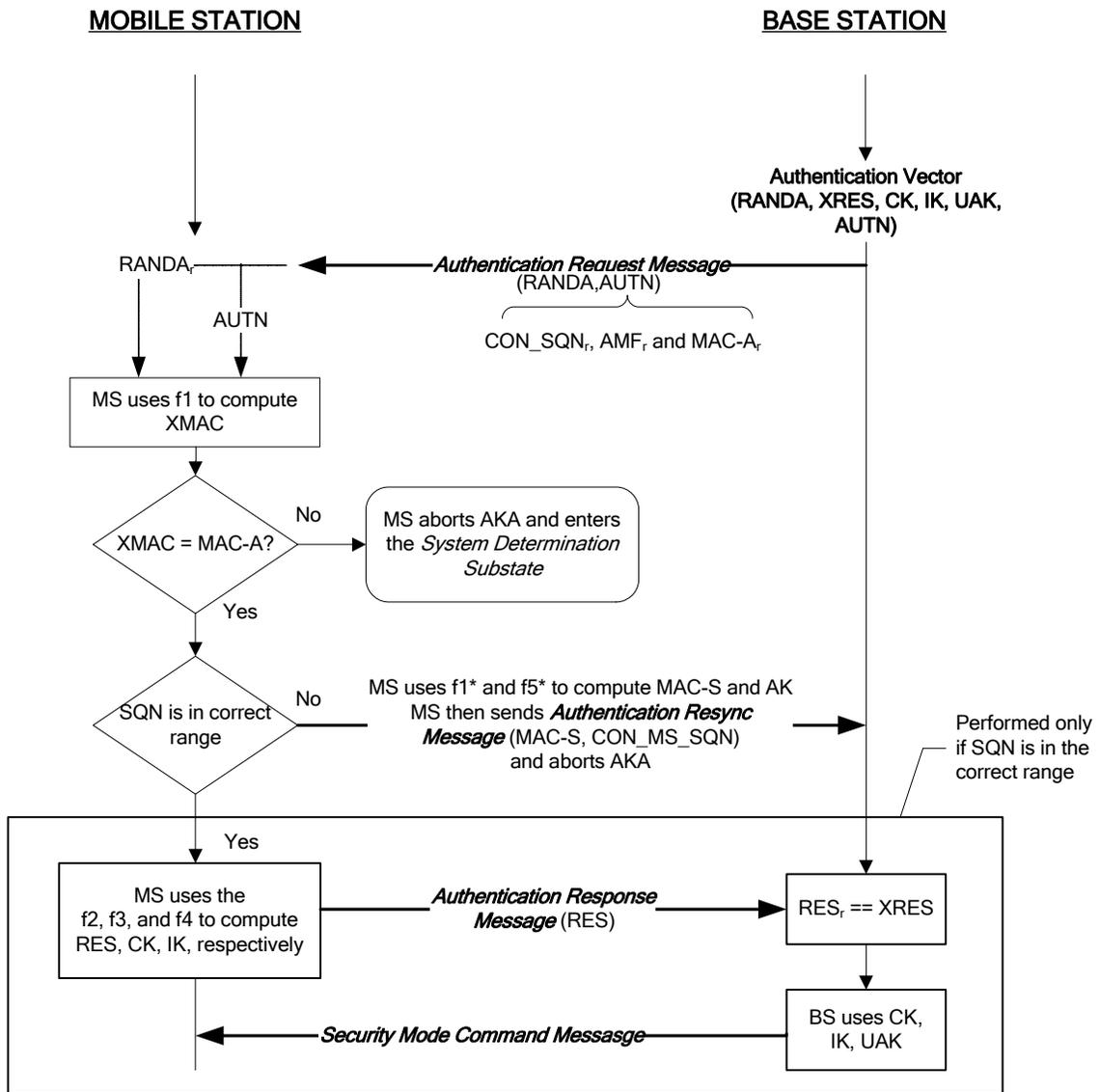
19 Once (IK, CK) has been established, the mobile station may start integrity protection and
20 encryption.

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

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

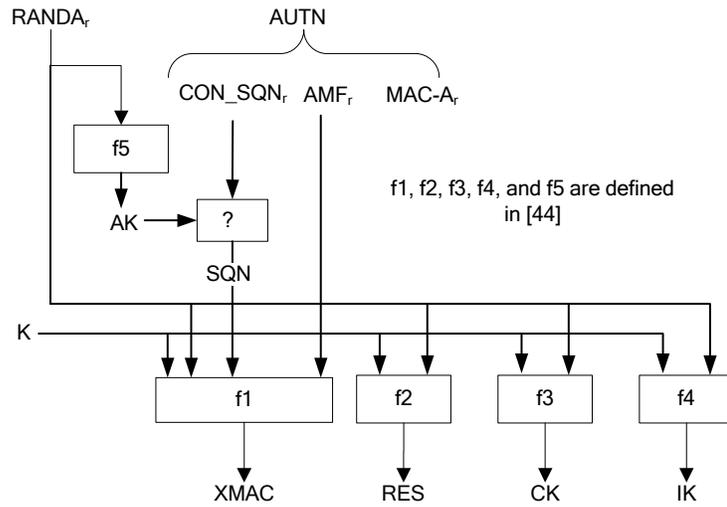
33 To minimize race conditions, on the base station side, the base station does not send any
34 messages that are encrypted or include a Message Authentication Code, and are non-
35 essential to the key set-up between the time it sends the *Authentication Request Message*
36 and the time it receives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

41



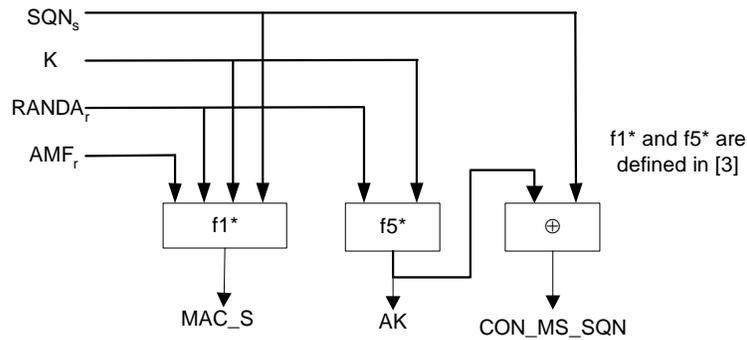
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Figure 2.3.12.5.2-1. Authentication and Key Agreement Procedures Message Flow



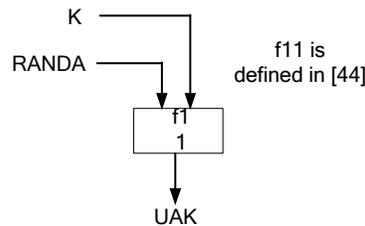
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Figure 2.3.12.5.2-2. User Authentication Function used by the Mobile Station



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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



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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_r*) and use the resultant key from the algorithm. The Key Strength Reduction Algorithm uses the encryption key, *RAND*, and *ENC_KEY_SIZE_r* 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].

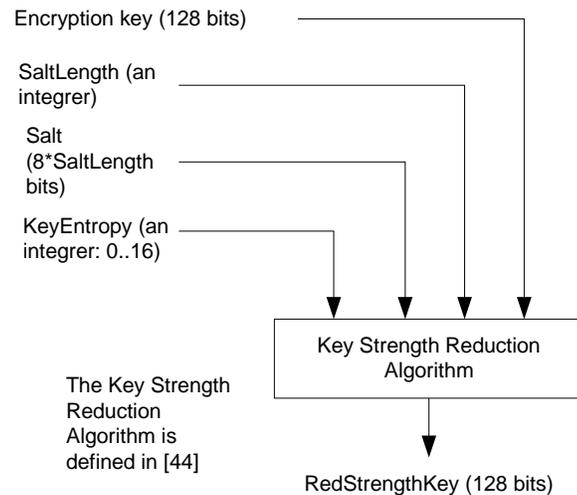


Figure 2.3.12.5.4-1. Key Strength Reduction

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_S.
- KeyEntropy shall be set to ENC_KEY_SIZE_r.

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)

1 In response, the base station shall select the integrity algorithm to be used among the
 2 integrity algorithms that are supported by both the mobile station and the base station,
 3 and then compute the MAC-I of a *Registration Accepted Order*, *Extended Channel*
 4 *Assignment Message*, or *Security Mode Command Message* based on the selected algorithm.

5 If and only if the base station sends a *Registration Accepted Order*, *Extended Channel*
 6 *Assignment Message*, or *Security Mode Command Message* with the CHANGE_KEYS field²⁶
 7 set to '1', the base station shall supply the base station LAC layer with the 24-bit value
 8 carried in NEW_SSEQ_H field and the 2-bit value in the NEW_KEY_ID field in the
 9 *Registration Message*, *Origination Message*, *Page Response Message*, *Authentication*
 10 *Response Message*, or the *Security Mode Request Message* that the base station is
 11 responding to.

12 2.3.13 Lock and Maintenance Required Orders

13 The mobile station shall have memory to store the lock reason code (LCKRSN_{P_{s-p}}) received
 14 in the *Lock Until Power-Cycled Order*. The data retention time under power-off conditions
 15 shall be at least 48 hours.

16 The mobile station shall have memory to store the maintenance reason code
 17 (MAINTRSN_{S-p}) received in the *Maintenance Required Order*. The data retention time under
 18 power-off conditions shall be at least 48 hours.

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

21 2.3.14 Mobile Station Revision Identification

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

- 25 • Mobile manufacturer code (MOB_MFG_CODE_p)
- 26 • Manufacturer's model number (MOB_MODEL_p)
- 27 • Firmware revision number (MOB_FIRM_REV_p)

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

- 30 • Protocol revision number (MOB_P_REV_p)

31 2.3.15 Temporary Mobile Subscriber Identity

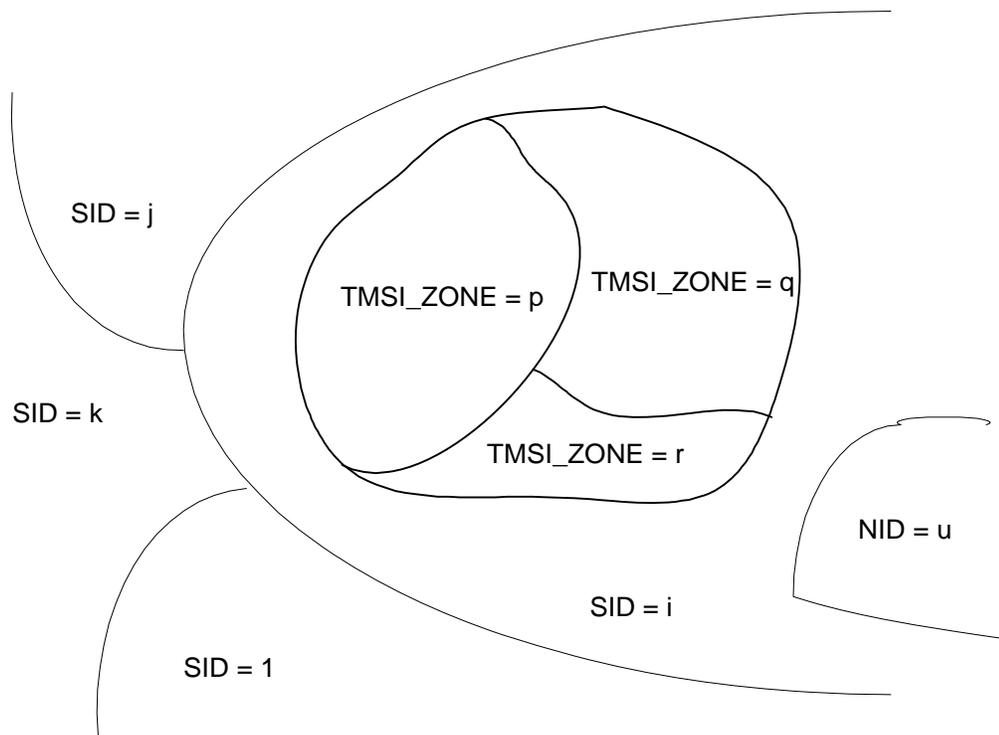
32 2.3.15.1 Overview

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

²⁶ 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.

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

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



11
 12 **Figure 2.3.15-1. TMSI Zone Example**

13

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

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

22 Whenever the mobile station sends its full TMSI, the mobile station sets a timer, called the
 23 full-TMSI timer. If the full-TMSI timer expires, the mobile station deletes the TMSI by
 24 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_{s-p})
- 8-octet assigning TMSI zone (ASSIGNING_TMSI_ZONE_{s-p})
- 4-octet TMSI code (TMSI_CODE_{s-p})
- 3-octet TMSI expiration time (TMSI_EXP_TIME_{s-p})

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^{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

Counter Identifier	Length (bits)	Description
BCCH_5	16	Number of times that the mobile station declared a loss of the Broadcast Control Channel

1

2.5 Reserved

2.6 Layer 3 Processing

This section describes mobile station Layer 3 processing. It contains frequent references to the messages that flow between the mobile station and base station. While reading this section, it may be helpful to refer to the PDU formats (see 2.7 and 3.7), and to the message flow examples (see Annex B and Annex C).

The mobile station shall ignore fields at the end of messages that do not exist in the protocol revision supported by the mobile station.

The values for the time and numerical constants used in this section (e.g., T_{20m} , N_{4m}) are specified in Annex D.

As illustrated in Figure 2.6-1, mobile station Layer 3 processing consists of the following states:

- *Mobile Station Initialization State* - In this state, the mobile station selects and acquires a system.
- *Mobile Station Idle State* - In this state, the mobile station monitors messages on the f-csch.
- *System Access State* - In this state, the mobile station sends messages to the base station on the r-csch and receives messages from the base station on the f-csch.
- *Mobile Station Control on the Traffic Channel State* - In this state, the mobile station communicates with the base station using the f/r-dsch and f/r-dtch.

After power is applied to the mobile station, it shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a power-up indication (see 2.6.1.1).

1 2.6.1 Mobile Station Initialization State

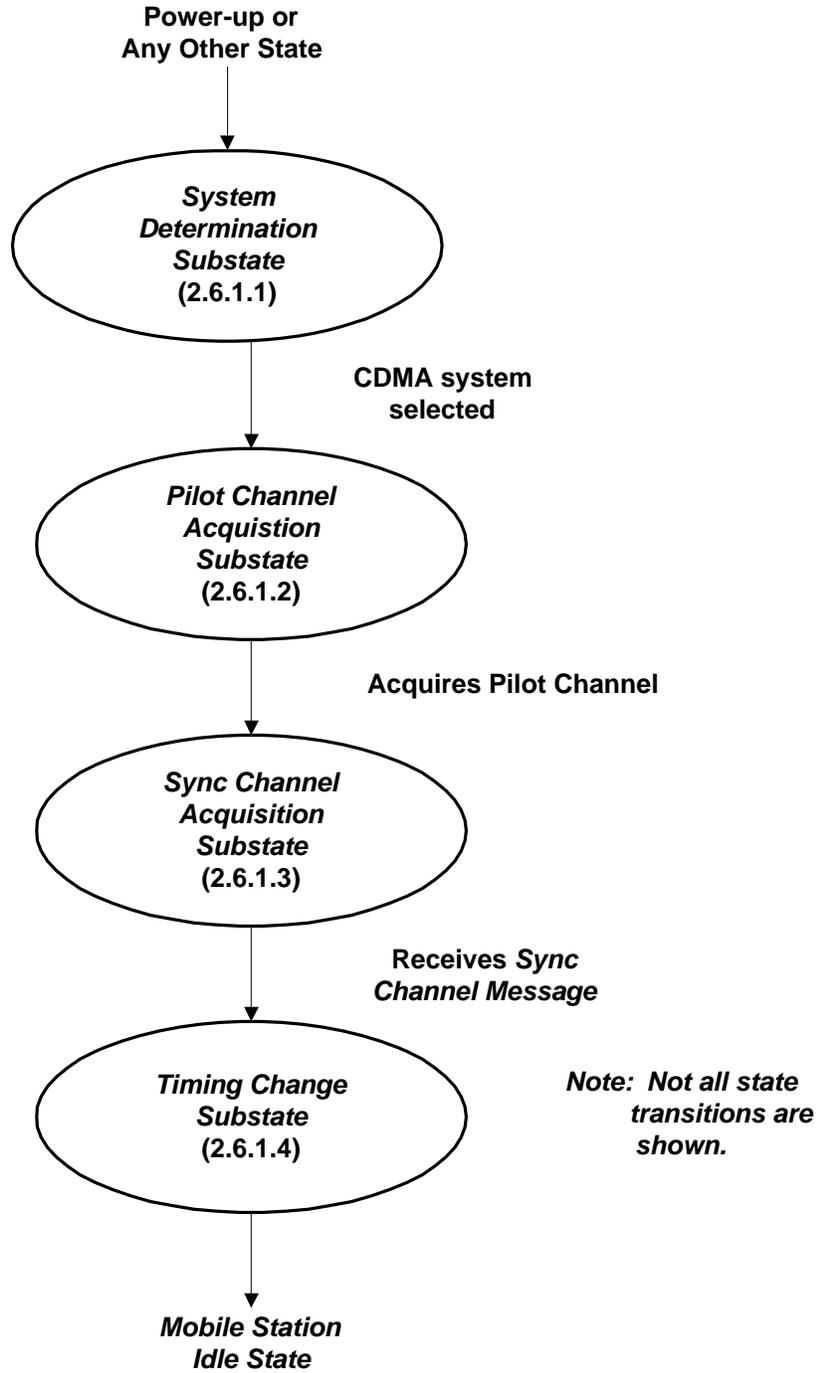
2 In this state, the mobile station first selects a system to use. If the selected system is a
3 CDMA system, the mobile station proceeds to acquire and then synchronize to the CDMA
4 system.

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.

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Figure 2.6.1-1. Mobile Station Initialization State

2.6.1.1 System Determination Substate

In this substate, the mobile station selects the system to use.

Upon entering the *System Determination Substate*, the mobile station shall initialize the registration parameters as specified in 2.6.5.5.1.1.

If the mobile station enters the *System Determination Substate* with a power-up indication, the mobile station shall set $RAND_S$ to 0 (see 2.3.12.1.2), $PACA_S$ to disabled, $PACA_CANCEL$ to '0', the $PACA$ state timer to disabled, $NDSS_ORIG_S$ to disabled, $MAX_REDIRECT_DELAY_S$ to 31, $REDIRECTION_S$ to disabled, all entries of $SDB_SO_OMIT_S$ to '0',

$RER_MODE_ENABLED$ to NO, $TKZ_MODE_ENABLED$ to NO, $TKZ_MODE_PENDING$ to NO, $RSC_MODE_ENABLED$ to NO, and $T_SLOTTED_S$ to T_{74m} . 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 any indication other than a power-up indication, and if $PACA_S$ is equal to enabled, the mobile station shall also set $PACA_S$ to disabled, $PACA_CANCEL$ to '0', the $PACA$ state timer to disabled, and should indicate to the user that the $PACA$ call has been canceled.

If the mobile station enters the *System Determination Substate* with an acquisition failure indication, the mobile station shall perform the following:

- If $REDIRECTION_S$ is equal to enabled, the mobile station shall attempt to select another system in accordance with the current redirection criteria (see 2.6.1.1.2). If the mobile station is able to select another system, the mobile station shall attempt to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has exhausted all possible selections using the current redirection criteria, the mobile station shall perform the following:
 - The mobile station shall set $REDIRECTION_S$ to disabled.
 - The mobile station shall set $RETURN_CAUSE_S$ to '0001'.
 - If $RETURN_IF_FAIL_S$ is equal to '1', the mobile station shall attempt to select the system from which it was redirected and shall attempt to acquire the selected system (see 2.6.1.1.4). The precise process for determining how to select the system from which the mobile station was redirected is left to the mobile station manufacturer.
 - If $RETURN_IF_FAIL_S$ is equal to '0', the mobile station shall select a system other than the system from which it was redirected 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). The precise process that the mobile station uses to avoid selecting the system from which it was redirected is left to the mobile station manufacturer.
- If $REDIRECTION_S$ 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).

1 If the mobile station enters the *System Determination Substate* with a new system
 2 indication, the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is
 3 enabled, the mobile station shall set NDSS_ORIG_S 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 to
 6 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_S to disabled. If NDSS_ORIG_S is enabled, the
 9 mobile station shall set NDSS_ORIG_S 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_S to disabled. If NDSS_ORIG_S is
 14 enabled, the mobile station shall set NDSS_ORIG_S to disabled and should indicate to the
 15 user that the call origination is canceled. The mobile station should set CDMACH_S to the
 16 CDMA Channel (CDMA_FREQ) specified in the *CDMA Capability Global Action Message* and
 17 should attempt to acquire a CDMA system on the specified CDMA channel (see 2.6.1.1.4).
 18 If the mobile station does not attempt to acquire a CDMA system on the specified CDMA
 19 Channel, the mobile station shall select a system in accordance with the custom system
 20 selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see
 21 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_S to disabled. If
 24 NDSS_ORIG_S is enabled, the mobile station shall set NDSS_ORIG_S to disabled and should
 25 indicate to the user that the call origination is canceled. The mobile station should set
 26 CDMACH_S 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 indication,
 33 the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the
 34 mobile station shall set NDSS_ORIG_S to disabled and should indicate to the user that the
 35 call origination is canceled. The mobile station shall select a system in accordance with the
 36 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
 37 system (see 2.6.1.1.4).

38 If the mobile station enters the *System Determination Substate* with an encryption/message
 39 integrity failure indication, the mobile station shall set REDIRECTION_S to disabled, KEY_ID
 40 to '00', D_SIG_ENCRYPT_MODE_S to '000', C_SIG_ENCRYPT_MODE_S to '000',
 41 LAST_2G_KEY_ID_S to '00', LAST_3G_KEY_ID_S to '10', ENC_KEY[j] to NULL, INT_KEY[j] to
 42 NULL, TX_EXT_SSEQ[i][j] to 0, RX_EXT_SSEQ[i][j] to 0, where i ranges from '0' to '1' and j
 43 ranges from '00' to '11'. If NDSS_ORIG_S is enabled, the mobile station shall set
 44 NDSS_ORIG_S to disabled and should indicate to the user that the call origination is

1 canceled. The mobile station shall select a system in accordance with the custom system
2 selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see
3 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_s to disabled. If NDSS_ORIG_s is
6 enabled, the mobile station shall set NDSS_ORIG_s 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, the
15 mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile
16 station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call
17 origination is canceled. The mobile station shall select a system in accordance with the
18 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
19 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_s 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_s to disabled.
 - 29 - The mobile station shall set RETURN_CAUSE_s to '0010'.
 - 30 - If RETURN_IF_FAIL_s 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_s is equal to '0', the mobile station shall select a system other
36 than the system from which it was redirected in accordance with the custom
37 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.

- 1 • If REDIRECTION_S is equal to disabled, the mobile station shall select a system in
2 accordance with the custom system selection process (see 2.6.1.1.1) and shall
3 attempt to acquire the selected system (see 2.6.1.1.4).

4 If the mobile station enters the *System Determination Substate* with a system lost indication,
5 the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the
6 mobile station shall set NDSS_ORIG_S to disabled and should indicate to the user that the
7 call origination is canceled. The mobile station should attempt to select the same system
8 that was lost, and should attempt to acquire the selected system (see 2.6.1.1.4). The
9 precise process for determining how to select the same system is left to the mobile station
10 manufacturer. If the mobile station does not attempt to select the same system, the mobile
11 station shall select a system in accordance with the custom system selection process (see
12 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

13 If the mobile station enters the *System Determination Substate* with a lock indication, the
14 mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the mobile
15 station shall set NDSS_ORIG_S to disabled and should indicate to the user that the call
16 origination is canceled. The mobile station shall select a system in accordance with the
17 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
18 system (see 2.6.1.1.4).

19 If the mobile station enters the *System Determination Substate* with an unlock indication,
20 the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the
21 mobile station shall set NDSS_ORIG_S to disabled and should indicate to the user that the
22 call origination is canceled. The mobile station shall select a system in accordance with the
23 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
24 system (see 2.6.1.1.4).

25 If the mobile station enters the *System Determination Substate* with an access denied
26 indication, the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is
27 enabled, the mobile station shall set NDSS_ORIG_S to disabled and should indicate to the
28 user that the call origination is canceled. The mobile station shall select a system in
29 accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to
30 acquire the selected system (see 2.6.1.1.4).

31 If the mobile station enters the *System Determination Substate* with an ACCT blocked
32 indication, the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is
33 enabled, the mobile station shall set NDSS_ORIG_S to disabled. The mobile station shall
34 select a system in accordance with the custom system selection process (see 2.6.1.1.1) and
35 shall attempt to acquire the selected system (see 2.6.1.1.4).

36 If the mobile station enters the *System Determination Substate* with an NDSS off indication,
37 the mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the
38 mobile station shall set NDSS_ORIG_S to disabled and should indicate to the user that the
39 call origination is canceled. The mobile station shall select a system in accordance with the
40 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
41 system (see 2.6.1.1.4).

42 If the mobile station enters the *System Determination Substate* with a release indication and
43 REDIRECTION_S is equal to enabled, the mobile station shall attempt to select the same

1 system on which the release occurred and shall attempt to acquire the selected system (see
2 2.6.1.1.4). The precise process for determining how to select the same system is left to the
3 mobile station manufacturer. If REDIRECTION_S is equal to disabled, the mobile station
4 shall select a system in accordance with the custom system selection process (see
5 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4). If NDSS_ORIG_S
6 is enabled, the mobile station shall set NDSS_ORIG_S to disabled.

7 If the mobile station enters the *System Determination Substate* with an error indication, the
8 mobile station shall set REDIRECTION_S to disabled. If NDSS_ORIG_S is enabled, the mobile
9 station shall set NDSS_ORIG_S to disabled and should indicate to the user that the call
10 origination is canceled. The mobile station shall select a system in accordance with the
11 custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected
12 system (see 2.6.1.1.4).

13 If the mobile station enters the *System Determination Substate* with a redirection indication,
14 the mobile station shall set REDIRECTION_S to enabled. The mobile station shall delete all
15 entries from the ZONE_LIST_S and SID_NID_LIST_S. The mobile station shall select a system
16 in accordance with the current redirection criteria (see 2.6.1.1.2) and shall attempt to
17 acquire the selected system (see 2.6.1.1.4).

18 If the mobile station enters the *System Determination Substate* with a registration rejected
19 indication, the mobile station shall perform the following:

- 20 • The mobile station shall delete the newly generated encryption key (if any).
- 21 • If REDIRECTION_S is equal to enabled, the mobile station shall perform the
22 following:
 - 23 - The mobile station shall set REDIRECTION_S to disabled.
 - 24 - The mobile station shall set RETURN_CAUSE_S to '0011'.
 - 25 - If RETURN_IF_FAIL_S is equal to '1', the mobile station shall attempt to select the
26 system from which it was redirected and shall attempt to acquire the selected
27 system (see 2.6.1.1.4). The precise process for determining how to select the
28 system from which the mobile station was redirected is left to the mobile station
29 manufacturer.
 - 30 - If RETURN_IF_FAIL_S is equal to '0', the mobile station shall select a system other
31 than the system from which it was redirected in accordance with the custom
32 system selection process (see 2.6.1.1.1) and shall attempt to acquire the
33 selected system (see 2.6.1.1.4). The precise process for determining how to
34 avoid the system from which the mobile station was redirected is left to the
35 mobile station manufacturer.
- 36 • If REDIRECTION_S is equal to disabled, the mobile station shall select a system in
37 accordance with the custom system selection process (see 2.6.1.1.1) and shall
38 attempt to acquire the selected system (see 2.6.1.1.4).

39 If the mobile station enters the *System Determination Substate* with a wrong system
40 indication, the mobile station shall perform the following:

- 1 • If REDIRECTION_S is equal to enabled, the mobile station shall attempt to select
2 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If
3 the mobile station is able to select another system, the mobile station shall attempt
4 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has
5 exhausted all possible selections using the current redirection criteria, the mobile
6 station shall perform the following:
- 7 - The mobile station shall set REDIRECTION_S to disabled.
8 - The mobile station shall set RETURN_CAUSE_S to '0100'.
9 - If RETURN_IF_FAIL_S is equal to '1', the mobile station shall attempt to select the
10 system from which it was redirected and shall attempt to acquire the selected
11 system (see 2.6.1.1.4). The precise process for determining how to select the
12 system from which the mobile station was redirected is left to the mobile station
13 manufacturer.
14 - If RETURN_IF_FAIL_S is equal to '0', the mobile station shall select a system other
15 than the system from which it was redirected in accordance with the custom
16 system selection process (see 2.6.1.1.1) and shall attempt to acquire the
17 selected system (see 2.6.1.1.4). The precise process for determining how to
18 avoid the system from which the mobile station was redirected is left to the
19 mobile station manufacturer.
- 20 • If REDIRECTION_S is equal to disabled, the mobile station shall select a system in
21 accordance with the custom system selection process (see 2.6.1.1.1) and shall
22 attempt to acquire the selected system (see 2.6.1.1.4).

23 If the mobile station enters the *System Determination Substate* with a wrong network
24 indication, the mobile station shall perform the following:

- 25 • If REDIRECTION_S is equal to enabled, the mobile station shall attempt to select
26 another system in accordance with the current redirection criteria (see 2.6.1.1.2). If
27 the mobile station is able to select another system, the mobile station shall attempt
28 to acquire the selected system (see 2.6.1.1.4). Otherwise, if the mobile station has
29 exhausted all possible selections using the current redirection criteria, the mobile
30 station shall perform the following:
- 31 - The mobile station shall set REDIRECTION_S to disabled.
32 - The mobile station shall set RETURN_CAUSE_S to '0101'.
33 - If RETURN_IF_FAIL_S is equal to '1', the mobile station shall attempt to select the
34 system from which it was redirected and shall attempt to acquire the selected
35 system (see 2.6.1.1.4). The precise process for determining how to select the
36 system from which the mobile station was redirected is left to the mobile station
37 manufacturer.

- 1 - If RETURN_IF_FAIL_s is equal to '0', the mobile station shall select a system other
2 than the system from which it was redirected in accordance with the custom
3 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_s 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_s to the band
15 class (see [30]) for the selected system.
- 16 • If the mobile station is to use a CDMA system with CDMABAND_s = '00000' or
17 CDMABAND_s = '00011', it shall perform the following:
- 18 - If the mobile station is to use System A, it shall set SERVSYS_s to SYS_A. If the
19 mobile station is to use System B, it shall set SERVSYS_s to SYS_B.
- 20 - The mobile station shall set CDMACH_s either to the Primary or Secondary
21 CDMA Channel number (see [2]) for the selected serving system (SERVSYS_s). 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_s other than '00000'
26 or '00011', it shall set CDMACH_s 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_s 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 Redirection*
36 *Message*, the mobile station shall process at most *j* sequential redirection records,
37 where *j* is equal to the number of redirection records in REDIRECT_REC_LIST as
38 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_{s-p} to '1'; otherwise the mobile station
3 shall set TMSI_CODE_{s-p} to TEMP_TMSI_CODE.
- 4 - Store the redirection record (REDIRECT_REC_s = 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_s to '1'.
- 8 + Set DIGITAL_REG_{s-p} to '00000000'.
- 9 + Set the maximum delay upon redirection (MAX_REDIRECT_DELAY_s =
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_s 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_s 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_s 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_s 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_s to SYS_A.
35 - For the second system selection, the mobile station shall set SERVSYS_s 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 associated
- 19 with the value of the i^{th} occurrence of the $CDMA_CHAN$ field and the CDMA
- 20 channel is supported for at least one band subclass listed in the record
- 21 (when included), the mobile station shall set $CDMACH_S$ to the value of the i^{th}
- 22 occurrence of the $CDMA_CHAN$ field and shall set $CDMABAND_S$ to the value
- 23 specified in the $BAND_CLASS$ field.
- 24 + Otherwise, the mobile station shall not make the i^{th} system selection.

25 2.6.1.1.3 System Selection Using System Reselection Criteria

26 The precise process for selecting a system using system reselection criteria is left to the

27 mobile station manufacturer. The mobile station should use information received in the

28 *Neighbor List Message*, *Extended Neighbor List Message*, *General Neighbor List Message*, or

29 the *Universal Neighbor List Message* to perform the system reselection process as follows:

- 30 • If there are pilots in the Neighbor List on a different Frequency Assignment than
- 31 that of the mobile station, the mobile station may select the CDMA system
- 32 consisting of these neighbor pilots. If the mobile station is to use a CDMA system,
- 33 it shall set $CDMABAND_S$ to the band class (see [30]) for the selected system and
- 34 shall set $CDMACH_S$ to the CDMA Channel number (see [2]) for the selected system.

35 2.6.1.1.4 Acquiring the Selected System

36 The mobile station shall attempt to acquire the selected system as follows:

- 37 • If the selected system is a CDMA system, the mobile station shall enter the *Pilot*
- 38 *Channel Acquisition Substate*.

1 2.6.1.2 Pilot Channel Acquisition Substate

2 In this substate, the mobile station acquires the Pilot Channel of the selected CDMA
3 system.

4 Upon entering the *Pilot Channel Acquisition Substate*, the mobile station shall tune to the
5 CDMA Channel number equal to $CDMACH_s$, shall set its code channel for the Pilot
6 Channel (see [2]) and shall search for the Pilot Channel for no longer than T_{20m} seconds
7 (see Annex D). If the mobile station acquires the Pilot Channel, the mobile station shall
8 enter the *Sync Channel Acquisition Substate*.

9 If the mobile station determines that it is unlikely to acquire the Pilot Channel within T_{20m}
10 seconds, the mobile station may enter the *System Determination Substate* with an
11 acquisition failure indication (see 2.6.1.1). The time, to either acquire the Pilot Channel or
12 determine that Pilot Channel acquisition is unlikely, shall not exceed T_{20m} seconds (see
13 Annex D), after which the mobile station shall enter the *System Determination Substate* with
14 an acquisition failure indication (see 2.6.1.1).

15 2.6.1.3 Sync Channel Acquisition Substate

16 In this substate, the mobile station receives and processes the *Sync Channel Message* to
17 obtain system configuration and timing information. A valid *Sync Channel Message* is one
18 that passes the CRC check and is in the appropriate format according to the protocol
19 revision of the base station.

20 Upon entering the *Sync Channel Acquisition Substate*, the mobile station shall set its code
21 channel for the Sync Channel (see [2]).

22 If the mobile station does not receive a valid *Sync Channel Message* within T_{21m} seconds,
23 the mobile station shall enter the *System Determination Substate* with an acquisition failure
24 indication.

25 If the mobile station receives a valid *Sync Channel Message* within T_{21m} seconds, but the
26 protocol revision level supported by the mobile station ($MOB_P_REV_p$ of the current band
27 class) is less than the minimum protocol revision level supported by the base station
28 ($MIN_P_REV_r$), the mobile station shall enter the *System Determination Substate* with a
29 protocol mismatch indication (see 2.6.1.1).

30 If the mobile station receives a valid *Sync Channel Message* within T_{21m} seconds, but the
31 values of the $PRAT_r$, the $SR1_BRAT_NON_TD_r$, the $SR1_BRAT_TD_r$, or the $SR3_BRAT_r$ fields
32 are designated as reserved by the protocol revision level supported by the mobile station
33 ($MOB_P_REV_p$ of the current band class), the mobile station shall enter the *System*
34 *Determination Substate* with a protocol mismatch indication (see 2.6.1.1).

35 If the mobile station receives a valid *Sync Channel Message* within T_{21m} seconds and the
36 protocol revision level supported by the mobile station ($MOB_P_REV_p$ of the current band
37 class) is greater than or equal to the minimum protocol revision level supported by the base
38 station ($MIN_P_REV_r$), the mobile station shall store the following information from the
39 message:

- 40 • Protocol revision level ($P_REV_s = P_REV_r$)
- 41 • Minimum protocol revision level ($MIN_P_REV_s = MIN_P_REV_r$)

- 1 • System identification ($SID_S = SID_T$)
 - 2 • Network identification ($NID_S = NID_T$)
 - 3 • Pilot PN sequence offset index ($PILOT_PN_S = PILOT_PN_T$)
 - 4 • Long code state ($LC_STATE_S = LC_STATE_T$)
 - 5 • System Time ($SYS_TIME_S = SYS_TIME_T$)
 - 6 • Paging Channel data rate ($PRAT_S = PRAT_T$)
 - 7 • Protocol revision level currently in use ($P_REV_IN_USE_S =$ the lesser value of
 - 8 P_REV_S and $MOB_P_REV_P$ of the current band class)

 - 9 • SR1 Non-TD BCCH support indicator ($SR1_BCCH_NON_TD_INCL_S =$
 - 10 $SR1_BCCH_NON_TD_INCL_T$)
 - 11 • SR1 TD BCCH support indicator ($SR1_TD_INCL_S = SR1_TD_INCL_T$)
 - 12 • If $SR1_BCCH_NON_TD_INCL_T$ is equal to '1':
 - 13 - $SR1_BRAT_NON_TD_S = SR1_BRAT_NON_TD_T$;
 - 14 - $SR1_CRAT_NON_TD_S = SR1_CRAT_NON_TD_T$;
 - 15 - $BCCH_CODE_CHAN_NON_TD_S = SR1_BCCH_CODE_CHAN_NON_TD_T$.
 - 16 • If $SR1_TD_INCL_T$ is included and is equal to '1', and the mobile station supports the
 - 17 Transmit Diversity indicated by $SR1_TD_MODE_T$:
 - 18 - $SR1_BRAT_TD_S = SR1_BRAT_TD_T$;
 - 19 - $SR1_CRAT_TD_S = SR1_CRAT_TD_T$;
 - 20 - $BCCH_CODE_CHAN_TD_S = SR1_BCCH_CODE_CHAN_TD_T$.
 - 21 • If the mobile station supports the Transmit Diversity, $SR1_BCCH_NON_TD_INCL_T$ is
 - 22 equal to '1', and $SR1_TD_INCL_T$ is equal to '0':
 - 23 - $SR1_BRAT_TD_S = SR1_BRAT_NON_TD_T$;
 - 24 - $SR1_CRAT_TD_S = SR1_CRAT_NON_TD_T$;
 - 25 - $BCCH_CODE_CHAN_TD_S = SR1_BCCH_CODE_CHAN_NON_TD_T$.
 - 26 • SR3 support indicator ($SR3_INCL_S = SR3_INCL_T$)
- 27 The mobile station shall ignore any fields at the end of the *Sync Channel Message* that are
- 28 not defined according to the protocol revision level ($MOB_P_REV_P$ of the current band class)
- 29 being used by the mobile station.

30 The mobile station may store the following information from the message:

- 31 • Number of leap seconds that have occurred since the start of System Time
- 32 ($LP_SEC_S = LP_SEC_T$)
- 33 • Offset of local time from System Time ($LTM_OFF_S = LTM_OFF_T$)
- 34 • Daylight savings time indicator ($DAYLT_S = DAYLT_T$)

1 If REDIRECTION_s and NDSS_ORIG_s are equal to disabled, the mobile station may enter the
2 *System Determination Substate* with a reselection indication (see 2.6.1.1).

3 If REDIRECTION_s is equal to enabled, the EXPECTED_SID field of REDIRECT_REC_s is not
4 equal to 0, and SID_r is not equal to EXPECTED_SID, the mobile station shall enter the
5 *System Determination Substate* with a wrong system indication (see 2.6.1.1). If
6 REDIRECTION_s is equal to enabled, the EXPECTED_NID field of REDIRECT_REC_s is not
7 equal to 65535, and NID_r is not equal to EXPECTED_NID, the mobile station shall enter
8 the *System Determination Substate* with a wrong network indication.

9 If P_REV_IN_USE_s is less than 6, the mobile station shall set POTENTIAL_CDMACH_s to
10 CDMA_FREQ_r.

11 If P_REV_IN_USE_s is equal to six, the mobile station shall perform the following:

- 12 • If the mobile station supports the Quick Paging Channel or any radio configuration
13 in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile station shall set
14 POTENTIAL_CDMACH_s equal to EXT_CDMA_FREQ_r; otherwise, the mobile station
15 shall set POTENTIAL_CDMACH_s equal to CDMA_FREQ_r.

16 If P_REV_IN_USE_s is greater than six, the mobile station shall perform the following:

- 17 • If the mobile station supports Spreading Rate 3 on the common channels and
18 SR3_INCL_s is equal to '1', the mobile station shall set:

19 - BRAT_s = SR3_BRAT_r;

20 + BCCH_CODE_RATE_s = 1/3;

21 - BCCH_s = SR3_BCCH_CODE_CHAN_r;

22 - SR3_PRIMARY_PILOT_s = SR3_PRIMARY_PILOT_r;

23 - SR3_PILOT_POWER1_s = SR3_PILOT_POWER1_r;

24 - SR3_PILOT_POWER2_s = SR3_PILOT_POWER2_r;

25 - If SR3_CENTER_FREQ_INCL_r is equal to '1', POTENTIAL_CDMACH_s =
26 SR3_CENTER_FREQ_r; otherwise, POTENTIAL_CDMACH_s = EXT_CDMA_FREQ_r.

- 27 • If the mobile station does not support Spreading Rate 3 on the common channel or
28 if SR3_INCL_s is equal to '0', the mobile station shall perform the following:

29 - If SR1_TD_INCL_r is equal to '1' and the mobile station supports the Transmit
30 Diversity mode specified by SR1_TD_MODE_r, the mobile station shall set:

31 + SR1_TD_MODE_s = SR1_TD_MODE_r

32 + SR1_TD_POWER_LEVEL_s = SR1_TD_POWER_LEVEL_r

33 + BRAT_s = SR1_BRAT_TDr

34 + BCCH_CODE_RATE_s = SR1_CRAT_TDr,

35 + BCCH_s = SR1_BCCH_CODE_CHAN_TDr,

36 + POTENTIAL_CDMACH_s = SR1_CDMA_FREQ_TDr

- 1 - Otherwise, if $SR1_BCCH_NON_TD_INCL_r$ is equal to '1', the mobile station shall
2 set:
- 3 + $BRAT_s = SR1_BRAT_NON_TD_r$
- 4 + $BCCH_CODE_RATE_s = SR1_CRAT_NON_TD_r$,
- 5 + $BCCH_s = SR1_BCCH_CODE_CHAN_NON_TD_r$,
- 6 + If $SR1_NON_TD_FREQ_INCL_r$ is equal to '1', $POTENTIAL_CDMACH_s =$
7 $SR1_CDMA_FREQ_NON_TD_r$; otherwise, $POTENTIAL_CDMACH_s =$
8 $EXT_CDMA_FREQ_r$
- 9 - Otherwise, the mobile station shall perform the following:
- 10 + If the mobile station supports the Quick Paging Channel or any radio
11 configuration in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile
12 station shall set $POTENTIAL_CDMACH_s = EXT_CDMA_FREQ_r$; otherwise,
13 the mobile station shall set $POTENTIAL_CDMACH_s = CDMA_FREQ_r$.
- 14 If $POTENTIAL_CDMACH_s$ is different from $CDMACH_s$, the mobile station shall set
15 $CDMACH_s = POTENTIAL_CDMACH_s$ and then tune to the CDMA Channel ($CDMACH_s$).

16 The mobile station shall enter the *Timing Change Substate*.

17 2.6.1.4 Timing Change Substate

18 Figure 2.6.1.4-1 illustrates the mobile station timing changes that occur in this substate.
19 The mobile station synchronizes its long code timing and system timing to those of the
20 CDMA system, using the $PILOT_PN_s$, LC_STATE_s , and SYS_TIME_s values obtained from the
21 received *Sync Channel Message*. SYS_TIME_s is equal to the System Time (see [2])
22 corresponding to 320 ms past the end of the last 80 ms superframe (see [2]) of the received
23 *Sync Channel Message* minus the pilot PN sequence offset. LC_STATE_s is equal to the
24 system long code state (see [2]) corresponding to SYS_TIME_s .

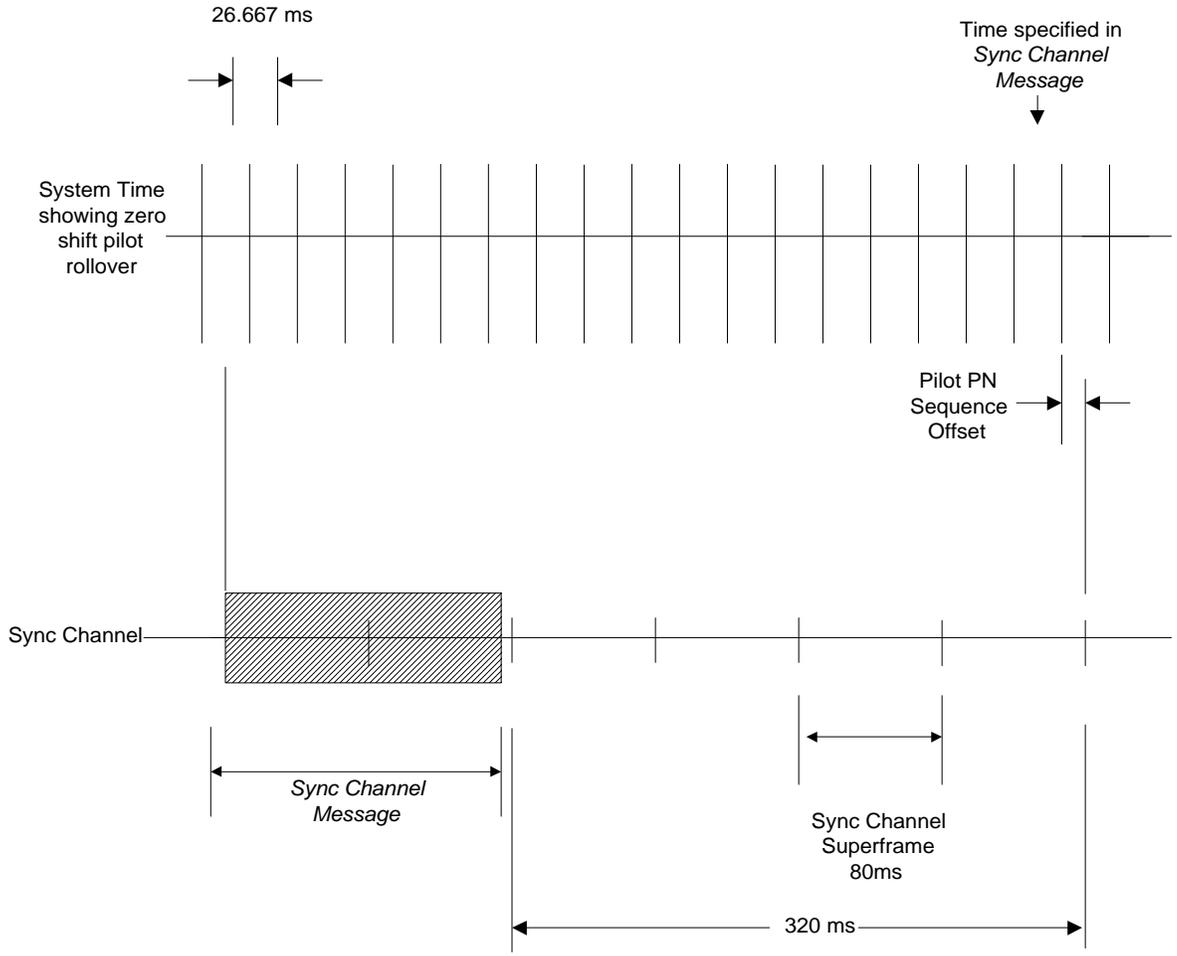
25 In the *Timing Change Substate*, the mobile station shall synchronize its long code timing to
26 the CDMA system long code timing derived from LC_STATE_s , and synchronize its system
27 timing to the CDMA system timing derived from SYS_TIME_s .

28 The mobile station shall perform the following:

- 29 • If $SR1_BCCH_NON_TD_INCL_s$ is equal to '1', or if $SR1_TD_INCL_s$ is equal to '1' and
30 the mobile supports the transmit diversity mode specified by $SR1_TD_MODE_s$, or if
31 the mobile station supports Spreading Rate 3 on the common channel and
32 $SR3_INCL_s$ is equal to '1', the mobile station shall:
- 33 - Set the stored message sequence numbers $CONFIG_MSG_SEQ_s$,
34 $A41_SYS_PAR_MSG_SEQ_s$, $ACC_MSG_SEQ_s$, $MC_RR_PAR_MSG_SEQ_s$,
35 $UNI_NGHBR_LST_MSG_SEQ_s$, $EXT_GLOB_SERV_REDIR_MSG_SEQ_s$,
36 $EXT_CHAN_LST_MSG_SEQ_s$, $FD_CHAN_LST_MSG_SEQ_s$,
37 $USER_ZONE_ID_MSG_SEQ_s$, $AP_PILOT_INFO_MSG_SEQ_s$, $AP_IDT_MSG_SEQ_s$,
38 $AP_ID_TEXT_MSG_SEQ_s$, $GOI_MSG_SEQ_s$, $FREQ_GOI_MSG_SEQ_s$,
39 $ATIM_MSG_SEQ_s$ and $PRI_NGHBR_LST_MSG_SEQ_s$ variables to NULL (see
40 2.6.2.2);

- 1 - Set the index number of the Primary Broadcast Control Channel (BCN) to 1;
- 2 - Set IMSI_11_12_s, IMSI_10_s and MCC_s to NULL;
- 3 - Perform registration initialization as specified in 2.6.5.5.1.3; and
- 4 - If the bits of TMSI_CODE_{s-p} are not all equal to '1' and if SYS_TIME_s exceeds
- 5 TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set all the bits of
- 6 TMSI_CODE_{s-p} to '1'.
- 7 • Otherwise, the mobile station shall:
- 8 - Set PAGECH_s to the Primary Paging Channel (see [2]);
- 9 - Set PAGE_CHAN_s to '1';
- 10 - Set the stored message sequence numbers CONFIG_MSG_SEQ_s,
- 11 SYS_PAR_MSG_SEQ_s, ACC_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
- 12 GEN_NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
- 13 CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
- 14 GLOB_SERV_REDIR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
- 15 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
- 16 USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
- 17 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
- 18 ATIM_MSG_SEQ_s and PRI_NGHBR_LST_MSG_SEQ_s variables to NULL (see
- 19 2.6.2.2);
- 20 - Set IMSI_11_12_s, IMSI_10_s and MCC_s to NULL;
- 21 - Perform registration initialization as specified in 2.6.5.5.1.3; and
- 22 - If the bits of TMSI_CODE_{s-p} are not all equal to '1' and if SYS_TIME_s exceeds
- 23 TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set all the bits of
- 24 TMSI_CODE_{s-p} to '1'.

25 The mobile station shall enter the *Mobile Station Idle State*.



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Figure 2.6.1.4-1. Mobile Station Internal Timing

1 2.6.2 Mobile Station Idle State

2 In this state, the mobile station monitors the Paging Channel or the Quick Paging Channel
3 or Forward Common Control Channel/Primary Broadcast Control Channel. The mobile
4 station can receive messages, receive an incoming call (mobile station terminated call),
5 initiate a call (mobile station originated call), cancel a PACA call, initiate a registration, or
6 initiate a message transmission.

7 The mobile station may monitor the Quick Paging Channel to determine if it should receive
8 messages from the Paging Channel or Forward Common Control Channel.

9 Upon entering the *Mobile Station Idle State*, the mobile station shall perform the following if
10 RSC_MODE_ENABLED is equal to NO:

- 11 • Set SLOTTED_s to YES if T_SLOTTED_s is equal to 0 or if the mobile station does not
12 support the slotted timer; otherwise, enable the T_{MS_Slotted} timer with the duration
13 specified by T_SLOTTED_s if it is not already enabled, and set SLOTTED_s to NO.

14 Upon entering the *Mobile Station Idle State* from the *Mobile Station Initialization State*, the
15 mobile station shall perform the following:

- 16 • If SR1_BCCH_NON_TD_INCL_s is equal to '1', or if SR1_TD_INCL_s is equal to '1' and
17 the mobile station supports the transmit diversity mode specified by
18 SR1_TD_MODE_s, or if the mobile station supports Spreading Rate 3 on the common
19 channel and SR3_INCL_s is equal to '1', the mobile station shall perform the
20 following:
 - 21 - Set its Primary Broadcast Control Channel code channel to BCCH_s,
 - 22 - Set the Primary Broadcast Control Channel data rate as determined by BRAT_s,
 - 23 - Set the Primary Broadcast Control Channel code rate as determined by
24 BCCH_CODE_RATE_s, and
 - 25 - Perform common channel supervision as specified in 2.6.2.1.1.4.
- 26 • Otherwise, the mobile station shall perform the following:
 - 27 - Set its code channel to PAGECH_s,
 - 28 - Set the Paging Channel data rate as determined by PRAT_s, and
 - 29 - Perform Paging Channel supervision as specified in 2.6.2.1.1.4.

30 Upon entering the *Mobile Station Idle State* from the *Mobile Station Control on the Traffic*
31 *Channel State*, the mobile station shall perform all of the following:

- 32 • Perform common channel supervision as specified in 2.6.2.1.1.4.

33 If REDIRECTION_s, PACA_s, and NDSS_ORIG_s are equal to disabled, the mobile station may
34 exit the *Mobile Station Idle State* at any time and enter the *System Determination Substate* of
35 the *Mobile Station Initialization State* with a reselection indication (see 2.6.1.1).

36 While in the *Mobile Station Idle State*, the mobile station shall perform the following
37 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* as
10 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 Message,*
18 *Extended Global Service Redirection Message, User Zone Identification Message,*
19 *Private Neighbor List Message, Access Parameters Message, General Overhead*
20 *Information Message, Frequent General Overhead Information Message, Flex Duplex*
21 *CDMA Channel List Message or 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 mobile
26 station is received other than a mobile station-directed page.
- 27 • The mobile station shall set NDSS_ORIG_s 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 specified
30 in 2.6.2.5 if directed by the user to initiate a call, or if NDSS_ORIG_s is equal to
31 enabled.
- 32 • If RETRY_DELAY_s[001] or RETRY_DELAY_s[101] is not set to 0:
 - 33 - The mobile station shall not send any *Origination Message* containing a packet
34 data service option²⁷ 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_s[001] and RETRY_DELAY_s[101].

²⁷ 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 $\text{RETRY_DELAY}_s[001]$, the mobile station shall reset
2 $\text{RETRY_DELAY}_s[001]$ to 0.
- 3 - At the system time stored in $\text{RETRY_DELAY}_s[101]$, the mobile station shall reset
4 $\text{RETRY_DELAY}_s[101]$ to 0.
- 5 • The mobile station shall perform the *Mobile Station PACA Cancel Operation* as
6 specified in 2.6.2.8, if PACA_s 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 the
12 *System Access State* (see 2.6.3) with an origination indication within T_{33m}
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 the
17 *Mobile Station Message Transmission Operation* as specified in 2.6.2.6 if directed by
18 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 $\text{RETRY_DELAY}_s[100]$ or $\text{RETRY_DELAY}_s[101]$ 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 $\text{RETRY_DELAY}_s[100]$ and
24 $\text{RETRY_DELAY}_s[101]$.
- 25 - At the system time stored in $\text{RETRY_DELAY}_s[100]$, the mobile station shall reset
26 $\text{RETRY_DELAY}_s[100]$ to 0.
- 27 - At the system time stored in $\text{RETRY_DELAY}_s[101]$, the mobile station shall reset
28 $\text{RETRY_DELAY}_s[101]$ to 0.
- 29 • If the mobile station supports the *Device Information Message* on the r-csch,
30 $\text{AUTO_MSG_SUPPORTED}_s$ 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 $\text{AUTO_MSG_INTERVAL}_s$ 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_FCSD_ALLOWED_s is equal to ‘1’,
3 RSC_MODE_ENABLED is equal to NO, SLOTTED_s 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_{s-p} are not all equal to ‘1’ and if System Time (in 80 ms
9 units) exceeds TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set all the bits of
10 TMSI_CODE_{s-p} to ‘1’ within T_{66m} seconds.
- 11 • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits
12 of TMSI_CODE_{s-p} 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 is
15 not originating an emergency call, the mobile station may set
16 REG_SECURITY_RESYNC²⁸ 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_s is not equal to any entry in TKZ_LIST, TKZ_SID_s is equal to SID_s,
21 TKZ_NID_s is equal to NID_s, and TKZ_MODE_SUPPORTED_s is equal to ‘1’, the
22 mobile station shall send a *Radio Environment Message* by performing the *Mobile*
23 *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_s is less than 11 after the mobile station performs an idle handoff,
29 the mobile station shall set TBR_RAND_SUPPR_ENABLE_s to ‘0’, and shall set
30 TBR_RAND_WINDOW_s 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

²⁸ REG_SECURITY_RESYNC was formerly called REG_ENCRYPT_RESYNC.

1 any of the Paging Channel slots; therefore, the non-slotted mode of operation requires the
2 mobile station to monitor all slots.

3 The Forward Common Control Channel is divided into 80 ms slots called Forward Common
4 Control Channel slots. Paging and mobile directed messages for a mobile station operating
5 in the non-slotted mode can be received in any of the Forward Common Control Channel
6 slots. The overhead messages can be received on the Primary Broadcast Control Channel.
7 Therefore, the non-slotted mode of operation requires the mobile station to continuously
8 monitor the Forward Common Control Channel/Primary Broadcast Control Channel.

9 2.6.2.1.1.1.1 General Overview for Individually Addressed Messages

10 The Paging Channel or the Forward Common Control Channel protocol provides for
11 scheduling the transmission of messages for a specific mobile station in certain assigned
12 slots. Support of this feature is optional and may be enabled by each mobile station. A
13 mobile station that monitors the Paging Channel or the Forward Common Control Channel
14 only during certain assigned slots is referred to as operating in the slotted mode. During
15 the slots in which the Paging Channel or the Forward Common Control Channel is not
16 being monitored, the mobile station can stop or reduce its processing for power
17 conservation. A mobile station may not operate in the slotted mode in any state except the
18 *Mobile Station Idle State*.

19 A mobile station operating in the slotted mode generally monitors the Paging Channel or
20 the Forward Common Control Channel for one or two slots per slot cycle. The mobile
21 station can specify its preferred slot cycle using the SLOT_CYCLE_INDEX and
22 SIGN_SLOT_CYCLE_INDEX fields in the *Registration Message*, *Origination Message*, or *Page*
23 *Response Message*. The mobile station can also specify a reduced slot cycle using the RSCI
24 field of the *Fast Call Setup Order*, *Release Order* (ORDQ = '00000011') or *Extended Release*
25 *Response Message*, which enables the mobile station to operate in the reduced slot cycle
26 mode. The length of the slot cycle, T, in units of 1.28 seconds,²⁹ is given by

$$27 \quad T = 2^i,$$

28 where i is the selected slot cycle index (see 2.6.2.1.1.3) which can take the values -4, -3, -2,
29 -1, 0, 1, 2, 3, 4, 5, 6, and 7.

30 Using the Terminal Information record of the *Status Response Message* or the *Extended*
31 *Status Response Message*,

- 32 • if P_REV_IN_USE_s is less than eleven, the mobile station reports max (0,
33 SLOT_CYCLE_INDEX_REG) with the SLOT_CYCLE_INDEX field.

²⁹ 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 $P_REV_IN_USE_s$ 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 $P_REV_IN_USE_s$ is less than eleven, the mobile station reports $\max(0,$
10 $SLOT_CYCLE_INDEX_REG)$ with the $SLOT_CYCLE_INDEX$ field.
11 • if $P_REV_IN_USE_s$ 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).

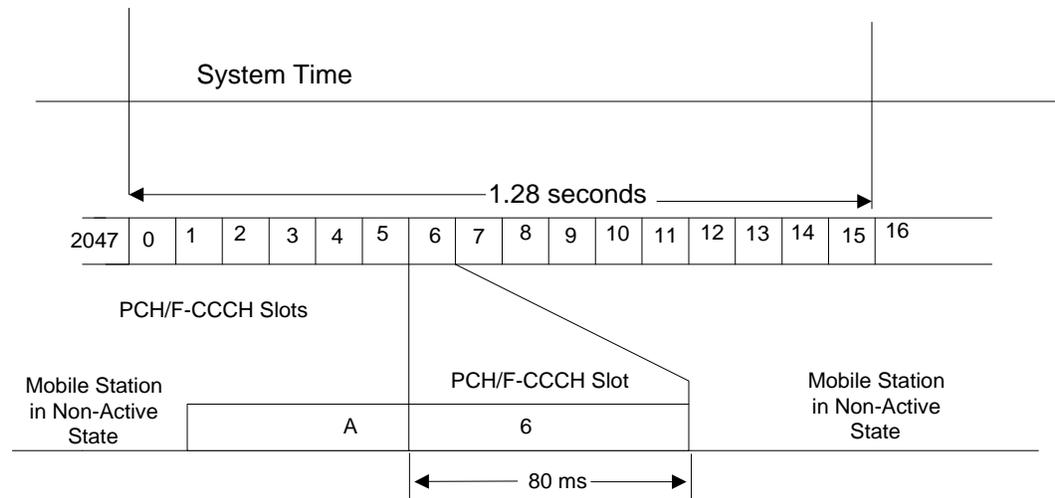
20 There are $16 \times T$ slots in a slot cycle.

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

$$23 \qquad \qquad \qquad \text{SLOT_NUM} = \lfloor t/4 \rfloor \text{ mod } 2048,$$

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 the
31 slot in which $SLOT_NUM$ equals 6. The next slot in which the mobile station must begin
32 monitoring the Paging Channel or the Forward Common Control Channel is 16 slots later,
33 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

2.6.2.1.1.1.1.1 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_{s-p} are equal to '1'), may stop
7 monitoring the Paging Channel or the Forward Common Control Channel after processing a
8 *General Page Message* containing CLASS_0_DONE equal to '1'. Similarly, a mobile station
9 which is operating in the slotted mode, has a class 1 IMSI assigned, and does not have a
10 TMSI assigned (all the bits of TMSI_CODE_{s-p} are equal to '1'), may stop monitoring the
11 Paging Channel or the Forward Common Control Channel after processing a *General Page*
12 *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_{s-p} are not all equal to '1'), may stop
15 monitoring the Paging Channel or the Forward Common Control Channel after processing a
16 *General Page Message* containing both CLASS_0_DONE equal to '1' and TMSI_DONE equal
17 to '1'. Similarly, a mobile station which is operating in the slotted mode, has a class 1 IMSI
18 assigned, and has a TMSI assigned (the bits of TMSI_CODE_{s-p} are not all equal to '1'), may
19 stop monitoring the Paging Channel or the Forward Common Control Channel after
20 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_{s-p} 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_{s-p}.

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_{s-p} 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_{s-p}.

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 (CLASS_0_DONE,
36 CLASS_1_DONE, TMSI_DONE, or ORDERED_TMSIS equal to '1', whichever is appropriate).
37 This allows the base station to carry over a message begun in the assigned slot into the
38 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

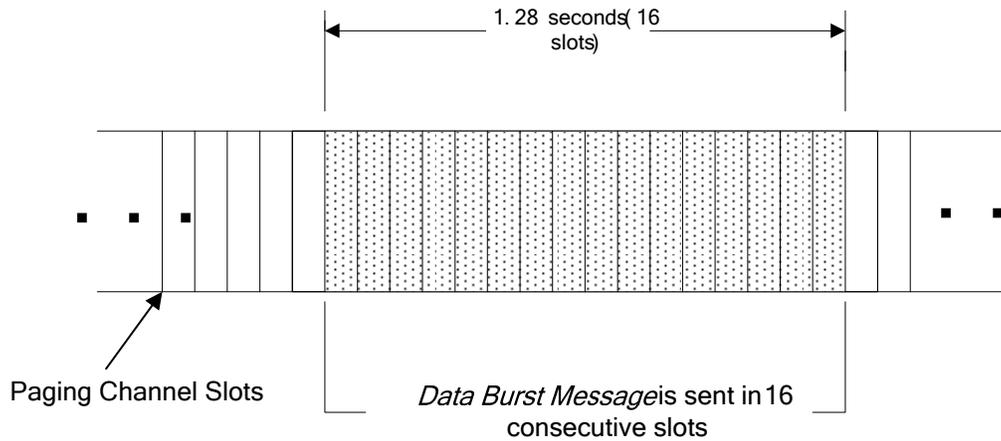
The Paging Channel protocol provides two methods for the transmission of broadcast messages. Each method enables mobile stations operating in the slotted mode or in the non-slotted mode to receive broadcast messages. A broadcast message on the Paging Channel is a *Data Burst Message* that has a broadcast 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 2.6.2.1.1.1.2.1-1 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

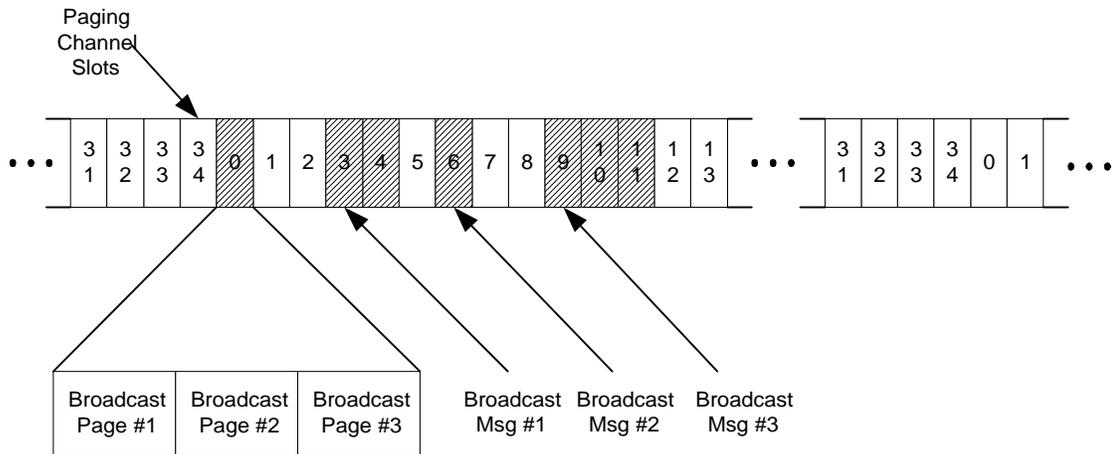


Figure 2.6.2.1.1.1.2.2-1. Periodic Broadcast Paging Example

2.6.2.1.1.1.3 Overview of Broadcast Messages on Broadcast Control Channel

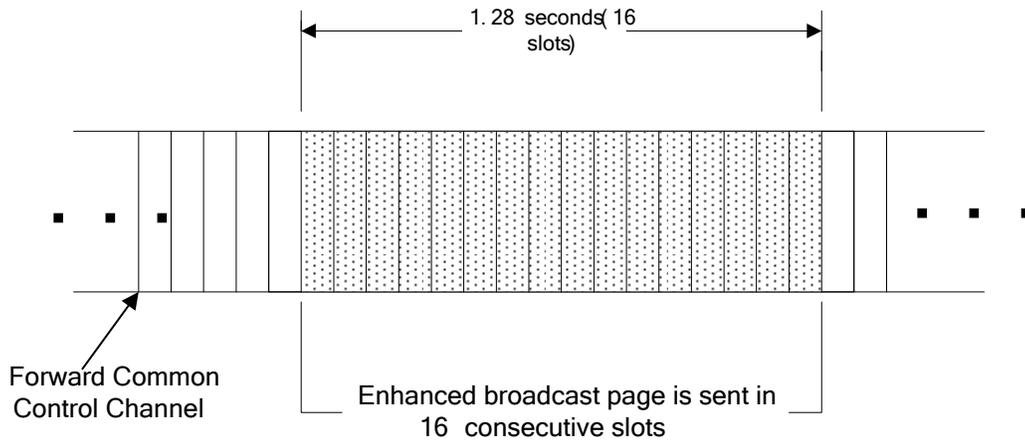
The Broadcast Control Channel/Forward Common Control Channel protocol provides two methods for the transmission of broadcast messages. Each method enables mobile stations operating in the slotted mode or in the non-slotted mode to receive broadcast messages on the Broadcast Control Channel when $NUM_BCCH_BCAST_S$ 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.

2.6.2.1.1.1.3.1 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 2.6.2.1.1.1.3.1-1 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 2.6.2.1.1.1.3.1-1. Multi-Slot Enhanced Broadcast Paging Example**

4

5 2.6.2.1.1.1.3.2 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 message
 11 is determined according to a time offset specified in the enhanced broadcast page. In
 12 addition, a broadcast slot for a repeat of the broadcast message can be specified via a time
 13 offset from the slot of the first broadcast message.

14 2.6.2.1.1.1.4 Overview of Broadcast Messages on Forward Common Control Channel
 15 The Forward Common Control Channel protocol provides two methods for the transmission
 16 of broadcast messages. Each method enables mobile stations operating in the slotted
 17 mode or in the non-slotted mode to receive broadcast messages on the Forward Common
 18 Control Channel when NUM_BCCH_BCAST_s equals '000'. A broadcast message on the
 19 Forward Common Control Channel is a *Data Burst Message* that has a broadcast address
 20 type. A mobile station operating in the slotted mode has assigned Forward Common
 21 Control Channel slots that it monitors to receive Forward Common Control Channel
 22 messages (see 2.6.2.1.1.1). An enhanced broadcast page is a record within a *General Page*
 23 *Message* or a *Universal Page Message* that has a broadcast address type. A base station
 24 may transmit an enhanced broadcast page in an assigned slot to inform mobile stations
 25 monitoring that slot that a broadcast message will be transmitted in the same F-CCCH
 26 where the enhanced broadcast page is received. A slot that a mobile station monitors in
 27 order to receive either an enhanced broadcast page or a broadcast message is referred to as
 28 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.

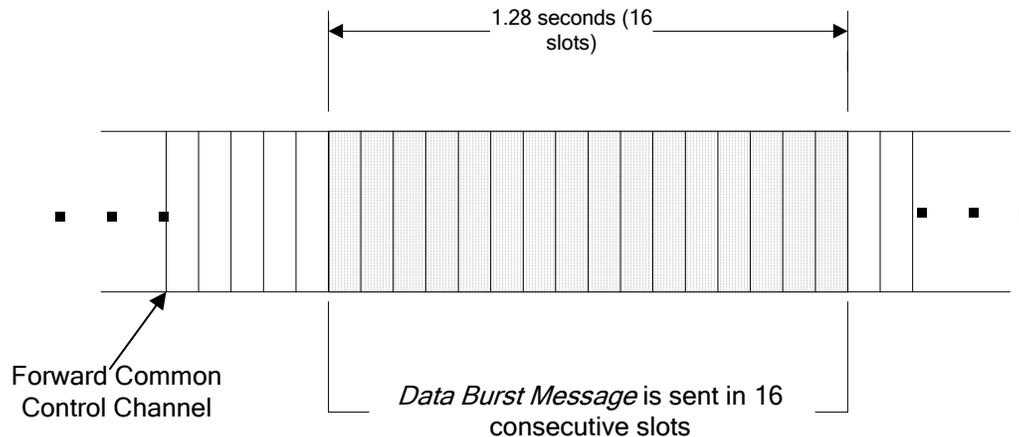


Figure 2.6.2.1.1.4.1-1. Multi-Slot Broadcast Message Transmission Example

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

1 enter the *System Determination Substate* of the *Mobile Station Initialization State* with a
2 system lost indication (see 2.6.1.1).

3 When a mobile station monitors the Paging Channel or the Forward Common Control
4 Channel in any state other than the *Mobile Station Idle State*, it shall operate in the non-
5 slotted mode.

6 A mobile station monitoring the Paging Channel shall operate in the non-slotted mode
7 when $PACA_S$ is equal to enabled.

8 A mobile station monitoring the Paging Channel shall operate in the non-slotted mode
9 when $SLOTTED_S$ is equal to NO.

10 2.6.2.1.1.3 Slotted Mode Requirements

11 A mobile station monitoring the Paging Channel shall not operate in the slotted mode if any
12 of the following conditions are true:

- 13 • $SLOTTED_S$ is equal to NO,
- 14 • Bit 5 of the station class mark is set to '0' (see 2.3.3),
- 15 • $PACA_S$ is equal to enabled, or
- 16 • The mobile station's configuration parameters are not current (see 2.6.2.2).

17 A mobile station monitoring the Forward Common Control Channel shall not operate in the
18 slotted mode if either of the following conditions is true:

- 19 • Bit 5 of the station class mark is set to '0' (see 2.3.3), or
- 20 • The mobile station's configuration parameters are not current (see 2.6.2.2).

21 A mobile station monitoring the Forward Common Control Channel with bit 5 of the station
22 class mark set to '1' shall monitor all Forward Common Control Channel slots (see
23 2.6.2.1.1.3.1) if either of the following conditions is true:

- 24 • $SLOTTED_S$ is equal to NO, or
- 25 • $PACA_S$ is equal to enabled.

26 During operation in the slotted mode, the mobile station shall ensure that its stored
27 configuration parameter values are current (see 2.6.2.2).

28 If the mobile station declares a loss of the Paging Channel or the Forward Common Control
29 Channel/Primary Broadcast Control Channel (see 2.6.2.1.1.4), the mobile station shall
30 enter the *System Determination Substate* of the *Mobile Station Initialization State* with a
31 system lost indication (see 2.6.1.1).

32 2.6.2.1.1.3.1 Monitoring Assigned Slots

33 The mobile station shall monitor the Paging Channel or the Forward Common Control
34 Channel in each of its assigned slots, if any of the following conditions is true:

- 35 • The mobile station does not support Quick Paging Channel operation, or
- 36 • $QPCH_SUPPORTED_S$ is equal to '0', or

- 1 • RSC_MODE_ENABLED is equal to YES, IGNORE_QPCH_s is equal to '1', and RSCI_s
2 is equal to -3 or -4.

3 If none of the above conditions is true, then for each of its assigned slots, the mobile
4 station shall perform the following:

- 5 • The mobile station should check its assigned paging indicators in the complete
6 Quick Paging Channel slot immediately preceding its assigned Paging Channel or
7 Forward Common Control Channel slot, as specified in 2.6.2.1.2.1; the mobile
8 station shall monitor the assigned Paging Channel or Forward Common Control
9 Channel slot if the paging indicators meet the conditions specified in 2.6.2.1.2.2.
10 • If the mobile station does not check its assigned paging indicators, the mobile
11 station shall monitor its assigned Paging Channel or Forward Common Control
12 Channel slot.

13 If the mobile station supports Quick Paging Channel operation, the mobile station is
14 configured to receive broadcast messages, BCAST_INDEX_s is not equal to '000', and
15 QPCH_BI_SUPPORTED_s equals '1', then for each of its assigned broadcast slots on the
16 Forward Common Control Channel or Paging Channel, the mobile station shall perform the
17 following:

- 18 • The mobile station should check the broadcast indicators in the complete Quick
19 Paging Channel broadcast slot immediately preceding its assigned broadcast slot, as
20 specified in 2.6.2.1.1.3.3.
21 • The mobile station should receive its assigned broadcast slot on the Forward
22 Common Control Channel or Paging Channel if the broadcast indicators meet the
23 conditions specified in 2.6.2.1.2.1.

24 The mobile station shall monitor each slot following an assigned slot in which the mobile
25 station received a *Universal Page Message* with READ_NEXT_SLOT equal to '1', and shall
26 begin monitoring the Forward Common Control Channel in time to receive the first bit of
27 the slot. If the mobile station is configured to receive broadcast messages, it shall monitor
28 each slot following an assigned slot in which the mobile station received a *Universal Page*
29 *Message* with READ_NEXT_SLOT_BCAST equal to '1', and shall begin monitoring the
30 Forward Common Control Channel in time to receive the first bit of the slot.

31 If SLOTTED_s is equal to NO or PACA_s is equal to enabled, the mobile station may stop
32 monitoring a Forward Common Control Channel slot when Layer 3 receives an address
33 mismatch indication from Layer 2. When the mobile station stops monitoring a Forward
34 Common Control Channel slot when SLOTTED_s is equal to NO or PACA_s is equal to
35 enabled, the mobile station shall begin monitoring the subsequent Forward Common
36 Control Channel slot in time to receive the first bit of the slot.

37 If the mobile station monitors a Paging Channel or Forward Common Control Channel slot,
38 it shall begin monitoring the Paging Channel or the Forward Common Control Channel in
39 time to receive the first bit of the slot. If the mobile station is not configured to receive
40 broadcast addresses, the mobile station shall continue to monitor the Paging Channel or
41 the Forward Common Control Channel until one of the following conditions is satisfied:

- 42 • Layer 3 receives an address mismatch indication from Layer 2 (see [4]); or

- 1 • The mobile station monitors the assigned slot and the slot following the assigned
2 slot, and the mobile station receives at least one valid message (see [4]).

3 If the mobile station is configured to receive broadcast addresses and the mobile station is
4 monitoring a Paging Channel, the mobile station shall continue to monitor the Paging
5 Channel until one of the preceding conditions is satisfied and should monitor the Paging
6 Channel until Layer 3 receives a broadcast address mismatch indication from Layer 2 (see
7 [4]).

8 If the mobile station is configured to receive broadcast addresses and the mobile station is
9 monitoring a Forward Common Control Channel, the mobile station shall continue to
10 monitor the Forward Common Control Channel until one of the preceding conditions is
11 satisfied and should monitor the Forward Common Control Channel until Layer 3 receives
12 a broadcast address mismatch indication from Layer 2 (see [4]).

13 The mobile station shall monitor each slot following a broadcast slot in which the mobile
14 station received a *Universal Page Message* with READ_NEXT_SLOT_BCAST equal to '1', and
15 shall begin monitoring the Forward Common Control Channel in time to receive the first bit
16 of the slot.

17 For each broadcast slot monitored to receive broadcast pages or broadcast messages that is
18 not one of its assigned slots, the mobile station should begin monitoring the Paging
19 Channel or the Forward Common Control Channel in the first bit of the broadcast slot.
20 The mobile station should continue to monitor the Paging Channel or the Forward
21 Common Control Channel until one of the following conditions is satisfied:

- 22 • Layer 3 receives a broadcast address mismatch indication from Layer 2; or
23 • The mobile station monitors the Paging Channel or the Forward Common Control
24 Channel to receive all messages beginning in the broadcast slot and in the slot
25 following the broadcast slot, and the mobile station receives at least one valid
26 message (see [4]).

27 To determine its assigned slots, the mobile station shall use the hash function specified in
28 2.6.7.1 to select a number, PGSLOT, in the range 0 to 2047 (spanning the maximum slot
29 cycle length, which is 163.84 seconds). The mobile station's assigned slots shall be those
30 slots in which

$$31 \quad (\lfloor t/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0,$$

32 where t is the System Time in 20ms frames and T is the slot cycle length in units of 1.28
33 seconds given by

$$34 \quad T = 2^i,$$

35 where i is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6,
36 and 7.

37 For each slot on the Broadcast Control Channel monitored to receive broadcast messages,
38 the mobile station should begin monitoring the Broadcast Control Channel in the first bit of
39 the slot. The mobile station should continue to monitor the Broadcast Control Channel
40 until one of the following conditions is satisfied:

- 1 • The mobile station has monitored all frames of a Broadcast Control Channel slot
2 and the frame quality for all of the frames of the slot was insufficient; or
- 3 • The mobile station monitors the Broadcast Control Channel slot specified by the
4 enhanced broadcast page and the slot did not contain an SCI bit set to '1' (see [4]).
- 5 • The mobile station has received a broadcast *Data Burst Message* having the same
6 BURST_TYPE and broadcast address as the enhanced broadcast page which
7 announced the *Data Burst Message*.

8 2.6.2.1.1.3.2 Determination of the Slot Cycle Index

9 When the SID and NID of the current base station (SID_s and NID_s, as stored from the
10 *System Parameters Message* or *ANSI-41 System Parameters Message*) do not match any
11 entry of SID_NID_LIST_s, the mobile station shall use a slot cycle index no greater than the
12 smaller of MAX_SLOT_CYCLE_INDEX_s and 1; otherwise:

- 13 • If RSC_MODE_ENABLED is equal to YES, the mobile station shall use a slot cycle
14 index no greater than min(RSCI_s, SLOT_CYCLE_INDEX_s).
- 15 • Otherwise, the mobile station shall use a slot cycle index no greater than
16 SLOT_CYCLE_INDEX_s (see 2.6.2.2.1.6).

17 If the mobile station is directed by the user to modify the preferred slot cycle index
18 (SLOT_CYCLE_INDEX_p), the mobile station shall perform parameter-change registration
19 (see 2.6.5.1.6).

20 2.6.2.1.1.3.3 Slot Cycles for Broadcast Message Transmission

21 2.6.2.1.1.3.3.1 Slot Cycles for Broadcast Message Transmission on the Paging Channel

22 Distribution of broadcast messages relies on specially defined Paging Channel slot cycles.
23 The definitions are as follows:

24 *Maximum paging cycle:* On the Paging Channel, a maximum paging cycle is a Paging
25 Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of M slots such that:

$$26 \quad M = 2^i \times 16, 0 \leq i \leq 7$$

27 where $i = \text{MAX_SLOT_CYCLE_INDEX}_s$ as received in the *System Parameters Message*.

28 The first slot of each maximum paging cycle is any Paging Channel slot in which

$$29 \quad \lfloor t/4 \rfloor \bmod M = 0,$$

30 where t represents system time in 20ms frames.

31 *Broadcast paging cycle:* On the Paging Channel, a broadcast paging cycle is a Paging
32 Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of B + 3 slots where:

$$33 \quad B = 2^i \times 16, 1 \leq i \leq 7$$

1 where $i = \text{BCAST_INDEX}_S$ as received in the *Extended System Parameters Message*, or set
2 by default when the *Extended System Parameters Message* is not sent.

3 The first slot of each broadcast paging cycle is any Paging Channel slot in which

$$4 \quad \lfloor t/4 \rfloor \bmod (B + 3) = 0,$$

5 where t represents system time in 20ms frames.

6 2.6.2.1.1.3.3.2 Slot Cycles for Broadcast Message Transmission on the Forward 7 Common Control Channel

8 Distribution of broadcast messages relies on specially defined Forward Common Control
9 Channel slot cycles. The definitions are as follows:

10 *Maximum paging cycle:* On the Forward Common Control Channel, a maximum paging
11 cycle is a Forward Common Channel slot cycle (see 2.6.2.1.1.3.1) having a duration of M
12 slots such that:

$$13 \quad M = 2^i \times 16, 0 \leq i \leq 7$$

14 where $i = \text{MAX_SLOT_CYCLE_INDEX}_S$ as received in the *MC-RR Parameters Message*.

15 The first slot of each maximum paging cycle is any Forward Common Control Channel slot
16 in which

$$17 \quad \lfloor t/4 \rfloor \bmod M = 0,$$

18 where t represents system time in 20ms frames.

19 *Broadcast paging cycle:* On the Forward Common Control Channel, a broadcast paging
20 cycle is a Forward Common Control Channel slot cycle (see 2.6.2.1.1.3.1) having a duration
21 of $B + 7$ slots where:

$$22 \quad B = 2^{1+i} \times 16, 1 \leq i \leq 7$$

23 where $i = \text{BCAST_INDEX}_S$ as received in the *MC-RR Parameters Message*.

24 The first slot of each broadcast paging cycle is any Forward Common Control Channel slot
25 in which

$$26 \quad \lfloor t/4 \rfloor \bmod (B + 7) = 0,$$

27 where t represents system time in 20ms frames.

28 2.6.2.1.1.3.4 Monitoring Paging Channel Broadcasts

29 The following requirements apply to mobile stations monitoring the Paging Channel and
30 supporting the reception of broadcast messages.

31 If BCAST_INDEX_S is equal to '000', the mobile station shall monitor only its assigned
32 Paging Channel slots (see 2.6.2.1.1.3.1).

1 If $BCAST_INDEX_s$ is not equal to '000', and the mobile station is configured to receive
 2 messages addressed to broadcast addresses, the mobile station should also monitor the
 3 Paging Channel beginning with the first slot of each broadcast paging cycle (see
 4 2.6.2.1.1.3.3).

5 If the mobile station receives a broadcast page containing a burst type and broadcast
 6 address for a *Data Burst Message* that the mobile station has been configured to receive
 7 (see 2.6.2.3), the mobile station should monitor the slot in which the corresponding
 8 broadcast Paging Channel message will be sent, determined as follows:

- 9 • The mobile station shall consider a broadcast page to have been received in the
 10 paging slot in which the *General Page Message* containing the broadcast page
 11 began.
- 12 • If $BCAST_INDEX_s$ is not equal to '000', the paging slot containing the broadcast
 13 page is defined as the reference slot.
- 14 • Let n represent the ordinal number of the broadcast page relative to other broadcast
 15 pages that are contained in the same *General Page Message* ($n = 1, 2, 3, \dots$). The
 16 mobile station should monitor the Paging Channel slot that occurs $n \times 3$ paging
 17 slots after the reference slot.

18 After receiving a broadcast message or a broadcast page for a *Data Burst Message* and a
 19 corresponding broadcast Paging Channel message when $BCAST_INDEX_s$ is not equal to
 20 '000', the mobile station should discard all further broadcast pages and all further
 21 broadcast Paging Channel messages containing the same $BURST_TYPE$ and BC_ADDR
 22 fields that are received within $4 \times (B + 3)$ paging slots of the first paging slot in the
 23 broadcast paging cycle in which the broadcast page or broadcast message was first
 24 received. ($B + 3$ is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

25 After receiving a broadcast message or a broadcast page for a *Data Burst Message* and a
 26 corresponding broadcast Paging Channel message when $BCAST_INDEX_s$ is equal to '000',
 27 the mobile station should discard all further broadcast pages and all further broadcast
 28 Paging Channel messages containing the same $BURST_TYPE$ and BC_ADDR fields that are
 29 received within $16 \times 2^{MAX_SLOT_CYLCE_INDEX_s}$ slots of the paging slot in which the
 30 broadcast page or broadcast message was first received.

31 If the mobile station receives a broadcast page containing a burst type and broadcast
 32 address for BCMC that the mobile station has been configured to receive (see 2.6.2.3), the
 33 mobile station shall do the following:

- 34 • If the burst type and broadcast address³⁰ indicates that response to the broadcast
 35 page is required, then the mobile station shall enter the *Update Overhead*
 36 *Information Substate* of the *System Access State* (see 2.6.3.2) with a page response
 37 indication within T_{33m} seconds after the page message is received.

³⁰ Format of broadcast address for BCMC is defined in BCMC service document (see [30]).

- 1 • If the burst type and broadcast address indicates to monitor broadcast messages,
2 then the mobile station shall continue to monitor the paging channel for a *BCMC*
3 *Service Parameters Message* containing the *BCMC_FLOW_ID* in the broadcast
4 address as follows:
- 5 - The mobile station shall monitor the F-PCH for the duration of four F-PCH slots
6 from the slot in which the broadcast page was received or until the *BCMC*
7 *Service Parameters Message* containing the *BCMC_FLOW_ID* is received; if the
8 mobile station detects the start of the *BCMC Service Parameters Message*, the
9 mobile station shall monitor the F-PCH until the entire *BCMC Service*
10 *Parameters Message* is received.

11 2.6.2.1.1.3.5 Support of Broadcast Delivery Options on the Paging Channel

12 A mobile station configured to receive broadcast messages shall support reception of
13 broadcast messages transmitted using Multi-Slot Broadcast Message Transmission (see
14 3.6.2.4.1.1.2.1.1).

15 A mobile station configured to receive broadcast messages shall support reception of
16 broadcast messages transmitted using Periodic Broadcast Paging (see 3.6.2.4.1.1.2.1.2).

17 2.6.2.1.1.3.6 Monitoring the Forward Common Control Channel for the Enhanced 18 Broadcast Page

19 The following requirements apply to mobile stations monitoring the Forward Common
20 Control Channel and supporting the reception of broadcast messages.

21 If *BCAST_INDEX_s* is equal to '000', the mobile station shall monitor only its assigned Quick
22 Paging Channel slots or its assigned Forward Common Control Channel slots (see
23 2.6.2.1.2) for enhanced broadcast pages.

24 If *BCAST_INDEX_s* is not equal to '000', and the mobile station is configured to receive
25 messages addressed to broadcast addresses, the mobile station should also monitor the
26 Quick Paging Channel broadcast slots or the Forward Common Control Channel broadcast
27 slots (see 2.6.2.1.2) beginning with the first slot of each broadcast paging cycle.

28 If the mobile station receives an enhanced broadcast page containing a burst type and
29 broadcast address for a *Data Burst Message* that the mobile station has been configured to
30 receive and *NUM_BCCH_BCAST_s* does not equal '000', the mobile station should monitor at
31 least one Broadcast Control Channel slot in which the corresponding broadcast message
32 will be sent, determined as follows:

- 33 • The mobile station shall monitor the Broadcast Control Channel slot which begins
34 40 ms × (1 + *TIME_OFFSET*) later than the beginning of the slot in which the
35 message containing the enhanced broadcast page began or the Broadcast Control
36 Channel slot which begins 40 ms × (1 + *REPEAT_TIME_OFFSET*) later than the
37 Broadcast Control Channel slot in which the first transmission began.

38 If the mobile station receives an enhanced broadcast page containing a burst type and
39 broadcast address for a *Data Burst Message* that the mobile station has been configured to
40 receive and *NUM_BCCH_BCAST_s* equals '000', the mobile station should monitor the slot in

1 which the corresponding broadcast Forward Common Control Channel message will be
2 sent, determined as follows:

- 3 • The mobile station shall consider an enhanced broadcast page to have been
4 received in the Forward Common Control Channel slot in which the *General Page*
5 *Message* or the *Universal Page Message* containing the enhanced broadcast page
6 began.
- 7 • When NUM_BCCH_BCAST_s equals 0, the mobile station shall monitor the Forward
8 Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME_OFFSET})$ later than
9 the beginning of the slot in which the message containing the enhanced broadcast
10 page began or the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1$
11 $+ \text{REPEAT_TIME_OFFSET})$ later than the Forward Common Control Channel slot in
12 which the first transmission began. After receiving an enhanced broadcast page for a
13 *Data Burst Message* and a corresponding broadcast message when BCAST_INDEX_s
14 is not equal to '000', the mobile station should discard all further enhanced
15 broadcast pages containing the same BURST_TYPE and having the same broadcast
16 address that are received within $4 \times (B + 7)$ slots of the first slot in the broadcast
17 paging cycle in which the enhanced broadcast page was received. ($B + 7$ is the
18 duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3.1). The mobile
19 station should ignore broadcast messages for which a corresponding enhanced
20 broadcast page was not received.

21 After receiving an enhanced broadcast page for a *Data Burst Message* and a corresponding
22 broadcast message when BCAST_INDEX_s is equal to '000', the mobile station should
23 discard all further enhanced broadcast pages containing the same BURST_TYPE and
24 having the same broadcast address that are received within $16 \times 2^{\text{MAX_SLOT_CYLCE_INDEX}_s}$
25 slots of the slot in which the enhanced broadcast page was received. The mobile station
26 should ignore broadcast messages for which a corresponding enhanced broadcast page was
27 not received.

28 If the mobile station received an enhanced broadcast page for a *Data Burst Message* and a
29 corresponding broadcast message, and the broadcast message announced by a pending
30 enhanced broadcast page containing the same BURST_TYPE and having the same
31 broadcast address has not yet been received, the mobile station shall ignore the pending
32 enhanced broadcast page.

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:

- 36 • If the burst type and broadcast address indicates that response to the broadcast
37 page is required, then the mobile station shall enter the *Update Overhead*
38 *Information Substate* of the *System Access State* (see 2.6.3.2) with a page response
39 indication within T_{33m} seconds after the page message is received.
- 40 • If the burst type and broadcast address indicates to monitor broadcast messages,
41 then the mobile station shall monitor the Primary Broadcast Control Channel slot
42 for a *BCMC Service Parameters Message* containing the BCMC_FLOW_ID in the
43 broadcast address, determined as follows:

1 where t represents system time in 20ms frames.

2 2.6.2.1.1.3.8.2 BSPM Slot Cycle on the Primary Broadcast Control Channel

3 On the Primary Broadcast Control Channel, a BSPM slot cycle is a Primary Broadcast
4 Control Channel slot cycle having a duration of B + 1 slots where:

$$5 \quad B = 2^i \times 16, 0 \leq i \leq 15$$

6 where i = BSPM_PERIOD_INDEX_s as received in the *MC-RR Parameters Message*.

7 The first slot of each BSPM slot cycle is any Primary Broadcast Control Channel slot in
8 which

$$9 \quad \lfloor t/2 \rfloor \bmod (B + 1) = 0, (40\text{ms})$$

$$10 \quad \lfloor t/4 \rfloor \bmod (B + 1) = 0, (80\text{ms})$$

$$11 \quad \lfloor t/8 \rfloor \bmod (B + 1) = 0, (160\text{ms})$$

12 where t represents system time in 20ms frames and the number in the parenthesis
13 represents the duration of the Primary Broadcast Control Channel slot (see [2]).

14 2.6.2.1.1.4 Common Channel Supervision

15 The mobile station shall monitor the Paging Channel, the Forward Common Control
16 Channel, or the Primary Broadcast Control Channel as specified in 2.6.2.1.1. The mobile
17 station shall set a timer for T_{30m} seconds whenever it begins to monitor the Paging
18 Channel, the Forward Common Control Channel, or the Primary Broadcast Control
19 Channel. The mobile station shall reset the timer for T_{30m} seconds whenever it gets an
20 indication that a valid message was received on the Paging Channel, the Forward Common
21 Control Channel, or the Primary Broadcast Control Channel, whether addressed to the
22 mobile station or not (see [4]). The mobile station shall disable the timer when it is not
23 monitoring the Paging Channel, the Forward Common Control Channel, or the Primary
24 Broadcast Control Channel. If the timer expires, the mobile station shall declare a loss of
25 the Paging Channel, the Forward Common Control Channel, or the Primary Broadcast
26 Control Channel.

27 2.6.2.1.2 Quick Paging Channel Monitoring Procedures

28 2.6.2.1.2.1 Overview

29 The Quick Paging Channel is divided into 80 ms slots called Quick Paging Channel slots.

30 The Quick Paging Channel protocol provides for scheduling the transmission of paging
31 indicators for a mobile station in Quick Paging Channel slots assigned to the mobile
32 station. Support of this feature is optional.

33 The Quick Paging Channel protocol provides for scheduling the transmission of
34 configuration change indicators for mobile stations in Quick Paging Channel slots.
35 Support of this feature is optional.

1 The Quick Paging Channel protocol provides for scheduling the transmission of broadcast
2 indicators for mobile stations in Quick Paging Channel broadcast slots. Support of this
3 feature is optional.

4 If the mobile station is operating in the slotted mode and it supports the Quick Paging
5 Channel, and QPCH_SUPPORTED_s is equal to '1', the mobile station monitors paging
6 indicators on the Quick Paging Channel³¹ as follows:

7 The mobile station's assigned Quick Paging Channel slots are offset from its assigned
8 Paging Channel slots or its assigned Forward Common Control Channel slots by 100 ms,
9 as shown in Figure 2.6.2.1.2.1-1. Two paging indicators are assigned to a mobile station in
10 its assigned Quick Paging Channel slot. In the following, t^* is the start time of the mobile
11 station's assigned Paging Channel or Forward Common Control Channel slot. According to
12 the hash function specified in 2.6.7.1, paging indicators are assigned as follows:

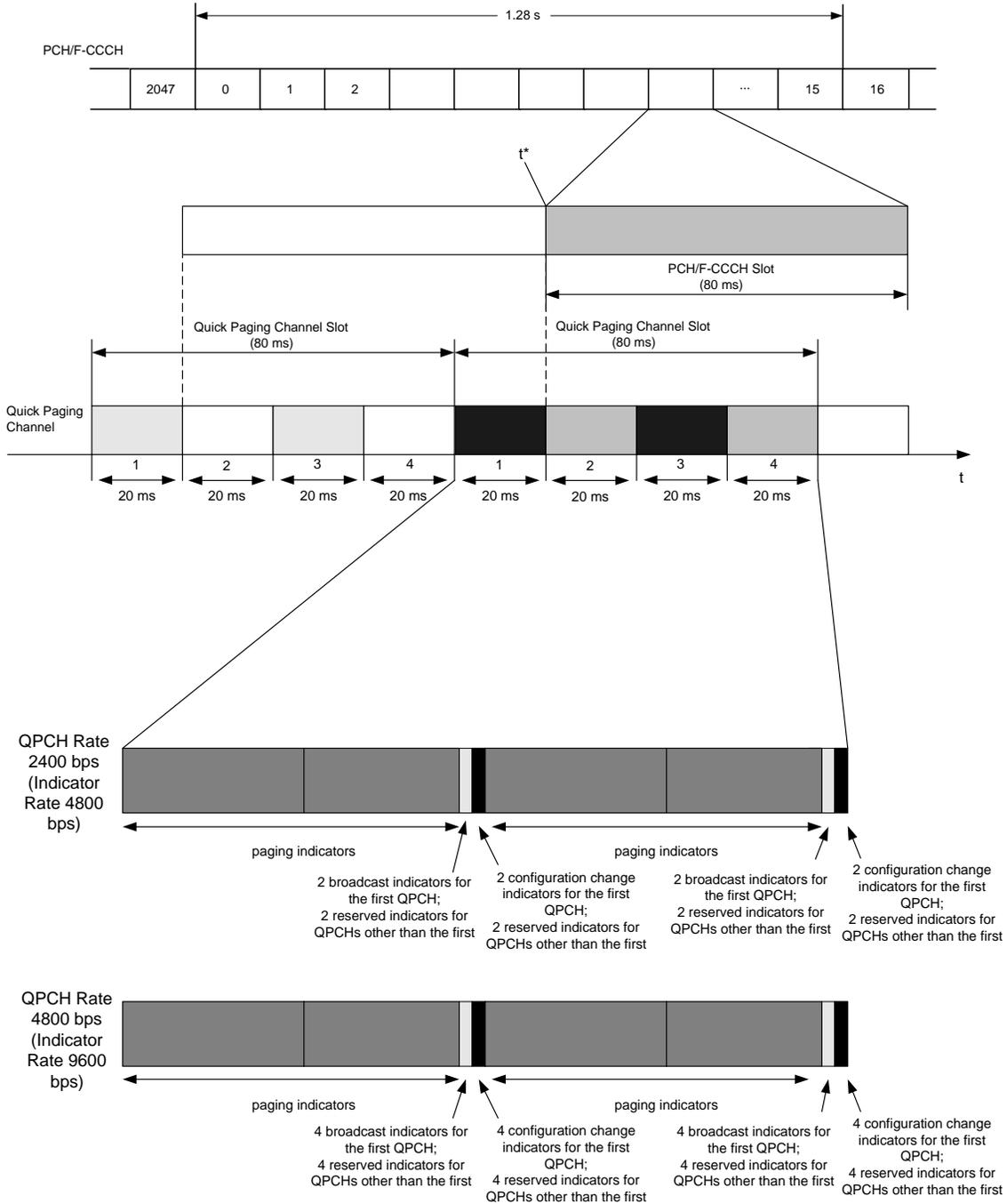
- 13 • The first paging indicator for the mobile station is assigned between (t^*-100) ms and
14 (t^*-80) ms (marked as 1 in Figure 2.6.2.1.2.1-1) and the second paging indicator is
15 assigned between (t^*-60) ms and (t^*-40) ms (marked as 3 in the figure); or
- 16 • The first paging indicator for the mobile station is assigned between (t^*-80) ms and
17 (t^*-60) ms (marked as 2 in the figure) and the second paging indicator is assigned
18 between (t^*-40) ms and (t^*-20) ms (marked as 4 in the figure).

19 If the mobile station is operating in the slotted mode and it supports the Quick Paging
20 Channel, the mobile station can, when performing an idle handoff to a base station whose
21 Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel
22 has recently been monitored, monitor one or more configuration change indicators.
23 Configuration change indicators are scheduled every 40 ms on the first Quick Paging
24 Channel.

25 If the mobile station is operating in the slotted mode, is configured to receive the broadcast
26 messages, supports the Quick Paging Channel, BCAST_INDEX_s is not equal to '000',
27 QPCH_SUPPORTED_s is equal to '1', and QPCH_BI_SUPPORTED_s is equal to '1', the mobile
28 station monitors broadcast indicators on the Quick Paging Channel as follows:

- 29 • The mobile station's assigned Quick Paging Channel broadcast slots are offset from
30 its assigned Forward Common Control Channel or Paging Channel broadcast slots
31 by 100 ms, as shown in Figure 2.6.2.1.2.1-1.
- 32 • The mobile station monitors one or more broadcast indicators in an assigned Quick
33 Paging Channel broadcast slot.

³¹ 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_s is equal to '1'.



1
2
3
4

Figure 2.6.2.1.2.1-1. Quick Paging Channel Timeline

1 2.6.2.1.2.2 Requirements

2 A mobile station operating in the slotted mode should monitor the paging indicators in the
3 mobile station's assigned Quick Paging Channel slot if all of the following conditions hold:

- 4 • The mobile station supports the Quick Paging Channel;
- 5 • $QPCH_SUPPORTED_s = '1'$; and
- 6 • The mobile station is not monitoring the Paging Channel or the Forward Common
7 Control Channel.

8 The mobile station's assigned Quick Paging Channel slots shall be those slots in which

$$9 \quad \lfloor (t+5)/4 \rfloor - PGSLOT \pmod{(16 \times T)} = 0.$$

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 To determine the position of the mobile station's two assigned paging indicators respective
17 to the beginning of the mobile station's assigned Quick Paging Channel slot, the mobile
18 station shall use the hash function specified in 2.6.7.1. The R1 and R2 outputs of the
19 hashing algorithm correspond to an indicator bit position relative to the beginning of the
20 Quick Paging Channel slot. The hashing algorithm is so devised that two paging indicators
21 (R1 and R2) for a mobile station will be in the first and third quarter slot or the second and
22 fourth quarter slot.

23 If the mobile station checks assigned paging indicators, the mobile station shall perform
24 the following:

- 25 • If the mobile station detects that one of the paging indicators is set to "OFF", the
26 mobile station need not detect another paging indicator.
- 27 • If the mobile station does not detect that at least one of the paging indicators is set
28 to "OFF", the mobile station shall monitor its assigned Paging Channel or Forward
29 Common Control Channel slot immediately following its assigned Quick Paging
30 Channel slot.³²

31 When performing an idle handoff to a base station whose Paging Channel or Forward
32 Common Control Channel was previously monitored, a mobile station operating in the

³² 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 set
30 to "OFF", the mobile station can enter or remain in the slotted mode after an idle handoff
31 (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.

1 The mobile station's assigned Quick Paging Channel broadcast slots shall be those slots in
2 which

$$3 \quad \lfloor (t+5)/4 \rfloor \bmod (B + 7) = 0.$$

4 where t is the System Time in 20ms frames, and B is the broadcast paging cycle such that
5 $B = 2^{1+i} \times 16$, $1 \leq i \leq 7$ and $i = \text{BCAST_INDEX}_S$ as received in the *MC-RR Parameters*
6 *Message*.

7 The mobile station's assigned Quick Paging Channel broadcast slots shall be those slots in
8 which

$$9 \quad \lfloor (t+5)/4 \rfloor \bmod (B + 3) = 0.$$

10 where t is the System Time in 20ms frames, and B is the broadcast paging cycle such that
11 $B = 2^i \times 16$, $1 \leq i \leq 7$ and $i = \text{BCAST_INDEX}_S$ as received in the *Extended System Parameters*
12 *Message*.

13 The mobile station should monitor one or more broadcast indicators on the Quick Paging
14 Channel. If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps),
15 the bit positions of the mobile station's first pair of broadcast indicators shall be the two
16 bits prior to the last two bits in the first 40 ms half of a Quick Paging Channel slot. The bit
17 positions of the mobile station's second pair of broadcast indicators shall be the two bits
18 prior to the last two bits in a Quick Paging Channel slot.

19 If the Quick Paging Channel data rate 4800 bps (indicator rate is 9600 bps), the bit
20 positions of the mobile station's first four broadcast indicators shall be the four bits prior to
21 the last four bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of
22 the mobile station's second four broadcast indicators shall be the four bits prior to the last
23 four bits in a Quick Paging Channel slot.

24 If the mobile station monitors broadcast indicators and determines that they are not set to
25 "OFF", the mobile station should perform the following:

- 26 • The mobile station should receive its assigned broadcast slot on the Forward
27 Common Control Channel or Paging Channel immediately following its assigned
28 Quick Paging Channel broadcast slot.

29 2.6.2.1.3 Registration

30 While in the *Mobile Station Idle State*, the mobile station shall perform the registration
31 procedures specified in 2.6.5.5.2.1.

32 2.6.2.1.4 Idle Handoff

33 2.6.2.1.4.1 Pilot Search

34 An idle handoff occurs when a mobile station has moved from the coverage area of one
35 base station into the coverage area of another base station during the *Mobile Station Idle*
36 *State*. If the mobile station detects a Pilot Channel signal from another base station that is
37 sufficiently stronger than that of the current base station, the mobile station determines
38 that an idle handoff should occur.

1 If both AP_IDT_MSG_SEQ_s and INTRA_FREQ_HO_HYS_s are not set to NULL, the mobile
 2 station shall only perform idle handoff to another pilot on the same frequency as the
 3 current base station when the following condition is satisfied:

$$4 \quad \text{Target Pilot Ec/Io (dB)} > (\text{INTRA_FREQ_HO_SLOPE}_s/8) \times \text{Current Pilot Ec/Io (dB)} + \\
 5 \quad \text{INTRA_FREQ_HO_HYS}_s \text{ (dB)}.$$

6 If both AP_IDT_MSG_SEQ_s and INTER_FREQ_HO_HYS_s are not set to NULL, the mobile
 7 station shall only perform idle handoff to another pilot on a different frequency than that of
 8 the current base station when the following condition is satisfied:

$$9 \quad \text{Target Pilot Ec/Io (dB)} > (\text{INTER_FREQ_HO_SLOPE}_s/8) \times \text{Current Pilot Ec/Io (dB)} + \\
 10 \quad \text{INTER_FREQ_HO_HYS}_s \text{ (dB)}.$$

11 When multiple idle handoff candidates are available, the mobile station should select, if
 12 any, a candidate which supports Primary Broadcast Control Channel.

13 Pilot Channels are identified by their offsets relative to the zero offset pilot PN sequence
 14 (see 3.1.3.2.1). Pilot offsets are grouped into sets describing their status with regard to
 15 pilot searching.

16 The following sets of pilot offsets are defined for a mobile station in the *Mobile Station Idle*
 17 *State*. Each pilot offset is a member of only one set.

- 18 • Active Set: The pilot offset of the Forward CDMA Channel whose Paging Channel or
 19 Forward Common Control Channel is being monitored.
- 20 • Neighbor Set: The offsets of the Pilot Channels that are likely candidates for idle
 21 handoff. The members of the Neighbor Set are specified in the *Neighbor List*
 22 *Message*, *Extended Neighbor List Message*, and the *General Neighbor List Message* on
 23 the Paging Channel, and the *Universal Neighbor List Message* on the Primary
 24 Broadcast Control Channel.
- 25 • Remaining Set: The set of all possible pilot offsets in the current system (integer
 26 multiples of PILOT_INC_s) on the current CDMA Frequency Assignment, excluding
 27 the pilots in the Neighbor Set and the Active Set.
- 28 • Private Neighbor Set: The offsets of the Pilot Channels for the private systems that
 29 are likely candidates for idle handoff. The members of the Private Neighbor Set are
 30 specified in the *Private Neighbor List Message*.

31 The mobile station shall support a Neighbor Set size of at least N_{8m} pilots (see Annex D).

32 In the *Mobile Station Idle State*, the mobile station shall continuously search for the
 33 strongest Pilot Channel signal on the corresponding CDMA Frequency Assignment
 34 whenever it monitors the Paging Channel or the Forward Common Control Channel.

35 The mobile station may search other frequencies and band classes. For example, if a pilot
 36 in the Neighbor Set or in the Private Neighbor Set is on a different Frequency Assignment
 37 than that of the mobile station, this frequency should be included in the search criteria.
 38 Search performance criteria are defined in [11]. If both AP_IDT_MSG_SEQ_s and
 39 INTER_FREQ_SRCH_TH_s are not set to NULL, the MS shall only start searching on different

1 frequencies than that of the current pilot when its current pilot E_c/I_o is below
 2 $INTER_FREQ_SRCH_TH_S$.

3 This search should be governed by the following:

- 4 • Active Set: The search window size for the pilot in the Active Set shall be the
 5 number of PN chips specified in Table 2.6.6.2.1-1 corresponding to $SRCH_WIN_A_S$.
 6 The mobile station should center the search window for the pilot of the Active Set
 7 around the earliest arriving usable multipath component of the pilot. If the mobile
 8 station receives a value greater than or equal to 13 for $SRCH_WIN_A_r$, it may store
 9 and use the value 13 in $SRCH_WIN_A_S$.
- 10 • Neighbor Set: The search window size for each pilot in the Neighbor Set shall be the
 11 number of PN chips specified in Table 2.6.6.2.1-1 corresponding to
 12 $SRCH_WIN_NGHBR_S$ field of the $NGHBR_REC$ for the pilot. The mobile station
 13 should center the search window for each pilot in the Neighbor Set around the
 14 pilot's PN sequence offset plus the corresponding $SRCH_OFFSET_NGHBR_S$ (see
 15 Table 2.6.6.2.1-2) using timing defined by the mobile station's time reference (see
 16 [2]). The mobile station should use the $SEARCH_PRIORITY$ field of the
 17 $NGHBR_REC$ for the corresponding pilot to schedule its neighbor search. If
 18 $ADD_PILOT_REC_INCL$ field of the $NGHBR_REC$ for the corresponding pilot is equal
 19 to '1', the mobile station shall use the information included in the
 20 $NGHBR_PILOT_REC$ field for searching the neighbor.

21 If the mobile station supports hopping pilot beacons and the $TIMING_INCL$ field of the
 22 $NGHBR_REC$ for the corresponding pilot is equal to '1', then the mobile station shall use
 23 the information included in the $NGHBR_TX_OFFSET$, $NGHBR_TX_DURATION$, and
 24 $NGHBR_TX_PERIOD$ fields of the $NGHBR_REC$ for the corresponding pilot to schedule the
 25 time for searching the neighbor.

- 26 • Remaining Set: The search window size for each pilot in the Remaining Set shall be
 27 the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to
 28 $SRCH_WIN_R_S$. The mobile station should center the search window for each pilot
 29 in the Remaining Set around the pilot's PN sequence offset using timing defined by
 30 the mobile station's time reference (see [2]). The mobile station should only search
 31 for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer
 32 multiples of $PILOT_INC_S$.
- 33 • Private Neighbor Set: The search window size for each pilot in the Private Neighbor
 34 Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to
 35 $SRCH_WIN_PRI_NGHBR_S$ field of the PRI_NGHBR_REC for the pilot. The mobile
 36 station should center the search window for each pilot in the Private Neighbor Set
 37 around the pilot's PN sequence offset using timing defined by the mobile station's
 38 time reference (see [2]).

39 If the mobile station determines that one of the Neighbor Set, Private Neighbor Set or
 40 Remaining Set Pilot Channel signals is sufficiently stronger (see [11]) than the Pilot
 41 Channel of the Active Set, the mobile station should perform an idle handoff as follows:

- 42 • If the mobile station is currently monitoring a Forward Supplemental Channel, the
 43 mobile station shall perform an idle handoff as specified in 2.6.13.4;

- Otherwise, the mobile station shall perform an idle handoff as specified in 2.6.2.1.4.2.

If RER_MODE_ENABLED is equal to YES, the mobile station performs idle handoff to a Pilot Channel that is not in RER_PILOT_LIST (see 2.6.4.4.2 and [4]), RER_SID_s is equal to SID_s, RER_NID_s is equal to NID_s, and RER_MODE_SUPPORTED_s is equal to '1', the mobile station shall send a *Radio Environment Message* by performing the *Mobile Station Message Transmission Operation* as specified in 2.6.2.6.

A mobile station operating in slotted mode, which is successfully demodulating the Paging Channel or the Forward Common Control Channel, should not perform an idle handoff while it is required to monitor its assigned slot (see 2.6.2.1.1.3.1).

2.6.2.1.4.2 Idle Handoff Procedures

While performing an idle handoff, the mobile station should not begin operating in non-slotted mode after the idle handoff if all of the following conditions hold:

- The mobile station supports the Quick Paging Channel;
- The mobile station has knowledge that the new base station supports configuration change indicators;
- The mobile station determines that the Quick Paging Channel configuration change indicator for the new Quick Paging Channel is set to "OFF" (see 2.6.2.1.2.1); and
- No more than T_{31m} seconds have elapsed since the mobile station last received a valid message on the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel.

Otherwise, the mobile station shall operate in non-slotted mode until the mobile station has received at least one valid configuration message or mobile station-addressed page on the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel. Following the reception of this message the mobile station may resume slotted mode operation in accordance with 2.6.2.1.1.3. After performing an idle handoff, the mobile station shall discard all unprocessed messages received on the old Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel.

If the new base station is listed in NGHBR_REC_LIST for the old base station (see 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 NGHBR_CONFIG field to determine the actions required to transition to the new base station. If the new base station is not listed in NGHBR_REC_LIST for the old base station, the mobile station shall perform the handoff operation using the same procedure as for a pilot in NGHBR_REC_LIST with the NGHBR_CONFIG field set to '011'.

If the mobile station is currently monitoring the Paging Channel and selected a neighbor base station for idle handoff which supports Primary Broadcast Control Channel, the mobile station shall perform the following:

- The mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a new system indication, upon performing idle handoff to this neighbor base station.

- 1 • The mobile station shall not perform any of the remaining procedures in this
2 section.

3 If the NGHBR_CONFIG field is '000', the mobile station shall perform the following:

- 4 • The mobile station shall set ACC_MSG_SEQ_s and CURR_ACC_MSG_SEQ to NULL
5 (see 2.6.2.2) and shall set PILOT_PN_s to the pilot offset index of the base station
6 transmitting the new Paging Channel or Forward Common Control
7 Channel/Primary Broadcast Control Channel.
- 8 • If the mobile station has not stored configuration parameters for the new Paging
9 Channel or Forward Common Control Channel and Primary Broadcast Control
10 Channel, or if the stored information is not current, the mobile station shall perform
11 the following:
- 12 - If the mobile station has monitored the Paging Channel before the idle handoff,
13 the mobile station shall set CONFIG_MSG_SEQ_s, 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_SYS_PAR_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s,
17 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
18 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
19 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
20 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
21 PRI_NGHBR_LST_MSG_SEQ_s to NULL.
- 22 - If the mobile station has monitored the Forward Common Control
23 Channel/Primary Broadcast Control Channel before the idle handoff, the mobile
24 station shall set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
25 UNI_NGHBR_LST_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
26 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
27 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
28 PRI_NGHBR_LST_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
29 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
30 ATIM_MSG_SEQ_s to NULL.
- 31 • If the stored information for the new Paging Channel or the Forward Common
32 Control Channel and Primary Broadcast Control Channel is current, the mobile
33 station shall set CONFIG_MSG_SEQ_s to the stored information for the new Paging
34 Channel or Forward Common Control Channel and Primary Broadcast Control
35 Channel, and the mobile station shall set NGHBR_REC_LIST to the stored
36 information for the new Paging Channel or the new Forward Common Control
37 Channel and Primary Broadcast Control Channel.
- 38 - If the associated NGHBR_BAND_s or NGHBR_FREQ_s of the new base station in
39 NGHBR_REC_LIST of the old base station is not equal to CDMABAND_s and
40 CDMACH_s respectively, the mobile station shall set CDMABAND_s to
41 NGHBR_BAND_s, CDMACH_s to NGHBR_FREQ_s, and tune to the new CDMA
42 Channel. The mobile station shall begin monitoring the Paging Channel or the

1 Forward Common Control Channel/Primary Broadcast Control Channel of the
 2 new base station, using the same rate, code rate, and code channel, as
 3 applicable.

- 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 If the NGHBR_CONFIG field is '001', the mobile station shall perform the following:

- 9 • The mobile station shall set ACC_MSG_SEQ_s and CURR_ACC_MSG_SEQ to NULL
 10 and shall set PILOT_PN_s to the pilot offset index of the base station transmitting the
 11 new Paging Channel.
- 12 • If the stored information for Primary Paging Channel or any of the Paging Channels
 13 on the associated NGHBR_FREQ_s of the new base station in NGHBR_REC_LIST of
 14 the old base station is current, the mobile station shall perform the following:
 - 15 - The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a
 16 new Paging Channel number in the range 1 to PAGE_CHAN_s, where
 17 PAGE_CHAN_s is the value stored for the Paging Channel whose stored
 18 information is current. The mobile station shall store the new Paging Channel
 19 number as PAGECH_s. The mobile station shall perform the following:
 - 20 + If the mobile station has not stored configuration parameters for the new
 21 Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the
 22 mobile station shall set CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s,
 23 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
 24 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
 25 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
 26 PRI_NGHBR_LST_MSG_SEQ_s, and EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
 27 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
 28 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
 29 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
 30 GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
 - 31 + If the stored information for the new Paging Channel is current, the mobile
 32 station shall set CONFIG_MSG_SEQ_s to the stored information for the new
 33 Paging Channel and set NGHBR_REC_LIST to the stored information for the
 34 new Paging Channel.
 - 35 - If the mobile station has monitored the Forward Common Control
 36 Channel/Primary Broadcast Control Channel before the idle handoff, the mobile
 37 station shall set Paging Channel data rate, PRATs = '00'.

- 1 - If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in
2 NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and
3 CDMACHs respectively, the mobile station shall set CDMABANDs to
4 NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA
5 Channel. The mobile station shall begin monitoring the new Paging Channel of
6 the new base station.
- 7 • If none of the Paging Channel stored information on the associated NGHBR_FREQs
8 of the new base station in NGHBR_REC_LIST of the old base station are current, the
9 mobile station shall perform the following:
- 10 - The mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs,
11 NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs,
12 GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs,
13 EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs,
14 EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs,
15 FD_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs,
16 AP_PILOT_INFO_MSG_SEQs, AP_IDT_MSG_SEQs, AP_ID_TEXT_MSG_SEQs,
17 GOI_MSG_SEQs, FREQ_GOI_MSG_SEQs, ATIM_MSG_SEQs and
18 PRI_NGHBR_LST_MSG_SEQs 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 Paging Channel data rate, PRATs = '00'.
- 22 - The mobile station shall set PAGE_CHANs to '1' and PAGECHs to the Primary
23 Paging Channel. If the associated NGHBR_BANDs or NGHBR_FREQs of the new
24 base station in NGHBR_REC_LIST of the old base station is not equal to
25 CDMABANDs and CDMACHs respectively, the mobile station shall set
26 CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the
27 new CDMA Channel. The mobile station shall begin monitoring the Primary
28 Paging Channel of the new base station.
- 29 • If PACAs is equal to enabled, the mobile station shall enter the *Update Overhead*
30 *Information Substate* of the *System Access State* (see 2.6.3) with an origination
31 indication within T_{33m} seconds to re-originate the PACA call using the new base
32 station.

33 If the NGHBR_CONFIG field is '010', the mobile station shall perform the following:

- 34 • The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL
35 and shall set PILOT_PNs to the pilot offset index of the base station transmitting the
36 new Paging Channel or Forward Common Control Channel/Primary Broadcast
37 Control Channel.
- 38 • If the mobile station has monitored the Paging Channel before the idle handoff, the
39 mobile station shall perform the following:

- 1 - If the stored information for Primary Paging Channel or any of the Paging
2 Channels on the target frequency or any of the frequencies of the new base
3 station is current, the mobile station shall perform the following:
- 4 + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the
5 stored value of the number of CDMA channels to determine the new CDMA
6 Channel and shall set `FREQ_NEW` to this new CDMA Channel. The mobile
7 station shall perform the following:
- 8 ○ If the stored information for any of the Paging Channels on the CDMA
9 channel specified by `FREQ_NEW` is current, the mobile station shall
10 perform the following:

11 The mobile station shall use the hash algorithm specified in 2.6.7.1 to
12 select a new Paging Channel number in the range 1 to `PAGE_CHANs`,
13 where `PAGE_CHANs` is the value stored for the Paging Channel
14 whose stored information is current. The mobile station shall store
15 the new Paging Channel number as `PAGECHs`. The mobile station
16 shall perform the following:

- 17 - If the mobile station has not stored configuration parameters for
18 the new Paging Channel, or if the stored parameters are not
19 current (see 2.6.2.2), the mobile station shall set `CONFIG-`
20 `_MSG_SEQs`, `SYS_PAR_MSG_SEQs`, `NGHBR_LST_MSG_SEQs`,
21 `EXT_NGHBR_LST_MSG_SEQs`, `GEN_NGHBR_LST_MSG_SEQs`,
22 `CHAN_LST_MSG_SEQs`, `EXT_SYS_PAR_MSG_SEQs`,
23 `USER_ZONE_ID_MSG_SEQs`, `PRI_NGHBR_LST_MSG_SEQs`, and
24 `EXT_GLOB_SERV_REDIR_MSG_SEQs`,
25 `EXT_CHAN_LST_MSG_SEQs`, `FD_CHAN_LST_MSG_SEQs`,
26 `AP_PILOT_INFO_MSG_SEQs`, `AP_IDT_MSG_SEQs`,
27 `AP_ID_TEXT_MSG_SEQs`, `GOI_MSG_SEQs`,
28 `FREQ_GOI_MSG_SEQs`, `ATIM_MSG_SEQs` and
29 `GLOB_SERV_REDIR_MSG_SEQs` to NULL.
- 30 - If the stored information for the new Paging Channel is current,
31 the mobile station shall set `CONFIG_MSG_SEQs` to the stored
32 information for the new Paging Channel and set
33 `NGHBR_REC_LIST` to the stored information for the new Paging
34 Channel.

35 If the band class corresponding to `FREQ_NEW` is not equal to
36 `CDMABANDs` of the old base station or `FREQ_NEW` is not equal to
37 `CDMACHs` of the old base station, the mobile station shall set
38 `CDMABANDs` to band class corresponding to `FREQ_NEW` and shall
39 set `CDMACHs` to `FREQ_NEW`, and tune to the new CDMA Channel.
40 The mobile station shall begin monitoring the new Paging Channel of
41 the new base station.

- 1 ○ If none of the Paging Channel stored information on the CDMA channel
2 specified by `FREQ_NEW` are current, the mobile station shall perform the
3 following:
- 4 The mobile station shall set `CONFIG_MSG_SEQs`, `SYS_PAR_MSG_SEQs`,
5 `NGHBR_LST_MSG_SEQs`, `EXT_NGHBR_LST_MSG_SEQs`,
6 `GEN_NGHBR_LST_MSG_SEQs`, `CHAN_LST_MSG_SEQs`,
7 `EXT_SYS_PAR_MSG_SEQs`, `GLOB_SERV_REDIR_MSG_SEQs`,
8 `EXT_GLOB_SERV_REDIR_MSG_SEQs`, `EXT_CHAN_LST_MSG_SEQs`,
9 `FD_CHAN_LST_MSG_SEQs`, `USER_ZONE_ID_MSG_SEQs`, and
10 `PRI_NGHBR_LST_MSG_SEQs`, `AP_PILOT_INFO_MSG_SEQs`,
11 `AP_IDT_MSG_SEQs`, `AP_ID_TEXT_MSG_SEQs`, `GOI_MSG_SEQs`,
12 `FREQ_GOI_MSG_SEQs`, `ATIM_MSG_SEQs` to NULL.
- 13 The mobile station shall set `PAGE_CHANs` to '1' and `PAGECHs` to the
14 Primary Paging Channel. If the band class corresponding to
15 `FREQ_NEW` is not equal to `CDMABANDs` of the old base station or
16 `FREQ_NEW` is not equal to `CDMACHs` of the old base station, the
17 mobile station shall set `CDMABANDs` to band class corresponding to
18 `FREQ_NEW` and shall set `CDMACHs` to `FREQ_NEW`, and tune to the
19 new CDMA Channel. The mobile station shall begin monitoring the
20 Primary Paging Channel of the new base station.
- 21 - If none of the Paging Channel stored information on any of the frequencies of
22 the new base station are current, the mobile station shall perform the following:
- 23 + The mobile station shall set `CONFIG_MSG_SEQs`, `SYS_PAR_MSG_SEQs`,
24 `NGHBR_LST_MSG_SEQs`, `EXT_NGHBR_LST_MSG_SEQs`,
25 `GEN_NGHBR_LST_MSG_SEQs`, `CHAN_LST_MSG_SEQs`,
26 `EXT_SYS_PAR_MSG_SEQs`, `GLOB_SERV_REDIR_MSG_SEQs`,
27 `EXT_GLOB_SERV_REDIR_MSG_SEQs`, `EXT_CHAN_LST_MSG_SEQs`,
28 `FD_CHAN_LST_MSG_SEQs`, `USER_ZONE_ID_MSG_SEQs`, and
29 `PRI_NGHBR_LST_MSG_SEQs`, `AP_PILOT_INFO_MSG_SEQs`,
30 `AP_IDT_MSG_SEQs`, `AP_ID_TEXT_MSG_SEQs`, `GOI_MSG_SEQs`,
31 `FREQ_GOI_MSG_SEQs`, `ATIM_MSG_SEQs` to NULL.
- 32 + The mobile station shall set `PAGE_CHANs` to '1' and `PAGECHs` to the
33 Primary Paging Channel. If the associated `NGHBR_BANDs` or
34 `NGHBR_FREQs` of the new base station in `NGHBR_REC_LIST` of the old base
35 station is not equal to `CDMABANDs` and `CDMACHs` of the old base station
36 respectively, the mobile station shall set `CDMABANDs` to `NGHBR_BANDs`,
37 and `CDMACHs` to `NGHBR_FREQs`; otherwise, the mobile station shall set
38 `CDMACHs` as follows:
- 39 ○ If the *Extended CDMA Channel List Message* is being sent on the old base
40 station, set `CDMACHs` to the first CDMA Channel given in the *Extended*
41 *CDMA Channel List Message* for the old base station.

- 1 ○ Otherwise, set $CDMACH_s$ to the first CDMA Channel given in the *CDMA*
2 *Channel List Message* for the old base station.

3 Then the mobile station shall tune to the new CDMA channel and begin
4 monitoring the Primary Paging Channel of the new base station.

- 5 • If the mobile station has monitored the Forward Common Control Channel/Primary
6 Broadcast Control Channel before the idle handoff, the mobile station shall perform
7 the following:

8 - If the stored information for any of the Forward Common Control Channels and
9 Primary Broadcast Control Channel on any of the frequencies of the new base
10 station is current, the mobile station shall perform the following:

11 + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the
12 stored value of the number of CDMA channels to determine the new CDMA
13 Channel and shall set $FREQ_NEW$ to this new CDMA Channel. The mobile
14 station shall perform the following

15 ○ If the stored information for any of the Forward Common Control
16 Channels and Primary Broadcast Control Channel on the CDMA channel
17 specified by $FREQ_NEW$ is current, the mobile station shall perform the
18 following:

19 ◇ The mobile station shall use the hash algorithm specified in 2.6.7.1
20 to select a new Forward Common Control Channel number in the
21 range 1 to NUM_FCCCH_s , where NUM_FCCCH_s is the stored value.
22 The mobile station shall store the new Forward Common Control
23 Channel number as $FCCCH_ID_s$.

24 ◇ If the stored information for this new Forward Common Control
25 Channel and Primary Broadcast Control Channel is current, the
26 mobile station shall perform the following:

27 — The mobile station shall set $CONFIG_MSG_SEQ_s$ to the stored
28 information for this new Forward Common Control Channel and
29 Primary Broadcast Control Channel and the mobile station shall
30 set $NGHBR_REC_LIST$ to the stored information for this new
31 Forward Common Control Channel and Primary Broadcast
32 Control Channel.

33 — If the band class corresponding to $FREQ_NEW$ is not equal to
34 $CDMABAND_s$ of the old base station or $FREQ_NEW$ is not equal
35 to $CDMACH_s$ of the old base station, the mobile station shall set
36 $CDMABAND_s$ to band class corresponding to $FREQ_NEW$ and
37 shall set $CDMACH_s$ to $FREQ_NEW$, and tune to the new CDMA
38 Channel. The mobile station shall begin monitoring the new
39 Forward Common Control Channel/Primary Broadcast Control
40 Channel of the new base station.

- 1 ◇ If the stored information for this new Forward Common Control
2 Channel and Primary Broadcast Control Channel is not current, the
3 mobile station shall perform the following:
- 4 — The mobile station shall set CONFIG_MSG_SEQ_s,
5 A41_SYS_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s,
6 MC_RR_PAR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
7 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
8 USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
9 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
10 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
11 PRI_NGHBR_LST_MSG_SEQ_s to NULL.
- 12 — If the band class corresponding to FREQ_NEW is not equal to
13 CDMABAND_s of the old base station or FREQ_NEW is not equal
14 to CDMACH_s of the old base station, the mobile station shall set
15 CDMABAND_s to band class corresponding to FREQ_NEW and
16 shall set CDMACH_s to FREQ_NEW, and tune to the new CDMA
17 Channel. The mobile station shall begin monitoring the Primary
18 Broadcast Control Channel of the new base station.
- 19 ○ If none of the Forward Common Control Channel and Primary Broadcast
20 Control Channel stored information on the CDMA channel specified by
21 FREQ_NEW are current, the mobile station shall perform the following:
- 22 The mobile station shall set CONFIG_MSG_SEQ_s,
23 A41_SYS_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s,
24 MC_RR_PAR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
25 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
26 USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
27 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
28 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
29 PRI_NGHBR_LST_MSG_SEQ_s to NULL.
- 30 If the associated NGHBR_BAND_s of the new base station in
31 NGHBR_REC_LIST of the old base station is not equal to
32 CDMABAND_s or the associated NGHBR_FREQ_s of the new base
33 station in NGHBR_REC_LIST of the old base station is not equal to
34 CDMACH_s of the old base station, the mobile station shall set
35 CDMABAND_s to NGHBR_BAND_s, CDMACH_s to NGHBR_FREQ_s, and
36 tune to the new CDMA Channel. Otherwise, the mobile station shall
37 set CDMACH_s to the first CDMA Channel given in the *Extended*
38 *CDMA Channel List Message* for the old base station and tune to the
39 new CDMA channel.
- 40 Then the mobile station shall begin monitoring the Primary Broadcast
41 Control Channel of the new base station, using the same rate, code
42 rate, and code channel.

- 1 - If none of the Forward Common Control Channel and Primary Broadcast
2 Control Channel stored information on any of the frequencies of the new base
3 station are current, the mobile station shall perform the following:
- 4 + The mobile station shall set CONFIG_MSG_SEQ_s,
5 A41_SYS_PAR_MSG_SEQ_s, UNI_NGHR_LST_MSG_SEQ_s,
6 MC_RR_PAR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
7 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
8 USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
9 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
10 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and PRI_NGHR_LST_MSG_SEQ_s
11 to NULL.
- 12 + If the associated NGHR_BAND_s or NGHR_FREQ_s of the new base station
13 in NGHR_REC_LIST of the old base station is not equal to CDMABAND_s
14 and CDMACH_s of the old base station respectively, the mobile station shall
15 set CDMABAND_s to NGHR_BAND_s, CDMACH_s to NGHR_FREQ_s, and
16 tune to the new CDMA Channel. Otherwise, the mobile station shall set
17 CDMACH_s to the first CDMA Channel given in the *Extended CDMA Channel*
18 *List Message* for the old base station and tune to the new CDMA channel.
- 19 + Then the mobile station shall begin monitoring the Primary Broadcast
20 Control Channel of the new base station, using the same rate, code rate, and
21 code channel.
- 22 • If PACA_s is equal to enabled, the mobile station shall enter the *Update Overhead*
23 *Information Substate* of the *System Access State* (see 2.6.3) with an origination
24 indication within T_{33m} seconds to re-originate the PACA call using the new base
25 station.
- 26 If the NGHR_CONFIG field is '011', the mobile station shall perform the following:
- 27 • Enter the *System Determination Substate* of the *Mobile Station Initialization State* with
28 a new system indication (see 2.6.1.1).
- 29 If the NGHR_CONFIG field is '100', the mobile station shall perform the following:
- 30 • The mobile station shall set ACC_MSG_SEQ_s and CURR_ACC_MSG_SEQ to NULL
31 (see 2.6.2.2) and shall set PILOT_PN_s to the pilot offset index of the base station
32 transmitting the new Forward Common Control Channel/Primary Broadcast
33 Control Channel.
- 34 • If the stored information for any of the Forward Common Control Channels and
35 Primary Broadcast Control Channel on the associated NGHR_FREQ_s of the new
36 base station in NGHR_REC_LIST of the old base station is current, 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 a
39 new Forward Common Control Channel number in the range 1 to
40 NUM_FCCCH_s, where NUM_FCCCH_s is the stored value. The mobile station
41 shall store the new Forward Common Control Channel number as FCCCH_ID_s.

- 1 - If the mobile station has not stored configuration parameters for this new
2 Forward Common Control Channel and Primary Broadcast Control Channel, or
3 if the stored information is not current, the mobile station shall perform the
4 following:
- 5 + The mobile station shall set CONFIG_MSG_SEQ_s,
6 A41_SYS_PAR_MSG_SEQ_s, UNI_NGHR_LST_MSG_SEQ_s,
7 MC_RR_PAR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
8 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
9 USER_ZONE_ID_MSG_SEQ_s, and PRI_NGHR_LST_MSG_SEQ_s,
10 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
11 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s to NULL.
- 12 + If the associated NGHR_BAND_s or NGHR_FREQ_s of the new base station
13 in NGHR_REC_LIST of the old base station is not equal to CDMABAND_s
14 and CDMACH_s respectively, the mobile station shall set CDMABAND_s to
15 NGHR_BAND_s, CDMACH_s to NGHR_FREQ_s, and tune to the new CDMA
16 Channel.
- 17 + Then the mobile station shall begin monitoring the Primary Broadcast
18 Control Channel of the new base station, using the same rate, code rate, and
19 code channel.
- 20 - If the stored information for this new Forward Common Control Channel and
21 Primary Broadcast Control Channel is current, the mobile station shall perform
22 the following:
- 23 + The mobile station shall set CONFIG_MSG_SEQ_s to the stored information
24 for this new Forward Common Control Channel and Primary Broadcast
25 Control Channel and the mobile station shall set NGHR_REC_LIST to the
26 stored information for this new Forward Common Control Channel and
27 Primary Broadcast Control Channel.
- 28 + If the associated NGHR_BAND_s or NGHR_FREQ_s of the new base station
29 in NGHR_REC_LIST of the old base station is not equal to CDMABAND_s
30 and CDMACH_s respectively, the mobile station shall set CDMABAND_s to
31 NGHR_BAND_s, CDMACH_s to NGHR_FREQ_s, and tune to the new CDMA
32 Channel. The mobile station shall begin monitoring the new Forward
33 Common Control Channel/Primary Broadcast Control Channel of the new
34 base station.
- 35 • If none of the Forward Common Control Channel and Primary Broadcast Control
36 Channel stored information on the associated NGHR_FREQ_s of the new base
37 station in NGHR_REC_LIST of the old base station are current, the mobile station
38 shall perform the following:

- 1 - The mobile station shall set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
 2 UNI_NGHRB_LST_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
 3 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 4 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
 5 PRI_NGHRB_LST_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
 6 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
 7 ATIM_MSG_SEQ_s to NULL.
- 8 - If the associated NGHRB_BAND_s or NGHRB_FREQ_s of the new base station in
 9 NGHRB_REC_LIST of the old base station is not equal to CDMABAND_s and
 10 CDMACH_s respectively, the mobile station shall set CDMABAND_s to
 11 NGHRB_BAND_s, CDMACH_s to NGHRB_FREQ_s, and tune to the new CDMA
 12 Channel.
- 13 - The mobile station shall begin monitoring the Primary Broadcast Control
 14 Channel of the new base station, using the same rate, code rate, and code
 15 channel.
- 16 • If PACA_s is equal to enabled, the mobile station shall enter the *Update Overhead*
 17 *Information Substate* of the *System Access State* (see 2.6.3) with an origination
 18 indication within T_{33m} seconds to re-originate the PACA call using the new base
 19 station.

20 2.6.2.1.5 Primary Broadcast Control Channel Monitoring

21 2.6.2.1.5.1 General Overview

22 The Broadcast Control Channel is divided into 40, 80, or 160 ms slots called the Broadcast
 23 Control Channel slots (see 3.1.3.5 in [2]). The Primary Broadcast Control Channel will be
 24 used for control messages. Support for the Primary Broadcast Control Channel is
 25 mandatory for mobile stations. The Primary Broadcast Control Channel will operate with
 26 the Forward Common Control Channels and the Quick Paging Channels, or only with the
 27 Forward Common Control Channels.

28 After a mobile station acquires and synchronizes with a new base station that supports a
 29 Primary Broadcast Control Channel, the mobile station monitors the Primary Broadcast
 30 Control Channel to receive overhead information. Once the mobile station has received the
 31 updated overhead information from the Primary Broadcast Control Channel, the mobile
 32 station may begin to monitor a Forward Common Control Channel or a Quick Paging
 33 Channel, if it is supported.

34 2.6.2.1.5.2 Requirements

35 If the base station supports the Primary Broadcast Control Channel, the mobile station
 36 shall monitor the Primary Broadcast Control Channel for overhead messages. If the mobile
 37 station determines that the CONFIG_MSG_SEQ has changed, the mobile station shall
 38 monitor the Primary Broadcast Control Channel to receive updated overhead messages.

1 2.6.2.1.6 System Reselection Procedures

2 If the mobile station supports more than one operating mode or the Remaining
3 Set/Neighbor Set contains pilots on frequencies different from the current frequency, the
4 mobile station shall enter the *System Determination Substate* of the *Mobile Station*
5 *Initialization State* with a system reselection indication (see 2.6.1.1) if all of the following are
6 true:

- 7 • RESELECT_INCLUDED_s is equal to '1';

- 8 • The following inequality is satisfied:

$$9 \quad -20 \times \log_{10} (E_C/I_0) > EC_I0_THRESH_s$$

10 where E_C/I_0 is the measured E_C/I_0 of the active pilot; and

- 11 • The following inequality is satisfied:

$$12 \quad pilot_power < EC_THRESH_s - 115$$

13 where $pilot_power$ (dBm/1.23 MHz) = $10 \times \log_{10} (PS)$ (dB) + mean input power

14 (dBm/1.23 MHz) and PS is the strength of the active pilot, as specified in 2.6.6.2.2.

15 2.6.2.1.7 Slotted Timer Expiration

16 Upon expiration of the slotted T_{MS} Slotted timer, the mobile station shall disable the timer,
17 set T_SLOTTED_s to T_{74m}, and set SLOTTED_s to YES.

18 2.6.2.1.8 Exiting the Reduced Slot Cycle Mode

19 If RSC_MODE_ENABLED is equal to YES, then at the system time specified by
20 RSC_END_TIME, the mobile station shall set RSC_MODE_ENABLED to NO and set
21 SLOTTED_s to YES.

22 2.6.2.1.9 Radio Environment Report Timer Expiration

23 Upon expiration of the radio environment report timer, the mobile station shall disable the
24 timer and set RER_MODE_ENABLED to NO. If TKZ_MODE_PENDING is equal to YES, then
25 the mobile station shall perform the following:

- 26 • Set TKZ_MODE_ENABLED to YES and TKZ_MODE_PENDING to NO.
- 27 • Initialize the tracking zone list (TKZ_LIST) to NULL.
- 28 • Enable the tracking zone update timer with an initial value of infinity if
29 TKZ_UPDATE_PRD_s is equal to '1111'; otherwise, the mobile station shall enable the
30 tracking zone update timer with an initial value of $2^{TKZ_UPDATE_PRD_s + 6}$ seconds.

31 2.6.2.2 Response to Overhead Information Operation

32 The overhead messages on the Primary Broadcast Control Channel are:

- 33 • *ANSI-41 System Parameters Message*
- 34 • *MC-RR Parameters Message*
- 35 • *Enhanced Access Parameters Message*
- 36 • *Universal Neighbor List Message*

- 1 • *User Zone Identification Message*
- 2 • *Private Neighbor List Message*
- 3 • *Extended Global Service Redirection Message*
- 4 • *Extended CDMA Channel List Message*
- 5 • *ANSI-41 RAND Message*
- 6 • *BCMC Service Parameters Message*
- 7 • *Access Point Identification Message*
- 8 • *Access Point Identification Text Message*
- 9 • *Access Point Pilot Information Message*
- 10 • *General Overhead Information Message*
- 11 • *Frequent General Overhead Information Message*
- 12 • *Flex Duplex CDMA Channel List Message*
- 13 • *Alternative Technologies Information Message*

14 The overhead messages on the Paging Channel are:

- 15 • *System Parameters Message*
- 16 • *Access Parameters Message*
- 17 • *Neighbor List Message*
- 18 • *CDMA Channel List Message*
- 19 • *Extended System Parameters Message*
- 20 • *Global Service Redirection Message*
- 21 • *Extended Neighbor List Message*
- 22 • *General Neighbor List Message*
- 23 • *User Zone Identification Message*
- 24 • *Private Neighbor List Message*
- 25 • *Extended Global Service Redirection Message*
- 26 • *Extended CDMA Channel List Message*
- 27 • *Access Point Identification Message*
- 28 • *Access Point Identification Text Message*
- 29 • *Access Point Pilot Information Message*
- 30 • *General Overhead Information Message*
- 31 • *Frequent General Overhead Information Message*
- 32 • *Flex Duplex CDMA Channel List Message*

- 1 • *Alternative Technologies Information Message*

2 The *Response to Overhead Information Operation* is performed whenever the mobile station
3 receives an overhead message. The mobile station updates internally stored information
4 from the received message's data fields.

5 Configuration parameters and access parameters are received in the configuration
6 messages and the *Access Parameters Message* or the *Enhanced Access Parameters Message*.

7 The configuration messages on the Primary Broadcast Control Channel are:

- 8 • *ANSI-41 System Parameters Message*
9 • *MC-RR Parameters Message*
10 • *Universal Neighbor List Message*
11 • *User Zone Identification Message*
12 • *Private Neighbor List Message*
13 • *Extended Global Service Redirection Message*
14 • *Extended CDMA Channel List Message*
15 • *Access Point Identification Message*
16 • *Access Point Identification Text Message*
17 • *Access Point Pilot Information Message*
18 • *General Overhead Information Message*
19 • *Frequent General Overhead Information Message*
20 • *Flex Duplex CDMA Channel List Message*
21 • *Alternative Technologies Information Message*

22 The configuration messages on the Paging Channel are:

- 23 • *System Parameters Message*
24 • *Neighbor List Message*
25 • *CDMA Channel List Message*
26 • *Extended System Parameters Message*
27 • *Global Service Redirection Message*
28 • *Extended Neighbor List Message*
29 • *General Neighbor List Message*
30 • *User Zone Identification Message*
31 • *Private Neighbor List Message*
32 • *Extended Global Service Redirection Message*
33 • *Extended CDMA Channel List Message*

- 1 • *Access Point Identification Message*
- 2 • *Access Point Identification Text Message*
- 3 • *Access Point Pilot Information Message*
- 4 • *General Overhead Information Message*
- 5 • *Frequent General Overhead Information Message*
- 6 • *Flex Duplex CDMA Channel List Message*
- 7 • *Alternative Technologies Information Message*

8 Associated with the set of configuration messages sent on each Paging Channel or Primary
 9 Broadcast Control Channel is a configuration message sequence number
 10 (CONFIG_MSG_SEQ). When the contents of one or more of the configuration messages
 11 change, the configuration message sequence number is incremented. For each of the
 12 configuration messages received, the mobile station stores the configuration message
 13 sequence number contained in the configuration message (A41_SYS_PAR_MSG_SEQ_s,
 14 MC_RR_PAR_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 15 AP_PILOT_INFO_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
 16 GEN_NGHBR_LST_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
 17 EXT_SYS_PAR_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
 18 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
 19 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
 20 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s or ATIM_MSG_SEQ_s).
 21 The mobile station also stores the most recently received configuration message sequence
 22 number (CONFIG_MSG_SEQ_s) contained in any message (see 2.6.2.2.1, 2.6.2.2.3,
 23 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,
 24 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,
 25 2.6.2.2.23, 2.6.2.2.24 and 2.6.2.3). The mobile station examines the stored values of the
 26 configuration message sequence numbers to determine whether the configuration
 27 parameters stored by the mobile station are current.

28 The field EXT_SYS_PARAMETER in the *System Parameters Message*, when set equal to '0',
 29 indicates that the base station is not sending the *Extended System Parameters Message*.
 30 When the mobile station receives the *System Parameters Message* with the
 31 EXT_SYS_PARAMETER field set equal to '0', the mobile station shall set
 32 EXT_SYS_PAR_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the *Extended System*
 33 *Parameters Message* is current.

34 The field EXT_CHAN_LST in the *System Parameters Message*, when set equal to '0',
 35 indicates that the base station is not sending the *Extended CDMA Channel List Message*.
 36 When the mobile station receives the *System Parameters Message* with the EXT_CHAN_LST
 37 field set equal to '0', the mobile station shall set EXT_CHAN_LST_MSG_SEQ_s to
 38 CONFIG_MSG_SEQ_s to indicate that the *Extended CDMA Channel List Message* is current.

39 The field GEN_NGHBR_LST in the *System Parameters Message*, when set equal to '0',
 40 indicates that the base station is not sending the *General Neighbor List Message*. When the
 41 mobile station receives the *System Parameters Message* with the GEN_NGHBR_LST field set

1 equal to '0', the mobile station shall set the GEN_NGHR_LST_MSG_SEQ_s to
2 CONFIG_MSG_SEQ_s to indicate that the *General Neighbor List Message* is current.

3 The field EXT_NGHR_LST in the *System Parameters Message*, when set equal to '0',
4 indicates that the base station is not sending the *Extended Neighbor List Message*. When
5 the mobile station receives the *System Parameters Message* with the EXT_NGHR_LST field
6 set equal to '0', the mobile station shall set EXT_NGHR_LIST_MSG_SEQ_s to
7 CONFIG_MSG_SEQ_s to indicate that the *Extended Neighbor List Message* is current.

8 The field GLOBAL_REDIRECT in the *System Parameters Message*, when set equal to '0',
9 indicates that the base station is not sending the *Global Service Redirection Message*. When
10 the mobile station receives the *System Parameters Message* with the GLOBAL_REDIRECT
11 field set equal to '0', the mobile station shall set GLOB_SERV_REDIR_MSG_SEQ_s to
12 CONFIG_MSG_SEQ_s to indicate that the *Global Service Redirection Message* is current.

13 The field EXT_GLOBAL_REDIRECT in the *System Parameters Message* or *MC-RR*
14 *Parameters Message*, when set equal to '0', indicates that the base station is not sending
15 the *Extended Global Service Redirection Message*. When the mobile station receives the
16 *System Parameters Message* or *MC-RR Parameters Message* with the
17 EXT_GLOBAL_REDIRECT field set equal to '0', the mobile station shall set
18 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the *Extended*
19 *Global Service Redirection Message* is current.

20 The field USER_ZONE_ID in the *System Parameters Message* or *MC-RR Parameters*
21 *Message*, when set equal to '0', indicates that the base station is not sending the *User Zone*
22 *Identification Message*. When the mobile station receives the *System Parameters Message* or
23 *MC-RR Parameters Message* with the USER_ZONE_ID field set equal to '0', the mobile
24 station shall set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the
25 *User Zone Identification Message* is current.

26 The field PRI_NGHR_LST in the *System Parameters Message* or *MC-RR Parameters*
27 *Message*, when set equal to '0', indicates that the base station is not sending the *Private*
28 *Neighbor List Message*. When the mobile station receives the *System Parameters Message*
29 or *MC-RR Parameters Message* with the PRI_NGHR_LST field set equal to '0', the mobile
30 station shall set PRI_NGHR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the
31 *Private Neighbor List Message* is current.

32 The field ATIM_IND in the *System Parameters Message* or *MC-RR Parameters Message*, when
33 set equal to '0' or if ATIM_IND is omitted, indicates that the base station is not sending the
34 *Alternative Technologies Information Message*. When the mobile station receives the *System*
35 *Parameters Message* or *MC-RR Parameters Message* with the ATIM_IND field set equal to '0',
36 or if the ATIM_IND field is omitted in the *System Parameters Message* or *MC-RR Parameters*
37 *Message*, the mobile station shall set ATIM_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate
38 that the *Alternative Technologies Information Message* is current.

39 The field AP_PILOT_INFO in the *System Parameters Message* or *MC-RR Parameters Message*,
40 when set equal to '0' or if AP_PILOT_INFO is omitted, indicates that the base station is not
41 sending the *Access Point Pilot Information Message*. When the mobile station receives the
42 *System Parameters Message* or *MC-RR Parameters Message* with the AP_PILOT_INFO field
43 set equal to '0', or if the AP_PILOT_INFO field is omitted in the *System Parameters Message*

1 or *MC-RR Parameters Message*, the mobile station shall set AP_PILOT_INFO_MSG_SEQ_s to
2 CONFIG_MSG_SEQ_s to indicate that the *Access Point Pilot Information Message* is current.

3 The field AP_IDT in the *System Parameters Message* or *MC-RR Parameters Message*, when
4 set equal to '0' or if AP_IDT is omitted, indicates that the base station is not sending the
5 *Access Point Identification Message*. When the mobile station receives the *System*
6 *Parameters Message* or *MC-RR Parameters Message* with the AP_IDT field set equal to '0', or
7 if the field AP_IDT is omitted in the *System Parameters Message* or *MC-RR Parameters*
8 *Message*, the mobile station shall set AP_IDT_MSG_SEQ_s to CONFIG_MSG_SEQ_s to
9 indicate that the *Access Point Identification Message* is current.

10 The field AP_ID_TEXT in the *System Parameters Message* or *MC-RR Parameters Message*,
11 when set equal to '0' or if AP_ID_TEXT is omitted, indicates that the base station is sending
12 the *Access Point Identification Text Message*. When the mobile station receives the *System*
13 *Parameters Message* or *MC-RR Parameters Message* with the AP_ID_TEXT field set equal to
14 '0', or if the field AP_ID_TEXT is omitted in the *System Parameters Message* or *MC-RR*
15 *Parameters Message*, the mobile station shall set AP_ID_TEXT_MSG_SEQ_s to
16 CONFIG_MSG_SEQ_s to indicate that the *Access Point Identification Text Message* is current.

17 The field GEN_OVHD_INF_IND in the *System Parameters Message* or *MC-RR Parameters*
18 *Message*, when set equal to '0' or if GEN_OVHD_INF_IND is omitted, indicates that the base
19 station is not sending the *General Overhead Information Message*. When the mobile station
20 receives the *System Parameters Message* or *MC-RR Parameters Message* with the
21 GEN_OVHD_INF_IND field set equal to '0', or if the GEN_OVHD_INF_IND field is omitted in
22 the *System Parameters Message* or *MC-RR Parameters Message*, the mobile station shall set
23 GOI_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the *General Overhead Information*
24 *Message* is current.

25 The field FREQ_GEN_OVHD_INF_IND in the *System Parameters Message* or *MC-RR*
26 *Parameters Message*, when set equal to '0' or if FREQ_GEN_OVHD_INF_IND is omitted,
27 indicates that the base station is not sending the *Frequent General Overhead Information*
28 *Message*. When the mobile station receives the *System Parameters Message* or *MC-RR*
29 *Parameters Message* with the FREQ_GEN_OVHD_INF_IND field set equal to '0', or if the
30 FREQ_GEN_OVHD_INF_IND field is omitted in the *System Parameters Message* or *MC-RR*
31 *Parameters Message*, the mobile station shall set FREQ_GOI_MSG_SEQ_s to
32 CONFIG_MSG_SEQ_s to indicate that the *Frequent General Overhead Information Message* is
33 current.

34 The field FD_CHAN_LST_IND in the *System Parameters Message* or *MC-RR Parameters*
35 *Message*, when set equal to '0' or if FD_CHAN_LST_IND is omitted, indicates that the base
36 station is not sending the *Flex Duplex CDMA Channel List Message*. When the mobile
37 station receives the *System Parameters Message* or *MC-RR Parameters Message* with the
38 FD_CHAN_LST_IND field set equal to '0', or if the FD_CHAN_LST_MSG_SEQ_s field is
39 omitted in the *System Parameters Message* or *MC-RR Parameters Message*, the mobile
40 station shall set FD_CHAN_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s to indicate that the
41 *Flex Duplex CDMA Channel List Message* is current.

1 The configuration message sequence number is also included in the *General Page Message*
 2 and the *Universal Page Message*. This allows the mobile station to determine whether the
 3 stored configuration parameters are current without waiting for a configuration message.

4 *Access Parameters Messages* or *Enhanced Access Parameters Messages* are independently
 5 sequence-numbered by the ACC_MSG_SEQ field. The mobile station stores the most
 6 recently received *Access Parameters Message* or *Enhanced Access Parameters Messages*
 7 sequence number (ACC_MSG_SEQ_s).

8 Paging Channels, Broadcast Control Channels, and Forward Common Control Channels
 9 shall be considered different if they are transmitted by different base stations, if they are
 10 transmitted on different code channels, or if they are transmitted on different CDMA
 11 Channels. Configuration and access parameters from one Paging Channel or Primary
 12 Broadcast Control Channel shall not be used while monitoring a different Paging Channel
 13 or Primary Broadcast Control Channel/Forward Common Control Channel except for
 14 registration and authentication parameters while the mobile station is performing an
 15 access probe handoff or access handoff. The mobile station shall ignore any overhead
 16 message whose PILOT_PN_r field is not equal to the pilot offset index (PILOT_PN_s) of the
 17 base station whose Paging Channel or Primary Broadcast Control Channel is being
 18 monitored.

19 The mobile station may store the configuration parameters from Paging Channels or
 20 Primary Broadcast Control Channel it has recently monitored. When a mobile station
 21 starts monitoring a Paging Channel or a Primary Broadcast Control Channel/Forward
 22 Common Control Channel that it has recently monitored, the mobile station can determine
 23 whether the stored parameters are current by examining the CONFIG_MSG_SEQ_s in a
 24 configuration message or a page message.

25 The mobile station shall use a special value, NULL, to be stored in place of sequence
 26 numbers for messages that have not been received or are marked as not current. The
 27 special value NULL shall be unequal to any valid message sequence number.

28 The mobile station shall consider the stored configuration parameters to be current only if
 29 all of the following conditions are true:

- 30 • If the mobile station is monitoring the Paging Channel, the following stored
 31 configuration message sequence numbers (SYS_PAR_MSG_SEQ_s,
 32 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
 33 EXT_SYS_PAR_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
 34 AP_ID_TEXT_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
 35 PRI_NGHBR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 36 EXT_GLOB_SERV_REDIR_MSG_SEQ_s and GLOB_SERV_REDIR_MSG_SEQ_s) are
 37 equal to CONFIG_MSG_SEQ_s; and
- 38 • If the mobile station is monitoring the Forward Common Control Channel/ Primary
 39 Broadcast Control Channel, the following stored configuration message sequence
 40 numbers (A41_SYS_PAR_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
 41 UNI_NGHBR_LST_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
 42 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,

- 1 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s, and
 2 EXT_GLOB_SERV_REDIR_MSG_SEQ_s) are equal to CONFIG_MSG_SEQ_s; and
- 3 • If the mobile station supports flexible spacing between forward and reverse
 4 channels, stored configuration message sequence number
 5 FD_CHAN_LST_MSG_SEQ_s is equal to CONFIG_MSG_SEQ_s; and
 - 6 • CONFIG_MSG_SEQ_s is not equal to NULL; and
 - 7 • No more than T_{31m} seconds (see Annex D) have elapsed since the mobile station
 8 last received a valid message on the Paging Channel or the Primary Broadcast
 9 Control Channel/Forward Common Control Channel for which the parameters were
 10 stored.

11 If the configuration parameters are not current, the mobile station shall process the stored
 12 parameters upon receipt of the configuration messages as described in 2.6.2.2.1, 2.6.2.2.3,
 13 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,
 14 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,
 15 2.6.2.2.23 and 2.6.2.2.24.

16 2.6.2.2.1 System Parameters Message

17 Whenever a *System Parameters Message* is received on the Paging Channel, the
 18 configuration message sequence number, CONFIG_MSG_SEQ_r, shall be compared to that
 19 stored in SYS_PAR_MSG_SEQ_s. If the comparison results in a match, the mobile station
 20 may ignore the message. If the comparison results in a mismatch, then the mobile station
 21 shall process the remaining fields in the message as described in 2.6.2.2.1.1, 2.6.2.2.1.2,
 22 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.

23 If PAGE_CHAN, REG_PRD, BASE_LAT, BASE_LONG, or PWR_REP_THRESH are not within
 24 the valid ranges specified in 3.7.2.3.2.1, then the mobile station shall ignore the *System
 25 Parameters Message* that contains them.

26 If BAND_CLASS is equal to '00001' and if EXT_SYS_PARAMETERS_r is not equal to '1', the
 27 mobile station shall ignore the *System Parameters Message* containing these fields.

28 2.6.2.2.1.1 Stored Parameters

29 The mobile station shall store the following parameters:

- 30 • Configuration message sequence number
 31 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
 32 SYS_PAR_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- 33 • Base station identification (BASE_ID_s = BASE_ID_r)
- 34 • Base station class (BASE_CLASS_s = BASE_CLASS_r)
- 35 • Maximum slot cycle index
 36 (MAX_SLOT_CYCLE_INDEX_s = MAX_SLOT_CYCLE_INDEX_r)
- 37 • Home registration indicator (HOME_REG_s = HOME_REG_r)
- 38 • SID roamer registration indicator (FOR_SID_REG_s = FOR_SID_REG_r)

- 1 • NID roamer registration indicator ($FOR_NID_REG_S = FOR_NID_REG_T$)
- 2 • Power-up registration indicator ($POWER_UP_REG_S = POWER_UP_REG_T$)
- 3 • Power-down registration indicator ($POWER_DOWN_REG_S = POWER_DOWN_REG_T$)
- 4 • Parameter-change registration indicator ($PARAMETER_REG_S = PARAMETER_REG_T$)
- 5 • Search window size for the Active Set and Candidate Set
- 6 ($SRCH_WIN_A_S = SRCH_WIN_A_T$)
- 7 • Search window size for the Neighbor Set ($SRCH_WIN_N_S = SRCH_WIN_N_T$)
- 8 • Search window size for the Remaining Set ($SRCH_WIN_R_S = SRCH_WIN_R_T$)
- 9 • Maximum age for retention of Neighbor Set members
- 10 ($NGHBR_MAX_AGE_S = NGHBR_MAX_AGE_T$)
- 11 • Power control reporting threshold ($PWR_REP_THRESH_S = PWR_REP_THRESH_T$)
- 12 • Power control reporting frame count ($PWR_REP_FRAMES_S = PWR_REP_FRAMES_T$)
- 13 • Threshold report mode indicator
- 14 ($PWR_THRESH_ENABLE_S = PWR_THRESH_ENABLE_T$)
- 15 • Periodic report mode indicator ($PWR_PERIOD_ENABLE_S = PWR_PERIOD_ENABLE_T$).
- 16 • Power report delay ($PWR_REP_DELAY_S = PWR_REP_DELAY_T$)
- 17 • Pilot detection threshold ($T_ADD_S = T_ADD_T$)
- 18 • Pilot drop threshold ($T_DROP_S = T_DROP_T$)
- 19 • Active Set versus Candidate Set comparison threshold ($T_COMP_S = T_COMP_T$)
- 20 • Drop timer value ($T_TDROP_S = T_TDROP_T$)
- 21 • Drop timer range value ($T_TDROP_RANGE_S = T_TDROP_RANGE_T$) if
- 22 $T_TDROP_RANGE_INCL_T$ is equal to '1'; otherwise, $T_TDROP_RANGE_S = '0000'$
- 23 • *Extended System Parameters Message sent*
- 24 ($EXT_SYS_PARAMETER_S = EXT_SYS_PARAMETER_T$)
- 25 • *Global Service Redirection Message sent*
- 26 ($GLOBAL_REDIRECT_S = GLOBAL_REDIRECT_T$)
- 27 • *Extended Global Service Redirection Message sent*
- 28 ($EXT_GLOBAL_REDIRECT_S = EXT_GLOBAL_REDIRECT_T$)
- 29 • *Extended Neighbor List Message sent*
- 30 ($EXT_NGHBR_LST_S = EXT_NGHBR_LST_T$)
- 31 • *General Neighbor List Message sent*
- 32 ($GEN_NGHBR_LST_S = GEN_NGHBR_LST_T$)
- 33 • *User Zone Identification Message sent*
- 34 ($USER_ZONE_ID_S = USER_ZONE_ID_T$)

- 1 • *Private Neighbor List Message* sent
2 (PRI_NGHRBR_LST_s = PRI_NGHRBR_LST_r)
- 3 • *Extended CDMA Channel List Message* sent
4 (EXT_CHAN_LST_s = EXT_CHAN_LST_r)
- 5 • If NEG_SLOT_CYCLE_INDEX_SUP_r is included and equal to '1', the mobile station
6 shall set MIN_SLOT_CYCLE_INDEX to -4; otherwise, the mobile station shall set
7 MIN_SLOT_CYCLE_INDEX to 0.
- 8 • If RC_BITMAP_CAPABILITY_EXT_ALLOWED_r is included and is equal to '1', the
9 mobile station shall set RC_BITMAP_CAPABILITY_EXT_ALLOWED_s to '1'; otherwise,
10 the mobile station shall set RC_BITMAP_CAPABILITY_EXT_ALLOWED_s to '0'.
- 11 • If the *Call Recovery Request Message* supported indicator CRRM_MSG_IND is
12 included, the mobile station shall set CRRM_MSG_IND_s = CRRM_MSG_IND_r.
13 Otherwise, the mobile station shall set CRRM_MSG_IND_s to '0'.

14 The mobile station shall also store the following parameters:

- 15 • If the mobile station is not in the *Origination Attempt Substate*, or *Page Response*
16 *Substate*, the mobile station shall store the following prior to storing the remaining
17 parameters:
 - 18 - Registered system identification (REG_SID_s = SID_s).
 - 19 - Registered network identification (REG_NID_s = NID_s).
 - 20 - Registered registration zone (REG_REG_ZONE_s = REG_ZONE_s).
 - 21 - Registered zone timer length (REG_ZONE_TIMER_s = ZONE_TIMER_r).
- 22 • System identification (SID_s = SID_r)
- 23 • Network identification (NID_s = NID_r)
- 24 • Registration zone (REG_ZONE_s = REG_ZONE_r)
- 25 • Number of registration zones to be retained (TOTAL_ZONES_s = TOTAL_ZONES_r)
- 26 • Zone timer length (ZONE_TIMER_s = ZONE_TIMER_r)
- 27 • Multiple SID storage indicator (MULT_SIDS_s = MULT_SIDS_r)
- 28 • Multiple NID storage indicator (MULT_NIDS_s = MULT_NIDS_r)
- 29 • Registration period (REG_PRD_s = REG_PRD_r)
- 30 • Base station latitude (BASE_LAT_s = BASE_LAT_r)
- 31 • Base station longitude (BASE_LONG_s = BASE_LONG_r)
- 32 • Registration distance (REG_DIST_s = REG_DIST_r)
- 33 • Base station horizontal location uncertainty (LOC_UNC_H_s = LOC_UNC_H_r)
- 34 • Base station height (HEIGHT_s = HEIGHT_r)
- 35 • Base station vertical location uncertainty (LOC_UNC_V_s = LOC_UNC_V_r)

1 If EXT_SYS_PARAMETER_s is equal to '0', then the mobile station shall perform the
2 following:

- 3 • Set EXT_SYS_PAR_MSG_SEQ_s to CONFIG_MSG_SEQ_s,
- 4 • Set BCAST_INDEX_s to MAX_SLOT_CYCLE_INDEX_s,
- 5 • Set IMSI_O to IMSI_M by setting IMSI_O_S_s to IMSI_M_S_p (i.e., setting IMSI_O_S1_s
6 to IMSI_M_S1_p and IMSI_O_S2_s to IMSI_M_S2_p), MCC_O_s to MCC_M_p,
7 IMSI_O_11_12_s to IMSI_M_11_12_p, and IMSI_O_ADDR_NUM_s to
8 IMSI_M_ADDR_NUM_p,
- 9 • Set RESELECT_INCLUDED_s to '0',
- 10 • For Band Class 0, if the mobile station determines it is operating in Korea, set
11 P_REV_s to '00000010'; otherwise, set P_REV_s to '00000011'. For Band Class 3, set
12 P_REV_s to '00000011'. For Band Class 1 and Band Class 4, set P_REV_s to
13 '00000001', and
- 14 • Set P_REV_IN_USE_s to the lesser value of P_REV_s and MOB_P_REV_p of the current
15 band class.

16 If EXT_CHAN_LST_s is equal to '0', then the mobile station shall set
17 EXT_CHAN_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

18 If GLOBAL_REDIRECT_s is equal to '0', then the mobile station shall set GLOB_SERV-
19 _REDIR_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

20 If EXT_GLOBAL_REDIRECT_s is equal to '0', then the mobile station shall set
21 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

22 If EXT_NGHBR_LST_s is equal to '0', then the mobile station shall set
23 EXT_NGHBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

24 If GEN_NGHBR_LST_s is equal to '0', then the mobile station shall perform the following:

- 25 • Set GEN_NGHBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
- 26 • Set the SRCH_WIN_NGHBR field of NGHBR_REC to SRCH_WIN_N_s for all entries.
- 27 • Set the SRCH_OFFSET_NGHBR field of NGHBR_REC to '000' for all entries.
- 28 • Set the TIMING_INCL field of NGHBR_REC to '0' for all entries.
- 29 • Set RESQ_ENABLED_s to '0'.
- 30 • Set the NGHBR_RESQ_CONFIGURED field of NGHBR_REC to '0' for all entries.
- 31 • If EXT_NGHBR_LST_s is equal to '0':
 - 32 - Set the SEARCH_PRIORITY field of the NGHBR_REC to '10' (high) for all entries.
 - 33 - Set the NGHBR_BAND field of the NGHBR_REC to CDMABAND_s for all entries.
 - 34 - Set the NGHBR_FREQ field of the NGHBR_REC to CDMACH_s for all entries.

1 If GEN_NGHRBR_LST_s is equal to '1', GEN_NGHRBR_LST_MSG_SEQ_s is equal to
 2 CONFIG_MSG_SEQ_s, and SETTING_SEARCH_WIN is equal to '1', the mobile station shall
 3 perform the following:

- 4 • Set the SRCH_WIN_NGHRBR field of each NGHRBR_REC to SEARCH_WIN_N_s for all
 5 NGHRBR_SET_SIZE_s entries.
- 6 • Set SETTING_SEARCH_WIN to '0'.

7 If USER_ZONE_ID_s is equal to '0', then the mobile station shall perform the following:

- 8 • Set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
- 9 • Set the UZID field of the UZ_REC to '0000000000000000' for all entries.
- 10 • Set the UZ_REV field of the UZ_REC to '0000' for all entries.
- 11 • Set the TEMP_SUB field of the UZ_REC to '0' for all entries.

12 If USER_ZONE_ID_s is equal to '1' and the mobile station does not support Tiered Services,
 13 then the mobile station shall set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

14 If PRI_NGHRBR_LST_s is equal to '0', then the mobile station shall set
 15 PRI_NGHRBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

16 If PRI_NGHRBR_LST_s is equal to '1' and the mobile station does not support Tiered Services,
 17 then the mobile station shall set PRI_NGHRBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.

18 The mobile station shall also store the following parameters:

- 19 • *Access Point Pilot Information Message sent*
 20 (AP_PILOT_INFO_s = AP_PILOT_INFO_r) if included; otherwise, AP_PILOT_INFO_s = '0'

21 If the APPIM_PERIOD_INDEX is included in the message APPIM_PERIOD_INDEX_s =
 22 APPIM_PERIOD_INDEX_r. Otherwise, APPIM_PERIOD_INDEX_s = 0.

- 23 • *Access Point Identification Message sent*
 24 (AP_IDTs = AP_IDTr) if included; otherwise, AP_IDTs = '0'
- 25 • *Access Point Identification Text Message sent*
 26 (AP_ID_TEXTs = AP_ID_TEXTr) if included; otherwise, AP_ID_TEXTs = '0'
- 27 • *General Overhead Information Message sent*
 28 (GEN_OVHD_INF_INDs = GEN_OVHD_INF_INDr) if included; otherwise,
 29 GEN_OVHD_INF_INDs = '0'

30 If the GEN_OVHD_CYCLE_INDEX is included in the message GEN_OVHD_CYCLE_INDEX_s
 31 = GEN_OVHD_CYCLE_INDEX_r. Otherwise, GEN_OVHD_CYCLE_INDEX_s = 0.

- 32 • *Frequent General Overhead Information Message sent*
 33 (FREQ_GEN_OVHD_INF_INDs = FREQ_GEN_OVHD_INF_INDr) if included; otherwise,
 34 FREQ_GEN_OVHD_INF_INDs = '0'.
- 35 • *Flex Duplex CDMA Channel List Message sent*
 36 (FD_CHAN_LST_INDs = FD_CHAN_LST_INDr) if included; otherwise,
 37 FD_CHAN_LST_INDs = '0'.

- 1 • *Alternative Technologies Information Message sent*
2 (*ATIM_INDs = ATIM_INDr*) if included; otherwise, *ATIM_INDs = '0'*

3 If the *ATIM_CYCLE_INDEX* is included in the message *ATIM_CYCLE_INDEX_s* =
4 *ATIM_CYCLE_INDEX_r*. Otherwise, *ATIM_CYCLE_INDEX_s* = 0.

- 5 • *Additional Geo Location Type Record allowed in General Extension Message* indicator
6 (*ADD_LOC_GEM_ALLOWED_s* = *ADD_LOC_GEM_ALLOWED_r*) if included; otherwise,
7 *ADD_LOC_GEM_ALLOWED_s* = '0'.

8 The mobile station shall ignore any fields at the end of the *System Parameters Message* that
9 are not defined according to the protocol revision level (*MOB_P_REV_p* of the current band
10 class) being used by the mobile station.

11 2.6.2.2.1.2 Paging Channel Assignment Change

12 If the number of Paging Channels specified in the *System Parameters Message*
13 (*PAGE_CHAN_r*) is different from *PAGE_CHAN_s*, the mobile station shall use the hash
14 algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to
15 *PAGE_CHAN_r*. The mobile station shall store the new Paging Channel number as
16 *PAGECH_s*. The mobile station shall then set *PAGE_CHAN_s* to *PAGE_CHAN_r*. The mobile
17 station shall set *ACC_MSG_SEQ_s* to NULL. If the mobile station has not stored
18 configuration parameters for the new Paging Channel, or if the stored parameters are not
19 current (see 2.6.2.2), the mobile station shall set *CONFIG_MSG_SEQ_s*, *SYS_PAR_MSG-*
20 *_SEQ_s*, *NGHBR_LST_MSG_SEQ_s*, *EXT_NGHBR_LST_MSG_SEQ_s*,
21 *GEN_NGHBR_LST_MSG_SEQ_s*, *CHAN_LST_MSG_SEQ_s*, *EXT_SYS_PAR_MSG_SEQ_s*,
22 *USER_ZONE_ID_MSG_SEQ_s*, *PRI_NGHBR_LST_MSG_SEQ_s*, and
23 *EXT_GLOB_SERV_REDIR_MSG_SEQ_s*, *EXT_CHAN_LST_MSG_SEQ_s*,
24 *FD_CHAN_LST_MSG_SEQ_s*, *AP_PILOT_INFO_MSG_SEQ_s*, *AP_IDT_MSG_SEQ_s*,
25 *AP_ID_TEXT_MSG_SEQ_s*, *GOI_MSG_SEQ_s*, *FREQ_GOI_MSG_SEQ_s*, *ATIM_MSG_SEQ_s* and
26 *GLOB_SERV_REDIR_MSG_SEQ_s* to NULL. The mobile station shall then begin monitoring
27 the new Paging Channel as specified in 2.6.2.1.1.

28 2.6.2.2.1.3 RESCAN Parameter

29 If the *RESCAN_r* field in the *System Parameters Message* equals '1', the mobile station shall
30 enter the *System Determination Substate* of the *Mobile Station Initialization State* with a
31 rescan indication (see 2.6.1.1).

32 2.6.2.2.1.4 Roaming Status

33 The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3).
34 The mobile station should indicate to the user whether the mobile station is roaming.

35 2.6.2.2.1.5 Registration

36 The mobile station shall update stored variables and perform other registration procedures
37 as specified in 2.6.5.5.2.2.

1 2.6.2.2.1.6 Slot Cycle Index

2 The mobile station shall set $SLOT_CYCLE_INDEX_S$ to :

$$3 \max \left(\begin{array}{l} MIN_SLOT_CYCLE_INDEX_S, \\ \min(SLOT_CYCLE_INDEX_REG, MAX_SLOT_CYCLE_INDEX_S) \end{array} \right).$$

4 Where, $SLOT_CYCLE_INDEX_REG$ is computed based on the slot cycle index value
5 included in the last registration attempt (see 2.6.5.5.3.1 and 2.6.5.5.3.2).

6 If the mobile station is operating in the slotted mode, it shall set its slot cycle length as
7 described in 2.6.2.1.1.3.

8 2.6.2.2.1.7 PACA Disable for SID Change

9 If $PACA_S$ is equal to enabled, and SID_S is not equal to $PACA_SID_S$, the mobile station shall
10 set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and
11 should indicate to the user that the PACA call has been canceled.

12 2.6.2.2.1.8 Retry Delay Disable for Packet Zone ID or SID/NID Change

13 The mobile station shall set $RETRY_DELAY_S[RETRY_TYPE]$ to 0 when the mobile station
14 determines that the Packet Zone Identification or the System Identification/Network
15 Identification (SID/NID pair) has been changed, where $RETRY_TYPE$ is equal to '001', '010',
16 '011', '100', or '101'.

17 2.6.2.2.1.9 Encryption key reset for SID/NID Change

18 When the mobile station determines that the System Identification/Network Identification
19 (SID/NID pair) has been changed, it shall perform the following:

- 20 • The mobile station shall disable the key setup timer if the timer is running.
- 21 • If there is an entry in the mobile station's $SID_NID_LIST_S$ that matches the previous
22 SID/NID pair, the mobile station shall perform the following:
 - 23 - The mobile station shall save the following encryption/integrity related
24 parameters associated with previous SID/NID pair:
 - 25 + KEY_ID ,
 - 26 + $ENC_KEY[KEY_ID]$ and $INT_KEY[KEY_ID]$,
 - 27 + $TX_EXT_SSEQ[0][KEY_ID]$, $TX_EXT_SSEQ[1][KEY_ID]$,
 - 28 $RX_EXT_SSEQ[0][KEY_ID]$, and $RX_EXT_SSEQ[1][KEY_ID]$ and
 - 29 + $C_SIG_ENCRYPT_MODE_S$.
 - 30 - If there are more than one SID/NID pairs in the $SID_NID_LIST_S$ for which there
31 are associated encryption/integrity related parameters saved, the mobile station
32 may remove the parameters associated with the SID/NID pair that was visited
33 at the earliest time.
- 34 • If there is an entry in the mobile station's $SID_NID_LIST_S$ that matches the base
35 station's SID and NID and the following encryption/integrity related parameters last

1 used in that system (SID/NID pair) are stored in the mobile station, the mobile
2 station shall restore them:

- 3 - KEY_ID,
- 4 - ENC_KEY[KEY_ID] and INT_KEY[KEY_ID],
- 5 - TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
- 6 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] and
- 7 - C_SIG_ENCRYPT_MODE_s.
- 8 • Otherwise, the mobile station shall set ENC_KEY['00'], ENC_KEY['01'],
- 9 INT_KEY['00'], and INT_KEY['01'] to NULL.

10 2.6.2.2.2 Access Parameters Message

11 Whenever an *Access Parameters Message* is received on the Paging Channel, the sequence
12 number, ACC_MSG_SEQ_r, shall be compared to ACC_MSG_SEQ_s. If the comparison
13 results in a match, the mobile station may ignore the message. If the comparison results
14 in a mismatch, then the mobile station shall process the remaining fields in the message as
15 follows.

16 If PROBE_PN_RAN, MAX_REQ_SEQ, or MAX_RSP_SEQ are not within the valid ranges
17 specified in 3.7.2.3.2.2, then the mobile station shall ignore the *Access Parameters Message*
18 that contains them.

19 The mobile station shall store the following parameters:

- 20 • *Access Parameters Message* sequence number (ACC_MSG_SEQ_s = ACC_MSG_SEQ_r)
- 21 • Number of Access Channels (ACC_CHAN_s = ACC_CHAN_r)
- 22 • Nominal transmit power offset (NOM_PWR_s = NOM_PWR_r)
- 23 • Initial power offset for access (INIT_PWR_s = INIT_PWR_r)
- 24 • Power increment (PWR_STEP_s = PWR_STEP_r)
- 25 • Number of access probes (NUM_STEP_s = NUM_STEP_r)
- 26 • Maximum Access Channel message capsule size (MAX_CAP_SZ_s = MAX_CAP_SZ_r)
- 27 • Access Channel preamble length (PAM_SZ_s = PAM_SZ_r)
- 28 • Persistence modifier for Access Channel attempts for registrations which are not
- 29 responses to the *Registration Request Order* (REG_PSIST_s = REG_PSIST_r)
- 30 • Persistence modifier for Access Channel attempts for message transmissions
- 31 (MSG_PSIST_s = MSG_PSIST_r)
- 32 • If PSIST_EMG_INCL_r is equal to '0', the mobile station shall set the persistence
- 33 modifier for emergency calls from mobile stations in access overload classes 0 to 9
- 34 (PSIST_EMG_s) to '000'; otherwise, the mobile station shall set PSIST_EMG_s equal
- 35 to PSIST_EMG_r.
- 36 • Time randomization for Access Channel probes
- 37 (PROBE_PN_RAN_s = PROBE_PN_RAN_r)

- 1 • Acknowledgment timeout ($ACH_ACC_TMO_S = ACC_TMO_T$)
- 2 • Access Channel probe backoff range ($PROBE_BKOFF_S = PROBE_BKOFF_T$)
- 3 • Access Channel probe sequence backoff range ($BKOFF_S = BKOFF_T$)
- 4 • Maximum number of probe sequences for an Access Channel request
- 5 ($MAX_REQ_SEQ_S = MAX_REQ_SEQ_T$)
- 6 • Maximum number of probe sequences for an Access Channel response
- 7 ($MAX_RSP_SEQ_S = MAX_RSP_SEQ_T$)
- 8 • If $CDMABAND_S$ is equal to '0', the mobile station shall set extended nominal
- 9 transmit power $NOM_PWR_EXT_S$ to '0'; otherwise, the mobile station shall store
- 10 extended nominal transmit power ($NOM_PWR_EXT_S = NOM_PWR_EXT_T$).
- 11 • IC threshold ($IC_THRESH_S = -7$)
- 12 • The mobile station shall also store the following parameters:
- 13 • Authentication mode (if $AUTH_T$ is equal to '00' or '01', then $AUTH_S = AUTH_T$;
- 14 otherwise $AUTH_S = '01'$)
- 15 • Random challenge value ($RAND_S = RAND_T$)

16 The mobile station shall ignore any fields at the end of the *Access Parameters Message*
 17 which are not defined according to the protocol revision level ($MOB_P_REV_P$ of the current
 18 band class) being used by the mobile station.

19 The mobile station shall store the persistence parameter number according to the following
 20 rule: If the mobile station's access overload class is in the range 0-9, set $PSIST_S$ equal to
 21 $PSIST(0-9)_T$; otherwise set $PSIST_S$ equal to $PSIST(n)_T$, where n is equal to the mobile station
 22 access overload class.

23 The mobile station shall store the Access Control based on Call Type (ACCT) information as
 24 follows:

- 25 • Set $ACCT_SO_LIST$ to NULL.
- 26 • Set $ACCT_SO_GRP_LIST$ to NULL.
- 27 • If $ACCT_INCL_T$ is equal to '1' and $ACCOLC_P$ is in the range 0 to 9, then the mobile
- 28 station shall perform the following:
 - 29 - Set $ACCT_INCL_EMG_S$ to $ACCT_INCL_EMG_T$.
 - 30 - If $ACCT_SO_INCL_T$ is equal to '1', then for each $ACCT_SO_T$ included in this
 - 31 message:
 - 32 + If $ACCT_AOC_BITMAP_INCL_T$ is equal to '0', or if $ACCT_AOC_BITMAP_INCL_T$
 - 33 is equal to '1' and the bit in the associated $ACCT_AOC_BITMAP1_T$
 - 34 corresponding to the mobile station's $ACCOLC_P$ (see Table 3.7.2.3.2.2-1) is
 - 35 equal to '1', then add $ACCT_SO_T$ to $ACCT_SO_LIST$.
 - 36 - If $ACCT_SO_GRP_INCL_T$ is equal to '1', then for each $ACCT_SO_GRP_T$ included in
 - 37 this message:

- 1 + If ACCT_AOC_BITMAP_INCL_T is equal to '0', or if ACCT_AOC_BITMAP_INCL_T
2 is equal to '1' and the bit in the associated ACCT_AOC_BITMAP2_T
3 corresponding to the mobile station's ACCOLC_P (see Table 3.7.2.3.2.2-1) is
4 equal to '1', then add ACCT_SO_GRP_T to ACCT_SO_GRP_LIST.

5 The mobile station shall set CURR_ACC_MSG_SEQ equal to ACC_MSG_SEQ_S.

6 2.6.2.2.3 Neighbor List Message

7 Whenever a valid *Neighbor List Message* is received on the current Paging Channel
8 (PAGECH_S), the configuration message sequence number, CONFIG_MSG_SEQ_T, shall be
9 compared to that stored in NGHBR_LST_MSG_SEQ_S. If the comparison results in a match,
10 the mobile station may ignore the message. If the comparison results in a mismatch, then
11 the mobile station shall process the remaining fields in the message as follows.

12 If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.3, then the mobile
13 station shall ignore the *Neighbor List Message* that contains it.

14 The mobile station shall store the following parameters:

- 15 • Configuration message sequence number
16 (CONFIG_MSG_SEQ_S = CONFIG_MSG_SEQ_T,
17 NGHBR_LST_MSG_SEQ_S = CONFIG_MSG_SEQ_T)
- 18 • Pilot PN sequence offset increment (PILOT_INC_S = PILOT_INC_T)

19 The mobile station shall set NGHBR_SET_SIZE_S to the number of neighboring base stations
20 contained in the *Neighbor List Message*.

21 For each of the neighboring base stations contained in the *Neighbor List Message*, the
22 mobile station shall perform the following:

- 23 • If the *i*th occurrence of NGHBR_CONFIG_T is equal to '000', '001', or '010', set the
24 NGHBR_CONFIG field of NGHBR_REC[i] to the *i*th occurrence of NGHBR_CONFIG_T;
25 otherwise, set the NGHBR_CONFIG field of NGHBR_REC [i] to '011'.
- 26 • Set the NGHBR_PN field of NGHBR_REC [i] to the *i*th occurrence of NGHBR_PN_T.

27 If GEN_NGHBR_LST_MSG_SEQ_S is not equal to CONFIG_MSG_SEQ_S, the mobile station
28 shall perform the following:

- 29 • Set the SEARCH_PRIORITY field of the NGHBR_REC to '10' (high) for all
30 NGHBR_SET_SIZE_S entries.
- 31 • Set the NGHBR_BAND field of NGHBR_REC to CDMABAND_S for all
32 NGHBR_SET_SIZE_S entries.
- 33 • If NGHBR_CONFIG_T equals '010', set the NGHBR_FREQ field of NGHBR_REC to the
34 first CDMA Channel listed in the *CDMA Channel List Message* or *Extended CDMA*
35 *Channel List Message* transmitted by the current base station for all
36 NGHBR_SET_SIZE_S entries; otherwise, set the NGHBR_FREQ field of NGHBR_REC
37 to CDMACH_S for all NGHBR_SET_SIZE_S entries.
- 38 • Set the SRCH_WIN_NGHBR field of NGHBR_REC to SRCH_WIN_N_S for all
39 NGHBR_SET_SIZE_S entries.

- 1 • Set the SRCH_OFFSET_NGHR field of NGHR_REC to '000' for all entries.

2 The mobile station shall set the ACCESS_ENTRY_HO field of the NGHR_REC to '0' for all
3 NGHR_SET_SIZE_s entries if any of the following conditions are met:

- 4 • EXT_SYS_PARAMETER_s is equal to '0',
5 • NGHR_SET_ENTRY_INFO_s is equal to '0', or
6 • EXT_SYS_PAR_MSG_SEQ_s is not equal to CONFIG_MSG_SEQ_s.

7 The mobile station shall set the ACCESS_HO_ALLOWED field of the NGHR_REC to '0' for
8 all NGHR_SET_SIZE_s entries if any of the following conditions are met:

- 9 • EXT_SYS_PARAMETER_s is equal to '0',
10 • NGHR_SET_ACCESS_INFO_s is equal to '0', or
11 • EXT_SYS_PAR_MSG_SEQ_s is not equal to CONFIG_MSG_SEQ_s.

12 The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it
13 consists only of pilot offsets listed in the *Neighbor List Message*. If the *Neighbor List*
14 *Message* contains more pilot offsets than the mobile station can store, the mobile station
15 shall store the pilot offsets beginning at the start of the *Neighbor List Message*, up to the
16 limits of the mobile station's Neighbor Set storage capacity.

17 2.6.2.2.4 CDMA Channel List Message

18 Whenever a *CDMA Channel List Message* is received on the Paging Channel, the
19 configuration message sequence number, CONFIG_MSG_SEQ_r, shall be compared to that
20 stored in CHAN_LST_MSG_SEQ_s. If the comparison results in a match, the mobile station
21 may ignore the message. If the comparison results in a mismatch, then the mobile station
22 shall process the remaining fields in the message as follows.

23 The mobile station shall store the following parameters:

- 24 • Configuration message sequence number
25 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
26 CHAN_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r)

27 The mobile station shall perform the following:

- 28 • If SYS_PAR_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s, and
29 FD_CHAN_LST_MSG_SEQ_s are current,
30 - If EXT_CHAN_LST_s is equal to '1', the mobile station shall ignore this message.
31 - If EXT_CHAN_LST_s is equal to '0', the mobile station shall process this message
32 as described below.
33 • Otherwise,
34 - if the mobile station does not support flexible spacing between forward and
35 reverse channels the mobile station shall process this message after
36 SYS_PAR_MSG_SEQ_s and EXT_SYS_PAR_MSG_SEQ_s are current.

- 1 - Otherwise, the mobile station shall process this message after
2 SYS_PAR_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s, and
3 FD_CHAN_LST_MSG_SEQ_s become current.

4 If the FD_CHAN_LST_SEQ_s is current and the mobile station supports at least one
5 bandclass listed by the base station in the *Flex Duplex CDMA Channel List Message*, the
6 mobile station shall ignore this message. Otherwise, mobile station shall process this
7 message as follows:

8 The mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of
9 channels listed in the *CDMA Channel List Message* to determine the CDMA Channel
10 (Frequency Assignment) for its Paging Channel. If the CDMA Frequency Assignment has
11 changed (the computed CDMA Channel is different from CDMACH_s), the mobile station
12 shall perform the following actions:

- 13 • Set CDMACH_s to the new CDMA Channel.
- 14 • Set PAGE_CHAN_s to '1'.
- 15 • Set PAGECH_s to the Primary Paging Channel.
- 16 • If the stored configuration parameters is not current (see 2.6.2.2) for the
17 corresponding base station and frequency assignment, set CONFIG_MSG_SEQ_s,
18 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
19 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
20 EXT_SYS_PAR_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, USER_ZONE_ID-
21 _MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
22 FD_CHAN_LST_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
23 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
24 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and ACC_MSG_SEQ_s to
25 NULL.
- 26 • Tune to the new CDMA Channel.

27 2.6.2.2.5 Extended System Parameters Message

28 Whenever an *Extended System Parameters Message* is received on the Paging Channel, the
29 configuration message sequence number, CONFIG_MSG_SEQ_r, shall be compared to that
30 stored in EXT_SYS_PAR_MSG_SEQ_s. If the comparison results in a match, the mobile
31 station may ignore the message. If the comparison results in a mismatch, then the mobile
32 station shall process the remaining fields in the message as follows.

33 If the protocol revision level supported by the mobile station (MOB_P_REV_p) is less than the
34 minimum protocol revision level supported by the base station (MIN_P_REV_r), the mobile
35 station shall enter the *System Determination Substate* of the *Mobile Station Initialization State*
36 with a protocol mismatch indication (see 2.6.1.1). Otherwise, the mobile station shall store
37 the following parameters:

- 38 • Configuration message sequence number
39 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
40 EXT_SYS_PAR_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- 41 • Preferred Access Channel MSID type (PREF_MSID_TYPE_s = PREF_MSID_TYPE_r)

- 1 • Extended Preferred Access Channel MSID type
2 (EXT_PREF_MSID_TYPE_s = EXT_PREF_MSID_TYPE_r) if included; otherwise, set
3 EXT_PREF_MSID_TYPE_s to NULL.
- 4 • MEID Required indicator (MEID_REQD_s = MEID_REQD_r) if included; otherwise, set
5 MEID_REQD_s to '0'
- 6 • Broadcast slot cycle index (BCAST_INDEX_s = BCAST_INDEX_r)
- 7 • The mobile station shall set its operational IMSI, IMSI_O, as follows:
- 8 - If IMSI_T_SUPPORTED_r is equal to '0', the mobile station shall set IMSI_O to
9 IMSI_{Mp}.
- 10 - If IMSI_T_SUPPORTED_r is equal to '1' and the mobile station's IMSI_{Tp} has been
11 programmed, the mobile station shall set IMSI_O to IMSI_{Tp}.
- 12 - If IMSI_T_SUPPORTED_r is equal to '1' and the mobile station's IMSI_{Tp} has not
13 been programmed, the mobile station shall set IMSI_O to IMSI_{Mp}.
- 14 • If MCC_r = '111111111' and IMSI_11_12_r = '1111111', the mobile station shall set
15 the IMSI_O to IMSI_{Mp} and store:
- 16 - Mobile Country Code (MCC_s = MCC_{Mp}) and
17 - IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_{M_11_12p});
- 18 otherwise, the mobile station shall store:
- 19 - Mobile Country Code (MCC_s = MCC_r) and
20 - IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_11_12_r).
- 21 • Least significant digit of MNC (IMSI_10_s = IMSI_10_r), if included.
- 22 • If IMSI_O is set to the IMSI_M, the mobile station shall set:
- 23 - IMSI_{O_Ss} to IMSI_{M_Sp} (i.e., IMSI_{O_S1s} to IMSI_{M_S1p} and IMSI_{O_S2s} to
24 IMSI_{M_S2p})
- 25 - IMSI_{O_11_12s} to IMSI_{M_11_12p}
- 26 - MCC_{O_s} to MCC_{Mp}
- 27 - IMSI_{O_ADDR_NUMs} to IMSI_{M_ADDR_NUMp}
- 28 • If IMSI_O is set to the IMSI_T, the mobile station shall set:
- 29 - IMSI_{O_Ss} to IMSI_{T_Sp} (i.e., IMSI_{O_S1s} to IMSI_{T_S1p} and IMSI_{O_S2s} to
30 IMSI_{T_S2p}).
- 31 - IMSI_{O_11_12s} to IMSI_{T_11_12p}
- 32 - MCC_{O_s} to MCC_{Tp}
- 33 - IMSI_{O_ADDR_NUMs} to IMSI_{T_ADDR_NUMp}
- 34 • If IMSI_O has been changed, the mobile station shall set SYS_PAR_MSG_SEQ_s,
35 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s to

- 1 NULL, and set PAGE_CHAN_s to '1', and set PAGECH_s to the Primary Paging
2 Channel.
- 3 • Protocol revision level (P_REV_s = P_REV_r) if included in the message; otherwise, set
4 P_REV_s as follows:
 - 5 - For Band Class 0, if the mobile station determines it is operating in Korea, set
6 P_REV_s to '00000010'; otherwise, set P_REV_s to '00000011'.
 - 7 - For Band Class 3, set P_REV_s to '00000011'.
 - 8 - For Band Class 1 and Band Class 4, set P_REV_s to '00000001'.
 - 9 • Minimum protocol revision level (MIN_P_REV_s = MIN_P_REV_r) if included in the
10 message; otherwise, MIN_P_REV_s = '00000010' for Band Class 0, MIN_P_REV_s =
11 '00000001' for Band Class 1 and Band Class 4, and MIN_P_REV_s = '00000011' for
12 Band Class 3.
 - 13 • Protocol revision level currently in use (P_REV_IN_USE_s = the lesser value of
14 P_REV_s and MOB_P_REV_p of the current band class)
 - 15 • Slope of the handoff add/drop criterion (SOFT_SLOPE_s = SOFT_SLOPE_r) if included
16 in the message; otherwise, SOFT_SLOPE_s = '000000'.
 - 17 • Intercept of the handoff add criterion (ADD_INTERCEPT_s = ADD_INTERCEPT_r)
 - 18 • Intercept of the handoff drop criterion (DROP_INTERCEPT_s = DROP_INTERCEPT_r)
 - 19 • Delete foreign TMSI (DELETE_FOR_TMSI_s = DELETE_FOR_TMSI_r)
 - 20 • Use TMSI (USE_TMSI_s = USE_TMSI_r)
 - 21 • TMSI zone length (TMSI_ZONE_LEN_s = TMSI_ZONE_LEN_r)
 - 22 • TMSI zone number (TMSI_ZONE_s = TMSI_ZONE_r)
 - 23 • Maximum number of alternative service options (MAX_NUM_ALT_SO_s =
24 MAX_NUM_ALT_SO_r).
 - 25 • System reselection indicator (RESELECT_INCLUDED_s = RESELECT_INCLUDED_r) if
26 included in the message; otherwise, RESELECT_INCLUDED_s = '0'.
 - 27 • Pilot reporting indicator (PILOT_REPORT_s = PILOT_REPORT_r)
 - 28 • Neighbor Set access entry handoff information indicator
29 (NGHBR_SET_ENTRY_INFO_s = NGHBR_SET_ENTRY_INFO_r) if included in the
30 message; otherwise, NGHBR_SET_ENTRY_INFO_s = '0'.
 - 31 • Neighbor Set access handoff information indicator (NGHBR_SET_ACCESS_INFO_s =
32 NGHBR_SET_ACCESS_INFO_r) if included in the message; otherwise,
33 NGHBR_SET_ACCESS_INFO_s = '0'.
 - 34 • Short Data Burst supported indicator (SDB_SUPPORTED_s = SDB_SUPPORTED_r)
 - 35 • Nominal reverse traffic channel output power offset relative to Reverse Pilot Channel
36 power (RLGAIN_TRAFFIC_PILOT_s = RLGAIN_TRAFFIC_PILOT_r)

- 1 • Broadcast GPS Assist Indicator ($BROADCAST_GPS_ASST_S =$
2 $BROADCAST_GPS_ASST_T$)
- 3 • Reverse Power Control Delay ($REV_PWR_CNTL_DELAY_S = REV_PWR_CNTL_DELAY_T$)
4 if included
- 5 • Permission for the mobile station to request QoS settings in the *Origination*
6 *Message*, *Origination Continuation Message*, or *Enhanced Origination Message*
7 ($MOB_QOS_S = MOB_QOS_T$)
- 8 • If $ENC_SUPPORTED_T$ is equal to '1', the mobile station shall store:
 - 9 - Signaling encryption supported indicator ($SIG_ENCRYPT_SUP_S =$
10 $SIG_ENCRYPT_SUP_T$)
 - 11 - User information encryption supported indicator ($UI_ENCRYPT_SUP_S =$
12 $UI_ENCRYPT_SUP_T$)
- 13 • Sync ID supported indicator ($USE_SYNC_ID_S = USE_SYNC_ID_T$)
- 14 • Concurrent services supported indicator ($CS_SUPPORTED_S = CS_SUPPORTED_T$)
- 15 • Maximum number of additional service reference identifiers allowed in origination
16 ($MAX_ADD_SERV_INSTANCE_S = MAX_ADD_SERV_INSTANCE_T$), if included;
17 otherwise, the mobile station shall set $MAX_ADD_SERV_INSTANCE_S$ to 0.
- 18 • Primary Broadcast Control Channel supported indicator ($BCCH_SUPPORTED_S =$
19 $BCCH_SUPPORTED_T$).
- 20 • Pilot information request supported indicator ($PILOT_INFO_REQ_SUPPORTED_S =$
21 $PILOT_INFO_REQ_SUPPORTED_T$).
- 22 • Message integrity supported indicator ($MSG_INTEGRITY_SUP_S =$
23 $MSG_INTEGRITY_SUP_T$), if $P_REV_IN_USE_S$ is greater than or equal to 10;
24 otherwise, $MSG_INTEGRITY_SUP_S = 0$.
- 25 • If $MSG_INTEGRITY_SUP_T$ is equal to '1' and $SIG_INTEGRITY_SUP_INCL_T$ is equal to
26 '1', the mobile station shall store the message integrity algorithms that the base
27 station supports ($SIG_INTEGRITY_SUP_S = SIG_INTEGRITY_SUP_T$); otherwise, the
28 mobile station shall set $SIG_INTEGRITY_SUP_S$ to '00000000'.
- 29 • Band class information request indicator ($BAND_CLASS_INFO_REQ_S =$
30 $BAND_CLASS_INFO_REQ_T$)
- 31 • Alternate CDMA band class ($ALT_BAND_CLASS_S = ALT_BAND_CLASS_T$), if
32 $BAND_CLASS_INFO_REQ_T$ is equal to '1'.
- 33 • CDMA off time report supported indicator
34 ($CDMA_OFF_TIME_REP_SUP_IND_S = CDMA_OFF_TIME_REP_SUP_IND_T$)
- 35 • If $CDMA_OFF_TIME_REP_SUP_IND_T$ is equal to '1', the mobile station shall store:
 - 36 - CDMA off time report threshold ($CDMA_OFF_TIME_REP_THRESHOLD_S =$
37 $CDMA_OFF_TIME_REP_THRESHOLD_T$ in units specified by
38 $CDMA_OFF_TIME_REP_UNIT_T$)

- 1 • Control Hold Mode supported indicator ($CHM_SUPPORTED_S = CHM_SUPPORTED_T$)
2 if included; otherwise, the mobile station shall perform the following:
- 3 - If $P_REV_IN_USE_S$ is less than six, set $CHM_SUPPORTED_S$ to '0'.
4 - Otherwise, set $CHM_SUPPORTED_S$ to '1'.
- 5 • Release to Idle State allowed indicator ($RELEASE_TO_IDLE_IND_S =$
6 $RELEASE_TO_IDLE_IND_T$).
- 7 • *Reconnect Message* supported indicator
8 ($RECONNECT_MSG_IND_S = RECONNECT_MSG_IND_T$).
- 9 • Short Data Burst allowed in *Reconnect Message* allowed indicator
10 ($SDB_IN_RCNM_IND_S = SDB_IN_RCNM_IND_T$), if included; otherwise, set
11 $SDB_IN_RCNM_IND_S$ to '0'.
- 12 • Forward Packet Data Channel supported Indicator ($FOR_PDCH_SUPPORTED_S =$
13 $FOR_PDCH_SUPPORTED_T$).
- 14 • PDCH Control Hold Mode supported indicator ($PDCH_CHM_SUPPORTED_S =$
15 $PDCH_CHM_SUPPORTED_T$) if included; otherwise, set $PDCH_CHM_SUPPORTED_S$ to
16 '0'.
- 17 • If $RER_MODE_SUPPORTED_T$ is not included, the mobile station shall set
18 $RER_MODE_SUPPORTED_S$ to '0'; otherwise, the mobile station shall set
19 $RER_MODE_SUPPORTED_S$ to $RER_MODE_SUPPORTED_T$.
- 20 • If $TKZ_MODE_SUPPORTED_T$ is not included, the mobile station shall set
21 $TKZ_MODE_SUPPORTED_S$ to '0'; otherwise, the mobile station shall set
22 $TKZ_MODE_SUPPORTED_S$ to $TKZ_MODE_SUPPORTED_T$. If
23 $TKZ_MODE_SUPPORTED_S$ is equal to '1', the mobile station shall store the tracking
24 zone identifier ($TKZ_ID_S = TKZ_ID_T$).
- 25 • If $AUTO_FCISO_ALLOWED_T$ is not included, the mobile station shall set
26 $AUTO_FCISO_ALLOWED_S$ to '0'; otherwise, the mobile station shall set
27 $AUTO_FCISO_ALLOWED_S$ to $AUTO_FCISO_ALLOWED_T$.
- 28 • If $CAND_BAND_INFO_REQ_T$ is included, the mobile station shall set
29 $CAND_BAND_INFO_REQ_S$ to $CAND_BAND_INFO_REQ_T$; otherwise, the mobile
30 station shall set $CAND_BAND_INFO_REQ_S$ to '0'.
- 31 If $BYPASS_REG_IND_T$ is included, the mobile station shall set $BYPASS_REG_IND_S$ to
32 $BYPASS_REG_IND_T$; otherwise, the mobile station shall set $BYPASS_REG_IND_S$ to '00'.
- 33 If $BCCH_SUPPORTED_S$ equals '1', the mobile station shall enter the *System Determination*
34 *Substate of the Mobile Station Initialization State* with a new system indication.
- 35 If $P_REV_IN_USE_S$ has been changed, the mobile station shall set $ACC_MSG_SEQ_S$,
36 $CURR_ACC_MSG_SEQ$, $SYS_PAR_MSG_SEQ_S$, $EXT_NGHBR_LST_MSG_SEQ_S$,
37 $GEN_NGHBR_LST_MSG_SEQ_S$, and $GLOB_SERV_REDIR_MSG_SEQ_S$ to NULL.

- 1 If NGHBR_SET_ENTRY_INFO is equal to '1', the mobile station shall store the access entry
 2 handoff in order and message processing operation indicator ($ACC_ENT_HO_ORDER_S =$
 3 $ACC_ENT_HO_ORDER_T$).
- 4 If the mobile station supports packet data service options, the mobile station shall store the
 5 packet data services zone identifier ($PACKET_ZONE_ID_S = PACKET_ZONE_ID_T$); otherwise,
 6 the mobile station shall set $PACKET_ZONE_ID_S$ to '00000000'.
- 7 If the mobile station supports packet data service options and the PZ_HYST_ENABLED field
 8 is included, the mobile station shall store the packet zone hysteresis enabled indicator
 9 ($PZ_HYST_ENABLED_S = PZ_HYST_ENABLED_T$); otherwise, the mobile station shall set
 10 $PZ_HYST_ENABLED_S$ to '1'.
- 11 If the mobile station supports packet data service options and the PZ_HYST_LIST_LEN field
 12 is included, the mobile station shall store the packet zone hysteresis list length
 13 ($PZ_HYST_LIST_LEN_S = PZ_HYST_LIST_LEN_T$); otherwise, the mobile station shall set
 14 $PZ_HYST_LIST_LEN_S$ to 4.
- 15 If the mobile station supports packet data service options and the PZ_HYST_ACT_TIMER
 16 field is included, the mobile station shall store the packet zone hysteresis activation timer
 17 ($PZ_HYST_ACT_TIMER_S = PZ_HYST_ACT_TIMER_T$); otherwise, the mobile station shall set
 18 $PZ_HYST_ACT_TIMER_S$ to 30 seconds.
- 19 If the mobile station supports packet data service options and the PZ_HYST_TIMER_MUL
 20 field and the PZ_HYST_TIMER_EXP field are included, the mobile station shall store the
 21 packet zone hysteresis timer ($PZ_HYST_TIMER_S = PZ_HYST_TIMER_MUL_T \times 8 \wedge$
 22 $PZ_HYST_TIMER_EXP_T$); otherwise, the mobile station shall set $PZ_HYST_TIMER_S$ to 60
 23 seconds.
- 24 If RESELECT_INCLUDED_S is equal to '1', the mobile station shall store:
- 25 • Pilot power threshold ($EC_THRESH_S = EC_THRESH_T$)
 - 26 • Pilot E_c/I_0 threshold ($EC_IO_THRESH_S = EC_IO_THRESH_T$)
- 27 If NGHBR_SET_ACCESS_INFO_S is equal to '1', the mobile station shall store:
- 28 • Access handoff permitted indicator ($ACCESS_HO_S = ACCESS_HO_T$)
 - 29 • Access probe handoff permitted indicator ($ACCESS_PROBE_HO_S =$
 30 $ACCESS_PROBE_HO_T$)
 - 31 • If $ACCESS_PROBE_HO_S$ is equal to '1', access handoff list update permitted
 32 indicator ($ACC_HO_LIST_UPD_S = ACC_HO_LIST_UPD_T$)
 - 33 • Maximum number of times that the mobile station is permitted to perform an
 34 access probe handoff ($MAX_NUM_PROBE_HO_S = MAX_NUM_PROBE_HO_T$)
 - 35 • Access handoff permitted for message response indicator ($ACCESS_HO_MSG_RSP_S$
 36 $= ACCESS_HO_MSG_RSP_T$)
 - 37 • Access probe handoff permitted for other messages indicator
 38 ($ACC_PROBE_HO_OTHER_MSG_S = ACC_PROBE_HO_OTHER_MSG_T$)

1 If NGHBR_SET_ENTRY_INFO_s or NGHBR_SET_ACCESS_INFO_s is equal to '1', the mobile
2 station shall store the size of the Neighbor Set (NGHBR_SET_SIZE_s = NGHBR_SET_SIZE_r).

3 If NGHBR_SET_ENTRY_INFO_s is equal to '0', then for all NGHBR_SET_SIZE_s occurrences of
4 ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
5 NGHBR_REC[i] to '0'.

6 If NGHBR_SET_ENTRY_INFO_s is equal to '1', then for all NGHBR_SET_SIZE_s occurrences of
7 ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
8 NGHBR_REC[i] to the ith occurrence of ACCESS_ENTRY_HO_r.

9 If NGHBR_SET_ACCESS_INFO_s is equal to '0', then for all NGHBR_SET_SIZE_s occurrences
10 of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
11 NGHBR_REC[i] to '0'.

12 If NGHBR_SET_ACCESS_INFO_s is equal to '1', then for all NGHBR_SET_SIZE_s occurrences
13 of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
14 NGHBR_REC[i] to the ith occurrence of ACCESS_HO_ALLOWED_r.

15 The mobile station shall set all bits of TMSI_CODE_{s-p} to '1' if all of the following conditions
16 are met:

- 17 • The bits of TMSI_CODE_{s-p} are not all equal to '1',
- 18 • DELETE_FOR_TMSI_s is equal to '1', and
- 19 • ASSIGNING_TMSI_ZONE_LEN_{s-p} is not equal to TMSI_ZONE_LEN_s, or the least
20 significant ASSIGNING_TMSI_ZONE_LEN_{s-p} octets of ASSIGNING_TMSI_ZONE_{s-p}
21 are not equal to TMSI_ZONE_s.

22 If the mobile station supports the Quick Paging Channel operation:

- 23 • The mobile station shall set QPCH_SUPPORTED_s to QPCH_SUPPORTED_r.
- 24 • If QPCH_SUPPORTED_r = '1':
 - 25 - The mobile station shall set QPCH_RATE_s to QPCH_RATE_r.
 - 26 - If the number of Quick Paging Channels specified in the received message
27 (NUM_QPCH_r) is different from NUM_QPCH_s, the mobile station shall use the
28 hash algorithm specified in 2.6.7.1 to select a new Quick Paging Channel
29 number in the range 1 to NUM_QPCH_r. The mobile station shall store the new
30 Quick Paging Channel number as QPAGECH_s and as ASSIGNED_QPAGECH_s.
31 The mobile station shall then set NUM_QPCH_s to NUM_QPCH_r.
 - 32 - The mobile station shall set QPCH_POWER_LEVEL_PAGE_s to
33 QPCH_POWER_LEVEL_PAGE_r.
 - 34 - The mobile station shall set QPCH_CCI_SUPPORTED_s to
35 QPCH_CCI_SUPPORTED_r.
 - 36 - If QPCH_CCI_SUPPORTED_r = '1', the mobile station shall set
37 QPCH_POWER_LEVEL_CONFIG_s to QPCH_POWER_LEVEL_CONFIG_r.

- 1 • The mobile station shall set QPCH_BI_SUPPORTED_S to QPCH_BI_SUPPORTED_T, if
2 included.
- 3 • If QPCH_BI_SUPPORTED_T = '1', the mobile station shall set
4 QPCH_POWER_LEVEL_BCAST_S to QPCH_POWER_LEVEL_BCAST_T.

5 If the mobile station supports the *Device Information Message* on the r-csch, the mobile
6 station shall store:

- 7 • Autonomous message supported indicator
8 (AUTO_MSG_SUPPORTED_S = AUTO_MSG_SUPPORTED_T)

9 If AUTO_MSG_SUPPORTED_T is equal to '1' and the mobile station supports the *Device
10 Information Message* on the r-csch, the mobile station shall store:

- 11 • Autonomous message interval
12 (AUTO_MSG_INTERVAL_S = AUTO_MSG_INTERVAL_T)

13 The mobile station shall store mobile station initiated position location determination
14 supported indicator (MS_INIT_POS_LOC_SUP_IND_S = MS_INIT_POS_LOC_SUP_IND_T).

15 The mobile station shall set FOR_PDCH_COMMON_PARMS_S = '0'.

16 If both FOR_PDCH_SUPPORTED_T and PDCH_PARMS_INCL_T are included and equal to '1',
17 the mobile station shall perform the following:

- 18 • If FOR_PDCH_RLGAIN_INCL_T is included and equal to '1', the mobile station shall
19 set:
- 20 - (RLGAIN_ACKCH_PILOT_S = RLGAIN_ACKCH_PILOT_T).
- 21 - (RLGAIN_CQICH_PILOT_S = RLGAIN_CQICH_PILOT_T).
- 22 • The mobile station shall set
23 NUM_SOFT_SWITCHING_FRAMES_S = NUM_SOFT_SWITCHING_FRAMES_T + 1, and
24 NUM_SOFTER_SWITCHING_FRAMES_S = NUM_SOFTER_SWITCHING_FRAMES_T + 1.
- 25 • The mobile station shall set
26 NUM_SOFT_SWITCHING_FRAMES_CHM_S = NUM_SOFT_SWITCHING_FRAMES_T + 1,
27 and NUM_SOFTER_SWITCHING_FRAMES_CHM_S =
28 NUM_SOFTER_SWITCHING_FRAMES_T + 1.
- 29 • The mobile station shall set NUM_SOFT_SWITCHING_SLOTS_S according to Table
30 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS_T.
- 31 • The mobile station shall set NUM_SOFTER_SWITCHING_SLOTS_S according to Table
32 3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTS_T.
- 33 • The mobile station shall set PDCH_SOFT_SWITCHING_DELAY_S to
34 PDCH_SOFT_SWITCHING_DELAY_T + 1, and PDCH_SOFTER_SWITCHING_DELAY_S
35 to PDCH_SOFTER_SWITCHING_DELAY_T + 1.
- 36 • The mobile station shall set FOR_PDCH_COMMON_PARMS_S = '1'.
- 37 • The mobile station shall set WALSH_TABLE_ID_S = WALSH_TABLE_ID_T.
- 38 • The mobile station shall set NUM_PDCCH_S = NUM_PDCCH_T.

- 1 • The mobile station shall store FOR_PDCCH_WALSH_S[i] to the ith occurrence of
2 FOR_PDCCH_WALSH_T.

3 If FOR_PDCH_SUPPORTED_T is included and equal to '1', then the mobile station shall set
4 Reverse Packet Data Channel supported indicator (REV_PDCH_SUPPORTED_S =
5 REV_PDCH_SUPPORTED_T).

6 If REV_PDCH_PARAMS_INCL_T is not included, or if it is included and equal to '0', the mobile
7 station shall set REV_PDCH_PARAMS_INCL_S to '0'; otherwise, the mobile station shall set
8 REV_PDCH_PARAMS_INCL_S to '1' and perform the following:

- 9 • If REV_PDCH_RLGAIN_INCL_T is equal to '1', the mobile station shall set:
- 10 - (RLGAIN_SPICH_PILOT_S = RLGAIN_SPICH_PILOT_T).
 - 11 - (RLGAIN_REQCH_PILOT_S = RLGAIN_REQCH_PILOT_T).
 - 12 - (RLGAIN_PDCCH_PILOT_S = RLGAIN_PDCCH_PILOT_T).
- 13 • If REV_PDCH_PARAMS_1_INCL_T is equal to '1', the mobile station shall set:
- 14 - (REV_PDCH_TABLE_SEL_S = REV_PDCH_TABLE_SEL_T).
 - 15 - (REV_PDCH_MAX_AUTO_TPR_S to REV_PDCH_MAX_AUTO_TPR_T).
 - 16 - (REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_S =
17 REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_T+1).
- 18 • If REV_PDCH_OPER_PARAMS_INCL_T is equal to '1', the mobile station shall set:
- 19 - (REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_S
20 =REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_T+1).
 - 21 - (REV_PDCH_DEFAULT_PERSISTENCE_S =
22 REV_PDCH_DEFAULT_PERSISTENCE_T).
 - 23 - (REV_PDCH_RESET_PERSISTENCE_S = REV_PDCH_RESET_PERSISTENCE_T).
 - 24 - (REV_PDCH_GRANT_PRECEDENCE_S = REV_PDCH_GRANT_PRECEDENCE_T).
 - 25 - (REV_PDCH_MSIB_SUPPORTED_S = REV_PDCH_MSIB_SUPPORTED_T).
 - 26 - (REV_PDCH_SOFT_SWITCHING_RESET_IND_S =
27 REV_PDCH_SOFT_SWITCHING_RESET_IND_T).

28 The mobile station shall store the following parameters:

- 29 • *BCMC Service Parameters Message* sent
30 (SENDING_BSPM_S = SENDING_BSPM_T), if included; otherwise, set
31 SENDING_BSPM_S to '0'.
- 32 • *BCMC Service Parameters Message* transmission periodicity index
33 (BSPM_PERIOD_INDEX_S = BSPM_PERIOD_INDEX_T) if SENDING_BSPM_T equals '1';
34 otherwise, BSPM_PERIOD_INDEX_S = NULL.
- 35 • If BSPM_PERIOD_INDEX_S is not equal to NULL, the mobile station shall set
36 BSPM_WAIT_TIME to (B + 1) × 160ms, where

1 $B = 2^i \times 16, 0 \leq i \leq 15$

2 and $i = \text{BSPM_PERIOD_INDEX}_S$.

3 If $\text{CAND_BAND_INFO_REQ}_R$ is set to '1', the mobile station shall store the number of
4 candidate band classes minus one ($\text{NUM_CAND_BAND_CLASS}_S =$
5 $\text{NUM_CAND_BAND_CLASS}_R$).

6 If $\text{CAND_BAND_INFO_REQ}_R$ is set to '1', the mobile station shall perform the following for
7 each occurrence of the CAND_BAND_CLASS record:

- 8 • Set the CAND_BAND_CLASS field of $\text{CAND_BAND_CLASS_REC}[i]$ to the i^{th}
9 occurrence of CAND_BAND_CLASS_R .
- 10 • Set the $\text{SUBCLASS_INFO_INCL}$ field of $\text{CAND_BAND_CLASS_REC}[i]$ to the i^{th}
11 occurrence of $\text{SUBCLASS_INFO_INCL}_R$.
- 12 • If the i^{th} occurrence of $\text{SUBCLASS_INFO_INCL}_R$ is set to '1', set the
13 SUBCLASS_REC_LEN field of $\text{CAND_BAND_CLASS_REC}[i]$ to the corresponding
14 value of $\text{SUBCLASS_REC_LEN}_R$.
- 15 • If the i^{th} occurrence of $\text{SUBCLASS_INFO_INCL}_R$ is set to '1', the mobile station shall
16 perform the following for each band subclass indicator received:
 - 17 - Set the $\text{BAND_SUBCLASS_IND_REC}[j]$ field of $\text{CAND_BAND_CLASS_REC}[i]$ to
18 the j^{th} occurrence of $\text{BAND_SUBCLASS_IND}_R$ in the
19 $\text{CDMA_BAND_CLASS_REC}[i]$.

20 If $\text{TX_PWR_LIMIT_INCL}_R$ is set to '1' and the mobile station is operating in the 1915MHz –
21 1920MHz block of the PCS band, the mobile station shall store the transmit power limit
22 $\text{TX_PWR_LIMIT}_S = (\text{TX_PWR_LIMIT}_R - 30\text{dBm})$; otherwise, the mobile station shall set
23 TX_PWR_LIMIT_S to the limit defined in [11].

24 2.6.2.2.6 Global Service Redirection Message

25 Whenever a *Global Service Redirection Message* is received on the Paging Channel, the
26 configuration message sequence number, CONFIG_MSG_SEQ_R , shall be compared to that
27 stored in $\text{GLOB_SERV_REDIR_MSG_SEQ}_S$. If the comparison results in a match or if
28 SYS_PAR_MSG_SEQ_S is not current, the mobile station may ignore the message; otherwise,
29 the mobile station shall store the following parameters:

- 30 • Configuration message sequence number
31 ($\text{CONFIG_MSG_SEQ}_S = \text{CONFIG_MSG_SEQ}_R$,
32 $\text{GLOB_SERV_REDIR_MSG_SEQ}_S = \text{CONFIG_MSG_SEQ}_R$)
- 33 • The mobile station shall ignore this message, if any of the following conditions is
34 true:
 - 35 - $\text{EXT_GLOBAL_REDIRECT}_S = '1'$
 - 36 - $\text{EXCL_P_REV_MS}_R = '1'$
 - 37 - Type of redirection as specified by RECORD_TYPE_R is not supported

- 1 - BAND_CLASS_r is not supported (RECORD_TYPE_r = '00000010')
- 2 - None of the included CDMA_CHAN_r are supported (RECORD_TYPE_r =
- 3 '00000010')

4 If the subfield corresponding to the access overload class, ACCOLC_p, of the mobile station
5 is set equal to '1' in the REDIRECT_ACCOLC_r field of the received message, the mobile
6 station shall store the following parameters and then shall enter the *System Determination*
7 *Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1):

- 8 • Return if fail indicator (RETURN_IF_FAIL_s = RETURN_IF_FAIL_r)
- 9 • If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of
- 10 TMSI_CODE_{s-p} to '1'
- 11 • Redirection record (REDIRECT_REC_s = redirection record from received message)
- 12 • If RECORD_TYPE_r = '00000001', the mobile station shall:
- 13 - Set CDMA_MODE_s to '1'
- 14 - Set DIGITAL_REG_{s-p} to '00000000'
- 15 - Set the maximum delay upon redirection (MAX_REDIRECT_DELAY_s =
- 16 MAX_REDIRECT_DELAY_r)

17 2.6.2.2.7 Extended Neighbor List Message

18 Whenever a valid *Extended Neighbor List Message* is received on the current Paging
19 Channel (PAGECH_s), the configuration message sequence number, CONFIG_MSG_SEQ_r,
20 shall be compared to that stored in EXT_NGHBR_LST_MSG_SEQ_s. If the comparison
21 results in a match, the mobile station may ignore the message. If the comparison results
22 in a mismatch, then the mobile station shall process the remaining fields in the message as
23 follows.

24 If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.14, then the
25 mobile station shall ignore the *Extended Neighbor List Message* that contains it.

26 The mobile station shall store the following parameters:

- 27 • Configuration message sequence number
28 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
29 EXT_NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
30 NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- 31 • Pilot PN sequence offset increment (PILOT_INC_s = PILOT_INC_r)

1 The mobile station shall set NGHBR_SET_SIZE_S to the number of neighboring base stations
2 contained in the *Extended Neighbor List Message*.

3 For each of the neighboring base stations contained in the *Extended Neighbor List Message*,
4 if FREQ_INCL_T equals '0', or if FREQ_INCL_T equals '1' and NGHBR_BAND_T is supported, the
5 mobile station shall perform the following:

- 6 • If the *i*th occurrence of NGHBR_CONFIG_T is equal to '000', '001', or '010', set the
7 NGHBR_CONFIG field of NGHBR_REC[i] to the *i*th occurrence of NGHBR_CONFIG_T;
8 otherwise, set the NGHBR_CONFIG field of NGHBR_REC [i] to '011'.
- 9 • Set the NGHBR_PN field of NGHBR_REC[i] to the *i*th occurrence of NGHBR_PN_T.
- 10 • Set the SEARCH_PRIORITY field of NGHBR_REC[i] to the *i*th occurrence of
11 SEARCH_PRIORITY_T.

12 For each of the neighboring base stations contained in the *Extended Neighbor List Message*,
13 if FREQ_INCL_T equals '1' and NGHBR_BAND_T is supported, the mobile station shall also
14 perform the following:

- 15 • Set the NGHBR_BAND field of NGHBR_REC[i] to the *i*th occurrence of
16 NGHBR_BAND_T.
- 17 • Set the NGHBR_FREQ field of NGHBR_REC[i] to the *i*th occurrence of
18 NGHBR_FREQ_T.

19 For each of the neighboring base stations contained in the *Extended Neighbor List Message*,
20 if FREQ_INCL_T equals '0', the mobile station shall also perform the following:

- 21 • Set the NGHBR_BAND field of NGHBR_REC[i] to CDMABAND_S.
- 22 • If NGHBR_CONFIG_T equals '010', set the NGHBR_FREQ field of NGHBR_REC[i] to
23 the first CDMA Channel listed in the *CDMA Channel List Message or Extended*
24 *CDMA Channel List Message* transmitted by the current base station; otherwise, set
25 the NGHBR_FREQ field of NGHBR_REC[i] to CDMACH_S.

26 If GEN_NGHBR_LST_MSG_SEQ_S is not equal to CONFIG_MSG_SEQ_S, the mobile station
27 shall perform the following:

- 28 • Set the SRCH_WIN_NGHBR field of NGHBR_REC to SRCH_WIN_N_S for all
29 NGHBR_SET_SIZE_S entries.
- 30 • Set the SRCH_OFFSET_NGHBR field of NGHBR_REC to '000' for all entries.

31 The mobile station shall set the ACCESS_ENTRY_HO field of the NGHBR_REC to '0' for all
32 NGHBR_SET_SIZE_S entries if any of the following conditions are met:

- 33 • EXT_SYS_PARAMETER_S is equal to '0',
- 34 • NGHBR_SET_ENTRY_INFO_S is equal to '0', or
- 35 • EXT_SYS_PAR_MSG_SEQ_S is not equal to CONFIG_MSG_SEQ_S.

36 The mobile station shall set the ACCESS_HO_ALLOWED field of the NGHBR_REC to '0' for
37 all NGHBR_SET_SIZE_S entries if any of the following conditions are met:

- 1 • EXT_SYS_PARAMETER_s is equal to '0',
- 2 • NGHBR_SET_ACCESS_INFO_s is equal to '0', or
- 3 • EXT_SYS_PAR_MSG_SEQ_s is not equal to CONFIG_MSG_SEQ_s.

4 The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it
5 consists only of pilot offsets listed in the *Extended Neighbor List Message*. If the *Extended*
6 *Neighbor List Message* contains more pilot offsets than the mobile station can store, the
7 mobile station shall store the pilot offsets beginning at the start of the *Extended Neighbor*
8 *List Message*, up to the limits of the mobile station's Neighbor Set storage capacity.

9 2.6.2.2.8 General Neighbor List Message

10 Whenever a valid *General Neighbor List Message* is received on the current Paging Channel
11 (PAGECH_s), the configuration message sequence number, CONFIG_MSG_SEQ_r shall be
12 compared to that stored in GEN_NGHBR_LST_MSG_SEQ_s. If the comparison results in a
13 match, the mobile station may ignore the message. If the comparison results in a
14 mismatch, then the mobile station shall process the remaining fields in the message as
15 follows.

16 If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.22, then the
17 mobile station shall ignore the *General Neighbor List Message* that contains it.

18 The mobile station shall store the following parameters:

- 19 • Configuration message sequence number
20 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
21 GEN_NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).
- 22 • Pilot PN sequence offset increment (PILOT_INC_s = PILOT_INC_r).

23 If NGHBR_CONFIG_PN_INCL_r is equal to '1' and FREQ_FIELDS_INCL_r is equal to '1', the
24 mobile station shall store the following parameters:

- 25 • Configuration message sequence number
26 (EXT_NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
27 NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).

28 The mobile station shall set NGHBR_SET_SIZE_s to the number of neighboring base stations
29 contained in the *General Neighbor List Message*.

30 For each of the neighboring base stations contained in the *General Neighbor List Message*, if
31 FREQ_INCL_r equal '0', or if FREQ_INCL_r equal '1' and NGHBR_BAND_r is supported, the
32 mobile station shall perform the following:

- 33 • If NGHBR_CONFIG_PN_INCL_r is equal to '1', set the NGHBR_CONFIG and
34 NGHBR_PN fields as follows:
 - 35 - If the *i*th occurrence of NGHBR_CONFIG_r is equal to '000', '001', or '010', set the
36 NGHBR_CONFIG field of NGHBR_REC[*i*] to the *i*th occurrence of
37 NGHBR_CONFIG_r; otherwise, set the NGHBR_CONFIG field of NGHBR_REC[*i*] to
38 '011'.
 - 39 - Set the NGHBR_PN field of NGHBR_REC[*i*] to the *i*th occurrence of NGHBR_PN_r.

- 1 • If $\text{NGHBR_SRCH_MODE}_T = '00'$ or $'10'$ and $\text{EXT_NGHBR_LST_MSG_SEQ}_S$ is not
2 equal to CONFIG_MSG_SEQ_T , set SEARCH_PRIORITY field of each NGHBR_REC to
3 $'10'$ (high) for all NGHBR_SET_SIZE_S entries.
- 4 • If $\text{NGHBR_SRCH_MODE}_T = '01'$ or $'11'$, set the SEARCH_PRIORITY field of
5 $\text{NGHBR_REC}[i]$ to the i^{th} occurrence of SEARCH_PRIORITY_T .
- 6 • If $\text{NGHBR_SRCH_MODE}_T = '00'$ or $'01'$, set the SRCH_WIN_NGHBR field of each
7 NGHBR_REC to SEARCH_WIN_S for all NGHBR_SET_SIZE_S entries if
8 SYS_PAR_MSG_SEQ_S is equal to CONFIG_MSG_SEQ_S ; otherwise, set
9 $\text{SETTING_SEARCH_WIN}$ to $'1'$.
- 10 • If $\text{NGHBR_SRCH_MODE}_T = '00'$ or $'01'$, set the SRCH_OFFSET_NGHBR field of each
11 NGHBR_REC to $'000'$.
- 12 • If $\text{NGHBR_SRCH_MODE}_T = '10'$ or $'11'$:
 - 13 - set the SRCH_WIN_NGHBR field of $\text{NGHBR_REC}[i]$ to the i^{th} occurrence of
14 SRCH_WIN_NGHBR_T
 - 15 - if $\text{SRCH_OFFSET_INCL}_T$ equals $'1'$, set the SRCH_OFFSET_NGHBR field of
16 $\text{NGHBR_REC}[i]$ to the i^{th} occurrence of $\text{SRCH_OFFSET_NGHBR}_T$, and
 - 17 - if $\text{SRCH_OFFSET_INCL}_T$ equals $'0'$, set the SRCH_OFFSET_NGHBR field of each
18 NGHBR_REC to $'000'$.
- 19 • If USE_TIMING_T is equal to $'1'$, set the TIMING_INCL field of $\text{NGHBR_REC}[i]$ to the
20 i^{th} occurrence of TIMING_INCL_T ; otherwise, set the TIMING_INCL field of
21 NGHBR_REC to $'0'$ for all entries.
- 22 • If BCCH_IND_INCL_T is equal to $'1'$, set the BCCH_SUPPORT field of $\text{NGHBR_REC}[i]$
23 to the i^{th} occurrence of BCCH_SUPPORT_T ; otherwise, set the BCCH_IND_INCL field
24 of NGHBR_REC to $'0'$ for all entries.
- 25 • Set the $\text{NGHBR_PDCH_SUPPORTED}$ field of $\text{NGHBR_REC}[i]$ to the i^{th} occurrence of
26 $\text{NGHBR_PDCH_SUPPORTED}_T$ if included; otherwise, set the
27 $\text{NGHBR_PDCH_SUPPORTED}$ field of NGHBR_REC to $'0'$ for all entries.
- 28 • The mobile station shall set $\text{RESQ_ENABLED}_S = \text{RESQ_ENABLED}_T$. If
29 RESQ_ENABLED_S is equal to $'1'$, then the mobile station shall store:
 - 30 - Call rescue delay timer value ($\text{RESQ_DELAY_TIME}_S = \text{RESQ_DELAY_TIME}_T$)
 - 31 - Call rescue allowed timer value ($\text{RESQ_ALLOWED_TIME}_S =$
32 $\text{RESQ_ALLOWED_TIME}_T$)
 - 33 - Call rescue attempt timer value ($\text{RESQ_ATTEMPT_TIME}_S =$
34 $\text{RESQ_ATTEMPT_TIME}_T$)
 - 35 - Code channel index for call rescue ($\text{RESQ_CODE_CHAN}_S =$
36 RESQ_CODE_CHAN_T)
 - 37 - Quasi-Orthogonal Function mask identifier for call rescue ($\text{RESQ_QOF}_S =$
38 RESQ_QOF_T)

- 1 - Minimum time between consecutive rescues ($RESQ_MIN_PERIOD_S =$
2 $RESQ_MIN_PERIOD_T + 1$) if $RESQ_MIN_PERIOD_INCL_T$ is equal to '1'; otherwise,
3 $RESQ_MIN_PERIOD_S = '00000'$.
- 4 - The required number of transmissions of a regular PDU before declaring L2
5 Acknowledgment Failure when Call Rescue is enabled
6 ($RESQ_NUM_TOT_TRANS_20MS_S = RESQ_NUM_TOT_TRANS_20MS_T$) if
7 included; otherwise, set $RESQ_NUM_TOT_TRANS_20MS_S$ to N_{1m} .
- 8 - The required number of transmissions of a mini PDU before declaring L2
9 Acknowledgment Failure when Call Rescue is enabled
10 ($RESQ_NUM_TOT_TRANS_5MS_S = RESQ_NUM_TOT_TRANS_5MS_T$) if included;
11 otherwise, set $RESQ_NUM_TOT_TRANS_5MS_S$ to N_{15m} .
- 12 - The Traffic Channel preamble length for Call Rescue Soft Handoff when
13 operating in Radio Configuration 1 or 2 ($RESQ_NUM_PREAMBLE_RC1_RC2_S =$
14 $RESQ_NUM_PREAMBLE_RC1_RC2_T$).
- 15 - The Traffic Channel preamble length for Call Rescue Soft Handoff when
16 operating in Radio Configuration greater than 2 ($RESQ_NUM_PREAMBLE_S =$
17 $RESQ_NUM_PREAMBLE_T$).
- 18 - The power level adjustment to be applied to the last closed-loop power level
19 when re-enabling the transmitter for call rescue soft handoff
20 ($RESQ_POWER_DELTA_S = RESQ_POWER_DELTA_T$).
- 21 - Set the $NGHBR_RESQ_CONFIGURED$ field of $NGHBR_REC[i]$ to the i^{th}
22 occurrence of $NGHBR_RESQ_CONFIGURED_T$.

23 For each of the neighboring base stations contained in the *General Neighbor List Message*, if
24 $FREQ_FIELDS_INCL_T$ equals '1', $FREQ_INCL_T$ equals '1', and $NGHBR_BAND_T$ is supported,
25 the mobile station shall also perform the following:

- 26 • Set the $NGHBR_BAND$ field of $NGHBR_REC[i]$ to the i^{th} occurrence of
27 $NGHBR_BAND_T$.
- 28 • Set the $NGHBR_FREQ$ field of $NGHBR_REC[i]$ to the i^{th} occurrence of
29 $NGHBR_FREQ_T$.

30 For each of the neighboring base stations contained in the *General Neighbor List Message*, if
31 USE_TIMING_T is equal to '1' and $TIMING_INCL_T$ equals '1', the mobile station shall also
32 perform the following:

- 33 • Set the $NGHBR_TX_OFFSET$ field of $NGHBR_REC[i]$ to the i^{th} occurrence of
34 $NGHBR_TX_OFFSET_T$.
- 35 • If $GLOBAL_TIMING_INCL_T$ is equal to '1', then the mobile station shall:
- 36 - Set the $NGHBR_TX_DURATION$ field of $NGHBR_REC$ to
37 $GLOBAL_TX_DURATION_T$ for all entries.
- 38 - Set the $NGHBR_TX_PERIOD$ field of $NGHBR_REC$ to $GLOBAL_TX_PERIOD_T$ for
39 all entries.

- 1 • If GLOBAL_TIMING_INCL_r is equal to '0', then the mobile station shall:
 - 2 - Set the NGHBR_TX_DURATION field of NGHBR_REC[i] to the ith occurrence of
 - 3 NGHBR_TX_DURATION_r.
 - 4 - Set the NGHBR_TX_PERIOD field of NGHBR_REC[i] to the ith occurrence of
 - 5 NGHBR_TX_PERIOD_r.

6 For each of the neighboring base stations contained in the *General Neighbor List Message*, if
 7 `FREQ_FIELDS_INCLr` equals '1' and `FREQ_INCLr` equals '0', or if `FREQ_FIELDS_INCLr`
 8 equals '0' and `EXT_NGHRBR_LST_MSG_SEQs` is not equal to `CONFIG_MSG_SEQr`, the
 9 mobile station shall also perform the following:

- 10 • Set the NGHBR_BAND field of NGHBR_REC[i] to CDMABAND_s.
- 11 • If NGHBR_CONFIG_r equals '010', set the NGHBR_FREQ field of NGHBR_REC[i] to
- 12 the first CDMA Channel listed in the *CDMA Channel List Message or Extended*
- 13 *CDMA Channel List Message* transmitted by the current base station; otherwise, set
- 14 the NGHBR_FREQ field of NGHBR_REC[i] to CDMACH_s.

15 The mobile station shall set the ACCESS_ENTRY_HO field of the NGHBR_REC to '0' for all
 16 NGHBR_SET_SIZE_s entries if any of the following conditions are met:

- 17 • EXT_SYS_PARAMETER_s is equal to '0'
- 18 • NGHBR_SET_ENTRY_INFO_s is equal to '0', or
- 19 • EXT_SYS_PAR_MSG_SEQ_s is not equal to CONFIG_MSG_SEQ_s.

20 The mobile station shall set the ACCESS_HO_ALLOWED field of the NGHBR_REC to '0' for
 21 all NGHBR_SET_SIZE_s entries if any of the following conditions are met:

- 22 • EXT_SYS_PARAMETER_s is equal to '0'
- 23 • NGHBR_SET_ACCESS_INFO_s is equal to '0', or
- 24 • EXT_SYS_PAR_MSG_SEQ_s is not equal to CONFIG_MSG_SEQ_s.

25 The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it
 26 consists only of pilot offsets listed in the *General Neighbor List Message*. If the *General*
 27 *Neighbor List Message* contains more pilot offsets than the mobile station can store, the
 28 mobile station shall store the pilot offsets beginning at the start of the *General Neighbor List*
 29 *Message*, up to the limits of the mobile station's Neighbor Set storage capacity.

30 For each of the neighboring base stations contained in the *General Neighbor List Message*,
 31 the mobile station shall set the ADD_PILOT_REC_INCL field of NGHBR_REC[i] to the ith
 32 occurrence of ADD_PILOT_REC_INCL_r. If ADD_PILOT_REC_INCL_r equals '1', for each pilot
 33 included in the message, the mobile station shall also perform the following:

- 34 • Set the NGHBR_PILOT_REC_TYPE field of NGHBR_PILOT_REC to
- 35 NGHBR_PILOT_REC_TYPE_r.
- 36 • If NGHBR_PILOT_REC_TYPE_r is equal to '000'. The mobile station shall:
 - 37 - Set the TD_POWER_LEVEL field of NGHBR_PILOT_REC to TD_POWER_LEVEL_r.
 - 38 - Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.

- 1 • If NGHBR_PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
- 2 - Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.
- 3 - Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
- 4 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 5 WALSH_LENGTH_r.
- 6 • If NGHBR_PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 7 - Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.
- 8 - Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
- 9 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 10 WALSH_LENGTH_r.
- 11 - Set the AUX_TD_POWER_LEVEL field of NGHBR_PILOT_REC to
- 12 AUX_TD_POWER_LEVEL_r.
- 13 - Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 14 • If NGHBR_PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 15 - Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
- 16 SR3_PRIMARY_PILOT_r.
- 17 - Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
- 18 SR3_PILOT_POWER1_r.
- 19 - Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
- 20 SR3_PILOT_POWER2_r.
- 21 • If NGHBR_PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 22 - Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
- 23 SR3_PRIMARY_PILOT_r.
- 24 - Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
- 25 SR3_PILOT_POWER1_r.
- 26 - Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
- 27 SR3_PILOT_POWER2_r.
- 28 - Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.
- 29 - Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
- 30 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 31 WALSH_LENGTH_r.
- 32 - If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1 field of
- 33 NGHBR_PILOT_REC to QOF1_r and set the AUX_PILOT_WALSH_CODE1 field of
- 34 NGHBR_PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh Code length
- 35 specified by WALSH_LENGTH1_r.

- 1 - Otherwise, set the AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF_r and
 2 set the AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to
 3 AUX_PILOT_WALSH_r with the Walsh Code length specified by
 4 WALSH_LENGTH_r.
- 5 - If ADD_INFO_INCL2_r is equal to '1', set the AUX_PILOT_QOF2 field of
 6 NGHBR_PILOT_REC to QOF2_r and set the AUX_PILOT_WALSH_CODE2 field of
 7 NGHBR_PILOT_REC to AUX_PILOT_WALSH2_r with the Walsh Code length
 8 specified by WALSH_LENGTH2_r.
- 9 - Otherwise, set the AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF_r and
 10 set the AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to
 11 AUX_PILOT_WALSH_r with the Walsh Code length specified by
 12 WALSH_LENGTH_r.

13 If HRPD_NGHBR_INCL_r equals '1', the mobile station shall set NUM_HRPD_NGHBR_s to
 14 NUM_HRPD_NGHBR_r, the number of neighboring HRPD systems contained in the *General*
 15 *Neighbor List Message*. For each of the neighboring HRPD systems contained in the
 16 *General Neighbor List Message*, the mobile station shall perform the following:

- 17 • Set the PN field of HRPD_NGHBR_LIST[i] to the ith occurrence of NGHBR_PN_r.
- 18 • Set the BAND_CLASS field of HRPD_NGHBR_LIST[i] to the ith occurrence of
 19 NGHBR_BAND_r if NGHBR_FREQ_INCL_r equals '1'; otherwise, set the BAND_CLASS
 20 field of HRPD_NGHBR_LIST[i] to CDMABAND_s.
- 21 • Set the CDMA_FREQ field of HRPD_NGHBR_LIST[i] to the ith occurrence of
 22 NGHBR_FREQ_r if NGHBR_FREQ_INCL_r equals '1'; otherwise, set the BAND_CLASS
 23 field of HRPD_NGHBR_LIST[i] to CDMACH_s.
- 24 • Set the PN_ASSOCIATION field of HRPD_NGHBR_LIST[i] to the ith occurrence of
 25 PN_ASSOCIATION_IND_r.
- 26 • Set the DATA_ASSOCIATION field of HRPD_NGHBR_LIST[i] to the ith occurrence of
 27 DATA_ASSOCIATION_IND_r.

28 2.6.2.2.9 User Zone Identification Message

29 Whenever a *User Zone Identification Message* is received on the Paging Channel or Primary
 30 Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile
 31 station shall compare the configuration message sequence number, CONFIG_MSG_SEQ_r,
 32 to that stored in USER_ZONE_ID_MSG_SEQ_s. If the comparison results in a match, the
 33 mobile station may ignore the message. If the comparison results in a mismatch, then the
 34 mobile station shall process the remaining fields in the message as follows.

35 The mobile station shall store the following parameters:

- 36 • Configuration message sequence number
 37 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
 38 USER_ZONE_ID_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- 39 • UZ_EXIT_RCVD_s = UZ_EXIT_r

1 The mobile station shall set NUM_UZID_S to the number of User Zones contained in the *User*
2 *Zone Identification Message*.

3 For each User Zone contained in the *User Zone Identification Message*, the mobile station
4 shall perform the following:

- 5 • Set the UZID field of UZ_REC(i) to the ith occurrence of UZID_r.
- 6 • Set the UZ_REV field of the UZ_REC(i) to the ith occurrence of UZ_REV_r.
- 7 • Set the TEMP_SUB field of the UZ_REC(i) to the ith occurrence of TEMP_SUB_r.

8 2.6.2.2.10 Private Neighbor List Message

9 Whenever a *Private Neighbor List Message* is received on the Paging Channel or Primary
10 Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile
11 station shall compare the configuration message sequence number, CONFIG_MSG_SEQ_r,
12 to that stored in PRI_NGHBR_LST_MSG_SEQ_S. If the comparison results in a match, the
13 mobile station may ignore the message. If the comparison results in a mismatch, then the
14 mobile station shall process the remaining fields in the message as follows.

15 The mobile station shall store the following parameters:

- 16 • Configuration message sequence number
17 (CONFIG_MSG_SEQ_S = CONFIG_MSG_SEQ_r,
18 PRI_NGHBR_LST_MSG_SEQ_S = CONFIG_MSG_SEQ_r)
- 19 • Common configuration included indicator (COMMON_INCL_S = COMMON_INCL_r)

20 The mobile station shall set NUM_PRI_NGHBR_S to the number of Private Neighbor base
21 stations contained in the *Private Neighbor List Message*.

22 For each Private Neighbor base station contained in the *Private Neighbor List Message* the
23 mobile station shall perform the following:

- 24 • Set the SRCH_WIN_PRI_NGHBR field of PRI_NGHBR_REC(i) to SRCH_WIN_PN_r.
- 25 • Set the SID field of PRI_NGHBR_REC(i) to the ith occurrence SID_r.
- 26 • Set the NID field of PRI_NGHBR_REC(i) to the ith occurrence NID_r.
- 27 • Set the PRI_NGHBR_PN field of PRI_NGHBR_REC(i) to the ith occurrence
28 PRI_NGHBR_PN_r.
- 29 • If COMMON_INCL_r is equal to '1', then the mobile station shall:
 - 30 - Set the BAND_CLASS field of PRI_NGHBR_REC(i) to COMMON_BAND_CLASS_r.
 - 31 - Set the NGHBR_FREQ field of PRI_NGHBR_REC(i) to COMMON_NGHBR_FREQ_r.
- 32 • If COMMON_INCL_r is equal to '0', then the mobile station shall:
 - 33 - Set the BAND_CLASS field of PRI_NGHBR_REC(i) to the ith occurrence of
34 BAND_CLASS_r.
 - 35 - Set the NGHBR_FREQ field of PRI_NGHBR_REC(i) to the ith occurrence of
36 NGHBR_FREQ_r.

- 1 • If i^{th} occurrence of UZID_INCL_r is equal to '0', then the mobile station shall set the
2 PS_NUM_UZID field of $\text{PRI_NGHBR_REC}(i)$ to '0000'.
- 3 • If i^{th} occurrence of UZID_INCL_r is equal to '1', then the mobile station shall set the
4 PS_NUM_UZID field of $\text{PRI_NGHBR_REC}(i)$ to the NUM_UZID_r associated with the i^{th}
5 occurrence of UZID_INCL_r .
- 6 • For each User Zone supported by the i^{th} private system, the mobile station shall
7 perform the following:
 - 8 - Set the $\text{PS_UZID}(j)$ field of $\text{PRI_NGHBR_REC}(i)$ to the j^{th} occurrence of UZID_r .
 - 9 - Set the $\text{PS_UZ_REV}(j)$ field of $\text{PRI_NGHBR_REC}(i)$ to the j^{th} occurrence of
10 UZ_REV_r .
 - 11 - Set the $\text{PS_TEMP_SUB}(j)$ field of $\text{PRI_NGHBR_REC}(i)$ to the j^{th} occurrence of
12 TEMP_SUB_r .

13 2.6.2.2.11 Extended Global Service Redirection Message

14 Whenever an *Extended Global Service Redirection Message* is received on the Paging
15 Channel or Primary Broadcast Control Channel, the configuration message sequence
16 number, CONFIG_MSG_SEQ_r , shall be compared to that stored in
17 $\text{EXT_GLOB_SERV_REDIR_MSG_SEQ}_s$. If the comparison results in a match, the mobile
18 station may ignore the message. If the comparison results in a mismatch, the mobile
19 station shall store the following parameters:

- 20 • Configuration message sequence number
21 $(\text{CONFIG_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r,$
22 $\text{GLOB_SERV_REDIR_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r,$
23 $\text{EXT_GLOB_SERV_REDIR_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r)$

24 The mobile station shall perform the following:

- 25 • The mobile station shall set $(\text{RETURN_IF_FAIL}_s = \text{RETURN_IF_FAIL}_r),$
26 TEMP_TMSI_CODE to TMSI_CODE_{s-p} , and clear the REDIRECT_REC_LIST . For i
27 = 1 to $(\text{NUM_ADD_RECORD}_r + 1)$, the mobile station shall perform the following:
 - 28 - If all the following conditions are satisfied from the i^{th} redirection record:
 - 29 + The subfield corresponding to the access overload class, ACCOLC_p , of the
30 mobile station is set equal to '1' in the REDIRECT_ACCOLC_r field or
31 $\text{ADD_REDIRECT_ACCOLC}_r$ of the i^{th} redirection record.
 - 32 + MOB_P_REV_p is in the redirection mobile protocol revision range associated
33 with the i^{th} redirection record ($\text{REDIRECT_P_REV_INCL}_r = '1'$ and
34 $\text{EXCL_P_REV_IND}_r = '0'$, and $(\text{REDIRECT_P_MIN}_r \leq \text{MOB_P_REV}_p \leq$
35 $\text{REDIRECT_P_MAX}_r)$ where i is equal to 1).
 - 36 + MOB_P_REV_p is not in any of the excluded mobile protocol revision range
37 associated with the i^{th} redirection record ($\text{REDIRECT_P_REV_INCL}_r = '1'$ and
38 $\text{EXCL_P_REV_IND}_r = '1'$ and $(\text{MOB_P_REV}_p < \text{REDIRECT_P_MIN}_r$ or
39 $\text{MOB_P_REV}_p > \text{REDIRECT_P_MAX}_r)$).

- 1 + Type of redirection as specified by RECORD_TYPE_r (*i* is equal to 1) or
2 ADD_RECORD_TYPE_r is supported.
- 3 + BAND_CLASS_r is supported (RECORD_TYPE_r = '00000010' or
4 ADD_RECORD_TYPE_r = '00000010').
- 5 + At least one of the CDMA_CHAN_r is supported for at least one band subclass
6 (when included) corresponding to REDIRECT_SUBCLASS_r = '1'.
7 (RECORD_TYPE_r = '00000010' or ADD_RECORD_TYPE_r = '00000010').
- 8 then mobile station shall store the following parameters from the redirection
9 record:
- 10 + Set DELETE_TMSI field of REDIRECT_REC_LIST[*j*] to DELETE_TMSI_r (*i* is
11 equal to 1) or ADD_DELETE_TMSI_r, where *j* (i.e., the initial *j* value is set to
12 0) is incremented by 1 whenever the *i*th redirection record satisfies the
13 redirection record selection conditions above.
- 14 + Set REDIRECT_REC_LIST[*j*] to the *i*th redirection record from the received
15 message.
- 16 + Set RECORD_TYPE field of REDIRECT_REC_LIST[*j*] to RECORD_TYPE_r (*i* is
17 equal to 1) or ADD_RECORD_TYPE_r.
- 18 + If RECORD_TYPE_r = '00000001' (*i* is equal to 1) or ADD_RECORD_TYPE_r =
19 '00000001', the mobile station shall:
- 20 ○ Set CDMA_MODE_s to '1'
- 21 ○ Set DIGITAL_REG field of REDIRECT_REC_LIST[*j*] to '00000000'.
- 22 ○ Set MAX_REDIRECT_DELAY field of REDIRECT_REC_LIST[*j*] to
23 MAX_REDIRECT_DELAY_r.
- 24 + If LAST_SEARCH_RECORD_IND_r or ADD_LAST_SEARCH_RECORD_IND_r is
25 equal to '1', the mobile station shall ignore the rest of the message.
- 26 • If REDIRECT_REC_LIST[*j*] is not empty, the mobile station shall enter the *System*
27 *Determination Substate* of the *Mobile Station Initialization State* with a redirection
28 indication (see 2.6.1.1); otherwise, the mobile station shall ignore the *Extended*
29 *Global Service Redirection Message*.

30 2.6.2.2.12 Extended CDMA Channel List Message Overview

31 The mobile station may receive the *Extended CDMA Channel List Message* from the Paging
32 Channel or from the Primary Broadcast Control Channel. The mobile station shall follow
33 requirements defined in 2.6.2.2.12.1 or 2.6.2.2.12.2 to process the *Extended CDMA*
34 *Channel List Message*.

35 2.6.2.2.12.1 Extended CDMA Channel List Message on Paging Channel

36 Whenever an *Extended CDMA Channel List Message* is received on the Paging Channel, the
37 mobile station shall compare the configuration message sequence number,
38 CONFIG_MSG_SEQ_r, to that stored in EXT_CHAN_LST_MSG_SEQ_s. If the comparison
39 results in a match, the mobile station may ignore the message. If the comparison results

1 in a mismatch, then the mobile station shall process the remaining fields in the message as
2 follows:

3 If the *Extended CDMA Channel List Message* lists CDMA channels from more than one band
4 class and the mobile station hashes to a band class other than the current band class, the
5 mobile station shall process this message after NGHBR_LST_MSG_SEQ_s,
6 EXT_NGHBR_LST_MSG_SEQ_s and GEN_NGHBR_LST_MSG_SEQ_s become current.

7 The mobile station shall store the following parameters:

- 8 • Configuration message sequence number
9 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
10 EXT_CHAN_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
11 CHAN_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).

12 The mobile station shall process this message if FD_CHAN_LST_SEQ_s is current and the
13 mobile station does not support any bandclass listed by the base station in the *Flex Duplex*
14 *CDMA Channel List Message* or if the mobile station does not support flexible spacing
15 between forward and reverse channels. Otherwise, the mobile station shall ignore this
16 message.

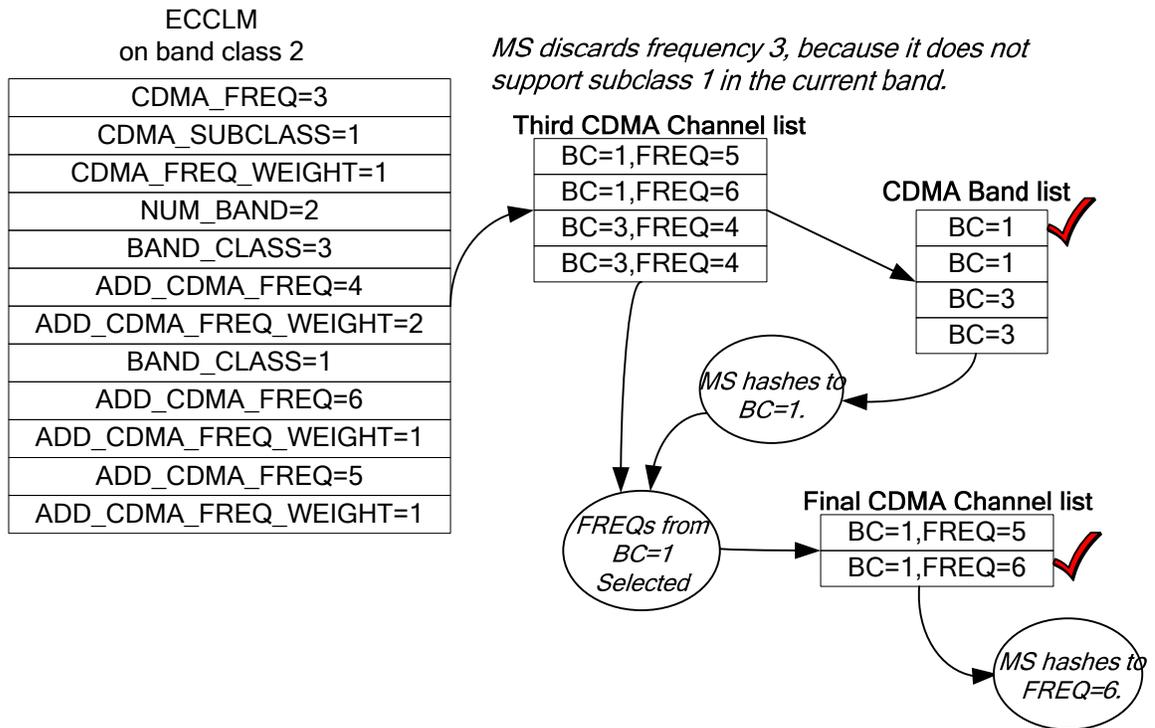
17 The mobile station shall determine the CDMA Channel (Frequency Assignment) for its
18 Paging Channel as follows:

- 19 • Starting from an empty list, the mobile station shall generate the first CDMA
20 Channel list from the *Extended CDMA Channel List Message* as follows:
 - 21 - For each band class record included in this message, the mobile station shall
22 perform the following:
 - 23 + If band subclass information is included for this band class record
24 (SUBCLASS_INFO_INCL_r = '1' or ADD_SUBCLASS_INFO_INCL_r = '1'), the
25 mobile station shall add only those channels belonging to the band class
26 and band subclasses that are supported by both the mobile station and the
27 base station, in the order they appear in the *Extended CDMA Channel List*
28 *Message*³³.
 - 29 + Otherwise (SUBCLASS_INFO_INCL_r = '0', ADD_SUBCLASS_INFO_INCL_r = '0'
30 or P_REV_IN_USE_s is less than 11), the mobile station shall add only those
31 channels that it supports for the associated band class, in the order they
32 appear in the *Extended CDMA Channel List Message*.

³³ 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 P_REV_IN_USE_s is greater than or equal to 11, the mobile station shall sort
2 the channels first by the ascending order of band class value, as specified in
3 [30], then by the ascending order of CDMA_FREQ within each band class.
- 4 • If RC_QPCH_SEL_INCL_r is equal to '1' and the mobile station is capable of RC
5 greater than 2 or capable of supporting Quick Paging Channel, the mobile station
6 shall eliminate the channels with RC_QPCH_HASH_IND_r equal to '0' from the first
7 CDMA Channel list to generate the second CDMA Channel list while preserving the
8 order in the first CDMA Channel list. Otherwise, the mobile station shall set the
9 second CDMA Channel list to be equal to the first CDMA Channel list.
- 10 • The mobile station shall generate the third CDMA Channel list as follows.
- 11 - If CDMA_FREQ_WEIGHT_INCL_r is equal to '0', the mobile station shall set the
12 third CDMA Channel list to be equal to the second CDMA Channel list.
- 13 - If CDMA_FREQ_WEIGHT_INCL_r is equal to '1', starting with an empty third
14 CDMA Channel list, for each entry "E" in the second CDMA Channel list in the
15 order they appear, the mobile station shall append N consecutive entries "E" at
16 the end of the third CDMA Channel list, where N is the weight of "E" and equals
17 either CDMA_FREQ_WEIGHT_{r+1} or ADD_CDMA_FREQ_WEIGHT_{r+1}
18 appropriately.
- 19 • The mobile station shall generate a CDMA band list as follows. Starting with an
20 empty CDMA band list, for each channel in the third CDMA Channel list in the
21 order they appear, the mobile station shall append an entry equal to the band class
22 of that channel, at the end of the CDMA band list.
- 23 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of
24 the CDMA band list to compute the band class for its Paging Channel.
- 25 • The mobile station shall eliminate those channels which are not in the computed
26 band class from the third CDMA channel list to generate the final CDMA channel
27 list.
- 28 • If the final CDMA Channel list is empty, the mobile station shall enter the *System*
29 *Determination Substate* with an acquisition failure indication.
- 30 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 and the
31 size of the final CDMA channel list to determine the CDMA Channel (Frequency
32 Assignment) for its Paging Channel.

33 Figure 2.6.2.2.12.1-1 shows an example of the hashing procedure.



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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_s but the computed CDMA band class is the same as CDMABAND_s), 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_s to the new CDMA Channel.
 - Set PAGE_CHAN_s to '1'.
 - Set PAGECH_s to the Primary Paging Channel.

- 1 - Set CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 2 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 3 FD_CHAN_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
 4 GEN_NGHBR_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
 5 GLOB_SERV_REDIR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
 6 USER_ZONE_IDMSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
 7 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
 8 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
 9 ACC_MSG_SEQ_s to NULL. The mobile station shall keep the parameters
 10 associated with the current overhead messages until they are updated on the
 11 new Paging Channel³⁴.
- 12 - Tune to the new CDMA Channel.
- 13 • Otherwise, the mobile station shall perform the following actions:
- 14 - Set CDMACH_s to the new CDMA Channel.
- 15 - The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a
 16 new Paging Channel number in the range 1 to PAGE_CHAN_s, where
 17 PAGE_CHAN_s is the value stored for the Paging Channel whose stored
 18 information is current. The mobile station shall store the new Paging Channel
 19 number as PAGECH_s.
- 20 - Tune to the new CDMA Channel and shall begin monitoring the new Paging
 21 Channel.

22 If the band class has changed (the computed CDMA band class is different than
 23 CDMABAND_s), the mobile station shall perform the following actions:

- 24 • If BYPASS_SYS_DET_IND_s is equal to '0' for this CDMA channel, the mobile station
 25 shall perform the following:
- 26 - Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class
- 27 - Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel
- 28 - The mobile station shall enter the *System Determination Substate* of the *Mobile*
 29 *Station Initialization State* with a new band indication.
- 30 • If BYPASS_SYS_DET_IND_s is equal to '1' for this CDMA channel, the mobile station
 31 shall perform the following:
- 32 - If the stored configuration parameters is not current (see 2.6.2.2) for the
 33 corresponding base station and frequency assignment, the mobile station shall
 34 perform the following actions:

³⁴ 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 CDMACH_S to the new CDMA Channel.
- 2 + Set CDMABAND_S to the new band class.
- 3 + Set PAGE_CHAN_S to '1'.
- 4 + Set PAGECH_S to the Primary Paging Channel.
- 5 + Set CONFIG_MSG_SEQ_S, SYS_PAR_MSG_SEQ_S, NGHBR_LST_MSG_SEQ_S,
6 CHAN_LST_MSG_SEQ_S, EXT_CHAN_LST_MSG_SEQ_S,
7 FD_CHAN_LST_MSG_SEQ_S, EXT_NGHBR_LST_MSG_SEQ_S,
8 GEN_NGHBR_LST_MSG_SEQ_S, EXT_SYS_PAR_MSG_SEQ_S,
9 GLOB_SERV_REDIR_MSG_SEQ_S, EXT_GLOB_SERV_REDIR_MSG_SEQ_S,
10 USER_ZONE_IDMSG_SEQ_S, PRI_NGHBR_LST_MSG_SEQ_S,
11 AP_PILOT_INFO_MSG_SEQ_S, AP_IDT_MSG_SEQ_S, AP_ID_TEXT_MSG_SEQ_S,
12 GOI_MSG_SEQ_S, FREQ_GOI_MSG_SEQ_S, ATIM_MSG_SEQ_S and
13 ACC_MSG_SEQ_S to NULL. The mobile station shall keep the parameters
14 associated with the current overhead messages until they are updated on
15 the new Paging Channel³⁵.
- 16 + Tune to the new CDMA Channel.
- 17 - Otherwise, the mobile station shall perform the following actions:
- 18 + Set CDMACH_S to the new CDMA Channel.
- 19 + Set CDMABAND_S to the new band class.
- 20 + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select
21 a new Paging Channel number in the range 1 to PAGE_CHAN_S, where
22 PAGE_CHAN_S is the value stored for the Paging Channel whose stored
23 information is current. The mobile station shall store the new Paging
24 Channel number as PAGECH_S.
- 25 + Tune to the new CDMA Channel and shall begin monitoring the new Paging
26 Channel.

27 2.6.2.2.12.2 Extended CDMA Channel List Message on Primary Broadcast Control 28 Channel

29 Whenever the *Extended CDMA Channel List Message* is received on the Primary Broadcast
30 Control Channel, the mobile station shall compare the configuration message sequence
31 number, CONFIG_MSG_SEQ_T, to that stored in CONFIG_MSG_SEQ_S. If the comparison
32 results in a match, the mobile station may ignore the message. If the comparison results

³⁵ 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 in a mismatch, the mobile station shall process the remaining fields in the message as
2 follows:

3 If the *Extended CDMA Channel List Message* lists CDMA channels from more than one band
4 class and the mobile station hashes to a band class other than the current band class, the
5 mobile station shall process this message after UNI_NGHBR_LST_MSG_SEQ_s becomes
6 current.

7 The mobile station shall store the following parameters:

- 8 • Configuration message sequence number
9 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
10 EXT_CHAN_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).

11 The mobile station shall process this message if FD_CHAN_LST_SEQ_s is current and the
12 mobile station does not support any bandclass listed by the base station in the *Flex Duplex*
13 *CDMA Channel List Message* or if the mobile station does not support flexible spacing
14 between forward and reverse channels. Otherwise, the mobile station shall ignore this
15 message.

16 To determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast Control
17 Channel, the mobile station shall first select a subset of CDMA channels from the *Extended*
18 *CDMA Channel List Message* that will be used for channel hashing. The attributes for
19 channel selection are support for that frequency, the band subclass (if included), RC
20 greater than 2, Quick Paging Channel and transmit diversity. The mobile station shall first
21 select the entire CDMA channel list for channel hashing. Starting from an empty list, the
22 mobile station shall then select the first CDMA Channel list as follows:

- 23 • For each band class record included in this message, the mobile station shall
24 perform the following:
 - 25 - If band subclass information is included for this band class record
26 (SUBCLASS_INFO_INCL_r = '1' or ADD_SUBCLASS_INFO_INCL_r = '1'), the mobile
27 station shall add only those channels belonging to the band class and band
28 subclasses that are supported by both the mobile station and the base station,
29 in the order they appear in the *Extended CDMA Channel List Message*³⁶.
 - 30 - Otherwise (SUBCLASS_INFO_INCL_r = '0', ADD_SUBCLASS_INFO_INCL_r = '0' or
31 P_REV_IN_USE_s is less than 11), the mobile station shall add only those
32 channels that it supports for the associated band class, in the order they appear
33 in the *Extended CDMA Channel List Message*.

³⁶ 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 $P_REV_IN_USE_S$ is greater than or equal to 11, the mobile station shall sort the
2 channels first by the ascending order of band class value as specified in [30], then
3 by the ascending order of $CDMA_FREQ$ within each band class.
- 4 • If $TD_SEL_INCL_T$ is equal to '1', the mobile station shall perform the following:
- 5 - If the mobile station is capable of supporting the transmit diversity mode
6 specified by TD_MODE_T , the mobile station shall select those CDMA channels
7 that have $TD_HASH_IND_T$ set to '1' from the CDMA channel list for the first
8 CDMA Channel list while preserving the order.
- 9 - If the mobile station is not capable of supporting the transmit diversity mode
10 specified by TD_MODE_T , the mobile station shall select those CDMA channels
11 that have $TD_HASH_IND_T$ set to '0' from the CDMA channel list for the first
12 CDMA Channel list while preserving the order.
- 13 • If $TD_SEL_INCL_T$ is equal to '0', the mobile station shall select the entire list for the
14 first CDMA Channel list.

15 From this first CDMA Channel list, the mobile station shall select the second CDMA
16 Channel list as follows:

- 17 • If $RC_QPCH_SEL_INCL_T$ is equal to '1' and the mobile station is capable of RC
18 greater than 2 or capable of supporting QPCH, the mobile station shall select those
19 CDMA channels with $RC_QPCH_HASH_IND_T$ set to '1' for the second CDMA
20 Channel list for CDMA channel hashing while preserving the order. If this list is
21 empty, the mobile station shall use the first CDMA Channel list as the second
22 CDMA Channel list for CDMA channel hashing.
- 23 • Otherwise, the mobile station shall use the first CDMA Channel list as the second
24 CDMA Channel list for CDMA channel hashing.

25 From this second CDMA Channel list, the mobile station shall select the third CDMA
26 Channel list subset as follows:

- 27 • If $CDMA_FREQ_WEIGHT_INCL_T$ is equal to '0', the mobile station shall set the third
28 CDMA Channel list to be equal to the second CDMA Channel list
- 29 • If $CDMA_FREQ_WEIGHT_INCL_T$ is equal to '1', starting with an empty third CDMA
30 Channel list, for each entry "E" in the second CDMA Channel list in the order they
31 appear, the mobile station shall append N consecutive entries "E" at the end of the
32 third CDMA Channel, where N is the weight of "E" and equals either
33 $CDMA_FREQ_WEIGHT_{T+1}$ or $ADD_CDMA_FREQ_WEIGHT_{T+1}$ appropriately

34 The mobile station shall determine the band class for its Primary Broadcast Control
35 Channel as follows:

- 36 • The mobile station shall generate a CDMA band list as follows. Starting with an
37 empty CDMA band list, for each channel in the third CDMA Channel list in the
38 order they appear, the mobile station shall append an entry equal to the band class
39 of that channel, at the end of the CDMA band list

- 1 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of
2 the CDMA band list to compute the band class for its Primary Broadcast Control
3 Channel.

4 After the band class has been selected, the mobile station shall determine the CDMA
5 Channel (Frequency Assignment) for its Primary Broadcast Control Channel as follows:

- 6 • The mobile station shall eliminate those channels which are not in the computed
7 band class from the third CDMA Channel list to generate the final CDMA Channel
8 list.
- 9 • If the final CDMA Channel list is empty, the mobile station shall enter the *System*
10 *Determination Substate* with an acquisition failure indication
- 11 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 with the
12 number of channels in the final CDMA Channel list to determine the CDMA
13 Channel (Frequency Assignment) for its Primary Broadcast Control Channel.

14 If the CDMA Frequency Assignment has changed but the band class is the same (the
15 computed CDMA Channel is different from CDMACH_s but the computed CDMA band class
16 is CDMABAND_s), the mobile station shall perform the following:

- 17 • Set CDMACH_s to the new CDMA Channel.
- 18 • Set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
19 UNI_NGHR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
20 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
21 PRI_NGHR_LST_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
22 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
23 ATIM_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL. The mobile station shall keep the
24 parameters associated with the current overhead messages until they are updated
25 on the new Primary Broadcast Control Channel³⁷.
- 26 • If the mobile station is operating in the Spreading Rate 1:
- 27 - If the assigned CDMA channel supports transmit diversity, the mobile station
28 shall set the following fields corresponding to the assigned CDMA channel:
- 29 + SR1_TD_POWER_LEVEL_s = TD_POWER_LEVEL_r.
- 30 + SR1_TD_MODE_s = TD_MODE_r.
- 31 + BRAT_s = SR1_BRAT_TD_s.
- 32 + BCCH_CODE_RATE_s = SR1_CRAT_TD_s.

³⁷ 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_s = BCCH_CODE_CHAN_TD_s.
- 2 - Otherwise, the mobile station shall set the following fields corresponding to the
- 3 assigned CDMA channel:
- 4 + BRAT_s = SR1_BRAT_NON_TD_s,
- 5 + BCCH_CODE_RATE_s = SR1_CRAT_NON_TD_s,
- 6 + BCCH_s = BCCH_CODE_CHAN_NON_TD_s,
- 7 • Tune to the new CDMA Channel

8 If the band class has changed (the computed CDMA band class is different than

9 CDMABAND_s), the mobile station shall perform the following actions:

- 10 • If BYPASS_SYS_DET_IND_r is equal to '0' for this CDMA channel, the mobile station
- 11 shall perform the following:
- 12 - Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class.
- 13 - Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel.
- 14 - The mobile station shall enter the *System Determination Substate* of the *Mobile*
- 15 *Station Initialization State* with a new band indication.
- 16 • If BYPASS_SYS_DET_IND_r is equal to '1' for this CDMA channel, the mobile station
- 17 shall perform the following:
- 18 - Set CDMACH_s to the new CDMA Channel.
- 19 - Set CDMABAND_s to the new band class.
- 20 - Set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
- 21 UNI_NGHBR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
- 22 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, and
- 23 PRI_NGHBR_LST_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
- 24 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
- 25 ATIM_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL. The mobile station shall keep
- 26 the parameters associated with the current overhead messages until they are
- 27 updated on the new Primary Broadcast Control Channel³⁸.
- 28 - If the mobile station is operating in the Spreading Rate 1:
- 29 + If the assigned CDMA channel supports transmit diversity, the mobile
- 30 station shall set the following fields corresponding to the assigned CDMA
- 31 channel:
- 32 ○ SR1_TD_POWER_LEVEL_s = TD_POWER_LEVEL_r.

³⁸ 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 ○ SR1_TD_MODE_S = TD_MODE_T.
- 2 ○ BRAT_S = SR1_BRAT_TD_S.
- 3 ○ BCCH_CODE_RATE_S = SR1_CRAT_TD_S.
- 4 ○ BCCH_S = BCCH_CODE_CHAN_TD_S.
- 5 - Otherwise, the mobile station shall set the following fields corresponding to the
- 6 assigned CDMA channel:
- 7 + BRAT_S = SR1_BRAT_NON_TD_S,
- 8 + BCCH_CODE_RATE_S = SR1_CRAT_NON_TD_S,
- 9 + BCCH_S = BCCH_CODE_CHAN_NON_TD_S,
- 10 - Tune to the new CDMA Channel

11 2.6.2.2.13 ANSI-41 System Parameters Message

12 Whenever an *ANSI-41 System Parameters Message* is received, the configuration message
 13 sequence number, CONFIG_MSG_SEQ_T, shall be compared to that stored in
 14 A41_SYS_PAR_MSG_SEQ_S. If the comparison results in a match, the mobile station may
 15 ignore the message. If the comparison results in a mismatch, then the mobile station shall
 16 process the remaining fields in the message as described in 2.6.2.2.13.1, 2.6.2.2.13.2,
 17 2.6.2.2.13.3, and 2.6.2.2.13.4.

18 If REG_PRD is not within the valid range specified in 3.7.2.3.2.31, then the mobile station
 19 shall ignore the *ANSI-41 System Parameters Message* that contains it.

20 2.6.2.2.13.1 Stored Parameters

21 The mobile station shall store the following parameters:

- 22 • Configuration message sequence number
 23 (CONFIG_MSG_SEQ_S = CONFIG_MSG_SEQ_T,
 24 A41_SYS_PAR_MSG_SEQ_S = CONFIG_MSG_SEQ_T)
- 25 • Home registration indicator (HOME_REG_S = HOME_REG_T)
- 26 • SID roamer registration indicator (FOR_SID_REG_S = FOR_SID_REG_T)
- 27 • NID roamer registration indicator (FOR_NID_REG_S = FOR_NID_REG_T)
- 28 • Power-up registration indicator (POWER_UP_REG_S = POWER_UP_REG_T)
- 29 • Power-down registration indicator (POWER_DOWN_REG_S = POWER_DOWN_REG_T)
- 30 • Parameter-change registration indicator (PARAMETER_REG_S = PARAMETER_REG_T)
- 31 • Preferred Enhanced Access Channel MSID type
 32 (PREF_MSID_TYPE_S = PREF_MSID_TYPE_T)
- 33 • Extended Preferred Enhanced Access Channel MSID type
 34 (EXT_PREF_MSID_TYPE_S = EXT_PREF_MSID_TYPE_T), if included; otherwise, set
 35 EXT_PREF_MSID_TYPE_S to NULL.

- 1 • MEID Required indicator is included ($MEID_REQD_S = MEID_REQD_R$), if included;
2 otherwise, set $MEID_REQD_S$ to '0'
- 3 • The mobile station shall set its operational IMSI, $IMSI_O$, as follows:
- 4 - If $IMSI_T_SUPPORTED_R$ is equal to '0', the mobile station shall set $IMSI_O$ to
5 $IMSI_M_P$.
- 6 - If $IMSI_T_SUPPORTED_R$ is equal to '1' and the mobile station's $IMSI_T_P$ has been
7 programmed, the mobile station shall set $IMSI_O$ to $IMSI_T_P$.
- 8 - If $IMSI_T_SUPPORTED_R$ is equal to '1' and the mobile station's $IMSI_T_P$ has not
9 been programmed, the mobile station shall set $IMSI_O$ to $IMSI_M_P$.
- 10 - If $IMSI_O$ has been changed, the mobile station shall set
11 $MC_RR_PAR_MSG_SEQ_S$, $EXT_CHAN_LST_MSG_SEQ_S$,
12 $FD_CHAN_LST_MSG_SEQ_S$ to NULL and set NUM_FCCCH_S to '1' and
13 $FCCCH_ID_S$ to '1'.
- 14 • If $OTHER_INFO_INCL_R$ is set to '1', the mobile station shall store:
- 15 - Base station identification ($BASE_ID_S = BASE_ID_R$)
- 16 - If $MCC_R = '111111111'$ and $IMSI_11_12_R = '1111111'$, the mobile station shall
17 set the $IMSI_O$ to $IMSI_M_P$ and store:
- 18 + Mobile Country Code ($MCC_S = MCC_M_P$) and
19 + IMSI 11th and 12th digits ($IMSI_11_12_S = IMSI_M_11_12_P$);
20 - Otherwise, the mobile station shall store:
- 21 + Mobile Country Code ($MCC_S = MCC_R$) and
22 + IMSI 11th and 12th digits ($IMSI_11_12_S = IMSI_11_12_R$).
- 23 - Broadcast GPS assist indicator ($BROADCAST_GPS_ASST_S =$
24 $BROADCAST_GPS_ASST_R$)
- 25 - Signaling encryption supported indicator ($SIG_ENCRYPT_SUP_S =$
26 $SIG_ENCRYPT_SUP_R$)
- 27 • Least significant digit of MNC ($IMSI_10_S = IMSI_10_R$), if included.
- 28 • If $IMSI_O$ is set to the $IMSI_M$, the mobile station shall set:
- 29 - $IMSI_O_S_S$ to $IMSI_M_S_P$ (i.e., $IMSI_O_S1_S$ to $IMSI_M_S1_P$ and $IMSI_O_S2_S$ to
30 $IMSI_M_S2_P$)
- 31 - $IMSI_O_11_12_S$ to $IMSI_M_11_12_P$
- 32 - MCC_O_S to MCC_M_P
- 33 - $IMSI_O_ADDR_NUM_S$ to $IMSI_M_ADDR_NUM_P$
- 34 • If $IMSI_O$ is set to the $IMSI_T$, the mobile station shall set:
- 35 - $IMSI_O_S_S$ to $IMSI_T_S_P$ (i.e., $IMSI_O_S1_S$ to $IMSI_T_S1_P$ and $IMSI_O_S2_S$ to
36 $IMSI_T_S2_P$).

- 1 - IMSI_O_11_12_s to IMSI_T_11_12_p
- 2 - MCC_O_s to MCC_T_p
- 3 - IMSI_O_ADDR_NUM_s to IMSI_T_ADDR_NUM_p
- 4 • Delete foreign TMSI (DELETE_FOR_TMSI_s = DELETE_FOR_TMSI_r)
- 5 • Use TMSI (USE_TMSI_s = USE_TMSI_r)
- 6 • TMSI zone length (TMSI_ZONE_LEN_s = TMSI_ZONE_LEN_r)
- 7 • TMSI zone number (TMSI_ZONE_s = TMSI_ZONE_r)
- 8 • Maximum number of alternative service options (MAX_NUM_ALT_SO_s =
- 9 MAX_NUM_ALT_SO_r).
- 10 • The mobile station shall set all bits of TMSI_CODE_{s-p} to '1' if all of the following
- 11 conditions are met:
- 12 - The bits of TMSI_CODE_{s-p} are not all equal to '1',
- 13 - DELETE_FOR_TMSI_s is equal to '1', and
- 14 - ASSIGNING_TMSI_ZONE_LEN_{s-p} is not equal to TMSI_ZONE_LEN_s, or the least
- 15 significant ASSIGNING_TMSI_ZONE_LEN_{s-p} octets of
- 16 ASSIGNING_TMSI_ZONE_{s-p} are not equal to TMSI_ZONE_s.
- 17 • Message integrity supported indicator (MSG_INTEGRITY_SUP_s =
- 18 MSG_INTEGRITY_SUP_r), if P_REV_IN_USE_s is greater than or equal to 10;
- 19 otherwise, MSG_INTEGRITY_SUP_s = 0.
- 20 • If MSG_INTEGRITY_SUP_r is equal to '1' and SIG_INTEGRITY_SUP_INCL_r is equal to
- 21 '1', the mobile station shall store the message integrity algorithms that the base
- 22 station supports (SIG_INTEGRITY_SUP_s = SIG_INTEGRITY_SUP_r); otherwise, the
- 23 mobile station shall set SIG_INTEGRITY_SUP_s to '00000000'.
- 24 If the mobile station supports packet data service options, the mobile station shall store the
- 25 packet data services zone identifier (PACKET_ZONE_ID_s = PACKET_ZONE_ID_r); otherwise,
- 26 the mobile station shall set PACKET_ZONE_ID_s to '00000000'.
- 27 If the mobile station supports packet data service options and the PZ_HYST_ENABLED field
- 28 is included, the mobile station shall store the packet zone hysteresis enabled indicator
- 29 (PZ_HYST_ENABLED_s = PZ_HYST_ENABLED_r); otherwise, the mobile station shall set
- 30 PZ_HYST_ENABLED_s to '1'.
- 31 If the mobile station supports packet data service options and the PZ_HYST_LIST_LEN field
- 32 is included, the mobile station shall store the packet zone hysteresis list length
- 33 (PZ_HYST_LIST_LEN_s = PZ_HYST_LIST_LEN_r); otherwise, the mobile station shall set
- 34 PZ_HYST_LIST_LEN_s to 4.
- 35 If the mobile station supports packet data service options and the PZ_HYST_ACT_TIMER
- 36 field is included, the mobile station shall store the packet zone hysteresis activation timer
- 37 (PZ_HYST_ACT_TIMER_s = PZ_HYST_ACT_TIMER_r); otherwise, the mobile station shall set
- 38 PZ_HYST_ACT_TIMER_s to 30 seconds.

1 If the mobile station supports packet data service options and the PZ_HYST_TIMER_MUL
 2 field and the PZ_HYST_TIMER_EXP field are included, the mobile station shall store the
 3 packet zone hysteresis timer ($PZ_HYST_TIMER_S = PZ_HYST_TIMER_MUL_T \times 8 \wedge$
 4 $PZ_HYST_TIMER_EXP_T$); otherwise, the mobile station shall set PZ_HYST_TIMER_S to 60
 5 seconds.

6 If the mobile station supports the *Device Information Message* on the r-csch, the mobile
 7 station shall store:

- 8 • Autonomous message supported indicator
 9 (AUTO_MSG_SUPPORTED_S = AUTO_MSG_SUPPORTED_T)

10 If AUTO_MSG_SUPPORTED_T is equal to '1' and the mobile station supports the *Device*
 11 *Information Message* on the r-csch, the mobile station shall store:

- 12 • Autonomous message interval
 13 (AUTO_MSG_INTERVAL_S = AUTO_MSG_INTERVAL_T)

14 The mobile station shall store concurrent service supported indicator (CS_SUPPORTED_S=
 15 CS_SUPPORTED_T).

16 Maximum number of additional service reference identifiers allowed in origination
 17 ($MAX_ADD_SERV_INSTANCE_S = MAX_ADD_SERV_INSTANCE_T$), if included; otherwise, the
 18 mobile station shall set MAX_ADD_SERV_INSTANCE_S to 0.

19 The mobile station shall store mobile station initiated position location determination
 20 supported indicator ($MS_INIT_POS_LOC_SUP_IND_S = MS_INIT_POS_LOC_SUP_IND_T$).

21 The mobile station shall also perform the following:

- 22 • If the mobile station is not in the *Origination Attempt Substate*, or *Page Response*
 23 *Substate*, the mobile station shall store the following prior to storing the remaining
 24 parameters:
 - 25 - Registered system identification ($REG_SID_S = SID_S$).
 - 26 - Registered network identification ($REG_NID_S = NID_S$).
 - 27 - Registered registration zone ($REG_REG_ZONE_S = REG_ZONE_S$).
 - 28 - Registered zone timer length ($REG_ZONE_TIMER_S = ZONE_TIMER_T$).
- 29 • System identification ($SID_S = SID_T$)
- 30 • Network identification ($NID_S = NID_T$)
- 31 • Registration zone ($REG_ZONE_S = REG_ZONE_T$)
- 32 • Number of registration zones to be retained ($TOTAL_ZONES_S = TOTAL_ZONES_T$)
- 33 • Zone timer length ($ZONE_TIMER_S = ZONE_TIMER_T$)
- 34 • Multiple SID storage indicator ($MULT_SIDS_S = MULT_SIDS_T$)
- 35 • Multiple NID storage indicator ($MULT_NIDS_S = MULT_NIDS_T$)
- 36 • Registration period ($REG_PRD_S = REG_PRD_T$)

- 1 • If DIST_REG_INCL is equal to '1', the mobile station shall store:
 - 2 - Registration distance ($REG_DIST_S = REG_DIST_R$)
- 3 • If DIST_REG_INCL is equal to '0', then the mobile station shall set REG_DIST_S equal
 - 4 to '0000000000'.
- 5 • If $TKZ_MODE_SUPPORTED_R$ is not included, the mobile station shall set
 - 6 $TKZ_MODE_SUPPORTED_S$ to '0'; otherwise, the mobile station shall set
 - 7 $TKZ_MODE_SUPPORTED_S$ to $TKZ_MODE_SUPPORTED_R$. If
 - 8 $TKZ_MODE_SUPPORTED_S$ is equal to '1', the mobile station shall store the tracking
 - 9 zone identifier ($TKZ_ID_S = TKZ_ID_R$).

10 The mobile station shall ignore any fields at the end of the *ANSI-41 System Parameters*
 11 *Message* that are not defined according to the protocol revision level ($MOB_P_REV_P$ of the
 12 current band class) being used by the mobile station.

13 2.6.2.2.13.2 Roaming Status

14 The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3).
 15 The mobile station should indicate to the user whether the mobile station is roaming.

16 2.6.2.2.13.3 Registration

17 The mobile station shall update stored variables and perform other registration procedures
 18 as specified in 2.6.5.5.2.2.

19 2.6.2.2.13.4 PACA Disable for SID Change

20 If $PACA_S$ is equal to enabled, and SID_S is not equal to $PACA_SID_S$, the mobile station shall
 21 set $PACA_S$ to disabled and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and
 22 should indicate to the user that the PACA call has been canceled

23 2.6.2.2.14 MC-RR Parameters Message

24 Whenever an *MC-RR Parameters Message* is received, the configuration message sequence
 25 number, $CONFIG_MSG_SEQ_R$, shall be compared to that stored in
 26 $MC_RR_PAR_MSG_SEQ_S$. If the comparison results in a match, the mobile station may
 27 ignore the message. If the comparison results in a mismatch, then the mobile station shall
 28 process the remaining fields in the message as described in 2.6.2.2.14.1, 2.6.2.2.14.2, and
 29 2.6.2.2.14.3.

30 If the protocol revision level supported by the mobile station ($MOB_P_REV_P$) is less than the
 31 minimum protocol revision level supported by the base station ($MIN_P_REV_R$), the mobile
 32 station shall enter the *System Determination Substate* of the *Mobile Station Initialization State*
 33 with a protocol mismatch indication (see 2.6.1.1).

34 If $BASE_LAT$, $BASE_LONG$, or PWR_REP_THRESH is not within the valid ranges specified
 35 in 3.7.2.3.2.31, then the mobile station shall ignore the *MC-RR Parameters Message* that
 36 contains them.

37 If the mobile station supports Spreading Rate 3 on the common channel and $SR3_INCL_S$ is
 38 equal to '1', the mobile station shall set:

- 1 • $BRAT_s = SR3_BRAT_r$,
- 2 • $BCCH_s = SR3_BCCH_CODE_CHAN_r$;
- 3 • $BCCH_CODE_RATE_s = 1/3$;
- 4 • $SR3_PRIMARY_PILOT_s = SR3_PRIMARY_PILOT_r$;
- 5 • $SR3_PILOT_POWER1_s = SR3_PILOT_POWER1_r$;
- 6 • $SR3_PILOT_POWER2_s = SR3_PILOT_POWER2_r$;
- 7 • If $SR3_CENTER_FREQ_INCL_r$ is equal to '1', $POTENTIAL_CDMACH_s =$
- 8 $SR3_CENTER_FREQ_r$.

9 If $POTENTIAL_CDMACH_s$ is different from $CDMACH_s$, the mobile station shall set
 10 $CDMACH_s = POTENTIAL_CDMACH_s$ and then tune to the CDMA Channel ($CDMACH_s$).

11 2.6.2.2.14.1 Stored Parameters

12 The mobile station shall store the following parameters:

- 13 • Configuration message sequence number
 14 ($CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r$,
 15 $MC_RR_PAR_MSG_SEQ_s = CONFIG_MSG_SEQ_r$)
- 16 • Base station identification ($BASE_ID_s = BASE_ID_r$)
- 17 • Protocol revision level ($P_REV_s = P_REV_r$)
- 18 • Protocol revision level currently in use ($P_REV_IN_USE_s =$ the lesser value of
 19 P_REV_s and $MOB_P_REV_p$ of the current band class)
- 20 • Minimum protocol revision level ($MIN_P_REV_s = MIN_P_REV_r$).
- 21 • Search window size for the Active Set and Candidate Set
 22 ($SRCH_WIN_A_s = SRCH_WIN_A_r$)
- 23 • Search window size for the Remaining Set ($SRCH_WIN_R_s = SRCH_WIN_R_r$)
- 24 • Pilot detection threshold ($T_ADD_s = T_ADD_r$)
- 25 • Pilot drop threshold ($T_DROP_s = T_DROP_r$)
- 26 • Active Set versus Candidate Set comparison threshold ($T_COMP_s = T_COMP_r$)
- 27 • Drop timer value ($T_TDROP_s = T_TDROP_r$)
- 28 • Drop timer range value ($T_TDROP_RANGE_s = T_TDROP_RANGE_r$) if
 29 $T_TDROP_RANGE_INCL_r$ is equal to '1'; otherwise, $T_TDROP_RANGE_s = '0000'$
- 30 • Maximum age for retention of Neighbor Set members
 31 ($NGHBR_MAX_AGE_s = NGHBR_MAX_AGE_r$)
- 32 • Slope of the handoff add/drop criterion ($SOFT_SLOPE_s = SOFT_SLOPE_r$)
- 33 • Intercept of the handoff add criterion ($ADD_INTERCEPT_s = ADD_INTERCEPT_r$)
- 34 • Intercept of the handoff drop criterion ($DROP_INTERCEPT_s = DROP_INTERCEPT_r$)

- 1 • If ENC_SUPPORTED_r is equal to '1', the mobile station shall store:
- 2 - Signaling encryption supported indicator (SIG_ENCRYPT_SUP_s =
- 3 SIG_ENCRYPT_SUP_r)
- 4 - User information encryption supported indicator (UI_ENCRYPT_SUP_s =
- 5 UI_ENCRYPT_SUP_r)

6 If P_REV_IN_USE_s has been changed, the mobile station shall set ACC_MSG_SEQ_s,
7 CURR_ACC_MSG_SEQ, A41_SYS_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s, and
8 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.

9 If CCH_INFO_INCL_r is equal to '1', the mobile station shall store:

- 10 • If MCC_r = '111111111' and IMSI_11_12_r = '111111', the mobile station shall set
11 the IMSI_O to IMSI_M_p and store:
- 12 - Mobile Country Code (MCC_s = MCC_{M_p}) and
- 13 - IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_M_11_12_p);
- 14 • Otherwise, the mobile station shall store:
- 15 - Mobile Country Code (MCC_s = MCC_r) and
- 16 - IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_11_12_r).
- 17 • Least significant digit of MNC (IMSI_10_s = IMSI_10_r), if included.
- 18 • If IMSI_O has been changed, the mobile station shall set
19 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s to NULL, and set
20 NUM_FCCCH_s to '1' and FCCCH_ID_s to '1'.
- 21 • *Extended Global Service Redirection Message* sent
22 (EXT_GLOBAL_REDIRECT_s = EXT_GLOBAL_REDIRECT_r) if included; otherwise,
23 EXT_GLOBAL_REDIRECT_s = '0'
- 24 • *User Zone Identification Message* sent
25 (USER_ZONE_ID_s = USER_ZONE_ID_r) if included; otherwise, USER_ZONE_ID_s = '0'
- 26 • *Private Neighbor List Message* sent
27 (PRI_NGHBR_LST_s = PRI_NGHBR_LST_r) if included; otherwise,
28 PRI_NGHBR_LST_s = '0'
- 29 • *ANSI-41 RAND Message* sent
30 (SENDING_RAND_s = SENDING_RAND_r) if included; otherwise,
31 SENDING_RAND_s = '0'
- 32 • *Access Point Pilot Information Message* sent
33 (AP_PILOT_INFO_s = AP_PILOT_INFO_r) if included; otherwise, AP_PILOT_INFO_s = '0'
- 34 If the APPIM_PERIOD_INDEX is included in the message APPIM_PERIOD_INDEX_s =
35 APPIM_PERIOD_INDEX_r. Otherwise, APPIM_PERIOD_INDEX_s = 0.
- 36 • *Access Point Identification Message* sent
37 (AP_IDT_s = AP_IDT_r) if included; otherwise, AP_IDT_s = '0'

- 1 • *Access Point Identification Text Message* sent
2 (AP_ID_TEXT_S = AP_ID_TEXT_T) if included; otherwise, AP_ID_TEXT_S = '0'
- 3 • *General Overhead Information Message* sent
4 (GEN_OVHD_INF_IND_S = GEN_OVHD_INF_IND_T) if included; otherwise,
5 GEN_OVHD_INF_IND_S = '0'

6 If the GEN_OVHD_CYCLE_INDEX is included in the message GEN_OVHD_CYCLE_INDEX_S
7 = GEN_OVHD_CYCLE_INDEX_T. Otherwise, GEN_OVHD_CYCLE_INDEX_S = 0.

- 8 • *Frequent General Overhead Information Message* sent
9 (FREQ_GEN_OVHD_INF_IND_S = FREQ_GEN_OVHD_INF_IND_T) if included; otherwise,
10 FREQ_GEN_OVHD_INF_IND_S = '0'.
- 11 • *Flex Duplex CDMA Channel List Message* sent
12 (FD_CHAN_LST_IND_S = FD_CHAN_LST_IND_T) if included; otherwise,
13 FD_CHAN_LST_IND_S = '0'.
- 14 • *Alternative Technologies Information Message* sent
15 (ATIM_IND_S = ATIM_IND_T) if included; otherwise, ATIM_IND_S = '0'

16 If the ATIM_CYCLE_INDEX is included in the message ATIM_CYCLE_INDEX_S =
17 ATIM_CYCLE_INDEX_T.

18 Otherwise, ATIM_CYCLE_INDEX_S = 0.

- 19 • *Maximum slot cycle index*
20 (MAX_SLOT_CYCLE_INDEX_S = MAX_SLOT_CYCLE_INDEX_T)
- 21 • *BCMC Service Parameters Message* sent
22 (SENDING_BSPM_S = SENDING_BSPM_T), if included; otherwise, set
23 SENDING_BSPM_S to '0'.
- 24 • *BCMC Service Parameters Message* transmission periodicity index
25 (BSPM_PERIOD_INDEX_S = BSPM_PERIOD_INDEX_T) if SENDING_BSPM_T equals '1';
26 otherwise, BSPM_PERIOD_INDEX_S = NULL.
- 27 • BSPM_PERIOD_INDEX_S is not equal to NULL, the mobile station shall set
28 BSPM_WAIT_TIME to $(B + 1) \times 160\text{ms}$ where
- 29
$$B = 2^i \times 16, 0 \leq i \leq 15$$
- 30 and $i = \text{BSPM_PERIOD_INDEX}_S$.
- 31 • Power control reporting threshold (PWR_REP_THRESH_S = PWR_REP_THRESH_T)
- 32 • Power control reporting frame count (PWR_REP_FRAMES_S = PWR_REP_FRAMES_T)
- 33 • Threshold report mode indicator
34 (PWR_THRESH_ENABLE_S = PWR_THRESH_ENABLE_T)
- 35 • Periodic report mode indicator (PWR_PERIOD_ENABLE_S = PWR_PERIOD_ENABLE_T).
- 36 • Power report delay (PWR_REP_DELAY_S = PWR_REP_DELAY_T)
- 37 • System reselection indicator (RESELECT_INCLUDED_S = RESELECT_INCLUDED_T).

- 1 • Pilot reporting indicator ($PILOT_REPORT_S = PILOT_REPORT_T$)
- 2 • Short Data Burst supported indicator ($SDB_SUPPORTED_S = SDB_SUPPORTED_T$)
- 3 • Broadcast GPS Assist Indicator ($BROADCAST_GPS_ASST_S =$
- 4 $BROADCAST_GPS_ASST_T$)
- 5 • Nominal reverse traffic channel output power offset relative to Reverse Pilot Channel
- 6 power ($RLGAIN_TRAFFIC_PILOT_S = RLGAIN_TRAFFIC_PILOT_T$)
- 7 • If NUM_FCCCH_T is not equal to '0':
- 8 - Number of the Forward Common Control Channels ($NUM_FCCCH_S =$
- 9 NUM_FCCCH_T)
- 10 - Data rate for the Forward Common Control Channels ($FCCCH_RATE_S =$
- 11 $FCCCH_RATE_T$)
- 12 - Code rate for the Forward Common Control Channels ($FCCCH_CODE_RATE_S =$
- 13 $FCCCH_CODE_RATE_T$)
- 14 - For $i = 0$ to $NUM_FCCCH_T - 1$, store the channel code index for each Forward
- 15 Common Control Channel ($FCCCH_CODE_CHAN_S[i] = FCCCH_CODE_CHAN_T$)
- 16 • Broadcast index ($BCAST_INDEX_S = BCAST_INDEX_T$)
- 17 • The number of Broadcast Control Channels ($NUM_BCCH_BCAST_S =$
- 18 $NUM_BCCH_BCAST_T$)
- 19 • If $NUM_BCCH_BCAST_T$ is greater than '000', i occurrences of the following fields,
- 20 where i ranges from 1 to $NUM_BCCH_BCAST_T$:
- 21 - Set the Broadcast Control Channel Number (BCN) to $i+1$
- 22 - BCCH Walsh code index ($BCCH_CODE_CHAN[BCN]_S = BCCH_CODE_CHAN[i]_T$)
- 23 - BCCH data rate ($BRAT[BCN]_S = BRAT[i]_T$)
- 24 - BCCH code rate ($BCCH_CODE_RATE[BCN]_S = BCCH_CODE_RATE[i]_T$)
- 25 • Sync ID supported indicator ($USE_SYNC_ID_S = USE_SYNC_ID_T$)
- 26 • Pilot information request supported indicator ($PILOT_INFO_REQ_SUPPORTED_S =$
- 27 $PILOT_INFO_REQ_SUPPORTED_T$).
- 28 • Band class information request indicator ($BAND_CLASS_INFO_REQ_S =$
- 29 $BAND_CLASS_INFO_REQ_T$)
- 30 • Alternate CDMA band class ($ALT_BAND_CLASS_S = ALT_BAND_CLASS_T$), if
- 31 $BAND_CLASS_INFO_REQ_T$ is equal to '1'.
- 32 • Access entry handoff in order and message processing operation indicator
- 33 ($ACC_ENT_HO_ORDER_S = ACC_ENT_HO_ORDER_T$).
- 34 • If $REV_PWR_CNTL_DELAY_INCL$ is equal to '1', reverse power control delay
- 35 ($REV_PWR_CNTL_DELAY_S = REV_PWR_CNTL_DELAY_T$)

- 1 • Permission indicator for the mobile station to request QoS settings in the *Origination*
2 *Message, Origination Continuation Message, or Enhanced Origination Message*
3 (MOB_QOS_s = MOB_QOS_r)
- 4 • If RESELECT_INCLUDED_s is equal to '1', the mobile station shall store:
- 5 - Pilot power threshold (EC_THRESH_s = EC_THRESH_r)
- 6 - Pilot E_c/I₀ threshold (EC_IO_THRESH_s = EC_IO_THRESH_r)
- 7 • Access handoff permitted indicator (ACCESS_HO_s = ACCESS_HO_r)
- 8 • Access probe handoff permitted indicator (ACCESS_PROBE_HO_s =
9 ACCESS_PROBE_HO_r)
- 10 • If ACCESS_PROBE_HO_s is equal to '1', access handoff list update permitted
11 indicator (ACC_HO_LIST_UPD_s = ACC_HO_LIST_UPD_r)
- 12 • Maximum number of times that the mobile station is permitted to perform an
13 access probe handoff (MAX_NUM_PROBE_HO_s = MAX_NUM_PROBE_HO_r)
- 14 • Access handoff permitted for message response indicator (ACCESS_HO_MSG_RSP_s
15 = ACCESS_HO_MSG_RSP_r)
- 16 • Access probe handoff permitted for other messages indicator
17 (ACC_PROBE_HO_OTHER_MSG_s = ACC_PROBE_HO_OTHER_MSG_r)
- 18 • If USER_ZONE_ID_s is equal to '0', then the mobile station shall perform the
19 following:
- 20 - Set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
- 21 - Set the UZID field of the UZ_REC to '0000000000000000' for all entries.
- 22 - Set the UZ_REV field of the UZ_REC to '0000' for all entries.
- 23 - Set the TEMP_SUB field of the UZ_REC to '0' for all entries.
- 24 • If USER_ZONE_ID_s is equal to '1' and the mobile station does not support Tiered
25 Services, then the mobile station shall set USER_ZONE_ID_MSG_SEQ_s to
26 CONFIG_MSG_SEQ_s.
- 27 • If PRI_NGHBR_LST_s is equal to '0', then the mobile station shall set
28 PRI_NGHBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
- 29 • If PRI_NGHBR_LST_s is equal to '1' and the mobile station does not support Tiered
30 Services, then the mobile station shall set PRI_NGHBR_LST_MSG_SEQ_s to
31 CONFIG_MSG_SEQ_s.
- 32 • If EXT_GLOBAL_REDIRECT_s is equal to '0', then the mobile station shall set
33 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
- 34 • The mobile station shall perform the following:
- 35 - If SENDING_RAND_s is equal to '1', the mobile station shall set AUTH_s to '01';
36 otherwise, the mobile station shall set AUTH_s to '00'.
- 37 • The mobile station shall store the following:

- 1 - Base station latitude ($BASE_LAT_S = BASE_LAT_R$)
- 2 - Base station longitude ($BASE_LONG_S = BASE_LONG_R$)
- 3 • If $CAND_BAND_INFO_REQ_R$ is included, the mobile station shall set
- 4 $CAND_BAND_INFO_REQ_S$ to $CAND_BAND_INFO_REQ_R$; otherwise, the mobile
- 5 station shall set $CAND_BAND_INFO_REQ_S$ to '0'.
- 6 • If $CAND_BAND_INFO_REQ_R$ is set to '1', the mobile station shall store the number of
- 7 candidate band classes minus one ($NUM_CAND_BAND_CLASS_S =$
- 8 $NUM_CAND_BAND_CLASS_R$).
- 9 • If $CAND_BAND_INFO_REQ_R$ is set to '1', the mobile station shall perform the
- 10 following for each occurrence of the $CAND_BAND_CLASS$ record:
- 11 - Set the $CAND_BAND_CLASS$ field of $CAND_BAND_CLASS_REC[i]$ to the i^{th}
- 12 occurrence of $CAND_BAND_CLASS_R$.
- 13 - Set the $SUBCLASS_REC_LEN$ field of $CAND_BAND_CLASS_REC[i]$ to the
- 14 corresponding value of $SUBCLASS_REC_LEN_R$.
- 15 - If the i^{th} occurrence of $SUBCLASS_REC_LEN_R$ field is non-zero, the mobile
- 16 station shall perform the following for each band subclass indicator received:
- 17 + Set the $BAND_SUBCLASS_IND_REC[j]$ field of $CAND_BAND_CLASS_REC[i]$
- 18 to the j^{th} occurrence of $BAND_SUBCLASS_IND_R$ in the
- 19 $CDMA_BAND_CLASS_REC[i]$.
- 20 If $TX_PWR_LIMIT_INCL_R$ is set to '1' and the mobile station is operating in the 1915MHz –
- 21 1920MHz block of the PCS band, the mobile station shall store the transmit power limit
- 22 $TX_PWR_LIMIT_S = (TX_PWR_LIMIT_R - 30dB)$; otherwise, the mobile station shall set
- 23 $TX_PWR_LIMIT_S$ to the limit defined in [11].
- 24 If $CCH_INFO_INCL_R$ is equal to '1' and the mobile station supports the Quick Paging
- 25 Channel operation:
- 26 • The mobile station shall set $QPCH_SUPPORTED_S$ to $QPCH_SUPPORTED_R$.
- 27 • If $QPCH_SUPPORTED_R = '1'$:
- 28 - The mobile station shall set $QPCH_RATE_S$ to $QPCH_RATE_R$.
- 29 - If the mobile station is monitoring the Primary Broadcast Control Channel in
- 30 Spreading Rate 1 and the number of Quick Paging Channels specified in the
- 31 received message (NUM_QPCH_R) is different from NUM_QPCH_S , the mobile
- 32 station shall use the hash algorithm specified in 2.6.7.1 to select a new Quick
- 33 Paging Channel number in the range 1 to NUM_QPCH_R . The mobile station
- 34 shall store the new Quick Paging Channel number as $QPAGECH_S$ and as
- 35 $ASSIGNED_QPAGECH_S$. The mobile station shall then set NUM_QPCH_S to
- 36 NUM_QPCH_R .
- 37 - If the mobile station is monitoring the Primary Broadcast Control Channel in
- 38 Spreading Rate 3 and the number of Quick Paging Channels specified in the

1 received message (NUM_QPCH_r) is different from NUM_QPCH_s, the mobile
 2 station shall perform the following:

- 3 + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select
 4 a new Quick Paging Channel number in the range 1 to NUM_QPCH_r.
- 5 + The mobile station shall store the new Quick Paging Channel number as
 6 QPAGECH_s and as ASSIGNED_QPAGECH_s.
- 7 + For $i = 0$ to NUM_QPCH_s - 1, store the channel code index for each Quick
 8 Paging Channel (QPCH_CODE_CHAN_s[i] = QPCH_CODE_CHAN_r).

- 9 • The mobile station shall set QPCH_POWER_LEVEL_PAGE_s to
 10 QPCH_POWER_LEVEL_PAGE_r.
- 11 • The mobile station shall set QPCH_CCI_SUPPORTED_s to QPCH_CCI_SUPPORTED_r.
- 12 • If QPCH_CCI_SUPPORTED_r = '1', the mobile station shall set
 13 QPCH_POWER_LEVEL_CONFIG_s to QPCH_POWER_LEVEL_CONFIG_r.
- 14 • The mobile station shall set QPCH_BI_SUPPORTED_s to QPCH_BI_SUPPORTED_r.
- 15 • If QPCH_BI_SUPPORTED_r = '1', the mobile station shall set
 16 QPCH_POWER_LEVEL_BCAST_s to QPCH_POWER_LEVEL_BCAST_r.

17 The mobile station shall store the following:

- 18 • CDMA off time report supported indicator
 19 (CDMA_OFF_TIME_REP_SUP_IND_s = CDMA_OFF_TIME_REP_SUP_IND_r)
- 20 • If CDMA_OFF_TIME_REP_SUP_IND_r is equal to '1', the mobile station shall store:
 21 - CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLD_s =
 22 CDMA_OFF_TIME_REP_THRESHOLD_r in units specified by
 23 CDMA_OFF_TIME_REP_UNIT_r)
- 24 • Control Hold Mode supported indicator (CHM_SUPPORTED_s = CHM_SUPPORTED_r)
 25 if included; otherwise, set CHM_SUPPORTED_s to '1'.
- 26 • Release to Idle State allowed indicator (RELEASE_TO_IDLE_IND_s =
 27 RELEASE_TO_IDLE_IND_r).
- 28 • *Reconnect Message* supported indicator
 29 (RECONNECT_MSG_IND_s = RECONNECT_MSG_IND_r).
- 30 • Short Data Burst allowed in *Reconnect Message* allowed indicator
 31 (SDB_IN_RCNM_IND_s = SDB_IN_RCNM_IND_r), if included; otherwise, set
 32 SDB_IN_RCNM_IND_s to '0'.
- 33 • Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTED_s =
 34 FOR_PDCH_SUPPORTED_r).
- 35 • PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED_s =
 36 PDCH_CHM_SUPPORTED_r) if included; otherwise, set PDCH_CHM_SUPPORTED_s to
 37 '0'.

38 The mobile station shall set FOR_PDCH_COMMON_PARMS_s = '0'.

- 1 If both FOR_PDCH_SUPPORTED_r and PDCH_PARAMS_INCL_r are included and equal to '1',
 2 the mobile station shall perform the following:
- 3 • If FOR_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile station shall
 4 set:
 - 5 - (RLGAIN_ACKCH_PILOT_s = RLGAIN_ACKCH_PILOT_r).
 - 6 - (RLGAIN_CQICH_PILOT_s = RLGAIN_CQICH_PILOT_r).
 - 7 • The mobile station shall set
 8 NUM_SOFT_SWITCHING_FRAMES_s = NUM_SOFT_SWITCHING_FRAMES_r + 1, and
 9 NUM_SOFTER_SWITCHING_FRAMES_s = NUM_SOFTER_SWITCHING_FRAMES_r + 1.
 - 10 • The mobile station shall set
 11 NUM_SOFT_SWITCHING_FRAMES_CHM_s = NUM_SOFT_SWITCHING_FRAMES_r + 1,
 12 and NUM_SOFTER_SWITCHING_FRAMES_CHM_s =
 13 NUM_SOFTER_SWITCHING_FRAMES_r + 1.
 - 14 • The mobile station shall set NUM_SOFT_SWITCHING_SLOTS_s according to Table
 15 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS_r.
 - 16 • The mobile station shall set NUM_SOFTER_SWITCHING_SLOTS_s according to Table
 17 3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTS_r.
 - 18 • The mobile station shall set PDCH_SOFT_SWITCHING_DELAY_s to
 19 PDCH_SOFT_SWITCHING_DELAY_r + 1, and PDCH_SOFTER_SWITCHING_DELAY_s
 20 to PDCH_SOFTER_SWITCHING_DELAY_r + 1.
 - 21 • The mobile station shall set FOR_PDCH_COMMON_PARAMS_s = '1'.
 - 22 • The mobile station shall set WALSH_TABLE_ID_s = WALSH_TABLE_ID_r.
 - 23 • The mobile station shall set NUM_PDCCH_s = NUM_PDCCH_r.
 - 24 • The mobile station shall store FOR_PDCCH_WALSH_s[i] to the ith occurrence of
 25 FOR_PDCCH_WALSH_r.
- 26 The mobile station shall store the following:
- 27 • If NEG_SLOT_CYCLE_INDEX_SUP_r is included and equal to '1', the mobile station
 28 shall set MIN_SLOT_CYCLE_INDEX to -4; otherwise, the mobile station shall set
 29 MIN_SLOT_CYCLE_INDEX to 0.
 - 30 • If RER_MODE_SUPPORTED_r is not included, the mobile station shall set
 31 RER_MODE_SUPPORTED_s to '0'; otherwise, the mobile station shall set
 32 RER_MODE_SUPPORTED_s to RER_MODE_SUPPORTED_r.
 - 33 • If AUTO_FCSO_ALLOWED_r is not included, the mobile station shall set
 34 AUTO_FCSO_ALLOWED_s to '0'; otherwise, the mobile station shall set
 35 AUTO_FCSO_ALLOWED_s to AUTO_FCSO_ALLOWED_r.
- 36 If FOR_PDCH_SUPPORTED_r is equal to '1', then the mobile station shall set Reverse Packet
 37 Data Channel supported indicator (REV_PDCH_SUPPORTED_s =
 38 REV_PDCH_SUPPORTED_r).

1 If $REV_PDCH_PARMS_INCL_T$ is not included, or if it is included and equal to '0', the mobile
 2 station shall set $REV_PDCH_PARMS_INCL_S$ to '0'; otherwise, the mobile station shall set
 3 $REV_PDCH_PARMS_INCL_S$ to '1' and perform the following:

- 4 • If $REV_PDCH_RLGAIN_INCL_T$ is equal to '1', the mobile station shall set:
 - 5 - $(RLGAIN_SPICH_PILOT_S = RLGAIN_SPICH_PILOT_T)$.
 - 6 - $(RLGAIN_REQCH_PILOT_S = RLGAIN_REQCH_PILOT_T)$.
 - 7 - $(RLGAIN_PDCCH_PILOT_S = RLGAIN_PDCCH_PILOT_T)$.
- 8 • If $REV_PDCH_PARMS_1_INCL_T$ is equal to '1', the mobile station shall set:
 - 9 - $(REV_PDCH_TABLE_SEL_S = REV_PDCH_TABLE_SEL_T)$.
 - 10 - $(REV_PDCH_MAX_AUTO_TPR_S$ to $REV_PDCH_MAX_AUTO_TPR_T)$.
 - 11 - $(REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_S =$
 12 $REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_T+1)$.
- 13 • If $REV_PDCH_OPER_PARMS_INCL_T$ is equal to '1', the mobile station shall set:
 - 14 - $(REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_S$
 15 $= REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_T+1)$.
 - 16 - $(REV_PDCH_DEFAULT_PERSISTENCE_S =$
 17 $REV_PDCH_DEFAULT_PERSISTENCE_T)$.
 - 18 - $(REV_PDCH_RESET_PERSISTENCE_S = REV_PDCH_RESET_PERSISTENCE_T)$.
 - 19 - $(REV_PDCH_GRANT_PRECEDENCE_S = REV_PDCH_GRANT_PRECEDENCE_T)$.
 - 20 - $(REV_PDCH_MSIB_SUPPORTED_S = REV_PDCH_MSIB_SUPPORTED_T)$.
 - 21 - $(REV_PDCH_SOFT_SWITCHING_RESET_IND_S$
 22 $= REV_PDCH_SOFT_SWITCHING_RESET_IND_T)$.

23 The mobile station shall store the following:

- 24 • If $BYPASS_REG_IND_T$ is included, the mobile station shall set $BYPASS_REG_IND_S$ to
 25 $BYPASS_REG_IND_T$; otherwise, the mobile station shall set $BYPASS_REG_IND_S$ to
 26 '00'.
- 27 • If $RC_BITMAP_CAPABILITY_EXT_ALLOWED_T$ is included and is equal to '1', the
 28 mobile station shall set $RC_BITMAP_CAPABILITY_EXT_ALLOWED_S$ to '1'; otherwise,
 29 the mobile station shall set $RC_BITMAP_CAPABILITY_EXT_ALLOWED_S$ to '0'.
- 30 • *Call Recovery Request Message* supported indicator $CRRM_MSG_IND$ is included,
 31 the mobile station shall set $CRRM_MSG_IND_S = CRRM_MSG_IND_T$. Otherwise, the
 32 mobile station shall set $CRRM_MSG_IND_S$ to '0'.
- 33 • Base station horizontal location uncertainty ($LOC_UNC_H_S = LOC_UNC_H_T$)
- 34 • Base station height ($HEIGHT_S = HEIGHT_T$)
- 35 • Base station vertical location uncertainty ($LOC_UNC_V_S = LOC_UNC_V_T$)

- 1 • *Additional Geo Location Type Record* allowed in *General Extension Message* indicator
 2 (ADD_LOC_GEM_ALLOWED_S = ADD_LOC_GEM_ALLOWED_T) if included; otherwise,
 3 ADD_LOC_GEM_ALLOWED_S = '0'.

4 The mobile station shall ignore any fields at the end of the *MC-RR Parameters Message* that
 5 are not defined according to the protocol revision level (MOB_P_REV_P of the current band
 6 class) being used by the mobile station.

7 2.6.2.2.14.2 Slot Cycle Index

8 The mobile station shall set SLOT_CYCLE_INDEX_S to:

$$9 \quad \max \left(\begin{array}{l} \text{MIN_SLOT_CYCLE_INDEX}_S, \\ \min(\text{SLOT_CYCLE_INDEX_REG}, \text{MAX_SLOT_CYCLE_INDEX}_S) \end{array} \right).$$

10 Where, SLOT_CYCLE_INDEX_REG is computed based on the slot cycle index value
 11 included in the last registration attempt (see 2.6.5.5.3.1 and 2.6.5.5.3.2).

12 If the mobile station is operating in the slotted mode, it shall set its slot cycle length as
 13 described in 2.6.2.1.1.3.

14 2.6.2.2.14.3 Forward Common Control Channel Assignment Change

15 If the number of Forward Common Control Channels specified in the *MC-RR Parameters*
 16 *Message* (NUM_FCCCH_T) is not equal to '0' and is different from NUM_FCCCH_S, the mobile
 17 station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common
 18 Control Channel number in the range 1 to NUM_FCCCH_T and shall store this value as
 19 FCCCH_ID_S. If NUM_FCCCH_T is not equal to '0', the mobile station shall store the FCCCH
 20 rate (FCCCH_RATE_S = FCCCH_RATE_T), the FCCCH code rate (FCCCH_CODE_RATE_S =
 21 FCCCH_CODE_RATE_T), and store FCCCH_CODE_CHAN_T of the corresponding Forward
 22 Common Control Channel as FCCCH_CODE_CHAN_S. The mobile station shall then set
 23 NUM_FCCCH_S to NUM_FCCCH_T.

24 The mobile station shall set ACC_MSG_SEQ_S to NULL.

25 2.6.2.2.14.4 RESCAN Parameter

26 If the RESCAN_T field in the *MC-RR Parameters Message* equals '1', the mobile station shall
 27 enter the *System Determination Substate* of the *Mobile Station Initialization State* with a
 28 rescan indication (see 2.6.1.1).

29 2.6.2.2.15 Enhanced Access Parameters Message

30 Whenever an *Enhanced Access Parameters Message* is received on the f-csch, the sequence
 31 number, ACC_MSG_SEQ_T, shall be compared to ACC_MSG_SEQ_S. If the comparison
 32 results in a match, the mobile station may ignore the message. If the comparison results
 33 in a mismatch, then the mobile station shall process the remaining fields in the message as
 34 follows:

35 If MAX_REQ_SEQ or MAX_RSP_SEQ are not within the valid ranges specified in
 36 3.7.2.3.2.2, then the mobile station shall ignore the *Enhanced Access Parameters Message*
 37 that contains them.

1 The mobile station shall store the following parameters:

- 2 • *Enhanced Access Parameters Message* sequence number
3 (ACC_MSG_SEQ_S = ACC_MSG_SEQ_T)
- 4 • Persistence related parameters:
 - 5 - If PSIST_PARMS_INCL is equal to '1', store the following:
 - 6 + Persistence parameter number according to the following rule: If the mobile
7 station's access overload class is in the range 0-9 inclusive, set PSIST_S equal
8 to PSIST(0-9)_EACH_T; otherwise set PSIST_S equal to PSIST(n)_EACH_T, where
9 n is equal to the mobile station access overload class.
 - 10 + Persistence modifier for Enhanced Access Channel attempts for registrations
11 which are not responses to the *Registration Request Order*
12 (REG_PSIST_S = REG_PSIST_EACH_T).
 - 13 + Persistence modifier for Enhanced Access Channel attempts for message
14 transmissions (MSG_PSIST_S = MSG_PSIST_EACH_T).
 - 15 + Persistence modifier for emergency calls by the mobile stations in access
16 overload classes 0 to 9 (PSIST_EMG_S = PSIST_EMG_T).
 - 17 - If PSIST_PARMS_INCL_T is equal to '0', store the following:
 - 18 + Set PSIST_S to 0.
 - 19 + Persistence modifier for emergency calls by a mobile station in access
20 overload classes 0 to 9 (PSIST_EMG_S = '000').
 - 21 + Persistence modifier for Enhanced Access Channel attempts for message
22 transmissions (MSG_PSIST_S = '000').
 - 23 + Persistence modifier for Enhanced Access Channel attempts for registrations
24 which are not responses to the *Registration Request Order*
25 (REG_PSIST_S = '000').
- 26 • The mobile station shall store the Access Control based on Call Type (ACCT)
27 information as follows:
 - 28 - Set ACCT_SO_LIST to NULL.
 - 29 - Set ACCT_SO_GRP_LIST to NULL.
 - 30 - If ACCT_INCL_T is equal to '1' and ACCOLC_P is in the range 0 to 9, then the
31 mobile station shall perform the following:
 - 32 + Set ACCT_INCL_EMG_S to ACCT_INCL_EMG_T.
 - 33 + If ACCT_SO_INCL_T is equal to '1', then for each ACCT_SO_T included in this
34 message:
 - 35 ○ If ACCT_AOC_BITMAP_INCL_T is equal to '0', or if
36 ACCT_AOC_BITMAP_INCL_T is equal to '1' and the bit in the associated
37 ACCT_AOC_BITMAP_{1,T} corresponding to the mobile station's ACCOLC_P

- 1 (see Table 3.7.2.3.2.2-1) is equal to '1', then add ACCT_SO_r to
 2 ACCT_SO_LIST.
- 3 + If ACCT_SO_GRP_INCL_r is equal to '1', then for each ACCT_SO_GRP_r
 4 included in this message:
- 5 ○ If ACCT_AOC_BITMAP_INCL_r is equal to '0', or if
 6 ACCT_AOC_BITMAP_INCL_r is equal to '1' and the bit in the associated
 7 ACCT_AOC_BITMAP2_r corresponding to the mobile station's ACCOLC_p
 8 (see Table 3.7.2.3.2.2-1) is equal to '1', then add ACCT_SO_GRP_r to
 9 ACCT_SO_GRP_LIST.
- 10 • Link Access Control related parameters:
- 11 - Acknowledgment timeout (EACH_ACC_TMO_s = ACC_TMO_r)
- 12 - Maximum number of probe sequences for an Enhanced Access Channel request
 13 (MAX_REQ_SEQ_s = MAX_REQ_SEQ_r)
- 14 - Maximum number of probe sequences for an Enhanced Access Channel
 15 response (MAX_RSP_SEQ_s = MAX_RSP_SEQ_r)
- 16 • Mode Selection Table:
- 17 NUM_MODE_SELECTION_ENTRIES_s = (NUM_MODE_SELECTION_ENTRIES_r + 1)
- 18 For i = 1 to NUM_MODE_SELECTION_ENTRIES_s:
- 19 - MODE_SELECTION_s[i].ACCESS_MODE = ACCESS_MODE field of the ith
 20 occurrence of the record
- 21 - MODE_SELECTION_s[i].MIN_DURATION = ACCESS_MODE_MIN_DURATION field
 22 of the ith occurrence of the record
- 23 - MODE_SELECTION_s[i].MAX_DURATION = ACCESS_MODE_MAX_DURATION
 24 field of the ith occurrence of the record
- 25 • Reverse gain adjustment of the Enhanced Access Channel or Reverse Common
 26 Control Channel relative to the Reverse Pilot Channel (RLGAIN_COMMON_PILOT_s =
 27 RLGAIN_COMMON_PILOT_r)
- 28 • The threshold level at which the interference correction begins to be applied
 29 (IC_THRESH_s = - IC_THRESH_r)
- 30 • The maximum interference correction that can be applied (IC_MAX_s = IC_MAX_r)
- 31 • Mode-specific parameters for the Enhanced Access Channel:
- 32 For i = 1 to NUM_MODE_PARM_REC + 1:
- 33 For j = 0 to 7:
- 34 If the (j+1)th subfield of APPLICABLE_MODES is equal to '1', store the
 35 following parameters:
- 36 - Nominal transmit power offset on the Enhanced Access Channel
 37 (MODE_PARAMS_s[j].EACH_NOM_PWR = EACH_NOM_PWR field of the ith

- 1 occurrence of the record)
- 2 – Initial power offset for access on the Enhanced Access Channel
3 (MODE_PARMS_s[j].EACH_INIT_PWR = EACH_INIT_PWR field of the *i*th
4 occurrence of the record)
- 5 – Power increment on the Enhanced Access Channel
6 (MODE_PARMS_s[j].EACH_PWR_STEP = EACH_PWR_STEP field of the *i*th
7 occurrence of the record)
- 8 – Number of access probes on the Enhanced Access Channel
9 (MODE_PARMS_s[j].EACH_NUM_STEP = EACH_NUM_STEP field of the *i*th
10 occurrence of the record)
- 11 – Preamble enabled indicator on the Enhanced Access Channel
12 (MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED = EACH_PREAMBLE_E
13 NABLED field of the *i*th occurrence of the record)
- 14 – Number of preamble fractions sent on the Enhanced Access Channel if
15 MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to '1'
16 (MODE_PARMS_s[j].EACH_PREAMBLE_NUM_FRAC =
17 EACH_PREAMBLE_NUM_FRAC field of the *i*th occurrence of the record)
- 18 – Fractional preamble duration on the Enhanced Access Channel if
19 MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to '1'
20 (MODE_PARMS_s[j].EACH_PREAMBLE_FRAC_DURATION = EACH_PREA
21 MBLE_FRAC_DURATION field of the *i*th occurrence of the record)
- 22 – Preamble gated-off duration on the Enhanced Access Channel if
23 MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to '1'
24 (MODE_PARMS_s[j].EACH_PREAMBLE_OFF_DURATION = EACH_PREAM
25 BLE_OFF_DURATION field of the *i*th occurrence of the record)
- 26 – Additional preamble duration on the Enhanced Access Channel if
27 MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to '1'
28 (MODE_PARMS_s[j].EACH_PREAMBLE_ADD_DURATION =
29 EACH_PREAMBLE_ADD_DURATION field of the *i*th occurrence of the
30 record)
- 31 – Enhanced Access Channel probe backoff range
32 (MODE_PARMS_s[j].EACH_PROBE_BKOFF = EACH_PROBE_BKOFF field
33 of the *i*th occurrence of the record)
- 34 – Enhanced Access Channel probe sequence backoff range
35 (MODE_PARMS_s[j].EACH_BKOFF = EACH_BKOFF field of the *i*th
36 occurrence of the record)
- 37 – Enhanced Access Channel slot (MODE_PARMS_s[j].EACH_SLOT = 1 +
38 EACH_SLOT field of the *i*th occurrence of the record)
- 39 – Enhanced Access Channel first slot offset
40 (MODE_PARMS_s[j].EACH_SLOT_OFFSET1 = EACH_SLOT_OFFSET1 field
41 of the *i*th occurrence of the record)

- 1 – Enhanced Access Channel second slot offset
2 (MODE_PARMS_s[j].EACH_SLOT_OFFSET2 = EACH_SLOT_OFFSET2 field
3 of the ith occurrence of the record)
- 4 • Additional parameters for the Basic Access Mode:
5 If BA_PARMS_LEN_r is equal to '000', set the Basic Access Mode supported indicator,
6 BA_SUPPORTED_s, to '0'; otherwise store the following parameters:
 - 7 – Basic Access Mode supported indicator (BA_SUPPORTED_s = '1')
 - 8 – Number of Enhanced Access Channels (NUM_EACH_BA_s = (NUM_EACH_BA_r +
9 1))
 - 10 – Rate words supported on the Enhanced Access Channels
11 (EACH_BA_RATES_SUPPORTED_s = EACH_BA_RATES_SUPPORTED_r)
 - 12 • Additional parameters for the Reservation Access Mode:
13 If RA_PARMS_LEN_r is equal to '0000', set the Reservation Access Mode supported
14 indicator, RA_SUPPORTED_s, to '0'; otherwise store the following parameters, if
15 included in the message:
 - 16 – Reservation Access Mode supported indicator (RA_SUPPORTED_s = '1')
 - 17 – Number of Enhanced Access Channels (NUM_EACH_RA_s = (NUM_EACH_RA_r +
18 1))
 - 19 – Number of Common Assignment Channels (NUM_CACH_s = (NUM_CACH_r + 1))
 - 20 – Code rate of Common Assignment Channels (CACH_CODE_RATE_s =
21 CACH_CODE_RATE_r)
 - 22 – For i = 0 to NUM_CACH_s - 1, store the channel code index for each Common
23 Assignment Channel (CACH_CODE_CHAN_s[i] = CACH_CODE_CHAN_r).
 - 24 – Number of Reverse Common Control Channels (NUM_RCCCH_s = (NUM_RCCCH_r
25 + 1))
 - 26 – Rate words supported on the Reverse Common Control Channels
27 (RCCCH_RATES_SUPPORTED_s = RCCCH_RATES_SUPPORTED_r)
 - 28 – Preamble enabled indicator on the Reverse Common Control Channels
29 (RCCCH_PREAMBLE_ENABLED_s = RCCCH_PREAMBLE_ENABLED_r)
 - 30 – Number of preamble fractions sent on the Reverse Common Control Channel if
31 RCCCH_PREAMBLE_ENABLED_r is equal to '1'
32 (RCCCH_PREAMBLE_NUM_FRAC_s = RCCCH_PREAMBLE_NUM_FRAC_r)
 - 33 – Fractional preamble duration on the Reverse Common Control Channel if
34 RCCCH_PREAMBLE_ENABLED_r is equal to '1'
35 (RCCCH_PREAMBLE_FRAC_DURATION_s =
36 RCCCH_PREAMBLE_FRAC_DURATION_r)
 - 37 – Preamble gated-off duration on the Reverse Common Control Channel if
38 RCCCH_PREAMBLE_ENABLED_r is equal to '1'
39 (RCCCH_PREAMBLE_OFF_DURATION_s =

- 1 RCCCH_PREAMBLE_OFF_DURATION_r)
- 2 - Additional preamble duration on the Reverse Common Control Channel if
- 3 RCCCH_PREAMBLE_ENABLED_r is equal to '1'
- 4 (RCCCH_PREAMBLE_ADD_DURATION_s =
- 5 RCCCH_PREAMBLE_ADD_DURATION_r)
- 6 - Slot duration on the Reverse Common Control Channel (RCCCH_SLOT_s = 1 +
- 7 RCCCH_SLOT_r)
- 8 - First slot offset of the Reverse Common Control Channel
- 9 (RCCCH_SLOT_OFFSET1_s = RCCCH_SLOT_OFFSET1_r)
- 10 - Second slot offset of the Reverse Common Control Channel
- 11 (RCCCH_SLOT_OFFSET2_s = RCCCH_SLOT_OFFSET2_r)
- 12 - Nominal transmit power offset on the Reverse Common Control Channel
- 13 (RCCCH_NOM_PWR_s = RCCCH_NOM_PWR_r)
- 14 - Initial power offset for access on the Reverse Common Control Channel
- 15 (RCCCH_INIT_PWR_s = RCCCH_INIT_PWR_r)
- 16 - Power Control delay for the Reservation Access Mode
- 17 (RA_PC_DELAY_s = RA_PC_DELAY_r)
- 18 - Maximum delay to receive the *Early Acknowledgment Channel Assignment*
- 19 *Message* on the Common Assignment Channel
- 20 (EACAM_CACH_DELAY_s = EACAM_CACH_DELAY_r)
- 21 - Indicator for handoff supported on the Reverse Common Control Channels
- 22 (RCCCH_HO_SUPPORTED_s = RCCCH_HO_SUPPORTED_r)
- 23 - Threshold for handoff on the Reverse Common Control Channels if
- 24 RCCCH_HO_SUPPORTED_r is equal to '1'
- 25 (RCCCH_HO_THRESH_s = RCCCH_HO_THRESH_r)
- 26 - Maximum delay to receive the *Early Acknowledgment Channel Assignment*
- 27 *Message* and the *Power Control Channel Assignment Message* if
- 28 RCCCH_HO_SUPPORTED_r is equal to '1'
- 29 (EACAM_PCCAM_DELAY_s = EACAM_PCCAM_DELAY_r)
- 30 - Number of Common Power Control Channels (NUM_CPCCH_s = (NUM_CPCCH_r +
- 31 1))
- 32 - Power control rate for the Common Power Control Channels
- 33 (CPCCH_RATE_s = CPCCH_RATE_r)
- 34 - For i = 0 to NUM_CPCCH_s - 1, store the channel code index for each Common
- 35 Power Control Channel (CPCCH_CODE_CHAN_s[i] = CPCCH_CODE_CHAN_r).
- 36 - Number of Power Control Subchannels for the Reservation Access Mode
- 37 (NUM_PCSCH_RA_s = (NUM_PCSCH_RA_r + 1))
- 38 The mobile station shall set CURR_ACC_MSG_SEQ equal to ACC_MSG_SEQ_s.

2.6.2.2.16 ANSI-41 RAND Message

Whenever an *ANSI-41 RAND Message* is received, the mobile station shall process the fields in the message as follows.

The mobile station shall store the following parameters:

- Random challenge value ($RAND_S = RAND_T$)
- Current *Enhanced Access Parameters Message* Sequence Number ($CURR_ACC_MSG_SEQ = ACC_MSG_SEQ_T$).
- Pilot PN sequence offset increment ($PILOT_PN_S = PILOT_PN_T$)

The mobile station shall also compare the *Enhanced Access Parameters Message* sequence number, $ACC_MSG_SEQ_T$, with that stored in $ACC_MSG_SEQ_S$. If the comparison results in a mismatch, then the mobile station shall set $ACC_MSG_SEQ_S$ to NULL (see 2.6.2.2).

The mobile station shall ignore any fields at the end of the *ANSI-41 RAND Message* which are not defined according to the protocol revision level ($MOB_P_REV_P$ of the current band class) being used by the mobile station.

2.6.2.2.17 Universal Neighbor List Message

Whenever a valid *Universal Neighbor List Message* is received on the Primary Broadcast Control Channel, the configuration message sequence number, $CONFIG_MSG_SEQ_T$ shall be compared to that stored in $UNIV_NGHBR_LST_MSG_SEQ_S$. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as described below.

The mobile station shall store the following parameters:

- Configuration message sequence number ($CONFIG_MSG_SEQ_S = CONFIG_MSG_SEQ_T$, $UNIV_NGHBR_LST_MSG_SEQ_S = CONFIG_MSG_SEQ_T$).

If $RADIO_INTERFACE_TYPE_T$ is equal to '0000' but the $PILOT_INC$ field is not within the valid range specified in 3.7.2.3.2.33, then the mobile station shall ignore the entire record that contains it.

If $RADIO_INTERFACE_TYPE_T$ is equal to '0000' and the $PILOT_INC$ field is within the valid range specified in 3.7.2.3.2.33, the mobile station shall perform the following:

The mobile station shall store the Pilot PN sequence offset increment ($PILOT_INC_S = PILOT_INC_T$).

The mobile station shall set $NGHBR_SET_SIZE_S$ to NUM_NGHBR_T .

For each of the neighboring base stations contained in the *Universal Neighbor List Message*, if $FREQ_INCL_T$ is equal to '0', or if $FREQ_INCL_T$ is equal to '1' and $NGHBR_BAND_T$ is supported, the mobile station shall perform the following:

- If the i^{th} occurrence of $NGHBR_CONFIG_T$ is equal to '000', '001', '010', or '100', set the $NGHBR_CONFIG$ field of $NGHBR_REC[i]$ to the i^{th} occurrence of $NGHBR_CONFIG_T$; otherwise, set the $NGHBR_CONFIG$ field of $NGHBR_REC[i]$ to '011'.

- 1 • Set the NGHBR_PN field of NGHBR_REC[i] to the ith occurrence of NGHBR_PN_r.
- 2 • If NGHBR_CONFIG_r is equal to '011', set the BCCH_SUPPORT field of
3 NGHBR_REC[i] to BCCH_SUPPORT_r of the corresponding record.
- 4 • Set the ADD_PILOT_REC_INCL field of NGHBR_REC[i] to the ith occurrence of
5 ADD_PILOT_REC_INCL_r. If ADD_PILOT_REC_INCL_r equals '1', for each pilot
6 included in the message, the mobile station shall also perform the following:
- 7 - Set the NGHBR_PILOT_REC_TYPE field of NGHBR_PILOT_REC to
8 NGHBR_PILOT_REC_TYPE_r.
- 9 - If NGHBR_PILOT_REC_TYPE_r is equal to '000'. The mobile station shall:
- 10 + Set the TD_POWER_LEVEL field of NGHBR_PILOT_REC to
11 TD_POWER_LEVEL_r.
- 12 + Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 13 - If NGHBR_PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
- 14 + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.
- 15 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
16 AUX_PILOT_WALSH_r with the Walsh Code length specified by
17 WALSH_LENGTH_r.
- 18 - If NGHBR_PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 19 + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.
- 20 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
21 AUX_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.
- 22 + Set the AUX_TD_POWER_LEVEL field of NGHBR_PILOT_REC to
23 AUX_TD_POWER_LEVEL_r.
- 24 + Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 25 - If NGHBR_PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 26 + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
27 SR3_PRIMARY_PILOT_r.
- 28 + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
29 SR3_PILOT_POWER1_r.
- 30 + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
31 SR3_PILOT_POWER2_r.
- 32 - If NGHBR_PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 33 + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
34 SR3_PRIMARY_PILOT_r.
- 35 + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
36 SR3_PILOT_POWER1_r.

- 1 + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
2 SR3_PILOT_POWER2r.
- 3 + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOFr.
- 4 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
5 AUX_PILOT_WALSHr with the Walsh Code length specified by
6 WALSH_LENGTHr.
- 7 + If ADD_INFO_INCL1r is equal to '1', set the AUX_PILOT_QOF1 field of
8 NGHBR_PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field
9 of NGHBR_PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length
10 specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field
11 of NGHBR_PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE1
12 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code
13 length specified by WALSH_LENGTHr.
- 14 + If ADD_INFO_INCL2r is equal to '1', set the AUX_PILOT_QOF2 field of
15 NGHBR_PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field
16 of NGHBR_PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length
17 specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field
18 of NGHBR_PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2
19 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code
20 length specified by WALSH_LENGTHr.
- 21 • If NGHBR_SRCH_MODE_r = '00' or '10', set the SEARCH_PRIORITY field of each
22 NGHBR_REC to '10' (high) for all NGHBR_SET_SIZE_s entries.
- 23 • If NGHBR_SRCH_MODE_r = '01' or '11', set the SEARCH_PRIORITY field of
24 NGHBR_REC[i] to the ith occurrence of SEARCH_PRIORITY_r.
- 25 • If NGHBR_SRCH_MODE_r = '00' or '01', set the SRCH_WIN_NGHBR field of each
26 NGHBR_REC to SRCH_WIN_N_r for all NGHBR_SET_SIZE_s entries.
- 27 • If NGHBR_SRCH_MODE_r = '00' or '01', set the SRCH_OFFSET_NGHBR field of each
28 NGHBR_REC to '000'.
- 29 • If NGHBR_SRCH_MODE_r = '10' or '11':
- 30 - set the SRCH_WIN_NGHBR field of NGHBR_REC[i] to the ith occurrence of
31 SRCH_WIN_NGHBR_r
- 32 - if SRCH_OFFSET_INCL_r equals '1', set the SRCH_OFFSET_NGHBR field of
33 NGHBR_REC[i] to the ith occurrence of SRCH_OFFSET_NGHBR_r, and
- 34 - if SRCH_OFFSET_INCL_r equals '0', set the SRCH_OFFSET_NGHBR field of each
35 NGHBR_REC to '000'.
- 36 • If USE_TIMING_r is equal to '1', set the TIMING_INCL field of NGHBR_REC[i] to the
37 ith occurrence of TIMING_INCL_r; otherwise, set the TIMING_INCL field of
38 NGHBR_REC to '0' for all entries.

- 1 • Set the NGHBR_PDCH_SUPPORTED field of NGHBR_REC[i] to the i^{th} occurrence of
2 NGHBR_PDCH_SUPPORTED_T if included; otherwise, set the
3 NGHBR_PDCH_SUPPORTED field of NGHBR_REC to '0' for all entries.
- 4 • The mobile station shall set RESQ_ENABLED_S = RESQ_ENABLED_T. If
5 RESQ_ENABLED_S is equal to '1', then the mobile station shall store:
- 6 - Call rescue delay timer value (RESQ_DELAY_TIME_S = RESQ_DELAY_TIME_T)
- 7 - Call rescue allowed timer value (RESQ_ALLOWED_TIME_S =
8 RESQ_ALLOWED_TIME_T)
- 9 - Call rescue attempt timer value (RESQ_ATTEMPT_TIME_S =
10 RESQ_ATTEMPT_TIME_T)
- 11 - Code channel index for call rescue (RESQ_CODE_CHAN_S =
12 RESQ_CODE_CHAN_T)
- 13 - Quasi-Orthogonal Function mask identifier for call rescue (RESQ_QOF_S =
14 RESQ_QOF_T)
- 15 - Minimum time between consecutive rescues (RESQ_MIN_PERIOD_S =
16 RESQ_MIN_PERIOD_T + 1) if RESQ_MIN_PERIOD_INCL_T is equal to '1'; otherwise,
17 RESQ_MIN_PERIOD_S = '00000'.
- 18 - The required number of transmissions of a regular PDU before declaring L2
19 Acknowledgment Failure when Call Rescue is enabled
20 (RESQ_NUM_TOT_TRANS_20MS_S = RESQ_NUM_TOT_TRANS_20MS_T) if
21 included; otherwise, set RESQ_NUM_TOT_TRANS_20MS_S to N_{1m}.
- 22 - The required number of transmissions of a mini PDU before declaring L2
23 Acknowledgment Failure when Call Rescue is enabled
24 (RESQ_NUM_TOT_TRANS_5MS_S = RESQ_NUM_TOT_TRANS_5MS_T) if included;
25 otherwise, set RESQ_NUM_TOT_TRANS_5MS_S to N_{15m}.
- 26 - The Traffic Channel preamble length for Call Rescue Soft Handoff when
27 operating in Radio Configuration 1 or 2 (RESQ_NUM_PREAMBLE_RC1_RC2_S =
28 RESQ_NUM_PREAMBLE_RC1_RC2_T).
- 29 - The Traffic Channel preamble length for Call Rescue Soft Handoff when
30 operating in Radio Configuration greater than 2 (RESQ_NUM_PREAMBLE_S =
31 RESQ_NUM_PREAMBLE_T).
- 32 - The power level adjustment to be applied to the last closed-loop power level
33 when re-enabling the transmitter for call rescue soft handoff
34 (RESQ_POWER_DELTA_S = RESQ_POWER_DELTA_T).
- 35 - Set the NGHBR_RESQ_CONFIGURED field of NGHBR_REC[i] to the i^{th}
36 occurrence of NGHBR_RESQ_CONFIGURED_T.

37 For each of the neighboring base stations contained in the *Universal Neighbor List Message*,
38 if $\text{FREQ_FIELDS_INCL}_T$ equals '1', FREQ_INCL_T equals '1', and NGHBR_BAND_T is
39 supported, the mobile station shall also perform the following:

- 1 • Set the NGHBR_BAND field of NGHBR_REC[i] to the i^{th} occurrence of
2 NGHBR_BAND_T.
- 3 • Set the NGHBR_FREQ field of NGHBR_REC[i] to the i^{th} occurrence of
4 NGHBR_FREQ_T.

5 For each of the neighboring base stations contained in the *Universal Neighbor List Message*,
6 if USE_TIMING_T is equal to '1' and TIMING_INCL_T equals '1', the mobile station shall also
7 perform the following:

- 8 • Set the NGHBR_TX_OFFSET field of NGHBR_REC[i] to the i^{th} occurrence of
9 NGHBR_TX_OFFSET_T.
- 10 • If GLOBAL_TIMING_INCL_T is equal to '1', then the mobile station shall:
- 11 - Set the NGHBR_TX_DURATION field of NGHBR_REC to
12 GLOBAL_TX_DURATION_T for all entries.
- 13 - Set the NGHBR_TX_PERIOD field of NGHBR_REC to GLOBAL_TX_PERIOD_T for
14 all entries.
- 15 • If GLOBAL_TIMING_INCL_T is equal to '0', then the mobile station shall:
- 16 - Set the NGHBR_TX_DURATION field of NGHBR_REC[i] to the i^{th} occurrence of
17 NGHBR_TX_DURATION_T.
- 18 - Set the NGHBR_TX_PERIOD field of NGHBR_REC[i] to the i^{th} occurrence of
19 NGHBR_TX_PERIOD_T.

20 For each of the neighboring base stations contained in the *Universal Neighbor List Message*,
21 if FREQ_FIELDS_INCL_T equals '1' and FREQ_INCL_T equals '0', the mobile station shall also
22 perform the following:

- 23 • Set the NGHBR_BAND field of NGHBR_REC[i] to CDMABAND_S.
- 24 • If NGHBR_CONFIG_T equals '010', set the NGHBR_FREQ field of NGHBR_REC[i] to
25 the first CDMA Channel listed in the *CDMA Channel List Message or Extended*
26 *CDMA Channel List Message* transmitted by the current base station; otherwise, set
27 the NGHBR_FREQ field of NGHBR_REC[i] to CDMACH_S.

28 If NGHBR_SET_ENTRY_INFO_T is equal to '0', then for all NGHBR_SET_SIZE_S occurrences of
29 ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
30 NGHBR_REC[i] to '0'.

31 If NGHBR_SET_ENTRY_INFO_T is equal to '1', then for all NGHBR_SET_SIZE_S occurrences of
32 ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
33 NGHBR_REC[i] to the i^{th} occurrence of ACCESS_ENTRY_HO_T.

34 If NGHBR_SET_ACCESS_INFO_T is equal to '0', then for all NGHBR_SET_SIZE_S occurrences
35 of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
36 NGHBR_REC[i] to '0'.

37 If NGHBR_SET_ACCESS_INFO_T is equal to '1', then for all NGHBR_SET_SIZE_S occurrences
38 of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
39 NGHBR_REC[i] to the i^{th} occurrence of ACCESS_HO_ALLOWED_T.

1 The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it
 2 consists only of pilot offsets listed in the *Universal Neighbor List Message*. If the *Universal*
 3 *Neighbor List Message* contains more pilot offsets than the mobile station can store, the
 4 mobile station shall store the pilot offsets beginning at the start of the *Universal Neighbor*
 5 *List Message*, up to the limits of the mobile station's Neighbor Set storage capacity.

6 If RADIO_INTERFACE_TYPE_r is equal to '0001', the mobile station shall process the fields
 7 contained in the record as follows:

8 If RADIO_INTERFACE_TYPE_r is equal to '0010', the mobile station shall process the fields
 9 contained in the record as follows:

10 The mobile station shall set NUM_HRPD_NGHRB_s to NUM_HRPD_NGHRB_r, the number of
 11 neighboring HRPD systems contained in the *Universal Neighbor List Message*. For each of
 12 the neighboring HRPD systems contained in the *Universal Neighbor List Message*, the
 13 mobile station shall perform the following:

- 14 • Set the PN field of HRPD_NGHRB_LIST[i] to the ith occurrence of NGHBR_PN_r.
- 15 • Set the BAND_CLASS field of HRPD_NGHRB_LIST[i] to the ith occurrence of
 16 NGHBR_BAND_r if NGHBR_FREQ_INCL_r equals '1'; otherwise, set the BAND_CLASS
 17 field of HRPD_NGHRB_LIST[i] to CDMABAND_s.
- 18 • Set the CDMA_FREQ field of HRPD_NGHRB_LIST[i] to the ith occurrence of
 19 NGHBR_FREQ_r if NGHBR_FREQ_INCL_r equals '1'; otherwise, set the BAND_CLASS
 20 field of HRPD_NGHRB_LIST[i] to CDMACH_s.
- 21 • Set the PN_ASSOCIATION field of HRPD_NGHRB_LIST[i] to the ith occurrence of
 22 PN_ASSOCIATION_IND_r.
- 23 • Set the DATA_ASSOCIATION field of HRPD_NGHRB_LIST[i] to the ith occurrence of
 24 DATA_ASSOCIATION_IND_r.

25 2.6.2.2.18BCMC Service Parameters Message

26 The mobile station may receive the *BCMC Service Parameters Message* on the Paging
 27 Channel or on the Primary Broadcast Control Channel.

28 When the mobile station desires to receive the *BCMC Service Parameters Message* on the
 29 Paging Channel, the mobile station shall monitor the F-PCH for the duration of four F-PCH
 30 slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.1) for the start of the *BCMC*
 31 *Service Parameters Message* transmission or until the *BCMC Service Parameters Message*
 32 with DIFF_BSPM_r equal to '0' is received; if the mobile station detects the start of the *BCMC*
 33 *Service Parameters Message*, the mobile station shall monitor the F-PCH until the entire
 34 *BCMC Service Parameters Message* is received.

35 When the mobile station desires to receive the *BCMC Service Parameters Message* on the
 36 Primary Broadcast Control Channel, the mobile station shall monitor the F-BCCH for the
 37 duration of four F-BCCH slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.2)
 38 for the start of the *BCMC Service Parameters Message* transmission or until the *BCMC*
 39 *Service Parameters Message* with DIFF_BSPM_r equal to '0' is received; if the mobile station
 40 detects the start of the *BCMC Service Parameters Message*, the mobile station shall monitor
 41 the F-BCCH until the entire *BCMC Service Parameters Message* is received.

1 Whenever the *BCMC Service Parameters Message* is received, the mobile station shall
 2 compare the BSPM sequence number, $BSPM_MSG_SEQ_r$, to that stored in
 3 $BSPM_MSG_SEQ_s$. If the comparison results in a match and $FULL_BSPM_IND = '1'$, the
 4 mobile station may ignore the message. If the comparison results in a mismatch, the
 5 mobile station shall process the remaining fields in the message as follows:

6 The mobile station shall perform the following:

- 7 • If $DIFF_BSPM_r$ equals '0', the mobile station shall perform the following:
 - 8 - The mobile station shall delete the currently stored *BCMC Service Parameters*
 9 *Message* parameters and shall store the parameters received in this *BCMC*
 10 *Service Parameters Message* as described below.
 - 11 - The mobile station shall set $FULL_BSPM_IND$ to '1'.
- 12 • If $DIFF_BSPM_r$ equals '1',
 - 13 - If $(BSPM_MSG_SEQ_r - BSPM_MSG_SEQ_s)$ modulo 64 is greater than one, the
 14 mobile station shall perform the following:
 - 15 + The mobile station shall delete the currently stored *BCMC Service Parameters*
 16 *Message* parameters and shall store the parameters received in this *BCMC*
 17 *Service Parameters Message* as described below.
 - 18 + The mobile station shall set $FULL_BSPM_IND$ to '0'.
 - 19 - Otherwise, the mobile station shall perform the following:
 - 20 + The mobile station shall update the currently stored *BCMC Service*
 21 *Parameters Message* parameters with the parameters received in this *BCMC*
 22 *Service Parameters Message* as described below.

23 The mobile station shall delete $BCMC_RETRY_DELAY_LIST_s[i]$ from BCMC Retry Delay List
 24 if $BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID$ is included in the *BCMC Service*
 25 *Parameters Message*.

26 The mobile station shall store the following parameters:

- 27 • BSPM sequence number ($BSPM_MSG_SEQ_s = BSPM_MSG_SEQ_r$).
- 28 • Frequency change registration required indication ($FREQ_CHG_REG_REQUIRED_s$
 29 $= FREQ_CHG_REG_REQUIRED_r$).
- 30 • Frequency change registration timer
 31 ($FREQ_CHG_REG_TIMER_s = FREQ_CHG_REG_TIMER_r$) if
 32 $FREQ_CHG_REG_TIMER_IND_r$ equals '1'; otherwise, set
 33 $FREQ_CHG_REG_TIMER_s$ to NULL.
- 34 • Autonomous BCMC request allowed indicator
 35 ($AUTO_REQ_ALLOWED_IND_s = AUTO_REQ_ALLOWED_IND_r$).
- 36 • If USE_TIME_r is set to '1' set the $BSPM_ACTION_TIME_s = ACTION_TIME_r$;
 37 otherwise, set the $BSPM_ACTION_TIME_s = NULL$. A BSPM with an explicit action

- 1 time shall take effect when System Time (in 80 ms units) modulo 64 becomes equal
2 to BSPM_ACTION_TIME_S.
- 3 • BCMC on traffic channel supported indicator
4 (BCMC_ON_TRAFFIC_SUP_S = BCMC_ON_TRAFFIC_SUP_T).
 - 5 • Length of time stamp for use on r-csch
6 (ACH_TIME_STAMP_SHORT_LENGTH_S = ACH_TIME_STAMP_SHORT_LENGTH_T) if
7 NON_DEFAULT_VALUE_INCLUDED_T equals '1'; otherwise,
8 ACH_TIME_STAMP_SHORT_LENGTH_S shall be set to 10.
 - 9 • Length of time stamp
10 (TIME_STAMP_LONG_LENGTH_S = TIME_STAMP_LONG_LENGTH_T) if
11 NON_DEFAULT_VALUE_INCLUDED_T equals '1'; otherwise,
12 TIME_STAMP_LONG_LENGTH_S shall be set to 52.
 - 13 • Unit for time stamp length (TIME_STAMP_UNIT_S = TIME_STAMP_UNIT_T) if
14 NON_DEFAULT_VALUE_INCLUDED_T equals '1'; otherwise,
15 TIME_STAMP_UNIT_S shall be set to 6.
 - 16 • If REGISTRATION_REQ_FLAG_INCL_T equals '1', the mobile station shall compute
17 and store a BCMC registration required timer expiration value:
18
$$\text{REGISTRATION_REQ_TIMER_MAX} = (2^{\text{REGISTRATION_REQ_TIMER_PERIOD}_T} \times 80 \text{ ms}).$$
 - 19 • For $i=1$ to NUM_FSCH_T, store the following:
 - 20 - FBSCH_LIST_S[i].FSCH_ID = the position where this Forward Supplemental
21 Channel is listed in this message (i.e. First Forward Supplemental Channel
22 listed is given FSCH_ID of '001', second one is given FSCH_ID of '010', and so
23 on).
 - 24 - FBSCH_LIST_S[i].FSCH_BAND_CLASS = i th occurrence of FSCH_BAND_CLASS_T
25 (Band class of the Forward Supplemental Channel) if
26 FSCH_BAND_CLASS_INCL_T equals '1'; otherwise,
27 FBSCH_LIST_S[i].FSCH_BAND_CLASS = CDMABAND_S.
 - 28 - FBSCH_LIST_S[i].FSCH_FREQ = i th occurrence of FSCH_FREQ_T (Frequency
29 assignment of the forward broadcast supplemental channel) if
30 FSCH_FREQ_INCL_T equals '1'; otherwise, FBSCH_LIST_S[i].FSCH_FREQ =
31 CDMACH_S.
 - 32 - FBSCH_LIST_S[i].FSCH_CODE_CHAN = i th occurrence of FSCH_CODE_CHAN_T
33 (Code channel index of the forward broadcast supplemental channel)
 - 34 - FBSCH_LIST_S[i].FSCH_PLCM (Public Long code mask of the Forward Broadcast
35 Supplemental Channel) shall be set as follows:
 - 36 + If FSCH_PLCM_SCHEME_INDR equals '00',
37 FBSCH_LIST_S[i].FSCH_PLCM shall be set to PLCM_42 as specified in
38 2.6.13.10.1.

- 1 + If FSCH_PLCM_SCHEME_INDr equals '01',
2 FBSCH_LISTs[i].FSCH_PLCM shall be set to PLCM_42 as specified in
3 2.6.13.10.2.
- 4 + If FSCH_PLCM_SCHEME_INDr equals '10', the mobile station shall perform
5 the following:
- 6 ○ If FSCH_PLCM_INDr equals '0', FBSCH_LISTs[i].FSCH_PLCM shall be set
7 to PLCM_42 as specified in 2.6.13.10.1.
- 8 ○ If FSCH_PLCM_INDr equals '1', FBSCH_LISTs[i].FSCH_PLCM shall be set
9 to PLCM_42 as specified in 2.6.13.10.2.
- 10 - FBSCH_LISTs[i].FSCH_MUX_OPTION = ith occurrence of FSCH_MUX_OPTIONr
11 (Multiplex Option of the Forward Broadcast Supplemental Channel).
- 12 - FBSCH_LISTs[i].FSCH_RC = ith occurrence of FSCH_RCr (Radio configuration of
13 the forward broadcast supplemental channel).
- 14 - FBSCH_LISTs[i].FSCH_CODING = ith occurrence of FSCH_CODINGr (Coding
15 type of the Forward Broadcast Supplemental Channel).
- 16 - FBSCH_LISTs[i].FSCH_OUTERCODE_RATE = ith occurrence of
17 FSCH_OUTERCODE_RATEr (Outer Code Rate of the Forward Broadcast
18 Supplemental Channel) if FSCH_OUTERCODE_INCLr equals '1'; otherwise,
19 FBSCH_LISTs[i].FSCH_OUTERCODE_RATE = NULL.
- 20 - FBSCH_LISTs[i].FSCH_OUTERCODE_OFFSET = ith occurrence of
21 FSCH_OUTERCODE_OFFSETr (Outer Coding Buffer Offset of the Forward
22 Broadcast Supplemental Channel) if FSCH_OUTERCODE_INCLr equals '1';
23 otherwise, FBSCH_LISTs[i].FSCH_OUTERCODE_OFFSET = NULL.
- 24 - FBSCH_LISTs[i].FSCH_NUM_BITS_IDX = ith occurrence of
25 FSCH_NUM_BITS_IDXr (Number of information bits index of the forward
26 broadcast supplemental channel).
- 27 - FBSCH_LISTs[i].FSCH_FRAME_40_USED = ith occurrence of
28 FSCH_FRAME_40_USEDr (40ms frame used indicator of the forward broadcast
29 supplemental channel).
- 30 - FBSCH_LISTs[i].FSCH_FRAME_80_USED = ith occurrence of
31 FSCH_FRAME_80_USEDr (80ms frame used indicator of the forward broadcast
32 supplemental channel).
- 33 - FBSCH_LISTs[i].TDM_STRUCTURE_IND = ith occurrence of TDM_
34 STRUCTURE_INDr (TDM structure used indicator).
- 35 + FBSCH_LISTs[i].TDM_SLOT_LENGTH = ith occurrence of
36 TDM_SLOT_LENGTHr (TDM slot length).

- 1 + If TDM_SUPER_PERIOD_MASK_LEN_r is included, FBSCH_LIST_s[i].
2 TDM_SUPER_PERIOD_MASK_LEN = ith occurrence of
3 TDM_SUPER_PERIOD_MASK_LEN_r (TDM super period mask length
4 indicator). Otherwise, set FBSCH_LIST_s[i].TDM_SUPER_PERIOD_MASK_LEN
5 as specified in Table 3.7.2.3.2.38-3, based on FSCH_OUTERCODE_RATE
6 field corresponding to FSCH_ID field included in this record
- 7 + If TDM_MEGA_PERIOD_MASK_LEN_r is included, FBSCH_LIST_s[i].
8 TDM_MEGA_PERIOD_MASK_LEN = ith occurrence of
9 TDM_MEGA_PERIOD_MASK_LEN_r (TDM mega period mask length
10 indicator). Otherwise, set FBSCH_LIST_s[i]. TDM_MEGA_PERIOD_MASK_LEN
11 as specified in Table 3.7.2.3.2.38-6.
- 12 • For i=1 to the number of flows included in this message, store the following:
- 13 - BCMC_FLOW_LIST_s[i].BCMC_FLOW_ID = ith occurrence of BCMC_FLOW_ID
14 (BCMC flow identifier). See section 2.6.13.11.
- 15 - If REGISTRATION_REQ_FLAG_INCL_r equals '1', and ith occurrence of
16 FLOW_INFO_ON_OTHER_FREQ_r equals '0',
17 BCMC_FLOW_LIST_s[i].REGISTRATION_REQ_FLAG = ith occurrence of
18 REGISTRATION_REQ_FLAG_r(Registration required flag).
- 19 - If AUTH_SIGNATURE_REQUIRED_r equals '1',
20 BCMC_FLOW_LIST_s[i].AUTH_SIGNATURE_REQ_IND = ith occurrence of
21 AUTH_SIGNATURE_REQ_IND_r(Authorization signature required indication).
- 22 - If BCMC_ON_TRAFFIC_SUP_r is set to '1',
23 BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IND = ith occurrence of
24 BCMC_FLOW_ON_TRAFFIC_IND_r (BCMC flow on traffic channel supported
25 identifier); otherwise, BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IND =
26 '0'.
- 27 - If the ith occurrence of NUM_LPM_ENTRIES_r equals '000', then
28 BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_IND = 0; otherwise,
29 BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_IND = 1 (BCMC flow On or Off
30 Indicator).
- 31 - For j=1 to NUM_LPM_ENTRIES_r, store the following:
- 32 + BCMC_FLOW_LIST_s[i].LPM_INFO[j].FSCH_ID = jth occurrence of FSCH_ID_r
33 (Forward broadcast supplemental channel identifier).
- 34 + If jth occurrence of TDM_USED_IND_r is set to 1, the mobile station shall
35 store the following:
- 36 ○ BCMC_FLOW_LIST_s[i].LPM_INFO[j]. TDM_MASK = jth occurrence of
37 TDM_MASK_r (TDM mask).

- 1 ○ If TDM_SUPER_PERIOD_MASK_INCL_T is set to '1',
2 BCMC_FLOW_LIST_S[i].LPM_INFO[j].TDM_SUPER_PERIOD_MASK = jth
3 occurrence of TDM_SUPER_PERIOD_MASK_T (TDM super period mask).
4 Otherwise, set all bits of
5 BCMC_FLOW_LIST_S[i].LPM_INFO[j].TDM_SUPER_PERIOD_MASK to '1'.
- 6 ○ If TDM_MEGA_PERIOD_MASK_INCL_T is set to '1',
7 BCMC_FLOW_LIST_S[i].LPM_INFO[j].TDM_MEGA_PERIOD_MASK = jth
8 occurrence of TDM_MEGA_PERIOD_MASK_T (TDM mega period mask).
9 Otherwise, set all bits of
10 BCMC_FLOW_LIST_S[i].LPM_INFO[j].TDM_MEGA_PERIOD_MASK to '1'.
- 11 ○ TDM period for BCMC flow identified by
12 BCMC_FLOW_LIST_S[i].BCMC_FLOW_ID on Forward Supplemental
13 Channel identified by BCMC_FLOW_LIST_S[i].LPM_INFO[j].FSCH_ID is
14 aligned at system time (t) as specified in section 2.6.13.12.
- 15 + BCMC_FLOW_LIST_S[i].LPM_INFO[j].BSR_ID = jth occurrence of BSR_ID_T
16 (BCMC Service Reference identifier).
- 17 + For k=0 to NUM_NGHBR_T, store the following:
- 18 ○ BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_PN = kth
19 occurrence of NGHBR_PN_T (Neighbor pilot PN sequence offset index).
- 20 ○ BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
21 NGHBR_BCMC_CONFIG = kth occurrence of NGHBR_BCMC_CONFIG_T
22 (Neighbor BCMC flow configuration).
- 23 ○ If NGHBR_BCMC_CONFIG_T equals '000', BCMC_FLOW_LIST_S[i].
24 LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_BAND_CLASS = NULL;
25 otherwise, the mobile station shall store the following:
- 26 ◇ If NGHBR_BCMC_CONFIG_T equals '010' or NGHBR_BCMC_CONFIG_T
27 equals '001' and NGHBR_FSCH_BAND_CLASS_INCL_T equals '0',
28 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
29 NGHBR_FSCH_BAND_CLASS =
30 FBSCH_LIST_S[i].NGHBR_FSCH_BAND_CLASS where i corresponds to
31 the entry of FBSCH_LIST_S where FBSCH_LIST_S[i].FSCH_ID equals
32 FSCH_ID of this Forward Supplemental Channel.
- 33 ◇ Otherwise, BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
34 NGHBR_FSCH_BAND_CLASS = kth occurrence of NGHBR_
35 FSCH_BAND_CLASS_T (Band class of the Forward Supplemental
36 Channel in the neighbor base station).
- 37 ○ If NGHBR_BCMC_CONFIG_T equals '000',
38 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
39 NGHBR_FSCH_CDMA_FREQ = NULL; otherwise, the mobile station shall
40 store the following:

- 1 ◇ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '010' or $\text{NGHBR_BCMC_CONFIG}_r$
2 equals '001' and $\text{NGHBR_FSCH_FREQ_INCL}_r$ equals '0',
3 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
4 $\text{NGHBR_FSCH_CDMA_FREQ} =$
5 $\text{FBSCH_LIST}_s[i].\text{FSCH_CDMA_FREQ}$ where i corresponds to the entry
6 of FBSCH_LIST_s where $\text{FBSCH_LIST}_s[i].\text{FSCH_ID}$ equals FSCH_ID of
7 this Forward Supplemental Channel.
- 8 ◇ Otherwise, $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
9 $\text{NGHBR_FSCH_CDMA_FREQ} = k$ th occurrence of
10 $\text{NGHBR_FSCH_CDMA_FREQ}_r$ (Neighbor Frequency assignment of the
11 forward broadcast supplemental channel).
- 12 ○ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '000',
13 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
14 $\text{NGHBR_FSCH_CODE_CHAN} = \text{NULL}$; otherwise, the mobile station shall
15 store the following:
- 16 ◇ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '001' or '010' and
17 $\text{NGHBR_FSCH_CODE_CHAN_INCL}_r$ equals '0',
18 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
19 $\text{NGHBR_FSCH_CODE_CHAN} =$
20 $\text{FBSCH_LIST}_s[i].\text{FSCH_CODE_CHAN}$ where i corresponds to the entry
21 of FBSCH_LIST_s where $\text{FBSCH_LIST}_s[i].\text{FSCH_ID}$ equals FSCH_ID of
22 this Forward Supplemental Channel.
- 23 ◇ Otherwise, $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
24 $\text{NGHBR_FSCH_CODE_CHAN} = k$ th occurrence of
25 $\text{NGHBR_FSCH_CODE_CHAN}_r$ (Neighbor pilot forward broadcast
26 supplemental channel code channel index).
- 27 ○ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '000',
28 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
29 $\text{NGHBR_FSCH_PLCM} = \text{NULL}$; otherwise, the mobile station shall store
30 the following:
- 31 ◇ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '010' or $\text{NGHBR_BCMC_CONFIG}_r$
32 equals '001' and $\text{NGHBR_FSCH_PARMS_INCL}_r$ equals '0',
33 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
34 $\text{NGHBR_FSCH_PLCM} = \text{FBSCH_LIST}_s[i].\text{FSCH_PLCM}$ where i
35 corresponds to the entry of FBSCH_LIST_s where
36 $\text{FBSCH_LIST}_s[i].\text{FSCH_ID}$ equals FSCH_ID of this FORWARD
37 SUPPLEMENTAL CHANNEL.
- 38 ◇ Otherwise, the mobile station shall perform the following:
- 39 — If $\text{NGHBR_FSCH_PLCM_IND}_r$ equals '0'
40 $\text{BMC}_\text{M}_\text{C_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.

- 1 NGHBR_FSCH_PLCM shall be set to PLCM_42 as specified in
2 2.6.13.10.1.
- 3 — If NGHBR_FSCH_PLCM_IND_r equals '1'
4 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
5 NGHBR_FSCH_PLCM shall be set to PLCM_42 as specified in
6 2.6.13.10.2.
- 7 ○ If NGHBR_BCMC_CONFIG_r equals '000',
8 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
9 NGHBR_FSCH_MUX_OPTION = NULL; otherwise, the mobile station shall
10 store the following:
- 11 ◇ If NGHBR_BCMC_CONFIG_r equals '010' or NGHBR_BCMC_CONFIG_r
12 equals '001' and NGHBR_FSCH_PARAMS_INCL_r equals '0',
13 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
14 NGHBR_FSCH_MUX_OPTION =
15 FBSCH_LIST_s[i].FSCH_MUX_OPTION where i corresponds to the
16 entry of FBSCH_LIST_s where FBSCH_LIST_s[i].FSCH_ID equals
17 FSCH_ID of this Forward Supplemental Channel.
- 18 ◇ Otherwise, BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
19 NGHBR_FSCH_MUX_OPTION = kth occurrence of
20 NGHBR_FSCH_MUX_OPTION_r (Multiplex Option of the Forward
21 Broadcast Supplemental Channel in the neighbor base station).
- 22 ○ If NGHBR_BCMC_CONFIG_r equals '000',
23 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k]. NGHBR_FSCH_RC
24 = NULL; otherwise, the mobile station shall store the following:
- 25 ◇ If NGHBR_BCMC_CONFIG_r equals '010' or NGHBR_BCMC_CONFIG_r
26 equals '001' and NGHBR_FSCH_PARAMS_INCL_r equals '0',
27 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
28 NGHBR_FSCH_RC = FBSCH_LIST_s[i].FSCH_RC where i corresponds
29 to the entry of FBSCH_LIST_s where FBSCH_LIST_s[i].FSCH_ID equals
30 FSCH_ID of this Forward Supplemental Channel.
- 31 ◇ Otherwise, BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].
32 NGHBR_FSCH_RC = kth occurrence of NGHBR_FSCH_RC_r (Neighbor
33 Radio configuration of the forward broadcast supplemental channel).
- 34 ○ If NGHBR_BCMC_CONFIG_r equals '000',
35 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_COD
36 ING = NULL; otherwise, the mobile station shall store the following:

- 1 ◇ If NGHBR_BCMC_CONFIG_r equals '010' or NGHBR_BCMC_CONFIG_r
2 equals '001' and NGHBR_FSCH_PARAMS_INCL_r equals '0',
3 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
4 CODING = FBSCH_LIST_s[i].NGHBR_FSCH_CODING where i
5 corresponds to the entry of FBSCH_LIST_s where
6 FBSCH_LIST_s[i].FSCH_ID equals FSCH_ID of this Forward
7 Supplemental Channel.
- 8 ◇ Otherwise,
9 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
10 CODING = kth occurrence of NGHBR_FSCH_CODING_r (Coding type
11 of the Forward Broadcast Supplemental Channel in this neighbor
12 base station).
- 13 ○ If NGHBR_BCMC_CONFIG_r equals '000',
14 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_OUT
15 ERCODE_RATE = NULL; otherwise, the mobile station shall store the
16 following:
- 17 ◇ If NGHBR_BCMC_CONFIG_r equals '010' or NGHBR_BCMC_CONFIG_r
18 equals '001' and NGHBR_FSCH_PARAMS_INCL_r equals '0',
19 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
20 OUTERCODE_RATE =
21 FBSCH_LIST_s[i].NGHBR_FSCH_OUTERCODE_RATE where i
22 corresponds to the entry of FBSCH_LIST_s where
23 FBSCH_LIST_s[i].FSCH_ID equals FSCH_ID of this Forward
24 Supplemental Channel.
- 25 ◇ Otherwise,
26 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
27 OUTERCODE_RATE = kth occurrence of
28 NGHBR_FSCH_OUTERCODE_RATE_r (Outer Code Rate of the
29 Forward Broadcast Supplemental Channel in this neighbor base
30 station) if NGHBR_FSCH_OUTERCODE_INCL_r equals '1' ; otherwise,
31 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
32 OUTERCODE_RATE = NULL.
- 33 ○ If NGHBR_BCMC_CONFIG_r equals '000',
34 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_OUT
35 ERCODE_OFFSET = NULL; otherwise, the mobile station shall store the
36 following:

- 1 ◇ If NGHBR_BCMC_CONFIG_T equals '010' or NGHBR_BCMC_CONFIG_T
2 equals '001' and NGHBR_FSCH_PARAMS_INCL_T equals '0',
3 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
4 OUTERCODE_OFFSET =
5 FBSCH_LIST_S[i].NGHBR_FSCH_OUTERCODE_OFFSET where i
6 corresponds to the entry of FBSCH_LIST_S where
7 FBSCH_LIST_S[i].FSCH_ID equals FSCH_ID of this Forward
8 Supplemental Channel.
- 9 ◇ Otherwise,
10 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
11 OUTERCODE_OFFSET = kth occurrence of
12 NGHBR_FSCH_OUTERCODE_OFFSET_T (Outer Coding Buffer Offset
13 of the Forward Broadcast Supplemental Channel in this neighbor
14 base station) if NGHBR_FSCH_OUTERCODE_INCL_T equals '1' ;
15 otherwise,
16 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_
17 OUTERCODE_OFFSET = NULL.
- 18 ○ If NGHBR_BCMC_CONFIG_T equals '000',
19 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
20 NGHBR_FSCH_NUM_BITS_IDX = NULL; otherwise, the mobile station
21 shall store the following:
- 22 ◇ If NGHBR_BCMC_CONFIG_T equals '010' or NGHBR_BCMC_CONFIG_T
23 equals '001' and NGHBR_FSCH_PARAMS_INCL_T equals '0',
24 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
25 NGHBR_FSCH_NUM_BITS_IDX =
26 FBSCH_LIST_S[i].FSCH_NUM_BITS_IDX where i corresponds to the
27 entry of FBSCH_LIST_S where FBSCH_LIST_S[i].FSCH_ID equals
28 FSCH_ID of this Forward Supplemental Channel.
- 29 ◇ Otherwise, BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
30 NGHBR_FSCH_NUM_BITS_IDX = kth occurrence of
31 NGHBR_FSCH_NUM_BITS_IDX_T (Neighbor Number of information
32 bits index of the forward broadcast supplemental channel).
- 33 ○ If NGHBR_BCMC_CONFIG_T equals '000',
34 BCMC_FLOW_LIST_S[i].LPM_INFO[j].NGHBR_INFO[k].
35 NGHBR_FSCH_FRAME_40_USED = NULL; otherwise, the mobile station
36 shall store the following:

- 1 ◇ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '010' or $\text{NGHBR_BCMC_CONFIG}_r$
2 equals '001' and $\text{NGHBR_FSCH_PARMS_INCL}_r$ equals '0',
3 $\text{BCMC_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
4 $\text{NGHBR_FSCH_FRAME_40_USED} =$
5 $\text{FBSCH_LIST}_s[i].\text{FSCH_FRAME_40_USED}$ where i corresponds to the
6 entry of FBSCH_LIST_s where $\text{FBSCH_LIST}_s[i].\text{FSCH_ID}$ equals
7 FSCH_ID of this FORWARD SUPPLEMENTAL CHANNEL.
- 8 ◇ Otherwise, $\text{BCMC_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
9 $\text{NGHBR_FSCH_FRAME_40_USED} =$ k th occurrence of
10 $\text{NGHBR_FSCH_FRAME_40_USED}_r$ (Neighbor 40ms frame used
11 indicator of the forward broadcast supplemental channel).
- 12 ○ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '000',
13 $\text{BCMC_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
14 $\text{NGHBR_FSCH_FRAME_80_USED} = \text{NULL}$; otherwise, the mobile station
15 shall store the following:
- 16 ◇ If $\text{NGHBR_BCMC_CONFIG}_r$ equals '010' or $\text{NGHBR_BCMC_CONFIG}_r$
17 equals '001' and $\text{NGHBR_FSCH_PARMS_INCL}_r$ equals '0',
18 $\text{BCMC_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
19 $\text{NGHBR_FSCH_FRAME_80_USED} =$
20 $\text{FBSCH_LIST}_s[i].\text{FSCH_FRAME_80_USED}$ where i corresponds to the
21 entry of FBSCH_LIST_s where $\text{FBSCH_LIST}_s[i].\text{FSCH_ID}$ equals
22 FSCH_ID of this FORWARD SUPPLEMENTAL CHANNEL.
- 23 ◇ Otherwise, $\text{BCMC_FLOW_LIST}_s[i].\text{LPM_INFO}[j].\text{NGHBR_INFO}[k]$.
24 $\text{NGHBR_FSCH_FRAME_80_USED} =$ k th occurrence of
25 $\text{NGHBR_FSCH_FRAME_80_USED}_r$ (Neighbor 80ms frame used
26 indicator of the forward broadcast supplemental channel).

27 For each of the neighboring base stations contained in the *BCMC Service Parameters*
28 *Message* and supports the broadcast control channel, the mobile station shall store the
29 following informations from the message:

- 30 • SR1 Non-TD BCCH support indicator ($\text{BCMC_SR1_BCCH_NON_TD_INCL}_s =$
31 $\text{BCMC_SR1_BCCH_NON_TD_INCL}_r$)
- 32 • SR1 TD BCCH support indicator ($\text{BCMC_SR1_TD_INCL}_s = \text{BCMC_SR1_TD_INCL}_r$)
- 33 • If $\text{BCMC_SR1_BCCH_NON_TD_INCL}_r$ is equal to '1':
- 34 - $\text{BCMC_SR1_BRAT_NON_TD}_s = \text{BCMC_SR1_BRAT_NON_TD}_r$;
35 - $\text{BCMC_SR1_CRAT_NON_TD}_s = \text{BCMC_SR1_CRAT_NON_TD}_r$;
- 36 - $\text{BCMC_BCCH_CODE_CHAN_NON_TD}_s =$
37 $\text{BCMC_SR1_BCCH_CODE_CHAN_NON_TD}_r$.
- 38 • If $\text{BCMC_SR1_TD_INCL}_r$ is included and is equal to '1', and the mobile station
39 supports the Transmit Diversity indicated by $\text{BCMC_SR1_TD_MODE}_r$:

- 1 - BCMC_SR1_BRAT_TD_S = BCMC_SR1_BRAT_TD_T;
- 2 - BCMC_SR1_CRAT_TD_S = BCMC_SR1_CRAT_TD_T;
- 3 - BCMC_BCCH_CODE_CHAN_TD_S = BCMC_SR1_BCCH_CODE_CHAN_TD_T.
- 4 • If the mobile station supports the Transmit Diversity,
5 BCMC_SR1_BCCH_NON_TD_INCL_T is equal to '1', and SR1_TD_INCL_T is equal to '0':
- 6 - BCMC_SR1_BRAT_TD_S = BCMC_SR1_BRAT_NON_TD_T;
- 7 - BCMC_SR1_CRAT_TD_S = BCMC_SR1_CRAT_NON_TD_T;
- 8 - BCMC_BCCH_CODE_CHAN_TD_S = BCMC_SR1_BCCH_CODE_CHAN_NON_TD_T.

9 2.6.2.2.19 Access Point Pilot Information Message

10 Whenever an *Access Point Pilot Information Message* is received on the Paging Channel or
11 the Primary Broadcast Control Channel, the configuration message sequence number,
12 CONFIG_MSG_SEQ_T, shall be compared to that stored in AP_PILOT_INFO_MSG_SEQ_S. If
13 the comparison results in a match, the mobile station may refresh the lifetime that the
14 information in the message remains valid to LIFETIME_S minutes after the reception of the
15 message. If the comparison results in a mismatch, then the mobile station shall process
16 the remaining fields in the message as follows.

17 The mobile station shall store the following parameters:

- 18 • Configuration message sequence number
19 (CONFIG_MSG_SEQ_S = CONFIG_MSG_SEQ_T,
20 AP_PILOT_INFO_MSG_SEQ_S = CONFIG_MSG_SEQ_T)
- 21 • Lifetime of the message
22 (LIFETIME_S = LIFETIME_T),

23 For each of the Access Point Pilot Information record contained in the *Access Point Pilot*
24 *Information Message*, the mobile station shall perform the following:

- 25 • Set the AP_ASSN_TYPE field of AP_NGHBR_REC_S[i] to the AP_ASSN_TYPE field of
26 the *i*th occurrence of APPI_REC_T.
- 27 • If the AP_SID_SAME_AS_PREVIOUS field of the *i*th occurrence of APPI_REC_T is set
28 to '1', set the AP_SID field of AP_NGHBR_REC_S[i] to the value of AP_SID field of
29 AP_NGHBR_REC_S[i-1]. Otherwise, set the AP_SID field of AP_NGHBR_REC_S[i] to the
30 AP_SID field of the *i*th occurrence of APPI_REC_T.
- 31 • If the AP_NID_SAME_AS_PREVIOUS field of the *i*th occurrence of APPI_REC_T is set
32 to '1', set the AP_NID field of AP_NGHBR_REC_S[i] to the value of AP_NID field of
33 AP_NGHBR_REC_S[i-1]. Otherwise, set the AP_NID field of AP_NGHBR_REC_S[i] to the
34 AP_NID field of the *i*th occurrence of APPI_REC_T.
- 35 • If the AP_BAND_SAME_AS_PREVIOUS field of the *i*th occurrence of APPI_REC_T is set
36 to '1', set the AP_BAND field of AP_NGHBR_REC_S[i] to the value of AP_BAND field of
37 AP_NGHBR_REC_S[i-1]. Otherwise, set the AP_BAND field of AP_NGHBR_REC_S[i] to
38 the AP_BAND field of the *i*th occurrence of APPI_REC_T.

- 1 • If the AP_FREQ_SAME_AS_PREVIOUS field of the i^{th} occurrence of APPI_REC_r is set
2 to '1', set the AP_FREQ field of AP_NGHBR_REC_s[i] to the value of AP_FREQ field of
3 AP_NGHBR_REC_s[i-1]. Otherwise, set the AP_FREQ field of AP_NGHBR_REC_s[i] to
4 the AP_FREQ field of the i^{th} occurrence of APPI_REC_r.
- 5 • If the AP_PN_REC_SAME_AS_PREVIOUS field of the i^{th} occurrence of APPI_REC_r is
6 set to '1', set the AP_PN_REC array values of AP_NGHBR_REC_s[i] to the values of
7 AP_PN_REC array of AP_NGHBR_REC_s[i-1]. Otherwise, set the AP_PN_REC array
8 values (of length AP_PN_COUNT) of AP_NGHBR_REC_s[i] as follows:
- 9 - If AP_PN_REC_TYPE field of the i^{th} occurrence of APPI_REC_r is set to '000', set
10 the k^{th} value of the AP_PN_REC array of AP_NGHBR_REC_s[i] to the k^{th} value of
11 AP_PN field in the i^{th} occurrence of APPI_REC_r, where k is between 0 and
12 AP_PN_COUNT-1.
- 13 - If AP_PN_REC_TYPE field of the i^{th} occurrence of APPI_REC_r is set to '001', set
14 the k^{th} value of the AP_PN_REC array of AP_NGHBR_REC_s[i] to the
15 AP_PN_START + ($k \times$ AP_PN_INC), where AP_PN_START and AP_PN_INC are
16 fields in the i^{th} occurrence of APPI_REC_r, where k is between 0 and
17 AP_PN_COUNT-1.

18 The mobile station may store and use the information in the message if no *Access Point*
19 *Pilot Information Message* is received within LIFETIME_s minutes of the reception of the
20 *Access Point Pilot Information Message* that the information is obtained. The mobile station
21 shall not use the information after LIFETIME_s minutes of the reception of the last *Access*
22 *Point Pilot Information Message*.

23 The mobile station may use the information in the *Access Point Pilot Information Message* to
24 identify access point pilots. E.g. While on traffic channel, if mobile station detects access
25 point pilot then the mobile station may read *Access Point Identification Message* on that
26 pilot to get handoff information in the HO_INFO_RECORD field.

27 2.6.2.2.20 Access Point Identification Message

28 Whenever an *Access Point Identification Message* is received on the Paging Channel or the
29 Primary Broadcast Control Channel, the configuration message sequence number,
30 CONFIG_MSG_SEQ_r, shall be compared to that stored in AP_IDT_MSG_SEQ_s. If the
31 comparison results in a match, the mobile station may ignore the message. If the
32 comparison results in a mismatch, then the mobile station shall process the remaining
33 fields in the message as follows.

34 The mobile station shall store the following parameters:

- 35 • Configuration message sequence number
36 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
37 AP_IDT_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- 38 • ASSTN_TYPE_s = ASSTN_TYPE_r
- 39 • System identification (SID_s = SID_r)

- 1 • Network identification ($NID_S = NID_R$)
- 2 • Access Point identification ($AP_ID_S = AP_ID_R$)
- 3 • Access Point identification mask ($AP_ID_MASK_S = AP_ID_MASK_R$)

4 If the HRPD_ACQ_REC_INCL field in the message is set to '1', then the mobile station shall
5 store the following fields:

- 6 • High Rate Packet Data PN ($HRPD_PN_S = HRPD_PN_R$)
- 7 • High Rate Packet Data band class ($HRPD_BAND_CLASS_S = HRPD_BAND_CLASS_R$)
- 8 • High Rate Packet Data channel number ($HRPD_CHANNEL_S = HRPD_CHANNEL_R$)

9 Otherwise, the mobile station shall set the HRPD_BAND_CLASS_S and HRPD_CHANNEL_S
10 fields to NULL.

11 If the LOC_REC_TYPE field in the message is set to '001' the mobile station shall store the
12 following:

- 13 • Base station latitude ($BASE_LAT_S = BASE_LAT_R$)
- 14 • Base station longitude ($BASE_LONG_S = BASE_LONG_R$)
- 15 • Base station height ($BASE_HEIGHT_S = BASE_HEIGHT_R$)
- 16 • Base station horizontal uncertainty ($LOC_UNC_H_S = LOC_UNC_H_R$)
- 17 • Base station horizontal uncertainty ($LOC_UNC_V_S = LOC_UNC_H_R$)

18 Otherwise, the mobile station shall set the BASE_LAT_S, BASE_LONG_S, BASE_HEIGHT_S,
19 LOC_UNC_H_S and LOC_UNC_V_S fields to NULL.

20 If the INTRA_FREQ_HO_HYS_INCL field in the message is set to '1', then the mobile station
21 shall store the following field:

- 22 • Intra-frequency idle handoff hysteresis ($INTRA_FREQ_HO_HYS_S =$
23 $INTRA_FREQ_HO_HYS_R$)

24 Otherwise, the mobile station shall set the INTRA_FREQ_HO_HYS_S field to NULL.

25 If the INTRA_FREQ_HO_SLOPE_INCL field in the message is set to '1', then the mobile
26 station shall store the following field:

- 27 • Intra-frequency idle handoff slope ($INTRA_FREQ_HO_SLOPE_S =$
28 $INTRA_FREQ_HO_SLOPE_R$)

29 Otherwise, the mobile station shall set the INTRA_FREQ_HO_SLOPE_S field to 8.

30 If the INTER_FREQ_HO_HYS_INCL field in the message is set to '1', then the mobile station
31 shall store the following field:

- 32 • Inter-frequency idle handoff hysteresis ($INTER_FREQ_HO_HYS_S =$
33 $INTER_FREQ_HO_HYS_R$)

34 Otherwise, the mobile station shall set the INTER_FREQ_HO_HYS_S field to NULL.

1 If the INTER_FREQ_HO_SLOPE_INCL field in the message is set to '1', then the mobile
2 station shall store the following field:

- 3 • Inter-frequency idle handoff slope ($\text{INTER_FREQ_HO_SLOPE}_s =$
4 $\text{INTER_FREQ_HO_SLOPE}_r$)

5 Otherwise, the mobile station shall set the $\text{INTER_FREQ_HO_SLOPE}_s$ field to 8. If the
6 $\text{INTER_FREQ_SRCH_TH_INCL}$ field in the message is set to '1', then the mobile station
7 shall store the following field:

- 8 • Inter-frequency idle search threshold ($\text{INTER_FREQ_SRCH_TH}_s =$
9 $\text{INTER_FREQ_SRCH_TH}_r$)

10 Otherwise, the mobile station shall set the $\text{INTER_FREQ_SRCH_TH}_s$ field to NULL.

11 The mobile station shall store HO_INFO_RECORDs included in the message as follows:

- 12 • $\text{HO_INFO_COUNT}_s = \text{HO_INFO_COUNT}_r$
- 13 • $\text{HO_INFO_RECORD}_s[i] = i^{\text{th}}$ HO_INFO_RECORD record in the message.

14 2.6.2.2.21 Access Point Identification Text Message

15 Whenever an *Access Point Identification Text Message* is received on the Paging Channel or
16 the Primary Broadcast Control Channel, the configuration message sequence number,
17 CONFIG_MSG_SEQ_r , shall be compared to that stored in $\text{AP_ID_TEXT_MSG_SEQ}_s$. If the
18 comparison results in a match, the mobile station may ignore the message. If the
19 comparison results in a mismatch, then the mobile station shall process the remaining
20 fields in the message as follows.

21 The mobile station shall store the following parameters:

- 22 • Configuration message sequence number
23 $(\text{CONFIG_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r,$
24 $\text{AP_ID_TEXT_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r)$
- 25 • Message Encoding ($\text{MSG_ENCODING}_s = \text{MSG_ENCODING}_r$)
- 26 • Mobile station shall store i^{th} occurrence of the CHAR_i field as follows
27 $\text{CHAR}_s[i] = \text{CHAR}_i$

28 2.6.2.2.22 General Overhead Information Message

29 Whenever a *General Overhead Information Message* is received on the Paging Channel or
30 the Primary Broadcast Control Channel, the configuration message sequence number,
31 CONFIG_MSG_SEQ_r , shall be compared to that stored in GOI_MSG_SEQ_s . If the
32 comparison results in a match, the mobile station may ignore the message. If the
33 comparison results in a mismatch, then the mobile station shall process the remaining
34 fields in the message as follows.

35 The mobile station shall store the following parameters:

- 36 • Configuration message sequence number
37 $(\text{CONFIG_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r,$

1 GOI_MSG_SEQ_s = CONFIG_MSG_SEQ_r)

2 For each of the General Overhead Information record contained in the *General Overhead*
3 *Information Message*, the mobile station shall perform the following:

- 4 • Set the GOI_REC_TYPE_s[i] to the GOI_REC_TYPE field of the *i*th occurrence of
5 GOI_REC_TYPE_r.
- 6 • Set the GOI_REC_s[i] to the GOI_REC field of the *i*th occurrence of GOI_REC_r.

7 2.6.2.2.23 Flex Duplex CDMA Channel List Message Overview

8 The mobile station may receive the *Flex Duplex CDMA Channel List Message* from the
9 Paging Channel or from the Primary Broadcast Control Channel. Whenever a *Flex Duplex*
10 *CDMA Channel List Message* is received on the Paging Channel, the mobile station shall
11 compare the configuration message sequence number, CONFIG_MSG_SEQ_r, to that stored
12 in FD_CHAN_LST_MSG_SEQ_s. If the comparison results in a match, the mobile station
13 may ignore the message. If the comparison results in a mismatch, then the mobile station
14 shall process the remaining fields in the message as follows:

15 If the *Flex Duplex CDMA Channel List Message* lists CDMA channels from more than one
16 band class and the mobile station hashes to a band class other than the current band
17 class, the mobile station shall process this message after NGHBR_LST_MSG_SEQ_s,
18 EXT_NGHBR_LST_MSG_SEQ_s and GEN_NGHBR_LST_MSG_SEQ_s become current.

19 If any of the REMAINING_FIELD_INCL fields included in this message is set to '0', the
20 mobile station shall process the remaining message after EXT_CHAN_LST_MSG_SEQ_s is
21 current.

22 The mobile station shall store the following parameters:

- 23 • Configuration message sequence number
24 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
25 FD_CHAN_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).
- 26 • If CAND_BAND_INFO_REQ_r is included, the mobile station shall set
27 CAND_BAND_INFO_REQ_s to CAND_BAND_INFO_REQ_r; otherwise, the mobile
28 station shall set CAND_BAND_INFO_REQ_s to '0'.
- 29 • The mobile station shall perform the following for each occurrence of the
30 CAND_BAND_CLASS record:
 - 31 - Set the CAND_BAND_CLASS field of CAND_BAND_CLASS_REC[i] to the *i*th
32 occurrence of CAND_BAND_CLASS_r.
 - 33 - Set the SUBCLASS_INFO_INCL field of CAND_BAND_CLASS_REC[i] to the
34 corresponding value of SUBCLASS_INFO_INCL_r.
 - 35 - If the *i*th occurrence of SUBCLASS_INFO_INCL field of
36 CAND_BAND_CLASS_REC[i] is set to '1', set the SUBCLASS_REC_LEN field of
37 CAND_BAND_CLASS_REC[i] to the corresponding value of
38 SUBCLASS_REC_LEN_r.

- 1 - If the i^{th} occurrence of SUBCLASS_INFO_INCL field of
2 CAND_BAND_CLASS_REC[i] is set to '1', the mobile station shall perform the
3 following for each band subclass indicator received:
- 4 + Set the BAND_SUBCLASS_IND_REC[j] field of CAND_BAND_CLASS_REC[i]
5 to the j^{th} occurrence of BAND_SUBCLASS_IND_r in the i^{th}
6 CAND_BAND_CLASS_REC record.
- 7 - Set the TD_MODE field of CAND_BAND_CLASS_REC[i] to the i^{th} occurrence of
8 TD_MODE_r
- 9 - Set the BYPASS_SYS_DET_IND field of CAND_BAND_CLASS_REC[i] to the i^{th}
10 occurrence of BYPASS_SYS_DET_IND_r.
- 11 - Set the NUM_FREQ field of CAND_BAND_CLASS_REC[i] to the i^{th} occurrence of
12 NUM_FREQ_r.
- 13 - For each FREQ record included in the CAND_BAND_CLASS_REC[i], the mobile
14 station shall store the following:
- 15 + Set the CDMA_FREQ[j] field of CAND_BAND_CLASS_REC[i] to the j^{th}
16 occurrence of CDMA_FREQ_r in the i^{th} CAND_BAND_CLASS_REC record.
- 17 + If the j^{th} occurrence of REMAINING_FIELD_INCL field of the
18 CAND_BAND_CLASS_REC[i] is set to '1', the mobile station shall store the
19 following:
- 20 ○ Set the REV_CDMA_FREQ[j] field of CAND_BAND_CLASS_REC[i] to the
21 j^{th} occurrence of REV_CDMA_FREQ_r in the i^{th}
22 CAND_BAND_CLASS_REC record.
- 23 ○ Set the RC_QPCH_HASH_IND[j] field of CAND_BAND_CLASS_REC[i] to
24 the j^{th} occurrence of RC_QPCH_HASH_IND_r if the field corresponding to
25 the CDMA_FREQ[j] field of the i^{th} CAND_BAND_CLASS_REC record is
26 included, otherwise set it to '0'.
- 27 ○ Set the TD_HASH_IND[j] field of CAND_BAND_CLASS_REC[i] to the j^{th}
28 occurrence of TD_HASH_IND_r if the field corresponding to the
29 CDMA_FREQ[j] field of the i^{th} CAND_BAND_CLASS_REC record is
30 included, otherwise set it to '0'.
- 31 ○ Set the TD_POWER_LEVEL[j] field of CAND_BAND_CLASS_REC[i] to the
32 j^{th} occurrence of TD_POWER_LEVEL_r if the field corresponding to the
33 CDMA_FREQ[j] field of the i^{th} CAND_BAND_CLASS_REC record is
34 included, otherwise set it to '0'.
- 35 ○ Set the CDMA_FREQ_WEIGHT[j] field of CAND_BAND_CLASS_REC[i] to
36 the j^{th} occurrence of CDMA_FREQ_WEIGHT_r if the field corresponding to
37 the CDMA_FREQ[j] field of the i^{th} CAND_BAND_CLASS_REC record is
38 included, otherwise set it to '0'.
- 39 + Otherwise, the mobile station should set these fields as follows:

- 1 ○ If the base station is sending the *Extended CDMA Channel List Message*
2 and includes CDMA_FREQ[j] and CAND_BAND_CLASS pair the mobile
3 station shall store the following:
- 4 ◇ Set the REV_CDMA_FREQ[j] field of CAND_BAND_CLASS_REC[i]
5 according to [45].
- 6 ◇ If the RC_QPCH_HASH_IND_r field corresponding to the
7 CDMA_FREQ[j] and CAND_BAND_CLASS pair in the *Extended CDMA*
8 *Channel List Message* is included, set the RC_QPCH_HASH_IND[j]
9 field of CAND_BAND_CLASS_REC[i] to this value, Otherwise, set it to
10 '0'.
- 11 ◇ If the TD_HASH_IND_r field corresponding to the CDMA_FREQ[j] and
12 CAND_BAND_CLASS pair in the *Extended CDMA Channel List*
13 *Message* is included, set the TD_HASH_IND[j] field of
14 CAND_BAND_CLASS_REC[i] to this value, Otherwise, set it to '0'.
- 15 ◇ If the TD_POWER_LEVEL_r field corresponding to the CDMA_FREQ[j]
16 and CAND_BAND_CLASS pair in the *Extended CDMA Channel List*
17 *Message* is included, set the TD_POWER_LEVEL[j] field of
18 CAND_BAND_CLASS_REC[i] to this value, Otherwise, set it to '0'.
- 19 ◇ If the CDMA_FREQ_WEIGHT_r field corresponding to the
20 CDMA_FREQ[j] and CAND_BAND_CLASS pair in the *Extended CDMA*
21 *Channel List Message* is included, set the CDMA_FREQ_WEIGHT[j]
22 field of CAND_BAND_CLASS_REC[i] to this value, Otherwise, set it to
23 '0'.
- 24 ○ If the base station is not sending the *Extended CDMA Channel List*
25 *Message* or if the CDMA_FREQ[j] and CAND_BAND_CLASS pair is not
26 included in the *Extended CDMA Channel List Message* the mobile station
27 shall set store the following:
- 28 ◇ Set the REV_CDMA_FREQ[j] field of CAND_BAND_CLASS_REC[i]
29 according to [45].
- 30 ◇ Set the RC_QPCH_HASH_IND[j] field of CAND_BAND_CLASS_REC[i]
31 to '0'.
- 32 ◇ Set the TD_HASH_IND[j] field of CAND_BAND_CLASS_REC[i] to '0'.
- 33 ◇ Set the TD_POWER_LEVEL[j] field of CAND_BAND_CLASS_REC[i] to
34 '0'.
- 35 ◇ Set the CDMA_FREQ_WEIGHT[j] field of CAND_BAND_CLASS_REC[i]
36 to '0'.

37 If this message is received on the Paging Channel, the mobile station shall process it as
38 specified in the section 2.6.2.2.23.1. Otherwise the mobile station shall process the
39 message as specified in section 2.6.2.2.23.2.

1 2.6.2.2.23.1 Flex Duplex CDMA Channel List Message on Paging Channel

2 The mobile station shall determine the CDMA Channel (Frequency Assignment) for its
3 Paging Channel as follows:

- 4 • Starting from an empty list, the mobile station shall generate the first CDMA
5 Channel list from the *Flex Duplex CDMA Channel List Message* as follows:
 - 6 - For each band class record included in this message, the mobile station shall
7 perform the following:
 - 8 + If band subclass information is included for this band class record
9 (SUBCLASS_INFO_INCL_S = '1'), the mobile station shall add only those
10 channels belonging to the band class and band subclasses that are
11 supported by both the mobile station and the base station, in the order they
12 appear in the *Flex Duplex CDMA Channel List Message*³⁹.
 - 13 + Otherwise (SUBCLASS_INFO_INCL_S = '0' or P_REV_IN_USE_S is less than 11),
14 the mobile station shall add only those channels that it supports for the
15 associated band class, in the order they appear in the *Flex Duplex CDMA*
16 *Channel List Message*.
 - 17 - If P_REV_IN_USE_S is greater than or equal to 11, the mobile station shall sort
18 the channels first by the ascending order of band class value, as specified in
19 [30], then by the ascending order of CDMA_FREQ within each band class.
 - 20 • If RC_QPCH_SEL_INCL_T is equal to '1' and the mobile station is capable of RC
21 greater than 2 or capable of supporting Quick Paging Channel, the mobile station
22 shall eliminate the channels with RC_QPCH_HASH_IND_S equal to '0' from the first
23 CDMA Channel list to generate the second CDMA Channel list while preserving the
24 order in the first CDMA Channel list. Otherwise, the mobile station shall set the
25 second CDMA Channel list to be equal to the first CDMA Channel list.
 - 26 • The mobile station shall generate the third CDMA Channel list as follows.
 - 27 - If CDMA_FREQ_WEIGHT_INCL_T is equal to '0', the mobile station shall set the
28 third CDMA Channel list to be equal to the second CDMA Channel list.
 - 29 - If CDMA_FREQ_WEIGHT_INCL_T is equal to '1', starting with an empty third
30 CDMA Channel list, for each entry "E" in the second CDMA Channel list in the
31 order they appear, the mobile station shall append N consecutive entries "E" at
32 the end of the third CDMA Channel list, where N is the weight of "E" and equals
33 CDMA_FREQ_WEIGHT_S+1.

³⁹ 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 • The mobile station shall generate a CDMA band list as follows. Starting with an
2 empty CDMA band list, for each channel in the third CDMA Channel list in the
3 order they appear, the mobile station shall append an entry equal to the band class
4 of that channel, at the end of the CDMA band list.
- 5 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of
6 the CDMA band list to compute the band class for its Paging Channel.
- 7 • The mobile station shall eliminate those channels which are not in the computed
8 band class from the third CDMA channel list to generate the final CDMA channel
9 list.
- 10 • If the final CDMA Channel list is empty, the mobile station shall proceed with the
11 processing of *Extended CDMA Channel List message* and the *CDMA Channel List*
12 *message*.
- 13 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 and the
14 size of the final CDMA channel list to determine the CDMA Channel (Frequency
15 Assignment) for its Paging Channel.

16 Figure 2.6.2.2.12.1-1 shows an example of the hashing procedure.

17 If the CDMA Frequency Assignment has changed but the band class is the same (the
18 computed CDMA Channel is different from $CDMACH_S$ but the computed CDMA band class
19 is the same as $CDMABAND_S$), the mobile station shall perform the following actions:

- 20 • If the stored configuration parameters is not current (see 2.6.2.2) for the
21 corresponding base station and frequency assignment, the mobile station shall
22 perform the following actions:
 - 23 - Set $CDMACH_S$ to the new CDMA Channel.
 - 24 - Set $REVCDMACH_S$ to the Reverse CDMA Channel.
 - 25 - Set $PAGE_CHAN_S$ to '1'.
 - 26 - Set $PAGECH_S$ to the Primary Paging Channel.

- 1 - Set CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 2 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 3 FD_CHAN_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
 4 GEN_NGHBR_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
 5 GLOB_SERV_REDIR_MSG_SEQ_s, EXT_GLOB_SERV_REDIR_MSG_SEQ_s,
 6 USER_ZONE_IDMSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
 7 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
 8 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
 9 ACC_MSG_SEQ_s to NULL. The mobile station shall keep the parameters
 10 associated with the current overhead messages until they are updated on the
 11 new Paging Channel⁴⁰
- 12 - Tune to the new CDMA Channel.
- 13 • Otherwise, the mobile station shall perform the following actions:
- 14 - Set CDMACH_s to the new CDMA Channel.
- 15 - The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a
 16 new Paging Channel number in the range 1 to PAGE_CHAN_s, where
 17 PAGE_CHAN_s is the value stored for the Paging Channel whose stored
 18 information is current. The mobile station shall store the new Paging Channel
 19 number as PAGECH_s.
- 20 - Tune to the new CDMA Channel and shall begin monitoring the new Paging
 21 Channel.

22 If the band class has changed (the computed CDMA band class is different than
 23 CDMABAND_s), the mobile station shall perform the following actions:

- 24 • If BYPASS_SYS_DET_IND_s is equal to '0' for this CDMA channel, the mobile station
 25 shall perform the following:
- 26 - Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class
- 27 - Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel
- 28 - The mobile station shall enter the *System Determination Substate* of the *Mobile*
 29 *Station Initialization State* with a new band indication.
- 30 • If BYPASS_SYS_DET_IND_s is equal to '1' for this CDMA channel, the mobile station
 31 shall perform the following:
- 32 - If the stored configuration parameters is not current (see 2.6.2.2) for the
 33 corresponding base station and frequency assignment, the mobile station shall
 34 perform the following actions:

⁴⁰ 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 CDMACH_S to the new CDMA Channel.
- 2 + Set REVCDMACH_S to the Reverse CDMA Channel.
- 3 + Set CDMABAND_S to the new band class.
- 4 + Set PAGE_CHAN_S to '1'.
- 5 + Set PAGECH_S to the Primary Paging Channel.
- 6 + Set CONFIG_MSG_SEQ_S, SYS_PAR_MSG_SEQ_S, NGHBR_LST_MSG_SEQ_S,
7 CHAN_LST_MSG_SEQ_S, EXT_CHAN_LST_MSG_SEQ_S,
8 FD_CHAN_LST_MSG_SEQ_S, EXT_NGHBR_LST_MSG_SEQ_S,
9 GEN_NGHBR_LST_MSG_SEQ_S, EXT_SYS_PAR_MSG_SEQ_S,
10 GLOB_SERV_REDIR_MSG_SEQ_S, EXT_GLOB_SERV_REDIR_MSG_SEQ_S,
11 USER_ZONE_IDMSG_SEQ_S, PRI_NGHBR_LST_MSG_SEQ_S,
12 AP_PILOT_INFO_MSG_SEQ_S, AP_IDT_MSG_SEQ_S, AP_ID_TEXT_MSG_SEQ_S,
13 GOI_MSG_SEQ_S, FREQ_GOI_MSG_SEQ_S, ATIM_MSG_SEQ_S and
14 ACC_MSG_SEQ_S to NULL. The mobile station shall keep the parameters
15 associated with the current overhead messages until they are updated on
16 the new Paging Channel⁴¹.
- 17 + Tune to the new CDMA Channel.
- 18 - Otherwise, the mobile station shall perform the following actions:
- 19 + Set CDMACH_S to the new CDMA Channel.
- 20 + Set CDMABAND_S to the new band class.
- 21 + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select
22 a new Paging Channel number in the range 1 to PAGE_CHAN_S, where
23 PAGE_CHAN_S is the value stored for the Paging Channel whose stored
24 information is current. The mobile station shall store the new Paging
25 Channel number as PAGECH_S.
- 26 + Tune to the new CDMA Channel and shall begin monitoring the new Paging
27 Channel.

28 2.6.2.2.23.2 Flex Duplex CDMA Channel List Message on Primary Broadcast Control 29 Channel

30 To determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast Control
31 Channel, the mobile station shall first select a subset of CDMA channels from the *Flex*
32 *Duplex CDMA Channel List Message* that will be used for channel hashing. The attributes
33 for channel selection are support for that frequency, the band subclass (if included), RC

⁴¹ 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 greater than 2, Quick Paging Channel and transmit diversity. The mobile station shall first
2 select the entire CDMA channel list for channel hashing.

- 3 • Starting from an empty list, the mobile station shall then select the first CDMA
4 Channel list as follows:
 - 5 - For each band class record included in this message, the mobile station shall
6 perform the following:
 - 7 - If band subclass information is included for this band class record
8 (SUBCLASS_INFO_INCL_S = '1'), the mobile station shall add only those channels
9 belonging to the band class and band subclasses that are supported by both the
10 mobile station and the base station, in the order they appear in the *Flex Duplex*
11 *CDMA Channel List Message*⁴².
 - 12 - Otherwise (SUBCLASS_INFO_INCL_S = '0' or P_REV_IN_USE_S is less than 11), the
13 mobile station shall add only those channels that it supports for the associated
14 band class, in the order they appear in the *Flex Duplex CDMA Channel List*
15 *Message*.
 - 16 • If P_REV_IN_USE_S is greater than or equal to 11, the mobile station shall sort the
17 channels first by the ascending order of band class value as specified in [30], then
18 by the ascending order of CDMA_FREQ within each band class.
 - 19 • If TD_SEL_INCL_T is equal to '1', the mobile station shall perform the following:
 - 20 - If the mobile station is capable of supporting the transmit diversity mode
21 specified by TD_MODE_S, the mobile station shall select those CDMA channels
22 that have TD_HASH_IND_S set to '1' from the CDMA channel list for the first
23 CDMA Channel list while preserving the order.
 - 24 - If the mobile station is not capable of supporting the transmit diversity mode
25 specified by TD_MODE_S, the mobile station shall select those CDMA channels
26 that have TD_HASH_IND_S set to '0' from the CDMA channel list for the first
27 CDMA Channel list while preserving the order.
 - 28 • If TD_SEL_INCL_T is equal to '0', the mobile station shall select the entire list for the
29 first CDMA Channel list.

30 From this first CDMA Channel list, the mobile station shall select the second CDMA
31 Channel list as follows:

- 32 • If RC_QPCH_SEL_INCL_T is equal to '1' and the mobile station is capable of RC
33 greater than 2 or capable of supporting QPCH, the mobile station shall select those

⁴² 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 channels with RC_QPCH_HASH_IND_s set to '1' for the second CDMA
 2 Channel list for CDMA channel hashing while preserving the order. If this list is
 3 empty, the mobile station shall use the first CDMA Channel list as the second
 4 CDMA Channel list for CDMA channel hashing.

- 5 • Otherwise, the mobile station shall use the first CDMA Channel list as the second
 6 CDMA Channel list for CDMA channel hashing.

7 From this second CDMA Channel list, the mobile station shall select the third CDMA
 8 Channel list subset as follows:

- 9 • If CDMA_FREQ_WEIGHT_INCL_r is equal to '0', the mobile station shall set the third
 10 CDMA Channel list to be equal to the second CDMA Channel list
- 11 • If CDMA_FREQ_WEIGHT_INCL_r is equal to '1', starting with an empty third CDMA
 12 Channel list, for each entry "E" in the second CDMA Channel list in the order they
 13 appear, the mobile station shall append N consecutive entries "E" at the end of the
 14 third CDMA Channel, where N is the weight of "E" and equals
 15 CDMA_FREQ_WEIGHT_s+1.

16 The mobile station shall determine the band class for its Primary Broadcast Control
 17 Channel as follows:

- 18 • The mobile station shall generate a CDMA band list as follows. Starting with an
 19 empty CDMA band list, for each channel in the third CDMA Channel list in the
 20 order they appear, the mobile station shall append an entry equal to the band class
 21 of that channel, at the end of the CDMA band list
- 22 • The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of
 23 the CDMA band list to compute the band class for its Primary Broadcast Control
 24 Channel.

25 After the band class has been selected, the mobile station shall determine the CDMA
 26 Channel (Frequency Assignment) for its Primary Broadcast Control Channel as follows:

- 27 • The mobile station shall eliminate those channels which are not in the computed
 28 band class from the third CDMA Channel list to generate the final CDMA Channel
 29 list.
- 30 • If the final CDMA Channel list is empty, the mobile station shall proceed with the
 31 processing of the *Extended CDMA Channel List message*.
- 32 • The mobile station shall then use the hash algorithm specified in 2.6.7.1 with the
 33 number of channels in the final CDMA Channel list to determine the CDMA
 34 Channel (Frequency Assignment) for its Primary Broadcast Control Channel.

35 If the CDMA Frequency Assignment has changed but the band class is the same (the
 36 computed CDMA Channel is different from CDMACH_s but the computed CDMA band class
 37 is CDMABAND_s), the mobile station shall perform the following:

- 38 • Set CDMACH_s to the new CDMA Channel.
- 39 • Set REVCDMACH_s to the new Reverse CDMA Channel.

- 1 • Set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
2 UNI_NGHRBR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
3 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
4 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
5 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
6 PRI_NGHRBR_LST_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL. The mobile station
7 shall keep the parameters associated with the current overhead messages until they
8 are updated on the new Primary Broadcast Control Channel⁴³.
- 9 • If the mobile station is operating in the Spreading Rate 1:
- 10 - If the assigned CDMA channel supports transmit diversity, the mobile station
11 shall set the following fields corresponding to the assigned CDMA channel:
- 12 + SR1_TD_POWER_LEVEL_s = TD_POWER_LEVEL_r.
13 + SR1_TD_MODE_s = TD_MODE_r.
14 + BRAT_s = SR1_BRAT_TD_s.
15 + BCCH_CODE_RATE_s = SR1_CRAT_TD_s.
16 + BCCH_s = BCCH_CODE_CHAN_TD_s.
- 17 - Otherwise, the mobile station shall set the following fields corresponding to the
18 assigned CDMA channel:
- 19 + BRAT_s = SR1_BRAT_NON_TD_s,
20 + BCCH_CODE_RATE_s = SR1_CRAT_NON_TD_s,
21 + BCCH_s = BCCH_CODE_CHAN_NON_TD_s,
- 22 • Tune to the new CDMA Channel
- 23 If the band class has changed (the computed CDMA band class is different than
24 CDMABAND_s), the mobile station shall perform the following actions:
- 25 • If BYPASS_SYS_DET_IND_s is equal to '0' for this CDMA channel, the mobile station
26 shall perform the following:
- 27 - Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class.
28 - Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel.
29 - The mobile station shall enter the *System Determination Substate* of the *Mobile*
30 *Station Initialization State* with a new band indication.

⁴³ 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 • If $BYPASS_SYS_DET_IND_S$ is equal to '1' for this CDMA channel, the mobile station
2 shall perform the following:
- 3 - Set $CDMACH_S$ to the new CDMA Channel.
- 4 - Set $REVCDMACH_S$ to the new Reverse CDMA Channel.
- 5 - Set $CDMABAND_S$ to the new band class.
- 6 - Set $CONFIG_MSG_SEQ_S$, $A41_SYS_PAR_MSG_SEQ_S$, $MC_RR_PAR_MSG_SEQ_S$,
7 $UNI_NGHBR_LST_MSG_SEQ_S$, $EXT_CHAN_LST_MSG_SEQ_S$,
8 $FD_CHAN_LST_MSG_SEQ_S$, $USER_ZONE_ID_MSG_SEQ_S$, and
9 $PRI_NGHBR_LST_MSG_SEQ_S$, $AP_PILOT_INFO_MSG_SEQ_S$, $AP_IDT_MSG_SEQ_S$,
10 $AP_ID_TEXT_MSG_SEQ_S$, $GOI_MSG_SEQ_S$, $FREQ_GOI_MSG_SEQ_S$,
11 $ATIM_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to NULL. The mobile station shall keep
12 the parameters associated with the current overhead messages until they are
13 updated on the new Primary Broadcast Control Channel⁴⁴.
- 14 - If the mobile station is operating in the Spreading Rate 1:
- 15 + If the assigned CDMA channel supports transmit diversity, the mobile
16 station shall set the following fields corresponding to the assigned CDMA
17 channel:
- 18 ○ $SR1_TD_POWER_LEVEL_S = TD_POWER_LEVEL_T$.
- 19 ○ $SR1_TD_MODE_S = TD_MODE_T$.
- 20 ○ $BRAT_S = SR1_BRAT_TD_S$.
- 21 ○ $BCCH_CODE_RATE_S = SR1_CRAT_TD_S$.
- 22 ○ $BCCH_S = BCCH_CODE_CHAN_TD_S$.
- 23 - Otherwise, the mobile station shall set the following fields corresponding to the
24 assigned CDMA channel:
- 25 + $BRAT_S = SR1_BRAT_NON_TD_S$,
- 26 + $BCCH_CODE_RATE_S = SR1_CRAT_NON_TD_S$,
- 27 + $BCCH_S = BCCH_CODE_CHAN_NON_TD_S$,
- 28 - Tune to the new CDMA Channel

29 2.6.2.2.24 Alternative Technologies Information Message

30 Whenever a *Alternative Technologies Information Message* is received on the Paging Channel
31 or the Primary Broadcast Control Channel, the configuration message sequence number,

⁴⁴ 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 CONFIG_MSG_SEQ_r, shall be compared to that stored in ATIM_MSG_SEQ_s. If the
 2 comparison results in a match, the mobile station may ignore the message. If the
 3 comparison results in a mismatch, then the mobile station shall process the remaining
 4 fields in the message as follows.

5 The mobile station shall store the following parameters:

- 6 • Configuration message sequence number
 7 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
 8 ATIM_MSG_SEQ_s = CONFIG_MSG_SEQ_r)

9 The mobile station shall store all the Radio Interface records contained in the *Alternative*
 10 *Technologies Information Message*.

11 2.6.2.2.25 Frequent General Overhead Information Message

12 Whenever a *Frequent General Overhead Information Message* is received on the Paging
 13 Channel or the Primary Broadcast Control Channel, the configuration message sequence
 14 number, CONFIG_MSG_SEQ_r, shall be compared to that stored in FREQ_GOI_MSG_SEQ_s.
 15 If the comparison results in a match, the mobile station may ignore the message. If the
 16 comparison results in a mismatch, then the mobile station shall process the remaining
 17 fields in the message as follows.

18 The mobile station shall store the following parameters:

- 19 • Configuration message sequence number
 20 (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r,
 21 FREQ_GOI_MSG_SEQ_s = CONFIG_MSG_SEQ_r)

22 For each of the General Overhead Information record contained in the *Frequent General*
 23 *Overhead Information Message*, the mobile station shall perform the following:

- 24 • Set the FREQ_GOI_REC_TYPE_s[i] to the GOI_REC_TYPE field of the *i*th occurrence of
 25 GOI_REC_TYPE_r.
- 26 • Set the FREQ_GOI_REC_s[i] to the GOI_REC field of the *i*th occurrence of GOI_REC_r.

27 If the mobile station supports the processing of GOI_REC_TYPE value of '00000010' in the
 28 General Overhead Information record and receives a General Overhead Information record
 29 with GOI_REC_TYPE of '00000010', the mobile station shall process the General Overhead
 30 Information as follows:

- 31 • The mobile station should use the information in the GOI_REC_TYPE of '00000010'
 32 to search for preferred networks⁴⁵. If the General Overhead Information record with

⁴⁵ For example, mobile station that is roaming may use this information to search for a home network if the home network is listed in the GOI_REC. Procedures for search is beyond the scope of this specification.

- 1 GOI_REC_TYPE of '00000010' includes the MCC and MNC⁴⁶, the mobile station
 2 should attempt to acquire the home system if all of the following conditions are met:
- 3 - The mobile station is currently not on the home system.
 - 4 - The MCC and MNC values contained in the General Overhead Information
 5 record match the home system of the mobile station.
 - 6 - The user has not directed the mobile station to stay on the current system.

7 If the mobile station is unable to acquire the home system, the mobile station may return
 8 and acquire the current system and continue to stay on this system⁴⁷.

9 2.6.2.3 Mobile Station Page Match Operation

10 The *Mobile Station Page Match Operation* is performed whenever the mobile station receives
 11 a mobile-station-addressed page or a broadcast page. If the mobile station receives a
 12 mobile-station-addressed page that contains the IMSI or TMSI assigned to the mobile
 13 station (see [4]) on the Paging Channel, the mobile station transmits a *Page Response*
 14 *Message* on the Access Channel. If the mobile station receives a mobile-station-addressed
 15 page that contains the IMSI or TMSI assigned to the mobile station (see [4]) on the Forward
 16 Common Control Channel, the mobile station transmits a *Page Response Message* on the r-
 17 csch. If the mobile station is configured to receive broadcast messages and it receives a
 18 *General Page Message* that contains a burst type and broadcast address that the mobile
 19 station has been configured to receive (see [4]) on the Paging Channel, the mobile station
 20 performs the broadcast page procedures as described in 2.6.2.1.1.3.4. If the mobile station
 21 is configured to receive broadcast messages and it receives a *General Page Message* or a
 22 *Universal Page Message* that contains a burst type and broadcast address that the mobile
 23 station has been configured to receive (see [4]) on the Forward Common Control Channel,
 24 the mobile station performs the enhanced broadcast page procedures as described in
 25 2.6.2.1.1.3.6.

26 When the mobile station receives a page message, it shall compare the configuration
 27 message sequence number, CONFIG_MSG_SEQ_r, to CONFIG_MSG_SEQ_s. If the
 28 comparison results in a mismatch, then the mobile station shall set CONFIG_MSG_SEQ_s to
 29 CONFIG_MSG_SEQ_r. The mobile station shall also compare the *Access Parameters*
 30 *Message* or the *Enhanced Access Parameters Message* sequence number, ACC_MSG_SEQ_r,
 31 with that stored in ACC_MSG_SEQ_s. If the comparison results in a mismatch, then the
 32 mobile station shall set ACC_MSG_SEQ_s to NULL (see 2.6.2.2). The mobile station shall set
 33 CURR_ACC_MSG_SEQ to ACC_MSG_SEQ_s.

34 The mobile station shall process each record for which it declares a page match (see [4]).

35 If the mobile station receives a broadcast page that contains a burst type and broadcast
 36 address that the mobile station has been configured to receive on the Paging Channel, the

⁴⁶ MNC is IMSI_11_12 when IMSI_10 is not included or concatenation of IMSI_11_12 and IMSI_10 when IMSI_10 is included.

⁴⁷ The system selection procedure for this scenario is beyond the scope of this specification.

1 mobile station should perform the broadcast page procedures described in 2.6.2.1.1.3.4. If
 2 the mobile station receives a broadcast page that contains a burst type and broadcast
 3 address that the mobile station has been configured to receive on the Forward Common
 4 Control Channel, the mobile station should perform the enhanced broadcast page
 5 procedures as described in 2.6.2.1.1.3.6.

6 If a page match is declared, the mobile station shall perform the following:

- 7 • The mobile station shall enter the *Update Overhead Information Substate* of the
 8 *System Access State* (see 2.6.3.2) with a page response indication within T_{33m}
 9 seconds after the page message is received.

10 If a page match is declared and the mobile station determines that it should be monitoring
 11 a neighboring base station, the mobile station may perform an access entry handoff to the
 12 neighboring base station, if all of the following conditions hold:

- 13 • The neighboring base station is listed in NGHBR_REC.
- 14 • The ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the neighboring
 15 base station is equal to '1'.
- 16 • If the mobile station performs an access entry handoff on the Access Channel, none
 17 of CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
 18 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
 19 CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
 20 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
 21 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
 22 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
 23 PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.
- 24 • If the mobile station performs an access entry handoff on the Enhanced Access
 25 Channel, none of CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
 26 MC_RR_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s,
 27 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
 28 USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
 29 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
 30 ATIM_MSG_SEQ_s and PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.

31 Otherwise, the mobile station shall not perform an access entry handoff to the neighboring
 32 base station.

33 The mobile station need not perform an access entry handoff to a base station operating on
 34 another frequency.

35 If the mobile station performs an access entry handoff, it shall follow the procedures
 36 specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the
 37 *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2).

38 If PACA is enabled, and if the mobile station performs an access entry handoff, the mobile
 39 station shall respond to the mobile-station-addressed page first and shall then re-originate
 40 the PACA call on the new base station.

2.6.2.4 Mobile Station Order and Message Processing Operation

During the *Mobile Station Order and Message Processing Operation*, the mobile station processes all messages except overhead messages (see 2.6.2.2) and page messages (see 2.6.2.3).

The mobile station shall set CURR_ACC_MSG_SEQ to NULL.

The mobile station shall perform address matching as described in [4].

If Layer 3 receives a message that requires acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* with an order/message response indication within T_{33m} seconds, unless otherwise specified for a 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_{33m} 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_s is equal to '1'.
- If the mobile station performs an access entry handoff on the Access Channel, none of CONFIG_MSG_SEQ_s, 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, USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s, and EXT_SYS_PAR_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s are equal to NULL.
- If the mobile station performs an access entry handoff on the Enhanced Access Channel, none of CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s, UNI_NGHBR_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and PRI_NGHBR_LST_MSG_SEQ_s are equal to NULL.

Otherwise, the mobile station shall not perform an access entry handoff to the neighboring base station.

1 The mobile station need not perform an access entry handoff to a base station operating on
2 another frequency.

3 If the mobile station performs an access entry handoff, it shall follow the procedures
4 specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the
5 *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2). If PACA is
6 enabled and the mobile station performs an access entry handoff, the mobile station shall
7 respond to the order/message first and then re-originate the PACA call in the new base
8 station.

9 The following directed messages and orders can be received. If any field value of the
10 message or order is outside its permissible range, the mobile station shall send a *Mobile*
11 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 12 1. *Abbreviated Alert Order*: The mobile station may alert the user.
- 13 2. *Audit Order*
- 14 3. *Authentication Challenge Message*: The mobile station shall process the message
15 and shall respond with an *Authentication Challenge Response Message* as specified
16 in 2.3.12.1.4, regardless of the value of AUTH_s. The mobile station shall enter the
17 *Update Overhead Information Substate* of the *System Access State* with an
18 order/message response indication within T_{32m} seconds.
- 19 4. *Authentication Request Message*: The mobile station shall process the message and
20 shall respond as specified in 2.3.12.5.2. The mobile station shall enter the *Update*
21 *Overhead Information Substate* of the *System Access State* with an order/message
22 response indication within T_{32m} seconds.
- 23 5. *Base Station Challenge Confirmation Order*: The mobile station shall process the
24 message and shall respond with an *SSD Update Confirmation Order* or *SSD Update*
25 *Rejection Order* as specified in 2.3.12.1.5. The mobile station shall enter the
26 *Update Overhead Information Substate* of the *System Access State* with an
27 order/message response indication within T_{32m} seconds.
- 28 6. *Base Station Reject Order*: The mobile station shall perform the procedures as
29 specified in 2.6.11.5.
- 30 7. *Channel Assignment Message*: The mobile station shall process the message as
31 follows:
 - 32 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
33 actions:
 - 34 - If the message requires acknowledgment, the mobile station shall wait until
35 Layer 3 receives an indication from Layer 2 that the acknowledgment to the
36 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_s = CDMA_FREQ_r, tune to the new Frequency
3 Assignment, and measure the strength of each pilot listed in the
4 assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
5 and 2.6.6.2.2.
- 6 - The mobile station shall set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to
7 NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence offset
8 of the strongest pilot in the list (PILOT_PN_r).
- 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_s,
12 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
13 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
14 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
15 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
16 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
17 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
18 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
19 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s to NULL. The mobile station
20 shall set PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel.
21 The mobile station shall then begin monitoring the Primary Paging Channel
22 of the selected base station.
- 23 • If ASSIGN_MODE_r equals '101' and FREQ_INCL_r equals '0', the mobile station
24 shall perform the following actions:
- 25 • If the message requires acknowledgment, the mobile station shall wait until
26 Layer 3 receives an indication from Layer 2 that the acknowledgment to the
27 message has been sent and acknowledged.
- 28 - The mobile station shall measure the strength of each pilot listed in the
29 assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
30 and 2.6.6.2.2, set PILOT_PN_s to the pilot PN sequence offset of the strongest
31 pilot in the list (PILOT_PN_r), and set CONFIG_MSG_SEQ_s and
32 ACC_MSG_SEQ_s to NULL (see 2.6.2.2).
- 33 - If the mobile station has not stored configuration parameters for the Primary
34 Paging Channel of the new base station, or if the stored information is not
35 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
36 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
37 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
38 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
39 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
40 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
41 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
42 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
43 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s to NULL. The mobile station
44 shall set PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel.

- 1 The mobile station shall then begin monitoring the Primary Paging Channel
2 of the selected base station.
- 3 • If ASSIGN_MODE_r equals '101', FREQ_INCL_r equals '1', and the band class is
4 not supported by the mobile station, the mobile station shall enter the *Update*
5 *Overhead Information Substate* of the *System Access State* with an
6 order/message response indication within T_{33m} seconds and send a *Mobile*
7 *Station Reject Order* with ORDQ field set to '00000110' (capability not supported
8 by the mobile station).
 - 9 • If ASSIGN_MODE_r equals '101', FREQ_INCL_r equals '1', and the band class is
10 supported by the mobile station, the mobile station shall perform the following
11 actions:
 - 12 • If the message requires acknowledgment, the mobile station shall wait until
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 CDMACH_s = CDMA_FREQ_r and CDMABAND_s =
16 BAND_CLASS_r. Then the mobile station shall tune to the new Frequency
17 Assignment, measure the strength of each pilot listed in the assignment
18 using the Neighbor Set search procedures specified in 2.6.6.2.1 and
19 2.6.6.2.2, set PILOT_PN_s to the pilot PN sequence offset of the strongest
20 pilot in the list (PILOT_PN_r), and set CONFIG_MSG_SEQ_s and
21 ACC_MSG_SEQ_s to NULL (see 2.6.2.2).
 - 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_s,
25 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
26 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
27 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
28 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
29 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
30 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
31 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
32 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s to NULL. The mobile station
33 shall set PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel.
34 The mobile station shall then begin monitoring the Primary Paging Channel
35 of the selected base station.
 - 36 • If ASSIGN_MODE_r is not equal to '001' or '101', the mobile station shall enter
37 the *Update Overhead Information Substate* of the *System Access State* with an
38 order/message response indication within T_{33m} seconds and send a *Mobile*
39 *Station Reject Order* with ORDQ field set to '00000010' (message not accepted in
40 this state).
- 41 8. *Data Burst Message*
- 42 9. *Extended Channel Assignment Message*: The mobile station shall process the

1 message as follows:

- 2 • If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '0', the mobile station shall
3 perform the following actions:

- 4 - If the message requires acknowledgment, the mobile station shall wait until
5 Layer 3 receives an indication from Layer 2 that the acknowledgment to the
6 message has been sent and acknowledged.
7 - The mobile station shall measure the strength of each pilot listed in the
8 assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
9 and 2.6.6.2.2 set PILOT_PN_s to the pilot PN sequence offset of the strongest
10 pilot in the list (PILOT_PN_r), and set CONFIG_MSG_SEQ_s and
11 ACC_MSG_SEQ_s to NULL (see 2.6.2.2).

- 12 - If the mobile station has not stored configuration parameters for the Primary
13 Paging Channel of the new base station, or if the stored information is not
14 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
15 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
16 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
17 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s,
18 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
19 PRI_NGHBR_LST_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s, and
20 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
21 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
22 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s to NULL. The mobile station
23 shall set PAGE_CHAN_s to '1' and PAGECH_s to the Primary Paging Channel.
24 If the mobile station was monitoring Forward Common Control Channel, the
25 mobile station shall set the PRAT_s to '00'. The mobile station shall then
26 begin monitoring the Primary Paging Channel of the selected base station.

- 27 • If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '1', and the band class is
28 not supported by the mobile station, the mobile station shall enter the *Update*
29 *Overhead Information Substate* of the *System Access State* with an
30 order/message response indication within T_{33m} seconds and send a *Mobile*
31 *Station Reject Order* with ORDQ field set to '00000110' (capability not supported
32 by the mobile station).

- 33 • If ASSIGN_MODE_r equals '001', FREQ_INCL_r equals '1', and the band class is
34 supported by the mobile station, the mobile station shall perform the following
35 actions:

- 36 - If the message requires acknowledgment, the mobile station shall wait until
37 Layer 3 receives an indication from Layer 2 that the acknowledgment to the
38 message has been sent and acknowledged.
39 - The mobile station shall set CDMACH_s = CDMA_FREQ_r and CDMABAND_s =
40 BAND_CLASS_r. The mobile station shall set CONFIG_MSG_SEQ_s and
41 ACC_MSG_SEQ_s to NULL (see 2.6.2.2). Then the mobile station shall tune
42 to the new Frequency Assignment, measure the strength of each pilot listed
43 in the assignment using the Neighbor Set search procedures specified in

- 1 2.6.6.2.1 and 2.6.6.2.2, and set $PILOT_PN_S$ to the pilot PN sequence offset
2 of the strongest pilot in the list ($PILOT_PN_T$).
- 3 - If the mobile station has not stored configuration parameters for the Primary
4 Paging Channel of the new base station, or if the stored information is not
5 current (see 2.6.2.2), the mobile station shall set $SYS_PAR_MSG_SEQ_S$,
6 $NGHBR_LST_MSG_SEQ_S$, $EXT_NGHBR_LST_MSG_SEQ_S$,
7 $GEN_NGHBR_LST_MSG_SEQ_S$, $CHAN_LST_MSG_SEQ_S$,
8 $EXT_CHAN_LST_MSG_SEQ_S$, $FD_CHAN_LST_MSG_SEQ_S$,
9 $EXT_SYS_PAR_MSG_SEQ_S$, $USER_ZONE_ID_MSG_SEQ_S$,
10 $PRI_NGHBR_LST_MSG_SEQ_S$, $GLOB_SERV_REDIR_MSG_SEQ_S$,
11 $AP_PILOT_INFO_MSG_SEQ_S$, $AP_IDT_MSG_SEQ_S$, $AP_ID_TEXT_MSG_SEQ_S$,
12 $GOI_MSG_SEQ_S$, $FREQ_GOI_MSG_SEQ_S$, $ATIM_MSG_SEQ_S$ and
13 $EXT_GLOB_SERV_REDIR_MSG_SEQ_S$ to NULL. The mobile station shall set
14 $PAGE_CHAN_S$ to '1' and $PAGECH_S$ to the Primary Paging Channel. If the
15 mobile station was monitoring Forward Common Control Channel, the
16 mobile station shall set the $PRAT_S$ to '00'. The mobile station shall then
17 begin monitoring the Primary Paging Channel of the selected base station.
- 18 • If $ASSIGN_MODE_T$ equals '100' or '101', the mobile station shall perform the
19 following actions:
- 20 - If $DIRECT_CH_ASSIGN_IND_T$ is included and is set to '1', the mobile station
21 shall process the message as defined below in the order specified:
- 22 + The mobile station shall set $CONFIG_MSG_SEQ_S$ to $CONFIG_MSG_SEQ_T$.
23 + If $RESPOND_IND_T$ is equal to '1', the mobile station shall process the
24 message as specified in section 2.6.3.3⁴⁸; otherwise, the mobile station
25 shall enter the *Update Overhead Information Substate* of the *System*
26 *Access State* with a direct channel assignment update overhead
27 indication within T_{33m} seconds.
- 28 - Otherwise, the mobile station shall enter the *Update Overhead Information*
29 *Substate* of the *System Access State* with an order/message response
30 indication within T_{33m} seconds and send a *Mobile Station Reject Order* with
31 ORDQ field set to '00000010' (message not accepted in this state).
- 32 • If $ASSIGN_MODE_T$ is not equal to '001', '100' or '101', the mobile station shall
33 enter the *Update Overhead Information Substate* of the *System Access State* with
34 an order/message response indication within T_{33m} seconds and send a *Mobile*
35 *Station Reject Order* with ORDQ field set to '00000010' (message not accepted in
36 this state).

⁴⁸ 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 10. *Feature Notification Message*

2 11. *Local Control Order*

3 12. *Lock Until Power-Cycled Order*: The mobile station shall record the reason for the
4 *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory
5 (LCKRSN_{P_{s-p}} equals the least significant four bits of ORDQ_r). After a mobile
6 station receives this order, it shall not enter the *System Access State* (see 2.6.3)
7 until it has received an *Unlock Order* or until after power-cycling the mobile station
8 (i.e., after the next mobile station power-up). This requirement shall take
9 precedence over any other mobile station requirement specifying entry to the
10 *System Access State*. The mobile station should notify the user of the locked
11 condition. The mobile station shall exit the *Mobile Station Idle State* and enter the
12 *System Determination Substate* of the *Mobile Station Initialization State* with a lock
13 indication (see 2.6.1.1). This allows the mobile station to operate in an alternate
14 operating mode while locked.

15 13. *Maintenance Required Order*: The mobile station shall record the reason for the
16 *Maintenance Required Order* in the mobile station's semi-permanent memory
17 (MAINTRSN_{S-p} equals the least significant four bits of ORDQ_r). If the mobile
18 station has previously received a *Lock Until Power-Cycled Order*, it shall remain in
19 the locked condition; otherwise the mobile station shall remain in the unlocked
20 condition. The mobile station should notify the user of the maintenance required
21 condition.

22 14. *PACA Message*: If P_REV_IN_USE_s is less than or equal to four, and if the mobile
23 station does not support PACA capability, the mobile station shall send a *Mobile*
24 *Station Reject Order* with the ORDQ field set to '00000110' (message requires a
25 capability that is not supported by the mobile station); otherwise, the mobile
26 station shall process the message as follows:

- 27 • If PACA_s is equal to disabled, the mobile station shall enter the *Update Overhead*
28 *Information Substate* of the *System Access State* with an order/message response
29 indication within T_{33m} seconds and shall send a *Mobile Station Reject Order* with
30 the ORDQ field set to '00000010' (message not accepted in this state).
- 31 • If PACA_s is equal to enabled, the mobile station shall perform the following:
 - 32 - If the purpose of the message is to respond to an *Origination Message*
33 (PURPOSE_r is equal to '0000'), the mobile station shall enter the *Update*
34 *Overhead Information Substate* of the *System Access State* with an
35 order/message response indication within T_{33m} seconds and send a *Mobile*
36 *Station Reject Order* with the ORDQ field set to '00000010' (message not
37 accepted in this state).

- 1 - If the purpose of the message is to provide the queue position of the PACA
2 call (PURPOSE_r is equal to '0001'), the mobile station shall set the PACA
3 state timer to the duration shown in Table 3.7.2.3.2.20-2, corresponding to
4 the value of PACA_TIMEOUT_s, should indicate to the user that the PACA call
5 is still queued, and should indicate the current queue position (Q_POS_r) of
6 the call.
- 7 - If the purpose of the message is to instruct the mobile station to re-originate
8 the PACA call (PURPOSE_r is equal to '0010'), the mobile station shall set the
9 PACA state timer to the duration shown in Table 3.7.2.3.2.20-2
10 corresponding to the value of PACA_TIMEOUT_s, and the mobile station shall
11 enter the *Update Overhead Information Substate* of the *System Access State*
12 (see 2.6.3) with a PACA response indication within T_{33m} seconds to re-
13 originate the PACA call.
- 14 - If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal
15 to '0011'), the mobile station shall set PACA_s to disabled and PACA_CANCEL
16 to '0', shall disable the PACA state timer, and should indicate to the user
17 that the PACA call has been canceled.
- 18 15. *Registration Accepted Order*: The mobile station shall perform the procedures as
19 specified in 2.6.11.1.
- 20 16. *Registration Rejected Order*: This order indicates that normal service is not
21 available on this system. The mobile station shall disable the full-TMSI timer. If
22 the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile
23 station shall set all the bits of the TMSI_CODE_{s-p} to '1'. The mobile station shall
24 enter the *System Determination Substate* of the *Mobile Station Initialization State* with
25 a registration rejected indication (see 2.6.1.1).
- 26 17. *Registration Request Order*: The mobile station shall process the message and
27 perform registration procedures as specified in 2.6.5.5.2.3.
- 28 18. *Security Mode Command Message*: The mobile station shall perform the procedures
29 as specified in 2.6.11.4.
- 30 19. *Service Redirection Message*: The mobile station shall process the message as
31 follows:
- 32 • If the mobile station is directed to an unsupported operation mode or band
33 class, the mobile station shall respond with a *Mobile Station Reject Order* with
34 ORDQ equal to '00000110' (message requires a capability that is not supported
35 by the mobile station).
 - 36 • If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of
37 TMSI_CODE_{s-p} to '1'. The mobile station shall disable the full-TMSI timer.
 - 38 • The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
 - 39 • If RECORD_TYPE_r is equal to '00000000', the mobile station shall enter the
40 *System Determination Substate* of the *Mobile Station Initialization State* with an
41 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
42 redirection record received in the message as REDIRECT_REC_s and shall enter

1 the *System Determination Substate* of the *Mobile Station Initialization State* with a
2 redirection indication (see 2.6.1.1).

3 20. *Retry Order*: The mobile station shall process the message as follows:

- 4 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
5 $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}]$ to 0, where RETRY_TYPE is equal to '001', '010',
6 '011', '100', or '101'.
- 7 • If RETRY_TYPE_R is equal to '001', '100', or '101', the mobile station shall
8 perform the following:
 - 9 - If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set
10 $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$ to 0.
 - 11 - If RETRY_DELAY_R is not equal to '00000000', the mobile station shall set
12 $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$ as follows:
 - 13 + If the most significant bit of the RETRY_DELAY_R is '0', set
14 $\text{RETRY_DELAY_UNIT}_S$ to 1000ms. If the most significant bit of the
15 RETRY_DELAY_R is '1', set $\text{RETRY_DELAY_UNIT}_S$ to 60000ms.
 - 16 + The mobile station shall set $\text{RETRY_DELAY_VALUE}_S$ to the seven least
17 significant bits of RETRY_DELAY_R .
 - 18 + The mobile station shall store the next system time 80 ms boundary +
19 $\text{RETRY_DELAY_VALUE}_S \times \text{RETRY_DELAY_UNIT}_S$ ms as
20 $\text{RETRY_DELAY}_S[\text{RETRY_TYPE}_R]$.

21 21. *Slotted Mode Order*: After receiving this order, the mobile station shall set
22 SLOTTED_S to YES. The mobile station shall disable the $T_{MS_Slotted}$ timer.

23 22. *SSD Update Message*: The mobile station shall process the message and shall
24 respond with a *Base Station Challenge Order* as specified in 2.3.12.1.5. The mobile
25 station shall enter the *Update Overhead Information Substate* of the *System Access*
26 *State* with an order/message response indication within T_{32m} seconds.

27 23. *Status Request Message*: The mobile station shall process the message. If
28 $P_REV_IN_USE_S$ is less than or equal to three, the mobile station shall respond
29 with a *Status Response Message*. If $P_REV_IN_USE_S$ is greater than three, the
30 mobile station shall respond with an *Extended Status Response Message*. The
31 mobile station shall enter the *Update Overhead Information Substate* of the *System*
32 *Access State* with an order/message response indication within T_{33m} seconds. If
33 the message does not specify any qualification information (QUAL_INFO_TYPE_R is
34 equal to '00000000'), the mobile station shall include the requested information
35 records in the response. If the message specifies a band class (QUAL_INFO_TYPE_R
36 is equal to '00000001'), the mobile station shall only include the requested
37 information records for the specified band class (BAND_CLASS_R) in the response.
38 If the message specifies a band class and an operating mode (QUAL_INFO_TYPE_R is
39 equal to '00000010'), the mobile station shall only include the requested
40 information records for the specified band class (BAND_CLASS_R) and operating
41 mode (OP_MODE_R) 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).

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_{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.

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_r 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_{32m} seconds.
- If ORDQ_r 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.

1 2.6.2.5 Mobile Station Origination Operation

2 The *Mobile Station Origination Operation* is performed when the mobile station is directed by
3 the user to initiate a call, or if the *Mobile Station Idle State* is entered with NDSS_ORIG_S
4 enabled.

5 If the mobile station is directed by the user to initiate a call, the mobile station shall
6 perform the following:

- 7 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
8 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
9 user that the PACA call has been canceled.
- 10 • The mobile station shall set CURR_ACC_MSG_SEQ to NULL.

11 The mobile station shall enter the *Update Overhead Information Substate* of the *System*
12 *Access State* (see 2.6.3) with an origination indication within T_{33m} seconds.

13 2.6.2.6 Mobile Station Message Transmission Operation

14 Support of this operation is optional. If the mobile station supports the *Mobile Station*
15 *Message Transmission Operation*, the operation is performed when the user directs the
16 mobile station to transmit a *Data Burst Message*, or when the mobile station detects a
17 change in hook status since the last time when the mobile station sent hook status
18 information and the mobile station supports the *Device Information Message* on the r-csch,
19 or when the mobile station determines that a *Radio Environment Message* is to be
20 transmitted on the r-csch, or when the mobile station requests to operate in reduced slot
21 cycle mode.

22 If the mobile station supports this operation, the mobile station shall set
23 CURR_ACC_MSG_SEQ to NULL.

24 If the mobile station supports this operation and the operation is performed when the user
25 directs the mobile station to transmit a *Data Burst Message*, the mobile station shall enter
26 the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a
27 message transmission indication within T_{33m} seconds.

28 If the mobile station supports this operation and the operation is performed when the
29 mobile station detects a change in hook status since the last time when the mobile station
30 sent hook status information, the mobile station shall enter the *Update Overhead*
31 *Information Substate* of the *System Access State* (see 2.6.3.2) with a hook status indication
32 within T_{33m} seconds.

33 If the mobile station supports this operation and the operation is performed when the
34 mobile station determines that a *Radio Environment Message* is to be transmitted on the r-
35 csch, the mobile station shall perform the following:

- 36 • If RER_MODE_ENABLED is set to YES, the mobile station shall enter the *Update*
37 *Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a radio
38 environment report indication within T_{33m} seconds.

- 1 • Otherwise, if TKZ_MODE_ENABLED is set to YES, the mobile station shall enter the
2 *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a
3 tracking zone indication within T_{33m} seconds.

4 If the mobile station supports this operation and the operation is performed when the
5 mobile station requests to operate in reduced slot cycle mode, the mobile station shall
6 enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2)
7 with a fast call setup indication within T_{33m} seconds.

8 2.6.2.7 Mobile Station Power-Down Operation

9 The *Mobile Station Power-Down Operation* is performed when the user directs the mobile
10 station to power down.

11 The mobile station shall update stored parameters and perform other registration
12 procedures as specified in 2.6.5.5.2.4.

13 If no power-down registration is performed (see 2.6.5.5.2.4), the mobile station may power
14 down.

15 2.6.2.8 Mobile Station PACA Cancel Operation

16 The *Mobile Station PACA Cancel Operation* is performed when the user directs the mobile
17 station to cancel a PACA call.

18 If PACA_s is equal to enabled, the mobile station shall perform the following:

- 19 • The mobile station shall set PACA_s to disabled.
- 20 • The mobile station shall set PACA_CANCEL to '0', if PACA_CANCEL is equal to '1'.
- 21 • The mobile station shall disable the PACA state timer.
- 22 • The mobile station should indicate to the user that the PACA call has been
23 canceled.
- 24 • The mobile station shall set CURR_ACC_MSG_SEQ to NULL.
- 25 • The mobile station shall enter the *Update Overhead Information Substate* of the
26 *System Access State* (see 2.6.3) with a PACA cancel indication within T_{33m} seconds.

27 2.6.3 System Access State

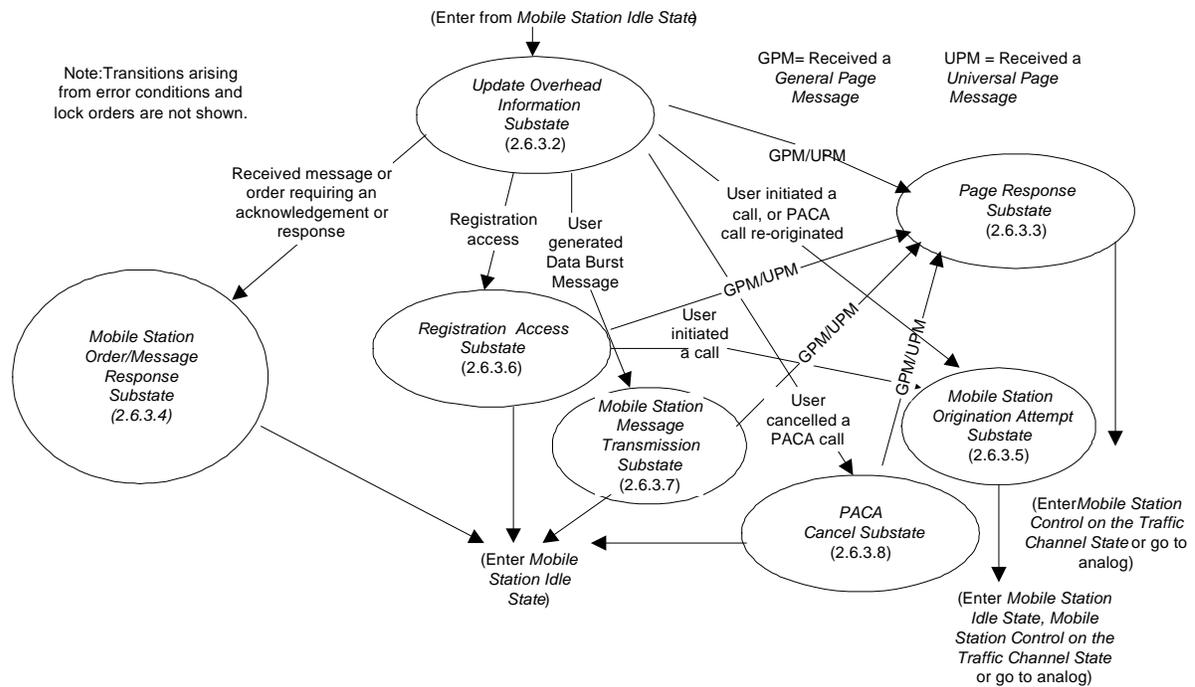
28 In this state, the mobile station sends messages to the base station on the r-csch and
29 receives messages from the base station on the f-csch.

30 As illustrated in Figure 2.6.3-1, the *System Access State* consists of the following substates:

- 31 • *Update Overhead Information Substate* - In this substate, if the base station supports
32 the Primary Broadcast Control Channel for Spreading Rate 1 or if both the base
33 station and mobile station supports the Primary Broadcast Control Channel for
34 Spreading Rate 3 and if the protocol revision level in use is greater than six, the
35 mobile station will monitor the Primary Broadcast Control Channel until it has
36 received a current set of overhead messages; otherwise, the mobile station will
37 monitor the Paging Channel until it has a current set of overhead messages.

- 1 • *Mobile Station Origination Attempt Substate* - In this substate, the mobile station
 2 sends an *Origination Message*, *Call Recovery Request Message* or a *Reconnect*
 3 *Message* (with ORIG_IND set to '1') to the base station.
- 4 • *Page Response Substate* - In this substate, the mobile station sends a *Page*
 5 *Response Message* or a *Reconnect Message* (with ORIG_IND set to '0') to the base
 6 station.
- 7 • *Mobile Station Order/Message Response Substate* - In this substate, the mobile
 8 station sends a response to a message received from the base station.
- 9 • *Registration Access Substate* - In this substate, the mobile station sends a
 10 *Registration Message* to the base station.
- 11 • *Mobile Station Message Transmission Substate* - In this substate, the mobile station
 12 sends a *Data Burst Message* or a *Device Information Message* to the base station.
- 13 • *PACA Cancel Substate* - In this substate, the mobile station sends a *PACA Cancel*
 14 *Message* to the base station.

15



16

17

Figure 2.6.3-1. System Access State

18

20 2.6.3.1 Access Procedures

21 2.6.3.1.1 Access Attempts

22 If the mobile station monitors the Paging Channel, the mobile station transmits on the
 23 Access Channel using a random access procedure. Many parameters of the random access

1 procedure are supplied by the base station in the *Access Parameters Message*. The random
2 access procedure is described in [4] and [3].

3 If the mobile station monitors the Forward Common Control Channel/ Primary Broadcast
4 Control Channel, the mobile station transmits on the Enhanced Access Channel using a
5 random access procedure. Many parameters of the random access procedure are supplied
6 by the base station in the *Enhanced Access Parameters Message*.

7 If Layer 3 receives an indication from Layer 2 that the system access is denied, the mobile
8 station shall update its registration variables using SID_s , NID_s , REG_ZONE_s , and
9 $ZONE_TIMER_s$ that were stored from the first base station to which the mobile station sent
10 an Access Probe, as specified in 2.6.5.5.3.2, and enter the *System Determination Substate* of
11 the *Mobile Station Initialization State* with an access denied indication (see 2.6.1.1).

12 If Layer 3 receives an indication from Layer 2 that the system is lost, the mobile station
13 shall update its registration variables using SID_s , NID_s , REG_ZONE_s , and $ZONE_TIMER_s$
14 that were stored from the first base station to which the mobile station transmitted an
15 Access Probe, as specified in 2.6.5.5.3.2 and enter the *System Determination Substate* of the
16 *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1)

17 2.6.3.1.2 Reserved

18 2.6.3.1.3 Handoffs

19 While in the *System Access State*, the mobile station shall continue its pilot search
20 (see 2.6.3.1.3.1), and may perform access handoffs (see 2.6.3.1.3.2) and/or access probe
21 handoffs (see 2.6.3.1.3.3).

22 If the mobile station performs access handoffs and/or access probe handoffs, the mobile
23 station shall maintain the following variables:

- 24 • $CURRENT_ACTIVE_PILOT_s$
- 25 • $PREVIOUS_ACTIVE_PILOT_s$
- 26 • $FIRST_ACTIVE_PILOT_s$

27 Upon entering the *System Access State* the mobile station shall set
28 $CURRENT_ACTIVE_PILOT_s$, $PREVIOUS_ACTIVE_PILOT_s$ and $FIRST_ACTIVE_PILOT_s$ to
29 NULL. Prior to starting an access attempt, the mobile station shall set
30 $CURRENT_ACTIVE_PILOT_s$ and $PREVIOUS_ACTIVE_PILOT_s$ to NULL. When the mobile
31 station selects a base station for transmission of an access probe, the mobile station shall
32 proceed as follows:

- 33 • If $CURRENT_ACTIVE_PILOT_s$ is not the same as the pilot of the selected base
34 station, the mobile station shall set $PREVIOUS_ACTIVE_PILOT_s$ to the value of
35 $CURRENT_ACTIVE_PILOT_s$.
- 36 • The mobile station shall set $CURRENT_ACTIVE_PILOT_s$ to the identity of the pilot
37 corresponding to the selected base station.
- 38 • If $FIRST_ACTIVE_PILOT_s$ is NULL, the mobile station shall set
39 $FIRST_ACTIVE_PILOT_s$ to the value of $CURRENT_ACTIVE_PILOT_s$.

1 Before the mobile station transmits an access probe to a new base station on the Access
2 Channel, the mobile station shall update parameters based on the *System Parameters*
3 *Message*, the *Access Parameters Message* and the *Extended System Parameters Message* on
4 the associated new Paging Channel and process parameters from the messages (see
5 2.6.2.2.1, 2.6.2.2.2, and 2.6.2.2.5).

6 Before the mobile station transmits an access probe to a new base station on the Enhanced
7 Access Channel, the mobile station shall update parameters based on the *ANSI-41 System*
8 *Parameters Message*, the *Enhanced Access Parameters Message*, and the *MC-RR Parameters*
9 *Message* on the associated new Primary Broadcast Control Channel and process
10 parameters from the messages (see 2.6.2.2.13, 2.6.2.2.14, and 2.6.2.2.15).

11 If the mobile station monitors the Paging Channel, the mobile station shall update
12 parameters based on the *Neighbor List Message*, the *Extended Neighbor List Message*, or the
13 *General Neighbor List Message* on the associated new Paging Channel and process
14 parameters from the message (see 2.6.2.2.3, 2.6.2.2.7, and 2.6.2.2.8).

15 If the mobile station monitors the Forward Common Control Channel/ Primary Broadcast
16 Control Channel, the mobile station shall update parameters based on the *Universal*
17 *Neighbor List Message* on the associated new Primary Broadcast Control Channel and
18 process parameters from the message (see 2.6.2.2.17).

19 If the mobile station receives the *User Zone Identification Message* or the *Private Neighbor*
20 *List Message*, the mobile station shall update parameters based on these messages on the
21 associated new Paging Channel or Primary Broadcast Control Channel and process
22 parameters from the messages (see 2.6.2.2.9 and 2.6.2.2.10). If the mobile station receives
23 a *Global Service Redirection Message* (see 2.6.2.2.6) which directs the mobile station away
24 from the new base station, the mobile station shall not access the new base station. If the
25 mobile station receives an *Extended Global Service Redirection Message* (see 2.6.2.2.11)
26 which directs the mobile station away from the new base station, the mobile station shall
27 not access the new base station. The mobile station shall process these messages only
28 once after each access handoff.

29 2.6.3.1.3.1 Pilot Search

30 The following sets of pilot offsets are defined for a mobile station in the *System Access*
31 *State*. Each pilot offset is a member of only one set.

- 32 • Active Set: The pilot offset of the Forward CDMA Channel whose Paging Channel or
33 Forward Common Control Channel/ Primary Broadcast Control Channel is being
34 monitored.
- 35 • Neighbor Set: The pilots that are not currently in the Active Set and are likely
36 candidates for access handoff or access probe handoff. The members of the
37 Neighbor Set are specified in the *Neighbor List Message*, the *Extended Neighbor List*
38 *Message*, and the *General Neighbor List Message on the Paging Channel*. The
39 members of the Neighbor Set are specified in the *Universal Neighbor List Message on*
40 *the Primary Broadcast Control Channel*.

- 1 • Remaining Set: The set of all possible pilot offsets in the current system (integer
2 multiples of 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 is
9 permitted to perform an access handoff when waiting for a response from the base station
10 or before sending a response to the base station. An access handoff is permitted after an
11 access attempt while the mobile station is in the *Page Response Substate* or the *Mobile*
12 *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 ACCESS_HO_LIST,
18 • 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 mobile
23 station shall perform an access handoff if the following conditions hold:

- 24 • The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
25 • ACCESS_HO_s is equal to '1',
26 • 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 Channel⁴⁹ 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 ACCESS_HO_LIST,
33 • ACCESS_HO_s is equal to '1', and
34 • The mobile station is not already in the process of performing an access attempt.

⁴⁹ Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

1 When the mobile station declares an insufficiency of the Paging Channel⁵⁰ or the Forward
 2 Common Control Channel, after receiving a message but before responding to that message
 3 while in the *Page Response Substate* or in the *Mobile Station Origination Attempt Substate*,
 4 the mobile station may perform an access handoff if all of the following conditions hold:

- 5 • The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- 6 • ACCESS_HO_s is equal to '1',
- 7 • ACCESS_HO_MSG_RSP_s is equal to '1', and
- 8 • The mobile station is not already in the process of performing an access attempt.

9 If ACCESS_PROBE_HO_s is equal to '0' and ACCESS_HO_s is equal to '1', and the mobile
 10 station declares a loss of the Paging Channel or the Forward Common Control Channel
 11 during an access attempt, after sending at least one complete access probe, the mobile
 12 station may monitor other Paging Channels or the Forward Common Control Channels
 13 which are in ACCESS_HO_LIST for T_{42m} seconds after the loss of the Paging Channel or
 14 the Forward Common Control Channel on which the access attempt was made⁵¹.

15 2.6.3.1.3.3 Access Probe Handoff

16 The mobile station is permitted to perform an access probe handoff when the mobile
 17 station is in the *Page Response Substate* or the *Mobile Station Origination Attempt Substate*.

18 The mobile station may perform an access probe handoff during an access attempt to a
 19 pilot in ACCESS_HO_LIST when the message being sent is the *Origination Message*,
 20 *Reconnect Message*, *Call Recovery Request Message* or the *Page Response Message*, if all of
 21 the following conditions hold:

- 22 • ACCESS_PROBE_HO_s is equal to '1',
- 23 • The mobile station is in the *Page Response Substate* or the *Mobile Station Origination*
 24 *Attempt Substate*, and
- 25 • The mobile station has performed fewer than (MAX_NUM_PROBE_HO_s + 1) access
 26 probe handoffs during the current access attempt.

27 The mobile station may also perform an access probe handoff during an access attempt to
 28 a pilot in ACCESS_HO_LIST when the message being sent is a message other than the
 29 *Origination Message*, *Reconnect Message*, *Call Recovery Request Message* or the *Page*
 30 *Response Message*, if all of the preceding conditions hold and
 31 ACC_PROBE_HO_OTHER_MSG_s is equal to '1'.

⁵⁰ Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

⁵¹ 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_s is equal to '1',
- 6 • ACCESS_PROBE_HO_s 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_{13m},
- 14 • The mobile station is in the *Page Response Substate* or the *Mobile Station Origination*
 15 *Attempt Substate*, and
- 16 • The mobile station has performed fewer than (MAX_NUM_PROBE_HO_s + 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_s 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 Control
 25 Channel (see 2.6.3.1.8); the mobile station may also perform an access probe handoff after
 26 getting an indication that the TA timer expired (see [4]) and the mobile station declares an
 27 insufficiency of the Paging Channel⁵² or the Forward Common Control Channel.

28 If the mobile station performs an access probe handoff, the mobile station shall suspend
 29 the access attempt on the old pilot and shall restart the access attempt on the new pilot
 30 (*i.e.* starting with the first probe of the first probe sequence of the access sub-attempt), as
 31 specified in [4]. The mobile station shall record the identity of the pilots to which access
 32 probes have been transmitted within the current access attempt.

33 The mobile station shall not reset its access probe handoff count until the access attempt
 34 ends.

⁵² Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

1 Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to cancel the access
 2 attempt if the length of the message to be sent exceeds MAX_CAP_SIZE of the new base
 3 station. The mobile station may monitor other Paging Channels or Forward Common
 4 Control Channels which are in ACCESS_HO_LIST for T_{42m} seconds after aborting the
 5 access attempt⁵³.

6 2.6.3.1.4 System Access State Exit Procedures

7 Upon exiting the *System Access State*, the mobile station shall direct Layer 2 to cancel (see
 8 [4]) any access attempt in progress and discard the associated message. The mobile station
 9 shall then disable the *System Access State* timer.

10 2.6.3.1.5 Reserved

11 2.6.3.1.6 Full-TMSI Timer

12 Whenever the mobile station sends its full TMSI, the mobile station enables a timer, called
 13 the full-TMSI timer. If the full-TMSI timer expires, the mobile station deletes the TMSI by
 14 setting all of the bits in the TMSI_CODE_{s-p} field to '1'.

15 The mobile station shall maintain the full-TMSI timer. The mobile station shall provide a
 16 means for enabling or disabling the full-TMSI timer.

17 If the mobile station sends a message with an address including the
 18 ASSIGNING_TMSI_ZONE_{s-p} and the full-TMSI timer is disabled, the mobile station shall
 19 enable the full-TMSI timer with a duration equal to T_{69m} + 2.56 × 2ⁱ seconds where i is
 20 equal to SLOT_CYCLE_INDEX_s.

21 2.6.3.1.7 Monitoring Pilots

22 The mobile station assists the base station in the Traffic Channel assignment process by
 23 monitoring and reporting (see [4]) the pilot strength of the pilot in the mobile station's
 24 Paging Channel or Forward Common Control Channel Active Set (see 2.6.3.1.3.1). The
 25 mobile station can also monitor and report (see [4]) other pilots on the same frequency; in
 26 such cases, the mobile station shall create ACCESS_HO_LIST and
 27 OTHER_REPORTED_LIST and shall monitor the pilots on those lists, if any.

28 For each monitored pilot, the mobile station shall record the pilot PN phase and the pilot
 29 strength PS, using the most recent measurements from the searcher element (see [2]), as
 30 they become available. The mobile station shall identify each pilot through its pilot PN
 31 phase (the phase of the pilot PN sequence, in units of one chip, relative to the zero offset
 32 pilot PN sequence of the pilot (see 2.6.6.2.4)). The mobile station shall determine the pilot
 33 strength, PS, as specified in 2.6.6.2.2.

34 2.6.3.1.7.1 Generation of the Initial Access Handoff List

35 ACCESS_HO_LIST is created immediately before transmitting the first access probe after
 36 entering the *System Access State*. When it is created, ACCESS_HO_LIST is defined as a set

⁵³ The mobile station would be waiting for a response to the message transmitted in the access probe.

1 of at most N_{13m} pilots, having the greatest pilot strength in comparison with other
 2 qualifying pilots and for which all of the following apply:

- 3 • The strength of each member exceeds T_ADD_s .
- 4 • Each member, other than the Active Set pilot, has the corresponding
 5 `ACCESS_HO_ALLOWED` field in the `NGHBR_REC` equal to '1'.
- 6 • The Active Set pilot that the mobile station monitors when the mobile station enters
 7 the *System Access State* is a member.
- 8 • All members can be contained in the Access Channel or Enhanced Access Channel
 9 message without exceeding the maximum capsule size.

10 2.6.3.1.7.2 Update of the Access Handoff List

11 When the mobile station performs an access probe handoff to a pilot which was not
 12 previously included in `ACCESS_HO_LIST` (see 2.6.3.1.3.3), it adds the pilot to
 13 `ACCESS_HO_LIST`.

14 If `ACC_HO_LIST_UPD_s` is equal to '1', the mobile station can update `ACCESS_HO_LIST`, as
 15 follows:

- 16 • The mobile station can add one or more new pilots other than the Active Set pilot to
 17 `ACCESS_HO_LIST` before transmitting an access probe.
- 18 • The mobile station can also drop from `ACCESS_HO_LIST` pilots to which access
 19 probes have not been transmitted since entering the *System Access State* and whose
 20 strength have fallen below T_ADD_s .

21 When it is updated before transmitting a subsequent access probe, `ACCESS_HO_LIST` is
 22 defined as a set of at most N_{13m} pilots, having the greatest pilot strength in comparison
 23 with other qualifying pilots and for which all of the following apply:

- 24 • The strength of each member to which access probes have not been transmitted
 25 exceeds T_ADD_s .
- 26 • Each member other than the pilot to which the first access probe in the System
 27 Access State was transmitted has the corresponding `ACCESS_HO_ALLOWED` field
 28 in the `NGHBR_REC` equal to '1'.
- 29 • The Active Set pilot to which the next access probe is to be transmitted is a
 30 member.
- 31 • All pilots to which access probes have been transmitted since entering the *System*
 32 *Access State* are members.
- 33 • All members can be contained in the Access Channel or Enhanced Access Channel
 34 message without exceeding the maximum capsule size.

35 2.6.3.1.7.3 Generation of the Other Reported List

36 `OTHER_REPORTED_LIST` (specified by `NUM_ADD_PILOTS` and `NUM_AUX_PILOTS`, see [4])
 37 is defined as a set of no more than N_{13m} minus the number of pilots in `ACCESS_HO_LIST`

1 pilots, having the greatest pilot strength in comparison with other qualifying pilots and for
2 which all of the following apply:

- 3 • The strength of each member exceeds T_ADD_s .
- 4 • No member is included in ACCESS_HO_LIST.
- 5 • All members can be contained in the Access Channel or Enhanced Access Channel
6 message without exceeding the maximum capsule size.

7 2.6.3.1.7.4 Update of OTHER_REPORTED_LIST

8 Before transmitting each access probe, the mobile station shall generate
9 OTHER_REPORTED_LIST according to section 2.6.3.1.7.3, using the most recent pilot
10 strength information available from its searcher element (see [2]). If the mobile station
11 updates ACCESS_HO_LIST before transmitting an access probe, it shall update
12 OTHER_REPORTED_LIST after updating ACCESS_HO_LIST.

13 2.6.3.1.8 Paging Channel and Forward Common Control Channel/ Primary Broadcast 14 Control Channel Monitoring

15 When in the *System Access State*, the mobile station shall monitor the Paging Channel or
16 the Forward Common Control Channel/ Primary Broadcast Control Channel at all times.

17 The mobile station shall set a timer for T_{72m} seconds, when it begins to monitor the Paging
18 Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel
19 and whenever it gets an indication that a valid message was received on the Paging
20 Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel,
21 whether addressed to the mobile station or not (see [4]).

22 If the T_{72m} timer expires:

- 23 • The mobile station shall first finish transmitting the access probe in progress, if
24 any.
- 25 • If by declaring a loss of the Paging Channel or the Forward Common Control
26 Channel, the eligibility requirements for performing access handoff are met (see
27 2.6.3.1.3.2), then the mobile station shall declare a loss of the Paging Channel or
28 the Forward Common Control Channel, and perform an access handoff. If by
29 declaring a loss of the Paging Channel or the Forward Common Control Channel,
30 the eligibility requirements for performing access probe handoff are met (see
31 2.6.3.1.3.3), then the mobile station may declare a loss of the Paging Channel or the
32 Forward Common Control Channel, and perform an access probe handoff. If the
33 mobile station performs an access handoff or an access probe handoff, the mobile
34 station restarts the Paging Channel or the Forward Common Control Channel/
35 Primary Broadcast Control Channel monitoring procedure for the new base station.
- 36 • If an access attempt was in progress when the timer expired and that access
37 attempt had already been suspended and resumed previously (see below), the

- 1 mobile station shall declare a loss of the Paging Channel⁵⁴ or the Forward Common
2 Control Channel and shall disable its transmitter.
- 3 • If an access attempt was in progress when the timer expired and that access
4 attempt had not been suspended and resumed before and the mobile station does
5 not perform access probe handoff, the mobile station shall declare a temporary loss
6 of the Paging Channel or the Forward Common Control Channel, shall direct Layer
7 2 to suspend the access attempt (see [4]), and shall perform the following:
 - 8 - The mobile station shall set the timer to $(T_{40m}-T_{72m})$ seconds.
 - 9 - If the mobile station receives an indication that a valid message on the Paging
10 Channel or the Forward Common Control Channel, whether addressed to the
11 mobile station or not, was received (see [4]) prior to the expiration of the $(T_{40m}-$
12 $T_{72m})$ timer, the mobile station shall re-enable the transmitter, shall direct
13 Layer 2 to resume operation from the beginning of the interrupted access probe
14 sequence of the access sub-attempt (see [4]), and shall transmit the first probe
15 of the new access probe sequence immediately after re-enabling the transmitter.
 - 16 - If the $(T_{40m}-T_{72m})$ timer expires, the mobile station shall direct Layer 2 to
17 cancel any access attempt (see [4]) and shall declare a loss of the Paging
18 Channel or the Forward Common Control Channel.
 - 19 • If an access attempt was not in progress when the timer expired and the mobile
20 station does not perform access handoff, the mobile station shall perform the
21 following:
 - 22 - The mobile station shall set the timer to $(T_{40m}-T_{72m})$ seconds.
 - 23 - If the $(T_{40m}-T_{72m})$ timer expires, the mobile station shall declare a loss of the
24 Paging Channel or the Forward Common Control Channel/ Primary Broadcast
25 Control Channel.

26 2.6.3.2 Update Overhead Information Substate

27 In this substate, if the base station supports the Primary Broadcast Control Channel for
28 Spreading Rate 1, or if both the mobile station and base station support Spreading Rate 3
29 on the common channels, then the mobile station shall monitor the Primary Broadcast
30 Control Channel until it has received the current configuration messages; otherwise, the
31 mobile station shall monitor the Paging Channel until it has received the current
32 configuration messages. The mobile station compares sequence numbers to determine
33 whether all of the configuration messages are up-to-date. To make sure it has the latest
34 access parameters, the mobile station receives at least one message containing the
35 ACC_MSG_SEQ field (except in case where the mobile station enters this substate with a
36 page response indication, since the initiating page contains ACC_MSG_SEQ), and waits, if
37 necessary, for an *Access Parameters Message* or an *Enhanced Access Parameters Message*.

⁵⁴ 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.

1 In addition, if the mobile station is monitoring the Primary Broadcast Control Channel and
2 `SENDING_RANDS` is equal to '1', then it shall also wait for an *ANSI-41 RAND Message*.

3 Upon entering the *Update Overhead Information Substate*, the mobile station shall set the
4 *System Access State* timer to a value of T_{41m} seconds. The mobile station shall set `PAGED`
5 to `NO`.

6 If the *System Access State* timer expires while in this substate, the mobile station shall
7 enter the *System Determination Substate* of the *Mobile Station Initialization State* with a
8 system lost indication (see 2.6.1.1).

9 If the mobile station declares a loss of the Paging Channel or the Primary Broadcast
10 Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

- 11 • If `PACAS` is equal to enabled, the mobile station shall set `PACAS` to disabled and
12 `PACA_CANCEL` to '0', shall disable the `PACA` state timer, and should indicate to the
13 user that the `PACA` call has been canceled.
- 14 • The mobile station shall declare an access attempt failure and update its
15 registration variables as specified in 2.6.5.5.3.2.
- 16 • The mobile station shall enter the *Mobile Station Idle State*.

17 If `PACAS` is equal to enabled, the mobile station shall set `PACA_CANCEL` to '1' when the
18 user directs the mobile station to cancel a `PACA` call.

19 If the mobile station receives any of the following messages, it shall process the message as
20 follows:

- 21 1. *System Parameters Message*: The mobile station shall process the parameters from
22 the message (see 2.6.2.2.1).
- 23 2. *Access Parameters Message*: The mobile station shall process the parameters from
24 the message (see 2.6.2.2.2).
- 25 3. *Neighbor List Message*: The mobile station shall process the parameters from the
26 message (see 2.6.2.2.3).
- 27 4. *CDMA Channel List Message*: The mobile station shall process the parameters from
28 the message (see 2.6.2.2.4).
- 29 5. *Extended System Parameters Message*: The mobile station shall process the
30 parameters from the message (see 2.6.2.2.5).
- 31 6. *Global Service Redirection Message*: The mobile station shall process the
32 parameters from the message (see 2.6.2.2.6).
- 33 7. *Extended Neighbor List Message*: The mobile station shall process the parameters
34 from the message (see 2.6.2.2.7).
- 35 8. *General Neighbor List Message*: The mobile station shall process the parameters
36 from the message (see 2.6.2.2.8).
- 37 9. *Lock Until Power-Cycled Order*: The mobile station shall record the reason for the
38 *Lock Until Power-Cycled Order* in the mobile station's semi-permanent memory

- 1 (LCKRSN_P_{s-p} equals the least-significant four bits of ORDQ_r). The mobile station
2 should notify the user of the locked condition. The mobile station shall then enter
3 the *System Determination Substate* of the *Mobile Station Initialization State* with a
4 lock indication (see 2.6.1.1), and shall not enter the *System Access State* again until
5 after the next mobile station power-up or until it has received an *Unlock Order*.
6 This requirement shall take precedence over any other mobile station requirement
7 specifying entry to the *System Access State*.
- 8 10. *General Page Message* or *Universal Page Message*: If CURR_ACC_MSG_SEQ is
9 equal to NULL, the mobile station shall set CURR_ACC_MSG_SEQ to
10 ACC_MSG_SEQ_r. The mobile station shall compare CONFIG_MSG_SEQ_s to
11 CONFIG_MSG_SEQ_r. If the comparison results in a mismatch, the mobile station
12 shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r. The mobile station may
13 ignore the rest of the message. If this substate was not entered with an origination
14 indication, page response indication, direct channel assignment update overhead
15 indication, direct channel assignment respond indication, or direct channel
16 assignment failure indication, the mobile station may also determine whether there
17 is a page match. If the mobile station attempts to determine whether there is a
18 page match, it shall use the procedure as defined in 2.6.2.3. If a match is
19 declared, the mobile station shall set PAGED to YES.
- 20 11. *User Zone Identification Message*: The mobile station shall process the parameters
21 from the message (see 2.6.2.2.9).
- 22 12. *Private Neighbor List Message*: The mobile station shall process the parameters
23 from the message (see 2.6.2.2.10).
- 24 13. *Extended Global Service Redirection Message*: The mobile station shall process the
25 parameters from the message (see 2.6.2.2.11).
- 26 14. *Extended CDMA Channel List Message*: The mobile station shall process the
27 parameters from the message (see 2.6.2.2.12).
- 28 15. *ANSI-41 System Parameters Message*: The mobile station shall process the
29 parameters from the message (see 2.6.2.2.13).
- 30 16. *MC-RR Parameters Message*: The mobile station shall process the parameters from
31 the message (see 2.6.2.2.14).
- 32 17. *Enhanced Access Parameters Message*: The mobile station shall process the
33 parameters from the message (see 2.6.2.2.15).
- 34 18. *ANSI-41 RAND Message*: The mobile station shall process the parameters from the
35 message (see 2.6.2.2.16).
- 36 19. *Universal Neighbor List Message*: The mobile station shall process the parameters
37 from the message (see 2.6.2.2.17).
- 38 20. *Extended Channel Assignment Message*: If this substate was entered with an
39 origination indication, or a direct channel assignment update overhead indication,
40 or a direct channel assignment respond indication, or a direct channel assignment
41 failure indication, or if the DIRECT_CH_ASSIGN_IND_r is not included, or the

- 1 DIRECT_CH_ASSIGN_IND_r is included and is set to '0', the mobile station shall
 2 ignore this message. Otherwise, the mobile station shall process the message as
 3 follows:
- 4 • If RESPOND_IND_r is equal to '0', the mobile station shall perform the following
 5 in the order specified:
 - 6 - The mobile station shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r.
 - 7 - The mobile station shall wait till stored configuration parameters are current
 8 (see 2.6.2.2).
 - 9 - Once the stored configuration parameters are current, the mobile station
 10 shall disable the System Access State timer and process the message as
 11 specified in section 2.6.3.3.
 - 12 • If RESPOND_IND_r is equal to '1', the mobile station shall perform the following
 13 in the order specified:
 - 14 - The mobile station shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r.
 - 15 - When all of the following conditions are met:
 - 16 + the stored configuration parameters are current (see 2.6.2.2)
 - 17 + CURR_ACC_MSG_SEQ_s and ACC_MSG_SEQ_s are equal and are not
 18 NULL, and
 - 19 + if the mobile station is monitoring the Primary Broadcast Control
 20 Channel and SENDING_RAND_s is equal to '1', the *ANSI-41 RAND*
 21 *Message* has been received,
- 22 the mobile station shall disable the System Access State timer and process
 23 the message as specified in section 2.6.3.3.

24 21. *General Extension Message*: The mobile station shall process this message as
 25 specified in section 2.6.18.

26 If the mobile station receives a message which is not included in the above list, the mobile
 27 station shall ignore the message.

28 If this substate was entered with a direct channel assignment update overhead indication,
 29 the mobile station shall perform the following in the order specified:

- 30 • The mobile station shall wait till the stored configuration parameters are current
 31 (see 2.6.2.2).
- 32 • Once the stored configuration parameters are current, the mobile station shall
 33 perform the following:
 - 34 - The mobile station shall disable the System Access State timer.
 - 35 - The mobile station shall process the *Extended Channel Assignment Message*
 36 received in *Mobile Station Idle State* as specified in section 2.6.3.3.

37 When all of the following conditions are met:

- 38 • The stored configuration parameters are current (see 2.6.2.2)

- 1 • CURR_ACC_MSG_SEQ_s and ACC_MSG_SEQ_s are equal and are not NULL, and
- 2 • If the mobile station is monitoring the Primary Broadcast Control Channel and
- 3 SENDING_RAND_s is equal to '1', the *ANSI-41 RAND Message* has been received,
- 4 then the mobile station shall disable the System Access State timer and shall perform one
- 5 of the following:
- 6 • If PAGED is equal to YES, the mobile station shall determine whether the message
- 7 resulting in the page match was received on the current Paging Channel or Forward
- 8 Common Control Channel. If the message was received on the current Paging
- 9 Channel or Forward Common Control Channel, the mobile station shall enter the
- 10 *Page Response Substate*; otherwise, the mobile station shall enter the *Mobile Station*
- 11 *Idle State*.
- 12 • If this substate was entered with a page response indication, direct channel
- 13 assignment respond indication, or direct channel assignment failure indication, and
- 14 the mobile station has not performed an access entry handoff, the mobile station
- 15 shall determine whether the message resulting in the page response was received
- 16 on the current Paging Channel or Forward Common Control Channel. If the
- 17 message was received on the current Paging Channel or Forward Common Control
- 18 Channel, the mobile station shall enter the *Page Response Substate*; otherwise, the
- 19 mobile station shall enter the *Mobile Station Idle State* with the corresponding
- 20 indication.
- 21 • If this substate was entered with a page response indication, direct channel
- 22 assignment respond indication, or direct channel assignment failure indication, and
- 23 the mobile station has performed an access entry handoff, the mobile station shall
- 24 enter the *Page Response Substate* with the corresponding indication.
- 25 • If this substate was entered with a page response retransmission indication, the
- 26 mobile station shall enter the *Page Response Substate*.
- 27 • If this substate was entered with an origination indication, the mobile station shall
- 28 enter the *Mobile Station Origination Attempt Substate* with an origination indication.
- 29 • If this substate was entered with a PACA response indication, the mobile station
- 30 shall enter the *Mobile Station Origination Attempt Substate* with a PACA response
- 31 indication.
- 32 • If this substate was entered with an order/message response indication and the
- 33 mobile station has not performed an access entry handoff, the mobile station shall
- 34 determine whether the message resulting in the response was received on the
- 35 current Paging Channel or Forward Common Control Channel. If the message was
- 36 received on the current Paging Channel or Forward Common Control Channel, the
- 37 mobile station shall enter the *Mobile Station Order/Message Response Substate*;
- 38 otherwise, the mobile station shall discard the response and enter the *Mobile Station*
- 39 *Idle State*.
- 40 • If this substate was entered with an order/message response indication and the
- 41 mobile station has performed an access entry handoff, the mobile station shall enter
- 42 the *Mobile Station Order/Message Response Substate*.

- 1 • If this substate was entered with a registration indication, the mobile station shall
2 enter the *Registration Access Substate*.
- 3 • If this substate was entered with a message transmission indication, the mobile
4 station shall enter the *Mobile Station Message Transmission Substate* with a message
5 transmission indication.
- 6 • If this substate was entered with a hook status indication, the mobile station shall
7 enter the *Mobile Station Message Transmission Substate* with a hook status
8 indication.
- 9 • If this substate was entered with a PACA cancel indication, the mobile station shall
10 enter the *PACA Cancel Substate*.
- 11 • If this substate was entered with a radio environment report indication, the mobile
12 station shall enter the *Mobile Station Message Transmission Substate* with a radio
13 environment report indication.
- 14 • If this substate was entered with a tracking zone indication, the mobile station shall
15 enter the *Mobile Station Message Transmission Substate* with a tracking zone
16 indication.
- 17 • If this substate was entered with a fast call setup indication, the mobile station
18 shall enter the *Mobile Station Message Transmission Substate* with a fast call setup
19 indication.

20 2.6.3.3 Page Response Substate

21 In this substate, the mobile station sends a *Page Response Message* or a *Reconnect*
22 *Message* in response to a mobile-station-addressed page or direct channel assignment from
23 a base station. If the mobile station sends a *Reconnect Message*, it shall set the ORIG_IND
24 field of the message to '0'.

25 If directed by the user to transmit a message, the mobile station may perform either of the
26 following:

- 27 • The mobile station may transmit a *Data Burst Message* to the base station in this
28 substate if all of the following conditions are true:
 - 29 - The mobile station has received confirmation of delivery of the *Page Response*
30 *Message* or a *Reconnect Message*, and
 - 31 - ACCT is not enabled for the service option number associated with the *Data*
32 *Burst Message* as follows:
 - 33 + The service option number associated with the *Data Burst Message* is not
34 equal to any ACCT_SO entry in ACCT_SO_LIST, and
 - 35 + The service option group number of the service option associated with the
36 *Data Burst Message* is not equal to any ACCT_SO_GRP entry in
37 ACCT_SO_GRP_LIST.

- 1 • If the mobile station sends a *Reconnect Message* in assured mode in this substate,
 2 the mobile station may include a Short Data Burst (see [30]) in the *Reconnect*
 3 *Message* by setting the SDB_INCL field to '1', if all of the following conditions are
 4 true:
- 5 - SDB_SUPPORTED_s and SDB_IN_RCNM_IND_s are equal to '1', and
 - 6 - ACCT is not enabled for the service option number associated with the Short
 7 Data Burst as follows:
 - 8 + The service option number associated with the Short Data Burst is not equal
 9 to any ACCT_SO entry in ACCT_SO_LIST, and
 - 10 + The service option group number of the service option associated with the
 11 Short Data Burst is not equal to any ACCT_SO_GRP entry in
 12 ACCT_SO_GRP_LIST.

13 The mobile station shall not send the *Reconnect Message* if RECONNECT_MSG_IND_s equals
 14 '0' or if this message is not being sent to reconnect a dormant packet data service instance.

15 If a base station responds to the *Page Response Message* or the *Reconnect Message* with an
 16 authentication request, the mobile station responds in this substate.

17 If a message received from the base station requires a Layer 2 acknowledgment and does
 18 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
 19 outstanding (see [4]).

20 If a message received from the base station requires a Layer 2 acknowledgment and also a
 21 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

22 When transmitting a response to a message received from the base station, Layer 3 shall
 23 indicate to Layer 2 that the type of the message is a response (see [4]).

24 When transmitting an autonomous message (i.e., a message that is not sent as a response
 25 to a message received from the base station) other than the *Data Burst Message*, Layer 3
 26 shall indicate to Layer 2 that the type of the message is a request other than a registration
 27 request or a message transmission request (see [4]).

28 When transmitting an autonomous *Data Burst Message*, Layer 3 shall indicate to Layer 2
 29 that the type of the message is a message transmission request (see [4]).

30 If the mobile station has a stored service configuration (that is, parameters conveyed by
 31 both the Service Configuration information record and the Non-negotiable Service
 32 Configuration information record) and corresponding SYNC_ID with associated SID and
 33 NID that are equal to the SID_s and NID_s respectively, and USE_SYNC_ID_s is equal to '1',
 34 the mobile station may include the SYNC_ID field in the *Page Response Message* or the
 35 *Reconnect Message* and, if included, shall set it to the SYNC_ID corresponding to the stored
 36 service configuration. If the mobile station includes SYNC_ID field in the *Page Response*
 37 *Message* or the *Reconnect Message*, the mobile station shall store the value of the SYNC_ID
 38 field in SYNC_ID_s.

39 If the mobile station enters the *Page Response Substate* with a direct channel assignment
 40 respond indication, the mobile station shall perform the following:

- 1 • The mobile station shall send a *Page Response Message* or a *Reconnect Message* in
2 unassured mode, and shall then enter the *Traffic Channel Initialization Substate* of
3 the *Mobile Station Control on the Traffic Channel State*,
- 4 • While in the *Page Response Substate*, the mobile station shall ignore all received
5 messages, and
- 6 • The mobile station shall not perform any other procedures in this section.
- 7 • Upon entering the *Page Response Substate* for any reason other than with a direct
8 channel assignment respond indication, the mobile station shall perform the
9 following:
 - 10 - Set RLGAIN_ADJ_s to '0000'.
 - 11 - If P_REV_IN_USE_s is less than 11, set PLCM_TYPE_s to '0000'; otherwise set
12 PLCM_TYPE_s to '0100'.
 - 13 - Send a *Page Response Message* or a *Reconnect Message*.

14 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
15 Common Control Channel. The mobile station may perform an access probe handoff or
16 access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a
17 loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during
18 an access attempt, the mobile station may perform an access probe handoff; otherwise, it
19 shall declare an access attempt failure and shall perform the following actions:

- 20 • The mobile station shall update its registration variables as specified in 2.6.5.5.3.2,
- 21 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
22 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL,
- 23 • If the mobile station is monitoring the Forward Common Control Channel, the
24 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 25 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
26 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
27 user that the PACA call has been canceled.
- 28 • The mobile station shall disable its transmitter, and
- 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, the mobile station shall perform an access handoff if all of the
32 following conditions hold:

- 33 • The mobile station declares a loss of the Paging Channel or the Forward Common
34 Control Channel, and
- 35 • The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2), and
36 there are pilots other than the active pilot in the access handoff list (see
37 2.6.3.1.3.2).

1 If the mobile station declares a loss of the Paging Channel or the Forward Common Control
 2 Channel and does not perform an access handoff, the mobile station shall perform the
 3 following:

- 4 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
 5 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 6 • If the mobile station is monitoring the Forward Common Control Channel, the
 7 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 8 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
 9 PACA_CANCEL to 0, shall disable the PACA state timer, and should indicate to the
 10 user that the PACA call has been canceled,
- 11 • The mobile station shall disable its transmitter, and
- 12 • The mobile station shall enter the *Mobile Station Idle State*.

13 If PACA_s is equal to enabled, the mobile station shall set PACA_CANCEL to '1' when the
 14 user directs the mobile station to cancel a PACA call.

15 If the mobile station receives confirmation of delivery of the *Page Response Message* or the
 16 *Reconnect Message* sent in this substate, the mobile station shall update its registration
 17 variables with respect to the base station to which the first access probe was transmitted
 18 after entering the *System Access State*, as specified in 2.6.5.5.3.1.

19 If the *System Access State* timer expires while in this substate, the mobile station shall
 20 perform the following:

- 21 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
 22 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
 23 user that the PACA call has been canceled.
- 24 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
 25 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL, and shall enter the *Mobile*
 26 *Station Idle State*.
- 27 • If the mobile station is monitoring the Forward Common Control Channel, the
 28 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL and
 29 enter the *Mobile Station Idle State*.

30 The mobile station shall set and disable the *System Access State* timer as follows:

- 31 • The mobile station shall disable the timer whenever it begins an access attempt.
- 32 • The mobile station shall set the timer to T_{42m} seconds whenever it ends an access
 33 attempt.
- 34 • The mobile station shall disable the timer whenever it exits the *System Access State*.

35 If the mobile station receives a *Channel Assignment Message* or the *Extended Channel*
 36 *Assignment Message*, Layer 3 shall send a *dedicated channel assignment* indication to Layer
 37 2 (see [4]). If the mobile station has not received confirmation of delivery of the *Page*
 38 *Response Message* or the *Reconnect Message*, before receiving the *Channel Assignment*
 39 *Message* or the *Extended Channel Assignment Message*, the mobile station shall update its

1 registration variables with respect to the base station to which the first access probe was
 2 transmitted after entering the *System Access State*, as specified in 2.6.5.5.3.1. If the mobile
 3 station has not received confirmation of delivery of a *Data Burst Message* before receiving
 4 the *Channel Assignment Message* or the *Extended Channel Assignment Message*, Layer 3
 5 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in
 6 progress and the mobile station may store the *Data Burst Message* for later transmission on
 7 the r-dsch.

8 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
 9 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
 10 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
 11 the message has been sent and acknowledged.

12 If Layer 3 receives a message other than a *Channel Assignment Message* or an *Extended*
 13 *Channel Assignment Message* with an indication from Layer 2 that an access attempt for a
 14 message being transmitted was not terminated as a result of processing the Layer 2 fields
 15 of the received message, the mobile station shall ignore the received message.

16 The following directed messages and orders can be received. If any field value of the
 17 message or order is outside its permissible range, the mobile station may send a *Mobile*
 18 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 19 1. *Authentication Challenge Message*: The mobile station shall respond to the message
 20 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 21 2. *Authentication Request Message*: The mobile station shall process the message and
 22 shall respond as specified in 2.3.12.5.2.
- 23 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
 24 message as specified in 2.3.12.1.5.
- 25 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
 26 specified in 2.6.11.5.
- 27 5. *Channel Assignment Message*: The mobile station shall process the message as
 28 follows:
 - 29 • If ASSIGN_MODE_R equals '000', the mobile station shall perform the following
 30 actions:
 - 31 - The mobile station shall set CH_IND_S to '01'.
 - 32 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
 33 FRAME_OFFSET_R), the message encryption mode indicator
 34 (ENCRYPT_MODE_S = ENCRYPT_MODE_R), and, if FREQ_INCL_R equals '1', the
 35 Frequency Assignment (CDMACH_S = CDMA_FREQ_R).
 - 36 - The mobile station shall set SERV_NEG_S to disabled.
 - 37 - If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled
 38 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
 39 indicate to the user that the PACA call has been canceled.
 - 40 - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8.

- 1 - If the mobile station is currently monitoring the Paging Channel, the mobile
2 station shall set IDLE_BCCH_CHAN to '0'; otherwise, the mobile station
3 shall set IDLE_BCCH_CHAN to '1'. The mobile station shall set
4 IDLE_CDMA_CHAN to CDMACH_s, IDLE_CDMABAND to CDMABAND_s,
5 IDLE_SID to SID_s, IDLE_NID to NID_s, and IDLE_P_REV to P_REV_s.
- 6 - The mobile station shall enter the *Traffic Channel Initialization Substate* of
7 the *Mobile Station Control on the Traffic Channel State*.
- 8 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
9 actions:
- 10 - If FREQ_INCL_r equals '1', the mobile station shall perform the following:
- 11 + If the message requires acknowledgment, the mobile station shall wait
12 until Layer 3 receives an indication from Layer 2 that the
13 acknowledgment to the message has been sent and acknowledged.
- 14 + The mobile station shall set CDMACH_s to CDMA_FREQ_r, tune to the new
15 Frequency Assignment, and measure the strength of each pilot listed in
16 the assignment using the Neighbor Set search procedures specified in
17 2.6.6.2.1 and 2.6.6.2.2.
- 18 - The mobile station shall set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to
19 NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence offset
20 of the strongest pilot in the list (PILOT_PN_r).
- 21 - If the mobile station has not stored configuration parameters for the Primary
22 Paging Channel of the new base station, or if the stored information is not
23 current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ_s,
24 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
25 GEN_NGHBR_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
26 PRI_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
27 EXT_CHAN_LST_MSG_SEQ_s, FD_CHAN_LST_MSG_SEQ_s EQ_s,
28 EXT_SYS_PAR_MSG_SEQ_s, GLOB_SERV_REDIR_MSG_SEQ_s,
29 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
30 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
31 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 32 - The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
33 Primary Paging Channel. The mobile station shall then begin monitoring
34 the Primary Paging Channel of the selected base station.
- 35 - If RESPOND_r is equal to '1', the mobile station shall enter the *Update*
36 *Overhead Information Substate* with a page response retransmission
37 indication within T_{34m} seconds after receiving the *Channel Assignment*
38 *Message*.
- 39 - If RESPOND_r is equal to '0', the mobile station shall enter the *Mobile Station*
40 *Idle State* within T_{34m} seconds after receiving the *Channel Assignment*
41 *Message*.

- 1 • If ASSIGN_MODE_T equals '100', the mobile station shall perform the following
- 2 actions:
- 3 - The mobile station shall set CH_IND_S to '01'.
- 4 - If PACA_S is equal to enabled, the mobile station shall set PACA_S 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_T 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_T equals '0', the mobile station shall perform the following
- 13 actions:
- 14 + The mobile station shall store the frame offset (FRAME_OFFSET_S =
- 15 FRAME_OFFSET_T), the message encryption mode indicator
- 16 (ENCRYPT_MODE_S = ENCRYPT_MODE_T), the granted mode
- 17 (GRANTED_MODE_S = GRANTED_MODE_T), and default configuration
- 18 (DEFAULT_CONFIG_S = DEFAULT_CONFIG_T).
- 19 + The mobile station shall set SERV_NEG_S 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_S, IDLE_CDMABAND to CDMABAND_S,
- 24 IDLE_SID to SID_S, IDLE_NID to NID_S, and IDLE_P_REV to P_REV_S.
- 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_T 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 ○ The mobile station shall store the frame offset ($FRAME_OFFSET_S =$
2 $FRAME_OFFSET_T$), the message encryption mode indicator
3 ($ENCRYPT_MODE_S = ENCRYPT_MODE_T$), the bypass indicator
4 ($BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_T$), the
5 granted mode ($GRANTED_MODE_S = GRANTED_MODE_T$), the default
6 configuration ($DEFAULT_CONFIG_S = DEFAULT_CONFIG_T$), the idle
7 Frequency Assignment ($IDLE_CDMA_CHAN = CDMACH_S$), the idle
8 band class ($IDLE_CDMABAND = CDMABAND_S$), the band class
9 ($CDMABAND_S = BAND_CLASS_T$), and the Frequency Assignment
10 ($CDMACH_S = CDMA_FREQ_T$).
- 11 ○ The mobile station shall initialize $CODE_CHAN_LIST$ as described in
12 2.6.8, and shall set $SERV_NEG_S$ to enabled.
- 13 ○ If the mobile station is currently monitoring the Paging Channel, the
14 mobile station shall set $IDLE_BCCH_CHAN$ to '0'; otherwise, the
15 mobile station shall set $IDLE_BCCH_CHAN$ to '1'. The mobile
16 station shall set $IDLE_SID$ to SID_S , $IDLE_NID$ to NID_S , and
17 $IDLE_P_REV$ to P_REV_S .
- 18 ○ 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 $ASSIGN_MODE_T$ equals '101', the mobile station shall perform the following
22 actions:
- 23 - If $FREQ_INCL_T$ 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 $CONFIG_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to
29 NULL (see 2.6.2.2) and shall set $PILOT_PN_S$ to the pilot PN sequence
30 offset of the strongest pilot in the list ($PILOT_PN_T$).
- 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 $SYS_PAR_MSG_SEQ_S$, $NGHBR_LST_MSG_SEQ_S$,
35 $EXT_NGHBR_LST_MSG_SEQ_S$, $GEN_NGHBR_LST_MSG_SEQ_S$,
36 $USER_ZONE_ID_MSG_SEQ_S$, $PRI_NGHBR_LST_MSG_SEQ_S$,
37 $CHAN_LST_MSG_SEQ_S$, $EXT_CHAN_LST_MSG_SEQ_S$,
38 $FD_CHAN_LST_MSG_SEQ_S$, $EXT_SYS_PAR_MSG_SEQ_S$,
39 $GLOB_SERV_REDIR_MSG_SEQ_S$, $AP_PILOT_INFO_MSG_SEQ_S$,
40 $AP_IDT_MSG_SEQ_S$, $AP_ID_TEXT_MSG_SEQ_S$, $GOI_MSG_SEQ_S$,
41 $FREQ_GOI_MSG_SEQ_S$, $ATIM_MSG_SEQ_S$ and
42 $EXT_GLOB_SERV_REDIR_MSG_SEQ_S$ to NULL.

- 1 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s 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_r 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_{34m} seconds after receiving the *Channel Assignment*
10 *Message*.
11 o If the *Channel Assignment Message* requires an acknowledgment, the
12 mobile station shall enter the *Update Overhead Information Substate*
13 with a page response retransmission indication within T_{34m} seconds
14 after Layer 3 receives an indication from Layer 2 that the
15 acknowledgment to the *Channel Assignment Message* has been sent
16 and acknowledged.
- 17 + If RESPOND_r 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_{34m} seconds after receiving the *Channel*
22 *Assignment Message*.
23 o If the *Channel Assignment Message* requires an acknowledgment, the
24 mobile station shall enter the *Mobile Station Idle State* within T_{34m}
25 seconds after Layer 3 receives an indication from Layer 2 that the
26 acknowledgment to the *Channel Assignment Message* has been sent
27 and acknowledged.
- 28 - If FREQ_INCL_r 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 ○ The mobile station shall set CDMACH_s to CDMA_FREQ_r and
2 CDMABAND_s to BAND_CLASS_r. 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_s to the
6 pilot PN sequence offset of the strongest pilot in the list (PILOT_PN_r),
7 and set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL (see
8 2.6.2.2).
- 9 ○ 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_s, NGHBR_LST_MSG_SEQ_s,
13 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
14 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
15 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
16 FD_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
17 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
18 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
19 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
20 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 21 ○ The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s 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_r is equal to '1', the mobile station shall perform the
25 following:
- 26 ◇ If the *Channel Assignment Message* does not require an
27 acknowledgment, the mobile station shall enter the *Update*
28 *Overhead Information Substate* with a page response
29 retransmission indication within T_{34m} seconds after receiving
30 the *Channel Assignment Message*.
- 31 ◇ If the *Channel Assignment Message* requires an acknowledgment,
32 the mobile station shall enter the *Update Overhead Information*
33 *Substate* with a page response retransmission indication within
34 T_{34m} seconds after Layer 3 receives an indication from Layer 2
35 that the acknowledgment to the *Channel Assignment Message*
36 has been sent and acknowledged.
- 37 ○ If RESPOND_r is equal to '0', the mobile station perform the following:
- 38 ◇ If the *Channel Assignment Message* does not require an
39 acknowledgment, the mobile station shall enter the *Mobile*
40 *Station Idle State* within T_{34m} seconds after receiving the *Channel*
41 *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_{34m} 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 6. *Data Burst Message*

7 7. *Extended Channel Assignment Message*: The mobile station shall process the
 8 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 Layer
 13 3 receives an indication from Layer 2 that the acknowledgment to the message
 14 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_s to '0'.
- 17 • If the mobile station is in *Page Response Substate* and has sent⁵⁵ a *Page*
 18 *Response Message* or a *Reconnect Message* the mobile station shall set
 19 RESPOND_IND_s to '0'; otherwise the mobile station shall set RESPOND_IND_s to
 20 RESPOND_IND_r.
- 21 • If ASSIGN_MODE_r equals '000', the mobile station shall perform the following
 22 actions:
- 23 - The mobile station shall set CH_IND_s to '01'.
- 24 - If PACA_s is equal to enabled, the mobile station shall set PACA_s 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_r 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 Order*
 30 with ORDQ field set to '00000110' (capability not supported by the mobile
 31 station) and shall remain in the current state⁵⁶.

⁵⁵ 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.

⁵⁶ 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_r is equal to '00' and DEFAULT_CONFIG_r 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_r) and
4 shall remain in the current state if any of the following conditions is true:
- 5 + FOR_FCH_RC_r is not equal to the RC associated with
6 DEFAULT_CONFIG_r (see Table 3.7.2.3.2.21-2).
7 + REV_FCH_RC_r is not equal to the RC associated with
8 DEFAULT_CONFIG_r (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 send
11 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_r equals '0010' and IMSI_O is derived from IMSI_T, or if
15 PLCM_TYPE_r 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_s is equal to or greater than 6, the mobile station shall
19 store the Forward Fundamental Channel Radio Configuration
20 (FOR_FCH_RC_s = FOR_FCH_RC_r) and the Reverse Fundamental Channel
21 Radio Configuration (REV_FCH_RC_s = REV_FCH_RC_r).
- 22 - If FREQ_INCL_r 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_s =
25 FRAME_OFFSET_r); the message encryption mode indicator
26 (ENCRYPT_MODE_s = ENCRYPT_MODE_r); the bypass indicator
27 (BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r); the granted
28 mode (GRANTED_MODE_s = GRANTED_MODE_r); the default
29 configuration (DEFAULT_CONFIG_s = DEFAULT_CONFIG_r); 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_s to C_SIG_ENCRYPT_MODE_r.
- 35 + The mobile station shall initialize CODE_CHAN_LIST as described in
36 2.6.8, and shall set SERV_NEG_s to enabled.

- 1 + The mobile station shall set FPC_FCH_INIT_SETPT_S to
2 FPC_FCH_INIT_SETPT_R, FPC_FCH_CURR_SETPT_S to
3 FPC_FCH_INIT_SETPT_S, FPC_FCH_FER_S to FPC_FCH_FER_R,
4 FPC_FCH_MIN_SETPT_S to FPC_FCH_MIN_SETPT_R,
5 FPC_FCH_MAX_SETPT_S to FPC_FCH_MAX_SETPT_R, and FPC_PRI_CHAN_S
6 to '0' if the mobile station supports any Radio Configuration greater than
7 2.
- 8 + The mobile station shall set FPC_SUBCHAN_GAIN_S to
9 FPC_SUBCHAN_GAIN_R.
- 10 + The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_R.
- 11 + The mobile station shall set REV_FCH_GATING_MODE_S to
12 REV_FCH_GATING_MODE_R.
- 13 + The mobile station shall set REV_PWR_CNTL_DELAY_S to
14 REV_PWR_CNTL_DELAY_R if REV_PWR_CNTL_DELAY_INCL_R is equal to
15 '1'.
- 16 + The mobile station shall set PLCM_TYPE_S to PLCM_TYPE_R if
17 PLCM_TYPE_INCL_R is equal to '1'; otherwise, the mobile station shall set
18 PLCM_TYPE_S as follows:
- 19 o If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000';
20 otherwise set PLCM_TYPE_S to '0100'.
- 21 + The mobile station shall set PLCM_39_S to PLCM_39_R if PLCM_TYPE_R 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_S, IDLE_CDMABAND to CDMABAND_S,
27 IDLE_SID to SID_S, IDLE_NID to NID_S, and IDLE_P_REV to P_REV_S.
- 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_R 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_R 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 $FPC_PRI_CHAN_S$
18 to '0' if the mobile station supports any Radio Configuration greater than
19 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 ○ 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 and
2 shall enter the *Traffic Channel Initialization Substate* of the *Mobile Station*
3 *Control on the Traffic Channel State*.
- 4 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
5 actions:
- 6 - If FREQ_INCL_r 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_s and ACC_MSG_SEQ_s to
12 NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence
13 offset of the strongest pilot in the list (PILOT_PN_r).
- 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_s, NGHBR_LST_MSG_SEQ_s,
18 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
19 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s
20 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
21 FD_CHAN_LST_MSG_SEQ_s EXT_SYS_PAR_MSG_SEQ_s,
22 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
23 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
24 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
25 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 26 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
27 Primary Paging Channel. If the mobile station was monitoring the
28 Forward Common Control Channel, the mobile station shall set the
29 PRAT_s to '00'. The mobile station shall then begin monitoring the
30 Primary Paging Channel of the selected base station.
- 31 + If RESPOND_r is equal to '1', the mobile station shall perform the
32 following:
- 33 ○ If the *Extended Channel Assignment Message* does not require an
34 acknowledgment, the mobile station shall enter the *Update Overhead*
35 *Information Substate* with a page response retransmission indication
36 within T_{34m} seconds after receiving the *Extended Channel*
37 *Assignment Message*.

- 1 ○ If the *Extended Channel Assignment Message* requires an
2 acknowledgment, the mobile station shall enter the *Update Overhead*
3 *Information Substate* with a page response retransmission indication
4 within T_{34m} seconds after Layer 3 receives an indication from Layer
5 2 that the acknowledgment to the *Extended Channel Assignment*
6 *Message* has been sent and acknowledged.
- 7 + If $RESPOND_r$ is equal to '0', the mobile station shall perform the
8 following:
- 9 ○ If the *Extended Channel Assignment Message* does not require an
10 acknowledgment, the mobile station shall enter the *Mobile Station Idle*
11 *State* within T_{34m} seconds after receiving the *Extended Channel*
12 *Assignment Message*.
- 13 ○ If the *Extended Channel Assignment Message* requires an
14 acknowledgment, the mobile station shall enter the *Mobile Station Idle*
15 *State* within T_{34m} seconds after Layer 3 receives an indication from
16 Layer 2 that the acknowledgment to the *Extended Channel*
17 *Assignment Message* has been sent and acknowledged.
- 18 - If $FREQ_INCL_r$ equals '1', and the band class is not supported by the mobile
19 station, the mobile station shall send a *Mobile Station Reject Order* with
20 ORDQ field set to '00000110' (capability not supported by the mobile
21 station) and remain in the current state.
- 22 - If $FREQ_INCL_r$ equals '1', and the band class is supported by the mobile
23 station, the mobile station shall perform the following actions:
- 24 + If the message requires acknowledgment, the mobile station shall wait
25 until Layer 3 receives an indication from Layer 2 that the
26 acknowledgment to the message has been sent and acknowledged.
- 27 + The mobile station shall set $CDMACH_s$ to $CDMA_FREQ_r$ and
28 $CDMABAND_s$ to $BAND_CLASS_r$. Then the mobile station shall tune to
29 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, set $PILOT_PN_s$ to the pilot PN sequence offset of
32 the strongest pilot in the list ($PILOT_PN_r$), and set $CONFIG_MSG_SEQ_s$
33 and $ACC_MSG_SEQ_s$ to NULL (see 2.6.2.2).

- 1 + If the mobile station has not stored configuration parameters for the
2 Primary Paging Channel of the new base station, or if the stored
3 information is not current (see 2.6.2.2), the mobile station shall set
4 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
5 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
6 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s
7 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
8 FD_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
9 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
10 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
11 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
12 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 13 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
14 Primary Paging Channel. If the mobile station was monitoring Forward
15 Common Control Channel, the mobile station shall set the PRAT_s to '00'.
16 The mobile station shall then begin monitoring the Primary Paging
17 Channel of the selected base station.
- 18 + If RESPOND_r is equal to '1', the mobile station shall perform the
19 following:
- 20 ○ If the *Extended Channel Assignment Message* does not require an
21 acknowledgment, the mobile station shall enter the *Update Overhead*
22 *Information Substate* with a page response retransmission indication
23 within T_{34m} seconds after receiving the *Extended Channel*
24 *Assignment Message*.
- 25 ○ If the *Extended Channel Assignment Message* requires an
26 acknowledgment, the mobile station shall enter the *Update Overhead*
27 *Information Substate* with a page response retransmission indication
28 within T_{34m} seconds after Layer 3 receives an indication from Layer
29 2 that the acknowledgment to the *Extended Channel Assignment*
30 *Message* has been sent and acknowledged.
- 31 + If RESPOND_r is equal to '0', the mobile station shall perform the
32 following:
- 33 ○ If the *Extended Channel Assignment Message* does not require an
34 acknowledgment, the mobile station shall enter the *Mobile Station Idle*
35 *State* within T_{34m} seconds after receiving the *Extended Channel*
36 *Assignment Message*.
- 37 ○ If the *Extended Channel Assignment Message* requires an
38 acknowledgment, the mobile station shall enter the *Mobile Station Idle*
39 *State* within T_{34m} seconds after Layer 3 receives an indication from
40 Layer 2 that the acknowledgment to the *Extended Channel*
41 *Assignment Message* has been sent and acknowledged.
- 42 • If ASSIGN_MODE_r equals '100', the mobile station shall perform the following
43 actions:

- 1 - If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled
2 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
3 indicate to the user that the PACA call has been canceled.
- 4 - If GRANTED_MODE_R equals '00' and the multiplex option and radio
5 configuration specified in the DEFAULT_CONFIG_R field are not supported by
6 the mobile station, the mobile station shall send a *Mobile Station Reject Order*
7 with ORDQ field set to '00000110' (capability not supported by the mobile
8 station) and shall remain in the current state.
- 9 - If GRANTED_MODE_R equals '11', P_REV_IN_USE_S is less than 11, and the
10 mobile station did not include a SYNC_ID field in the *Page Response*
11 *Message* or *Reconnect Message* that was transmitted in this substate, the
12 mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to
13 '00000110' (capability not supported by the mobile station) and shall remain
14 in the current state.
- 15 - If SYNC_ID_INCL_R is included and equals '1', and the mobile station does not
16 have a stored service configuration corresponding to SYNC_ID_R for the
17 current SID_S and NID_S pair, the mobile station shall send a *Mobile Station*
18 *Reject Order* with ORDQ field set to '00011011' (Requested stored service
19 configuration is not available) and shall remain in the current state.
- 20 - If GRANTED_MODE_R equals '11', SR_ID_RESTORE_R is not equal to '111', and
21 a service option connection record corresponding to SR_ID_RESTORE_R is not
22 contained in the stored service configuration, the mobile station shall send a
23 *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not
24 supported by the mobile station) and shall remain in the current state.
- 25 - If GRANTED_MODE_R equals '00' and DEFAULT_CONFIG_R is not equal to
26 '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
27 field set to '00001110' (RC does not match with DEFAULT_CONFIG) and
28 shall remain in the current state if one of the following conditions is true:
- 29 + FOR_RC_R is not equal to the RC associated with DEFAULT_CONFIG_R as
30 specified in Table 3.7.2.3.2.21-2.
- 31 + REV_RC_R is not equal to the RC associated with DEFAULT_CONFIG_R as
32 specified in Table 3.7.2.3.2.21-2.
- 33 - If the mobile station does not support either of the Radio Configurations
34 (FOR_RC or REV_RC), the mobile station shall send a *Mobile Station Reject*
35 *Order* with the ORDQ field set to '00000110' (capability not supported by the
36 mobile station) and remain in the current state.
- 37 - If CH_IND_R = '01' and the mobile station does not support Fundamental
38 Channel, the mobile station shall send a *Mobile Station Reject Order* with the
39 ORDQ field set to '00000110' (capability not supported by the mobile
40 station) and remain in the current state.
- 41 - If CH_IND_R = '10' and the mobile station does not support the Dedicated
42 Control Channel, the mobile station shall send a *Mobile Station Reject Order*

- 1 with the ORDQ field set to '00000110' (capability not supported by the
2 mobile station) and remain in the current state.
- 3 - If CH_IND_r = '11' and the mobile station does not support the Dedicated
4 Control
5 Channel and Fundamental Channel concurrently, the mobile station shall
6 send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'
7 (capability not supported by the mobile station) and remain in the current
8 state.
- 9 - If FREQ_INCL_r equals '1' and if the band class (BAND_CLASS_r) is not
10 supported by the mobile station, the mobile station shall send a *Mobile
11 Station Reject Order* with ORDQ field set to '00000110' (capability not
12 supported by the mobile station) and remain in the current state.
- 13 - If PLCM_TYPE_r equals '0010' and IMSI_O is derived from IMSI_T, or if
14 PLCM_TYPE_r equals '0011' and IMSI_O is derived from IMSI_M, the mobile
15 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
16 '00011100' (PLCM_TYPE mismatch) and remain in the current state.
- 17 - If FUNDICATED_BCNC_IND_r equals '1', and the mobile station does not
18 support BCNC reception on the Forward Fundicated Channels assigned in
19 this message, the mobile station shall send a *Mobile Station Reject Order* with
20 the ORDQ field set to '00000110' (capability not supported by the mobile
21 station) and remain in the current state.
- 22 - If the mobile station does not send a Mobile Station Reject Order as specified
23 above, it shall continue to perform the actions specified below.
- 24 - The mobile station shall set
- 25 + IDLE_CDMABAND = CDMABAND_s
- 26 + IDLE_CDMACH = CDMACH_s
- 27 - If FREQ_INCL_r equals '1', the mobile station shall set
- 28 + CDMABAND_s = BAND_CLASS_r
- 29 + CDMACH_s = CDMA_FREQ_r
- 30 - The mobile station shall store the bypass indicator
31 (BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r).
- 32 - The mobile station shall store granted mode (GRANTED_MODE_s =
33 GRANTED_MODE_r). If GRANTED_MODE_r equals '11', the mobile station
34 shall perform the following:
- 35 + The mobile station shall store the service reference to be restored
36 (SR_ID_RESTORE_s = SR_ID_RESTORE_r).
- 37 + If SR_ID_RESTORE_r equals '000', the mobile station shall store bitmap of
38 service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_s =
39 SR_ID_RESTORE_BITMAP_r).

- 1 + If SYNC_ID_INCL_T is included and equals '1', the mobile station shall
2 store the service configuration synchronization identifier (SYNC_ID_S =
3 SYNC_ID_T).
- 4 - The mobile station shall store the default configuration (DEFAULT_CONFIG_S
5 = DEFAULT_CONFIG_T).
- 6 - The mobile station shall store the Forward Traffic Channel Radio
7 Configuration (FOR_RC_S = FOR_RC_T) and the Reverse Traffic Channel Radio
8 Configuration (REV_RC_S = REV_RC_T).
- 9 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
10 FRAME_OFFSET_T).
- 11 - The mobile station shall store the message encryption mode indicator
12 (ENCRYPT_MODE_S = ENCRYPT_MODE_T).
- 13 - The mobile station shall perform the procedures in 2.6.11.2.
- 14 - The mobile station shall store the Forward power control subchannel relative
15 gain [FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_T].
- 16 - The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_T.
- 17 - The mobile station shall set PLCM_TYPE_S to PLCM_TYPE_T if
18 PLCM_TYPE_INCL_T is equal to '1'; otherwise, the mobile station shall set
19 PLCM_TYPE_S as follows:
- 20 + If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000'; otherwise
21 set PLCM_TYPE_S to '0100'.
- 22 - The mobile station shall set PLCM_39_S to PLCM_39_T if PLCM_TYPE_T is equal
23 to '0001'.
- 24 - If FIXED_PREAMBLE_TRANSMIT_IND_T is included, the mobile station shall
25 set FIXED_PREAMBLE_TRANSMIT_IND_S to
26 FIXED_PREAMBLE_TRANSMIT_IND_T; otherwise, the mobile station shall set
27 FIXED_PREAMBLE_TRANSMIT_IND_S to '0'. If
28 FIXED_PREAMBLE_TRANSMIT_IND_S equals '1', the mobile station shall set
29 FIXED_NUM_PREAMBLE_S to FIXED_NUM_PREAMBLE_T.
- 30 - The mobile station shall set REV_FCH_GATING_MODE_S to
31 REV_FCH_GATING_MODE_T.
- 32 - The mobile station shall set REV_PWR_CNTL_DELAY_S to
33 REV_PWR_CNTL_DELAY_T if REV_PWR_CNTL_DELAY_INCL_T is equal to '1'.
- 34 - If 3XFL_1XRL_INCL_T is equal to '1', the mobile station shall set
35 1XRL_FREQ_OFFSET_S to 1XRL_FREQ_OFFSET_T.
- 36 - If DIRECT_CH_ASSIGN_IND_T is equal to '1', the mobile station shall perform
37 the following:
- 38 + The mobile station shall set RTC_NOM_PWR_S to RTC_NOM_PWR_T.

- 1 + If the mobile station has not received confirmation of delivery of the *Page*
2 *Response Message* or the *Reconnect Message* sent in this substate, the
3 mobile station shall perform the following:
- 4 ○ Set RTC_NOM_PWR_USE_IND to '1'.
5 ○ Set DIRECT_CH_ASSIGN_RECOVER_IND_s to
6 DIRECT_CH_ASSIGN_RECOVER_IND_r
- 7 - The mobile station shall set EARLY_RL_TRANSMIT_IND_s to
8 EARLY_RL_TRANSMIT_IND_r.
- 9 - If TX_PWR_LIMIT_INCL_r is set to '1', the mobile station shall perform the
10 following:
- 11 + If the mobile station is being assigned to operate in the 1915MHz –
12 1920MHz block of the PCS band, the mobile station shall store the
13 transmit power limit TX_PWR_LIMIT_s = (TX_PWR_LIMIT_r - 30dB);
- 14 + Otherwise, the mobile station shall set TX_PWR_LIMIT_s to the limit
15 defined in [11] for the target base station.
- 16 - The mobile station shall store the channel indicator (CH_IND_s = CH_IND_r)
17 and the mobile station shall perform the following actions:
- 18 + If CH_IND_r equals '01', the mobile station shall set
19 FPC_FCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
20 FPC_FCH_CURR_SETPT_s to FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to
21 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
22 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r, and FPC_PRI_CHAN_s
23 to '0' if the mobile station supports any Radio Configuration greater than
24 2. Then for each included member of the Active Set, the mobile station
25 shall store the following:
- 26 ○ Set the PILOT_PN field to PILOT_PN_r.
- 27 ○ Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
28 ADD_PILOT_REC_INCL_r equals '1', the mobile station shall store the
29 following:
- 30 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
31 PILOT_REC_TYPE_r.
- 32 ◇ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
33 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
34 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 35 ◇ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall.
- 36 — Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 37 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
38 AUX_PILOT_WALSH_r with the Walsh Code length specified by
39 WALSH_LENGTH_r.

- 1 ◇ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 2 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 3 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 4 AUX_WALSH_r with the Walsh Code length specified by
- 5 WALSH_LENGTH_r.
- 6 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 7 AUX_TD_POWER_LEVEL_r.
- 8 – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 9 ◇ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 10 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 11 SR3_PRIMARY_PILOT_r.
- 12 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 13 SR3_PILOT_POWER1_r.
- 14 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 15 SR3_PILOT_POWER2_r.
- 16 ◇ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 17 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 18 SR3_PRIMARY_PILOT_r.
- 19 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 20 SR3_PILOT_POWER1_r.
- 21 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 22 SR3_PILOT_POWER2_r.
- 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 – If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1
- 28 field of PILOT_REC to QOF1_r and set the
- 29 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 30 AUX_PILOT_WALSH1_r with the Walsh Code length specified
- 31 by WALSH_LENGTH1_r.
- 32 – Otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to
- 33 QOF_r and set the AUX_PILOT_WALSH_CODE1 field of
- 34 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
- 35 length specified by WALSH_LENGTH_r.

- 1 – If ADD_INFO_INCL_{2r} is equal to ‘1’, set the AUX_PILOT_QOF2
- 2 field of PILOT_REC to QOF2_r and set the
- 3 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
- 4 AUX_PILOT_WALSH2_r with the Walsh Code length specified
- 5 by WALSH_LENGTH2_r.
- 6 – Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to
- 7 QOF_r and set the AUX_PILOT_WALSH_CODE2 field of
- 8 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
- 9 length specified by WALSH_LENGTH_r.
- 10 ○ Set the PWR_COMB_IND field to PWR_COMB_IND_r.
- 11 ○ Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- 12 ○ Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 13 + If CH_IND_r equals ‘01’ and 3X_FCH_INFO_INCL_r equals ‘1’, for each
- 14 included member of the Active Set, the mobile station store the following:
- 15 ○ If 3X_FCH_LOW_INCL_r equals ‘1’, set the QOF_MASK_ID_FCH_LOW
- 16 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
- 17 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
- 18 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
- 19 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
- 20 ○ If 3X_FCH_HIGH_INCL_r equals ‘1’, set the QOF_MASK_ID_FCH_HIGH
- 21 field to QOF_MASK_ID_FCH_HIGH_r and the
- 22 CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
- 23 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
- 24 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
- 25 CODE_CHAN_FCH_r.
- 26 + If CH_IND_r equals ‘10’, the mobile station shall set
- 27 FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
- 28 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s,
- 29 FPC_DCCH_FER_s to FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to
- 30 FPC_DCCH_MIN_SETPT_r, FPC_DCCH_MAX_SETPT_s to
- 31 FPC_DCCH_MAX_SETPT_r, FUNDICATED_BCMC_IND_s to
- 32 FUNDICATED_BCMC_IND_r, and FPC_PRI_CHAN_s to ‘1’ if the mobile
- 33 station supports any Radio Configuration greater than 2. Then for each
- 34 included member of the Active Set, the mobile station shall store the
- 35 following:
- 36 ○ Set the PILOT_PN to PILOT_PN_r.
- 37 ○ Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
- 38 ADD_PILOT_REC_INCL is equal to ‘1’, the mobile station shall store
- 39 the following:
- 40 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
- 41 PILOT_REC_TYPE_r.

- 1 ◇ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
2 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
3 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 4 ◇ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall.
5 — Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
6 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
7 AUX_PILOT_WALSH_r with the Walsh Code length specified by
8 WALSH_LENGTH_r.
- 9 ◇ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
10 — Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
11 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
12 AUX_WALSH_r with the Walsh Code length specified by
13 WALSH_LENGTH_r.
14 — Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
15 AUX_TD_POWER_LEVEL_r.
16 — Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 17 ◇ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
18 — Set the SR3_PRIMARY_PILOT field of PILOT_REC to
19 SR3_PRIMARY_PILOT_r.
20 — Set the SR3_PILOT_POWER1 field of PILOT_REC to
21 SR3_PILOT_POWER1_r.
22 — Set the SR3_PILOT_POWER2 field of PILOT_REC to
23 SR3_PILOT_POWER2_r.
- 24 ◇ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
25 — Set the SR3_PRIMARY_PILOT field of PILOT_REC to
26 SR3_PRIMARY_PILOT_r.
27 — Set the SR3_PILOT_POWER1 field of PILOT_REC to
28 SR3_PILOT_POWER1_r.
29 — Set the SR3_PILOT_POWER2 field of PILOT_REC to
30 SR3_PILOT_POWER2_r.
31 — Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
32 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
33 AUX_PILOT_WALSH_r with the Walsh Code length specified by
34 WALSH_LENGTH_r.

- 1 + If CH_IND_r equals '10', and FUNDICATED_BCMC_IND_r equals '1', for
2 each included member of the Active Set, the mobile station shall store
3 the following:
- 4 ○ Set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r.
 - 5 ○ Set FOR_CPCSCH_s to FOR_CPCSCH_r.
- 6 + If CH_IND_r equals '11', the mobile station shall set
7 FPC_FCCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
8 FPC_FCH_CURR_SETPT_s to FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to
9 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
10 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r,
11 FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
12 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s,
13 FPC_DCCH_FER_s to FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to
14 FPC_DCCH_MIN_SETPT_r, FPC_DCCH_MAX_SETPT_s to
15 FPC_DCCH_MAX_SETPT_r, FPC_PRI_CHAN_s to FPC_PRI_CHAN_r, and
16 FUNDICATED_BCMC_IND_s to FUNDICATED_BCMC_IND_r. Then for each
17 included member of the Active Set, the mobile station shall store the
18 following:
- 19 ○ Set the PILOT_PN to PILOT_PN_r.
 - 20 ○ Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC. If
21 ADD_PILOT_REC_INCL is equal to '1', the mobile station shall store
22 the following:
 - 23 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
24 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
27 and 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.

- 1 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 2 ◇ If PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:
- 3 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 4 SR3_PRIMARY_PILOT_r.
- 5 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 6 SR3_PILOT_POWER1_r.
- 7 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 8 SR3_PILOT_POWER2_r.
- 9 ◇ If PILOT_REC_TYPE_r is equal to ‘100’, the mobile station shall:
- 10 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 11 SR3_PRIMARY_PILOT_r.
- 12 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 13 SR3_PILOT_POWER1_r.
- 14 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 15 SR3_PILOT_POWER2_r.
- 16 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 17 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 18 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 19 WALSH_LENGTH_r.
- 20 – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1
- 21 field of PILOT_REC to QOF1_r and set the
- 22 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 23 AUX_PILOT_WALSH1_r with the Walsh Code length specified
- 24 by WALSH_LENGTH1_r.
- 25 – Otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to
- 26 QOF_r and set the AUX_PILOT_WALSH_CODE1 field of
- 27 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
- 28 length specified by WALSH_LENGTH_r.
- 29 – If ADD_INFO_INCL2_r is equal to ‘1’, set the AUX_PILOT_QOF2
- 30 field of PILOT_REC to QOF2_r and set the
- 31 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
- 32 AUX_PILOT_WALSH2_r with the Walsh Code length specified
- 33 by WALSH_LENGTH2_r.
- 34 – Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to
- 35 QOF_r and set the AUX_PILOT_WALSH_CODE2 field of
- 36 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
- 37 length specified by WALSH_LENGTH_r.
- 38 ○ Set the PWR_COMB_IND field to PWR_COMB_IND_r.
- 39 ○ Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.

- 1 ○ Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 2 ○ Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCH_r.
- 3 ○ Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCH.
- 4 + If CH_IND_r equals '11' and 3X_FCH_INFO_INCL_r equals '1', for each
- 5 included member of the Active Set, the mobile station store the following:
- 6 ○ If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
- 7 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
- 8 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
- 9 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
- 10 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
- 11 ○ If 3X_FCH_HIGH_INCL_r equals '1', set the QOF_MASK_ID_FCH_HIGH
- 12 field to QOF_MASK_ID_FCH_HIGH_r and the
- 13 CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
- 14 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
- 15 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
- 16 CODE_CHAN_FCH_r.
- 17 + If CH_IND_r equals '11' and 3X_DCCH_INFO_INCL_r equals '1', for each
- 18 included member of the Active Set, the mobile station store the following:
- 19 ○ If 3X_DCCH_LOW_INCL_r equals '1', set the
- 20 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW_r
- 21 and the CODE_CHAN_DCCH_LOW field to
- 22 CODE_CHAN_DCCH_LOW_r. Otherwise, set the
- 23 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH_r and the
- 24 CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH_r.
- 25 ○ If 3X_DCCH_HIGH_INCL_r equals '1', set the
- 26 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGH_r
- 27 and the CODE_CHAN_DCCH_HIGH field to
- 28 CODE_CHAN_DCCH_HIGH_r. Otherwise, set the
- 29 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCH_r and the
- 30 CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCH_r.
- 31 + If CH_IND_r equals '11' and FUNDICATED_BCMC_IND_r equals '1', the
- 32 mobile station shall store the following:
- 33 ○ Set REV_FCH_ASSIGNED_s to REV_FCH_ASSIGNED_r.
- 34 + If CH_IND_r equals '11' and FUNDICATED_BCMC_IND_r equals '1', the
- 35 mobile station shall set FCH_BCMC_IND to '1'; otherwise, the mobile
- 36 station shall set FCH_BCMC_IND to '0'.
- 37 + If CH_IND_r equals '11' and FUNDICATED_BCMC_IND_r equals '1' and
- 38 FOR_CPCCH_INFO_INCL_r is included and is set to '1', for each included
- 39 member of the Active Set, the mobile station shall store the following:
- 40 ○ Set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r.

- 1 ○ Set FOR_CPCSCH_S to FOR_CPCSCH_T.
- 2 + If CH_IND_T equals '11' and FUNDICATED_BCNC_IND_T equals '1' and
- 3 ADD_PLCM_FOR_FCH_INCL_T is included and is set to '1', the mobile
- 4 station shall store the following:
- 5 ○ Set ADD_PLCM_FOR_FCH_TYPE_S to ADD_PLCM_FOR_FCH_TYPE_T.
- 6 ○ Set ADD_PLCM_FOR_FCH_39_S to ADD_PLCM_FOR_FCH_39_T if
- 7 ADD_PLCM_FOR_FCH_TYPE_T is equal to '1'.
- 8 - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8,
- 9 and shall set SERV_NEG_S to enabled.
- 10 - If the mobile station is currently monitoring the Paging Channel, the mobile
- 11 station shall set IDLE_BCCH_CHAN to '0'; otherwise, the mobile station shall
- 12 set IDLE_BCCH_CHAN to '1'. The mobile station shall set IDLE_SID to SID_S,
- 13 IDLE_NID to NID_S, and IDLE_P_REV to P_REV_S.
- 14 - If FREQ_INCL_T equals '1', the mobile station shall then tune to the new
- 15 frequency assignment.
- 16 - If DIRECT_CH_ASSIGN_IND_T is equal to '1' and RESPOND_IND_T is equal to
- 17 '1', the mobile station shall perform the following:
- 18 + If the mobile station is in *Mobile Station Idle State*, then the mobile
- 19 station shall enter the *Update Overhead Information Substate* of the
- 20 *System Access State* (see 2.6.3.2) with a direct channel assignment
- 21 respond indication within T_{33m} seconds after the *Extended Channel*
- 22 *Assignment Message* is received; otherwise, the mobile station shall enter
- 23 the *Page Response Substate* with a direct channel assignment respond
- 24 indication.
- 25 Otherwise, the mobile station shall enter the *Traffic Channel Initialization*
- 26 *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 27 • If ASSIGN_MODE_T equals '101', the mobile station shall perform the following
- 28 actions:
- 29 - If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled
- 30 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
- 31 indicate to the user that the PACA call has been canceled.
- 32 - If GRANTED_MODE_T equals '11', P_REV_IN_USE_S is less than 11, and the
- 33 mobile station did not include a SYNC_ID field in the *Page Response*
- 34 *Message* or *Reconnect Message* that was transmitted in this substate, the
- 35 mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to
- 36 '00000110' (capability not supported by the mobile station) and shall remain
- 37 in this state.
- 38 - If GRANTED_MODE_T equals '11', SR_ID_RESTORE_T is not equal to '111', and
- 39 a service option connection record corresponding to SR_ID_RESTORE_T or
- 40 SR_ID_RESTORE_BITMAP_T is not contained in the stored service

- 1 configuration, the mobile station shall send a *Mobile Station Reject Order*
 2 with ORDQ field set to '00000110' (capability not supported by the mobile
 3 station) and shall remain in the current state,.
- 4 - If SYNC_ID_INCL_r is included and equals '1', and the mobile station does not
 5 have stored service configuration corresponding to SYNC_ID_r for the current
 6 SID_s and NID_s pair, the mobile station shall send a *Mobile Station Reject*
 7 *Order* with ORDQ field set to '00011011' (Requested stored service
 8 configuration is not available) and shall remain in the current state.
 - 9 - If the mobile station does not support any of the specified Radio
 10 Configurations (FOR_PDCH_RC, FOR_FCH_DCCH_RC or
 11 REV_FCH_DCCH_RC), the mobile station shall send a *Mobile Station Reject*
 12 *Order* with the ORDQ field set to '00000110' (capability not supported by the
 13 mobile station) and remain in the current state.
 - 14 - If EXT_CH_IND_r signals the allocation of a F-FCH or R-FCH and the mobile
 15 station does not support the Fundamental Channel, the mobile station shall
 16 send a *Mobile Station Reject Order* with the ORDQ field set to '00000110'
 17 (capability not supported by the mobile station) and remain in the current
 18 state.
 - 19 - If EXT_CH_IND_r signals the allocation of a F-DCCH or R-DCCH and the
 20 mobile station does not support the Dedicated Control Channel, 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
 23 the current state.
 - 24 - If FREQ_INCL_r equals '1' and if the band class (BAND_CLASS_r) is not
 25 supported by the mobile station, the mobile station shall send a *Mobile*
 26 *Station Reject Order* with ORDQ field set to '00000110' (capability not
 27 supported by the mobile station) and remain in the current state.
 - 28 - If PLCM_TYPE_r equals '0010' and IMSI_O is derived from IMSI_T, or if
 29 PLCM_TYPE_r equals '0011' and IMSI_O is derived from IMSI_M, the mobile
 30 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
 31 '00011100' (PLCM_TYPE mismatch) and remain in the current state.
 - 32 - If FUNDICATED_BCNC_IND_r equals '1', and the mobile station does not
 33 support BCNC reception on the Forward Fundicated Channels assigned in
 34 this message, the mobile station shall send a *Mobile Station Reject Order* with
 35 the ORDQ field set to '00000110' (capability not supported by the mobile
 36 station) and remain in the current state.
 - 37 - If the mobile station does not send a *Mobile Station Reject Order* as specified
 38 above, it shall continue to perform the actions specified below.
 - 39 - Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to
 40 the MAC layer.
 - 41 - If FREQ_INCL_r equals '1', the mobile station shall set

- 1 + CDMABAND_S = BAND_CLASS_T
- 2 + CDMACH_S = CDMA_FREQ_T
- 3 - The mobile station shall store the bypass indicator
4 (BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_T).
- 5 - The mobile station shall store the granted mode indicator
6 (GRANTED_MODE_S = GRANTED_MODE_T). Furthermore, if
7 GRANTED_MODE_T equals '11', the mobile station shall store service
8 reference to be restored (SR_ID_RESTORE_S = SR_ID_RESTORE_T).
- 9 - If SR_ID_RESTORE_T equals '000', the mobile station shall store bitmap of
10 service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_S =
11 SR_ID_RESTORE_BITMAP_T).
- 12 - If SYNC_ID_INCL_T is included and equals '1', the mobile station shall store
13 the service configuration synchronization identifier (SYNC_ID_S = SYNC_ID_T).
- 14 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
15 FRAME_OFFSET_T).
- 16 - The mobile station shall store the message encryption mode indicator
17 (ENCRYPT_MODE_S = ENCRYPT_MODE_T).
- 18 - The mobile station shall perform the following procedures in the order listed
19 below:
- 20 + If D_SIG_ENCRYPT_MODE_T is included, the mobile station shall perform
21 the following:
- 22 ○ If D_SIG_ENCRYPT_MODE_T is equal to '000', the mobile station shall
23 set D_SIG_ENCRYPT_MODE_S to C_SIG_ENCRYPT_MODE_S;
24 otherwise, the mobile station shall set D_SIG_ENCRYPT_MODE_S to
25 D_SIG_ENCRYPT_MODE_T, ENC_KEY_S to the most recently generated
26 CMEAKEY in the mobile station associated with AUTHR of the *Page*
27 *Response Message*, and EXT_ENCRYPT_SEQ[0] and
28 EXT_ENCRYPT_SEQ[1] to 256 × ENC_SEQ_H (the ENC_SEQ_H field
29 in the *Page Response Message*).
- 30 + If ENC_KEY_SIZE_T is included, the mobile station shall set
31 ENC_KEY_SIZE_S to ENC_KEY_SIZE_T.
- 32 + If C_SIG_ENCRYPT_MODE is included, the mobile station shall set
33 C_SIG_ENCRYPT_MODE_S to C_SIG_ENCRYPT_MODE_T.
- 34 - The mobile station shall set EXT_CH_IND_S to EXT_CH_IND_T.
- 35 - The mobile station shall set CH_IND_S to '00'.
- 36 - If EXT_CH_IND_T signals the allocation of a F-FCH or a F-DCCH, the mobile
37 station shall store the Forward power control subchannel relative gain
38 [FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_T].
- 39 - The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_T.

- 1 - The mobile station shall set $PLCM_TYPE_S$ to $PLCM_TYPE_R$ if
2 $PLCM_TYPE_INCL_R$ is equal to '1'; otherwise, the mobile station shall set
3 $PLCM_TYPE_S$ as follows:
- 4 + If $P_REV_IN_USE_S$ is less than 11, set $PLCM_TYPE_S$ to '0000'; otherwise
5 set $PLCM_TYPE_S$ to '0100'.
- 6 - The mobile station shall set $PLCM_39_S$ to $PLCM_39_R$ if $PLCM_TYPE_R$ is equal
7 to '0001'.
- 8 - The mobile station shall set $FUNDICATED_BCMC_IND_S$ to
9 $FUNDICATED_BCMC_IND_R$. If $FUNDICATED_BCMC_IND_R$ equals '1' and the
10 $EXT_CH_IND_R$ signals the allocation of a F-FCH, the mobile station shall set
11 FCH_BCMC_IND to '1'; otherwise, the mobile station shall set
12 FCH_BCMC_IND to '0'.
- 13 - If $FUNDICATED_BCMC_IND_R$ equals '1' and $ADD_PLCM_FOR_FCH_INCL_R$ is
14 included and is set to '1', the mobile station shall store the following:
- 15 + Set $ADD_PLCM_FOR_FCH_TYPE_S$ to $ADD_PLCM_FOR_FCH_TYPE_R$.
- 16 + Set $ADD_PLCM_FOR_FCH_39_S$ to $ADD_PLCM_FOR_FCH_39_R$ if
17 $ADD_PLCM_FOR_FCH_TYPE_R$ is equal to '1'.
- 18 - If $EXT_CH_IND_R$ signals the allocation of R-FCH, the mobile station shall set
19 $REV_FCH_GATING_MODE_S$ to $REV_FCH_GATING_MODE_R$.
- 20 - The mobile station shall set $REV_PWR_CNTL_DELAY_S$ to
21 $REV_PWR_CNTL_DELAY_R$ if $REV_PWR_CNTL_DELAY_INCL_R$ is equal to '1'.
- 22 - The mobile station shall set $FULL_CI_FEEDBACK_IND_S$ to
23 $FULL_CI_FEEDBACK_IND_R$.
- 24 - If $EXT_CH_IND_R$ equals '01000', the mobile station shall set
25 $FOR_CPCCH_RATE_S$ to $FOR_CPCCH_RATE_R$, and
26 $FOR_CPCCH_UPDATE_RATE_S$ to $FOR_CPCCH_UPDATE_RATE_R$; otherwise,
27 the mobile station shall set $FOR_CPCCH_RATE_S$ to '00', and
28 $FOR_CPCCH_UPDATE_RATE_S$ to '00'.
- 29 - The mobile station shall set $REV_CQICH_FRAME_OFFSET_S$ to
30 $REV_CQICH_FRAME_OFFSET_R$.
- 31 - The mobile station shall set $REV_CQICH_REPS_S$ to $REV_CQICH_REPS_R$.
- 32 - The mobile station shall set $REV_ACKCH_REPS_S$ to $REV_ACKCH_REPS_R$.
- 33 - The mobile station shall set $FOR_PDCH_RC_S$ to $FOR_PDCH_RC_R$.
- 34 - If $EXT_CH_IND_R$ signals the allocation of a R-PDCH, the mobile station shall
35 set $REV_PDCH_RC_S$ to $REV_PDCH_RC_R$.
- 36 - If $EXT_CH_IND_R$ signals the allocation of a F-FCH, the mobile station shall
37 set $FOR_FCH_RC_S$ to $FOR_FCH_DCCH_RC_R$.
- 38 - If $EXT_CH_IND_R$ signals the allocation of a F-DCCH, the mobile station shall
39 set $FOR_DCCH_RC_S$ to $FOR_FCH_DCCH_RC_R$.

- 1 - If EXT_CH_IND_r signals the allocation of a R-FCH, the mobile station shall
2 set REV_FCH_RC_s to REV_FCH_DCCH_RC_r.
- 3 - If EXT_CH_IND_r signals the allocation of a R-DCCH, the mobile station shall
4 set REV_DCCH_RC_s to REV_FCH_DCCH_RC_r.
- 5 - If EXT_CH_IND_r signals the allocation of a F-FCH and a F-DCCH, the mobile
6 station shall set FPC_PRI_CHAN_s to FPC_PRI_CHAN_r.
- 7 - If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall
8 set FPC_FCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
9 FPC_FCH_CURR_SETPT_s to FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to
10 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
11 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r.
- 12 - If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile station shall
13 set FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
14 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s, FPC_DCCH_FER_s to
15 FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to FPC_DCCH_MIN_SETPT_r,
16 FPC_DCCH_MAX_SETPT_s to FPC_DCCH_MAX_SETPT_r.
- 17 - If EARLY_RL_TRANSMIT_IND_r is included, the mobile station shall set
18 EARLY_RL_TRANSMIT_IND_s to EARLY_RL_TRANSMIT_IND_r; otherwise, the
19 mobile station shall set EARLY_RL_TRANSMIT_IND_s to '0'.
- 20 - If the FIXED_PREAMBLE_TRANSMIT_IND_r is included, the mobile station
21 shall set FIXED_PREAMBLE_TRANSMIT_IND_s to
22 FIXED_PREAMBLE_TRANSMIT_IND_r; otherwise, the mobile station shall set
23 FIXED_PREAMBLE_TRANSMIT_IND_s to '0'. If
24 FIXED_PREAMBLE_TRANSMIT_IND_s equals '1', the mobile station shall
25 store FIXED_NUM_PREAMBLE_s to FIXED_NUM_PREAMBLE_r.
- 26 - If TX_PWR_LIMIT_INCL_r is set to '1', the mobile station shall perform the
27 following:
- 28 + If the mobile station is being assigned to operate in the 1915MHz –
29 1920MHz block of the PCS band, the mobile station shall store the
30 transmit power limit TX_PWR_LIMIT_s = (TX_PWR_LIMIT_r - 30dB);
- 31 + Otherwise, the mobile station shall set TX_PWR_LIMIT_s to the limit
32 defined in [11] for the target base station.
- 33 - If FOR_PDCH_PARAMS_INCL_r is equal to '1', the mobile station shall set
34 FOR_PDCH_COMMON_PARAMS_s = '0'; otherwise, if
35 FOR_PDCH_COMMON_PARAMS_s is equal to '0', the mobile station shall send
36 a *Mobile Station Reject Order* with ORDQ equal to '00000011' (message
37 structure not acceptable) and remain in the current state.
- 38 - If FOR_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile station
39 shall set RLGAIN_ACKCH_PILOT_s to RLGAIN_ACKCH_PILOT_r, and
40 RLGAIN_CQICH_PILOT_s to RLGAIN_CQICH_PILOT_r.

- 1 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
2 NUM_SOFT_SWITCHING_FRAMES_s to NUM_SOFT_SWITCHING_FRAMES_r +
3 1, and NUM_SOFT_SWITCING_FRAMES_s to
4 NUM_SOFT_SWITCING_FRAMES_r + 1.
- 5 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '1', the mobile
6 station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
7 NUM_SOFT_SWITCHING_FRAMES_CHM_r + 1, and
8 NUM_SOFT_SWITCING_FRAMES_CHM_s to
9 NUM_SOFT_SWITCING_FRAMES_CHM_r + 1.
- 10 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '0', the mobile
11 station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
12 NUM_SOFT_SWITCHING_FRAMES_r + 1, and
13 NUM_SOFT_SWITCING_FRAMES_CHM_s to
14 NUM_SOFT_SWITCING_FRAMES_r + 1.
- 15 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
16 NUM_SOFT_SWITCHING_SLOTS_s according to Table 3.7.2.3.2.21-9 based
17 on the value of NUM_SOFT_SWITCHING_SLOTS_r.
- 18 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
19 NUM_SOFT_SWITCING_SLOTS_s according to Table 3.7.2.3.2.21-9 based
20 on the value of NUM_SOFT_SWITCING_SLOTS_r.
- 21 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '1', the mobile
22 station shall:
- 23 + Set NUM_SOFT_SWITCHING_SLOTS_CHM_s according to Table
24 3.7.2.3.2.21-9 based on the value of
25 NUM_SOFT_SWITCHING_SLOTS_CHM_r.
- 26 + Set NUM_SOFT_SWITCING_SLOTS_CHM_s according to Table
27 3.7.2.3.2.21-9 based on the value of
28 NUM_SOFT_SWITCING_SLOTS_CHM_r.
- 29 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '0', the mobile
30 station shall:
- 31 + Set NUM_SOFT_SWITCHING_SLOTS_CHM_s according to Table
32 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS_r.
- 33 + Set NUM_SOFT_SWITCING_SLOTS_CHM_s according to Table
34 3.7.2.3.2.21-9 based on the value of
35 NUM_SOFT_SWITCING_SLOTS_r.
- 36 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
37 PDCH_SOFT_SWITCHING_DELAY_s to PDCH_SOFT_SWITCHING_DELAY_r +
38 1, and PDCH_SOFT_SWITCING_DELAY_s to
39 PDCH_SOFT_SWITCING_DELAY_r + 1.
- 40 - If TX_DISABLED_TIMER_INCL_r is equal to '1', the mobile station shall set
41 TX_DISABLED_TIMER_s to TX_DISABLED_TIMER_r; otherwise, the mobile
42 station shall set TX_DISABLED_TIMER_s to T_{81m}.

- 1 - If EXT_CH_IND_r signals the allocation of a R-PDCH, the mobile station shall:
- 2 + Set FOR_GCH_ASSIGNED_s to FOR_GCH_ASSIGNED_r.
- 3 + Set FOR_RCCH_ASSIGNED_s to FOR_RCCH_ASSIGNED_r.
- 4 + If FOR_RCCH_ASSIGNED_s is equal to '1', the mobile station shall:
- 5 ○ Set FOR_RCCH_DRC_MODE_s to FOR_RCCH_DRC_MODE_r.
- 6 ○ Set FOR_RCCH_REPETITION_s to FOR_RCCH_REPETITION_r.
- 7 ○ Set FOR_RCCH_UPDATE_RATE_s to FOR_RCCH_UPDATE_RATE_r.
- 8 + If FOR_ACKCH_ASSIGNED_r is equal to '1', the mobile station shall set
- 9 FOR_ACKCH_MODE_s to FOR_ACKCH_MODE_r.
- 10 + If FOR_ACKCH_COMB_SEL_r is included, the mobile station shall set
- 11 FOR_ACKCH_COMB_SEL_s to FOR_ACKCH_COMB_SEL_r; otherwise, the
- 12 mobile station shall set FOR_ACKCH_COMB_SEL_s to '0'.
- 13 + If REV_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile
- 14 station shall perform the following:
- 15 ○ The mobile station shall set RLGAIN_SPICH_PILOT_s to
- 16 RLGAIN_SPICH_PILOT_r.
- 17 ○ The mobile station shall set RLGAIN_REQCH_PILOT_s to
- 18 RLGAIN_REQCH_PILOT_r.
- 19 ○ The mobile station shall set RLGAIN_PDCCH_PILOT_s to
- 20 RLGAIN_PDCCH_PILOT_r.
- 21 + If REV_PDCH_PARAMS_1_INCL_r is included and equal to '1', the mobile
- 22 station shall perform the following:
- 23 ○ The mobile station shall set REV_PDCH_TABLE_SEL_s to
- 24 REV_PDCH_TABLE_SEL_r.
- 25 ○ The mobile station shall set REV_PDCH_MAX_AUTO_TPR_s to
- 26 REV_PDCH_MAX_AUTO_TPR_r.
- 27 - Otherwise, the mobile station shall:
- 28 + Set FOR_GCH_ASSIGNED_s to NULL.
- 29 + Set FOR_RCCH_ASSIGNED_s to NULL.
- 30 - For each included member of the Active Set, the mobile station shall store
- 31 the following:
- 32 + Set the PILOT_PN field to PILOT_PN_r.
- 33 + Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
- 34 ADD_PILOT_REC_INCL_r equals '1', the mobile station shall store the
- 35 following:
- 36 ○ Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPE_r.

- 1 ○ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
2 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r and
3 set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 4 ○ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
5 ◇ Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
6 ◇ Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
7 AUX_PILOT_WALSH_r with the Walsh Code length specified by
8 WALSH_LENGTH_r.
- 9 ○ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
10 ◇ Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
11 ◇ Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
12 AUX_WALSH_r with the Walsh Code length specified by
13 WALSH_LENGTH_r.
14 ◇ Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
15 AUX_TD_POWER_LEVEL_r.
16 ◇ Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 17 ○ Set FOR_PDCH_INCL_s to FOR_PDCH_INCL_r.
- 18 ○ If FOR_PDCH_INCL_r is equal to '1', the mobile station shall perform
19 the following:
20 ◇ If FOR_PDCH_PARAMS_INCL_r is equal to '1', the mobile station
21 shall store the following parameters:
22 — The mobile station shall set WALSH_TABLE_ID_s to
23 WALSH_TABLE_ID_r.
24 — The mobile station shall set NUM_PDCCH_s to NUM_PDCCH_r.
25 — The mobile station shall store FOR_PDCCH_WALSH_s[i] to the
26 ith occurrence of FOR_PDCCH_WALSH_r.
27 ◇ The mobile station shall set MAC_ID_s to MAC_ID_r.
28 ◇ The mobile station shall set REV_CQICH_COVER_s to
29 REV_CQICH_COVER_r.
30 ◇ If EXT_CH_IND_r signals the allocation of a F-CPCCH, the mobile
31 station shall set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r,
32 and, FOR_CPCSCH_s to FOR_CPCSCH_r.
33 ◇ The mobile station shall store FOR_PDCCH_WALSH_s[i] to the ith
34 occurrence of FOR_PDCCH_WALSH_r.
- 35 ○ The mobile station shall set PWR_COMB_IND_s to PWR_COMB_IND_r.
- 36 ○ If PDCH_GROUP_IND_INCL_r is equal to '1', the mobile station shall
37 set PDCH_GROUP_IDENTIFIER_s as follows:

- 1 ◇ If this is the first pilot in the list that has a F-PDCH assignment,
2 the mobile station shall perform the following:
- 3 ○ The mobile station shall set PDCH_GROUP_IDENTIFIER_s to '000';
- 4 ◇ Otherwise, the mobile station shall perform the following:
- 5 - If PDCH_GROUP_IND_r is set to '1', the mobile station shall set
6 PDCH_GROUP_IDENTIFIER_s to the same value as that of the previous pilot
7 in the list that has a F-PDCH assigned; otherwise, the mobile station shall
8 set PDCH_GROUP_IDENTIFIER_s to the value one greater than that of the
9 previous pilot in the list that has a F-PDCH assigned.
- 10 + Otherwise, the mobile station shall perform the following:
- 11 ○ If this is the first pilot in the list that has a F-PDCH assignment, the
12 mobile station shall perform the following:
- 13 ◇ The mobile station shall set PDCH_GROUP_IDENTIFIER_s to '000';
- 14 ○ Otherwise, the mobile station shall perform the following:
- 15 ◇ If F-PDCH is assigned for this pilot, the mobile station shall
16 perform the following:
- 17 — If PWR_COMB_IND_r is set to '1', and there are no pilots
18 between this pilot and the previous pilot in the list that has a
19 F-PDCH assigned, the mobile station shall set
20 PDCH_GROUP_IDENTIFIER_s to the same value as that of the
21 previous pilot in the list that has a F-PDCH assigned.
- 22 — If PWR_COMB_IND_r is set to '1', and all pilots between this
23 pilot and the previous pilot in the list that has a F-PDCH
24 assigned have PWR_COMB_IND set to '1', the mobile station
25 shall set PDCH_GROUP_IDENTIFIER_s to the same value as
26 that of the previous pilot in the list that has a F-PDCH
27 assigned.
- 28 — Otherwise, the mobile station shall set
29 PDCH_GROUP_IDENTIFIER_s to the value one greater than
30 that of the previous pilot in the list.
- 31 ◇ Otherwise, the mobile station shall set
32 PDCH_GROUP_IDENTIFIER_s to NULL.
- 33 + If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station
34 shall set CODE_CHAN_FCH_s = CODE_CHAN_FCH_r, and
35 QOF_MASK_ID_FCH_s = QOF_MASK_ID_FCH_r.
- 36 + If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile station
37 shall set CODE_CHAN_DCCH_s = CODE_CHAN_DCCH_r, and
38 QOF_MASK_ID_DCCH_s = QOF_MASK_ID_DCCH_r.

- 1 + If FOR_PDCH_INCL_T is equal to '1', EXT_CH_IND_T signals the allocation
2 of a R-PDCH, and FOR_ACKCH_ASSIGNED_T is equal to '1', the mobile
3 station shall set FOR_ACKCH_WALSH_INDEX_S to
4 FOR_ACKCH_WALSH_INDEX_T, and FOR_ACKSCH_INDEX_S to
5 FOR_ACKSCH_INDEX_T.
- 6 + If FOR_RCCH_INCL_T is included and set to '1', the mobile station shall do
7 the following:
8 ○ Set FOR_RCCH_WALSH_INDEX_S to FOR_RCCH_WALSH_INDEX_T.
9 ○ Set FOR_RCSCH_INDEX_S to FOR_RCSCH_INDEX_T.
- 10 + If FOR_PDCH_INCL_T is equal to '1', and if FOR_GCH_ASSIGNED_T is
11 included and set to '1', the mobile station shall perform the following;
12 ○ Set NUM_FOR_GCH_S to NUM_FOR_GCH_T, and
13 ○ For each of the NUM_FOR_GCH_S occurrences of
14 FOR_GCH_WALSH_INDEX_T, the mobile station shall set
15 FOR_GCH_WALSH_INDEX_S[j] to FOR_GCH_WALSH_INDEX_T[j].
- 16 + Otherwise, the mobile station shall perform the following:
17 ○ Set NUM_FOR_GCH_S to 0, and
18 ○ Set FOR_GCH_WALSH_INDEX_S to NULL.
- 19 - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8,
20 and shall set SERV_NEG_S to enabled.
- 21 - If DIRECT_CH_ASSIGN_IND_T is equal to '1', the mobile station shall perform
22 the following:
23 + The mobile station shall set RTC_NOM_PWR_S to RTC_NOM_PWR_T.
24 + If the mobile station has not received confirmation of delivery of the *Page*
25 *Response Message* or the *Reconnect Message* sent in this substate, the
26 mobile station shall perform the following:
27 ○ Set RTC_NOM_PWR_USE_IND to '1'.
28 ○ Set DIRECT_CH_ASSIGN_RECOVER_IND_S to
29 DIRECT_CH_ASSIGN_RECOVER_IND_T
- 30 - If FREQ_INCL_T equals '1', the mobile station shall then tune to the new
31 frequency assignment.
- 32 - If DIRECT_CH_ASSIGN_IND_T is equal to '1' and RESPOND_IND_T is equal to
33 '1', the mobile station shall perform the following:
34 + If the mobile station is in *Mobile Station Idle State*, then the mobile
35 station shall enter the *Update Overhead Information Substate* of the
36 *System Access State* (see 2.6.3.2) with a direct channel assignment
37 respond indication within T_{33m} seconds after the *Extended Channel*
38 *Assignment Message* is received; otherwise, the mobile station shall enter

1 the *Page Response Substate* with a direct channel assignment respond
2 indication.

3 + Otherwise, the mobile station shall enter the *Traffic Channel Initialization*
4 *Substate* of the *Mobile Station Control on the Traffic Channel State*.

5 8. *Fast Call Setup Order:*

- 6 • If $ORDQ_R$ is equal to '00000000', the mobile station shall process the message
7 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 8 • If $ORDQ_R$ is equal to '00000001', the mobile station shall process the message
9 as specified in 2.6.12.1.

10 9. *Feature Notification Message*

11 10. *Local Control Order*

12 11. *Lock Until Power-Cycled Order:* The mobile station shall disable its transmitter and
13 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's
14 semi-permanent memory ($LCKRSN_{S-p}$ equals the least significant four bits of
15 $ORDQ_R$). The mobile station should notify the user of the locked condition. The
16 mobile station shall enter the *System Determination Substate* of the *Mobile Station*
17 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the
18 *System Access State* again until after the next mobile station power-up or until it
19 has received an *Unlock Order*. This requirement shall take precedence over any
20 other mobile station requirement specifying entry to the *System Access State*.

21 12. *Maintenance Required Order:* The mobile station shall record the reason for the
22 *Maintenance Required Order* in the mobile station's semi-permanent memory
23 ($MAINTRSN_{S-p}$ equals the least significant four bits of $ORDQ_R$). The mobile station
24 shall remain in the unlocked condition. The mobile station should notify the user
25 of the maintenance required condition.

26 13. *Registration Accepted Order:* The mobile station shall perform the procedures as
27 specified in 2.6.11.1.

28 14. *Registration Rejected Order:* This order indicates that normal service is not
29 available on this system. The mobile station shall disable the full-TMSI timer. If
30 the received order specifies to delete the TMSI ($ORDQ = '00000100'$), the mobile
31 station shall set all the bits of the $TMSI_CODE_{S-p}$ to '1'. The mobile station shall
32 enter the *System Determination Substate* of the *Mobile Station Initialization State* with
33 a registration rejected indication (see 2.6.1.1).

34 15. *Release Order:* If $NDSS_ORIG_S$ is equal to enabled, the mobile station shall set
35 $NDSS_ORIG_S$ to disabled, and should indicate to the user that the call origination
36 has been canceled. The mobile station shall enter the *Mobile Station Idle State* or
37 the *System Determination Substate* of the *Mobile Station Initialization State* with a
38 release indication (see 2.6.1.1). If the mobile station enters the *Mobile Station Idle*
39 *State*, and if $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to

1 disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should
2 indicate to the user that the PACA call has been canceled.

3 16. *Retry Order*: The mobile station shall process the message as follows:

- 4 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
5 RETRY_DELAY_S[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
6 '011', '100', or '101'.
- 7 • If RETRY_TYPE_R is equal to '001', '100', or '101', the mobile station shall perform
8 the following:
 - 9 - If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set
10 RETRY_DELAY_S[RETRY_TYPE_R] to 0.
 - 11 - If RETRY_DELAY_R is not equal to '00000000', the mobile station shall set
12 RETRY_DELAY_S[RETRY_TYPE_R] as follows:
 - 13 + If the most significant bit of the RETRY_DELAY_R is '0', set
14 RETRY_DELAY_UNIT_S to 1000ms. If the most significant bit of the
15 RETRY_DELAY_R is '1', set RETRY_DELAY_UNIT_S to 60000ms.
 - 16 + The mobile station shall set RETRY_DELAY_VALUE_S to the seven least
17 significant bits of RETRY_DELAY_R.
 - 18 + The mobile station shall store the next system time 80 ms boundary +
19 RETRY_DELAY_VALUE_S × RETRY_DELAY_UNIT_S ms as
20 RETRY_DELAY_S[RETRY_TYPE_R].

21 17. *Security Mode Command Message*: The mobile station shall perform the procedures
22 as specified in 2.6.11.4.

23 18. *Service Redirection Message*: The mobile station shall process the message as
24 follows:

- 25 • If the mobile station is directed to an unsupported operation mode or band
26 class, the mobile station shall respond with a *Mobile Station Reject Order* with
27 ORDQ equal to '00000110' (message requires a capability that is not supported
28 by the mobile station).
- 29 • If DELETE_TMSI_R is equal to '1', the mobile station shall set all the bits of
30 TMSI_CODE_{S-p} to '1'. The mobile station shall disable the full-TMSI timer.
- 31 • The mobile station shall set RETURN_IF_FAIL_S = RETURN_IF_FAIL_R.
- 32 • If RECORD_TYPE_R is equal to '00000000', the mobile station shall enter the
33 *System Determination Substate* of the *Mobile Station Initialization State* with an
34 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
35 redirection record received in the message as REDIRECT_REC_S and shall enter
36 the *System Determination Substate* of the *Mobile Station Initialization State* with a
37 redirection indication (see 2.6.1.1).

38 19. *SSD Update Message*: The mobile station shall respond to the message as specified
39 in 2.3.12.1.5.

1 20. *Status Request Message*: The mobile station shall disable the *System Access State*
 2 timer and respond to the message. If $P_REV_IN_USE_s$ is less than or equal to
 3 three, the mobile station shall respond with a *Status Response Message*. If
 4 $P_REV_IN_USE_s$ is greater than three, the mobile station shall respond with an
 5 *Extended Status Response Message*. If the message does not specify any
 6 qualification information ($QUAL_INFO_TYPE_r$ is equal to '00000000'), the mobile
 7 station shall include the requested information records in the response. If the
 8 message specifies a band class ($QUAL_INFO_TYPE_r$ is equal to '00000001'), the
 9 mobile station shall only include the requested information records for the
 10 specified band class ($BAND_CLASS_r$) in the response. If the message specifies a
 11 band class and an operating mode ($QUAL_INFO_TYPE_r$ is equal to '00000010'), the
 12 mobile station shall only include the requested information records for the
 13 specified band class ($BAND_CLASS_r$) and operating mode (OP_MODE_r) in the
 14 response. If the message specifies a band class or a band class and an operating
 15 mode which is not supported by the mobile station, the mobile station shall send a
 16 *Mobile Station Reject Order* with $ORDQ$ set to '00000110' (message requires a
 17 capability that is not supported by the mobile station). If the response to this
 18 message exceeds the allowable length, the mobile station shall send a *Mobile*
 19 *Station Reject Order* with $ORDQ$ set to '00001000' (response message would exceed
 20 the allowable length). If the message specifies an information record which is not
 21 supported by the mobile station for the specified band class and operating mode,
 22 the mobile station shall send a *Mobile Station Reject Order* with $ORDQ$ set to
 23 '00001001' (information record is not supported for the specified band class and
 24 operating mode).

25 21. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code
 26 as follows:

- 27 • The mobile station shall store the length of the TMSI zone field by setting
 28 $ASSIGNING_TMSI_ZONE_LEN_{s-p}$ to $TMSI_ZONE_LEN_r$;
- 29 • The mobile station shall store the assigning TMSI zone number by setting the
 30 $ASSIGNING_TMSI_ZONE_LEN_{s-p}$ least significant octets of
 31 $ASSIGNING_TMSI_ZONE_{s-p}$ to $TMSI_ZONE_r$, and
- 32 • The mobile station shall store the TMSI code by setting $TMSI_CODE_{s-p}$ to
 33 $TMSI_CODE_r$.

34 The mobile station shall set the TMSI expiration time by setting $TMSI_EXP_TIME_{s-p}$
 35 to $TMSI_EXP_TIME_r$. The mobile station shall disable the full-TMSI timer. The
 36 mobile station shall then respond with a *TMSI Assignment Completion Message*
 37 within T_{56m} seconds.

38 22. *User Zone Reject Message*

39 23. *General Extension Message*: The mobile station shall process this message as
 40 specified in section 2.6.18.

41 24. *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 If the mobile station performs an access probe handoff or access handoff and receives any
2 of the following messages, it shall process the message as specified in 2.6.3.1.3:

- 3 • If the mobile station is currently monitoring the Paging Channel:
 - 4 1. *System Parameters Message*
 - 5 2. *Access Parameters Message*
 - 6 3. *Neighbor List Message*
 - 7 4. *Extended System Parameters Message*
 - 8 5. *Extended Neighbor List Message*
 - 9 6. *General Neighbor List Message*
 - 10 7. *Global Service Redirection Message*
 - 11 8. *Extended Global Service Redirection Message*
- 12 • If the mobile station is currently monitoring the Primary Broadcast Control
13 Channel:
 - 14 1. *ANSI-41 System Parameters Message*
 - 15 2. *Enhanced Access Parameters Message*
 - 16 3. *Universal Neighbor List Message*
 - 17 4. *MC-RR Parameters Message*
 - 18 5. *Extended Global Service Redirection Message*

19 2.6.3.4 Mobile Station Order/Message Response Substate

20 In this substate, the mobile station sends a message that is a response to a message
21 received from the base station. If the base station responds to the mobile station's message
22 with an authentication request, the mobile station responds in this substate.

23 If a message received from the base station requires a Layer 2 acknowledgment and does
24 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
25 outstanding (see [4]).

26 If a message received from the base station requires a Layer 2 acknowledgment and also a
27 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

28 When transmitting a response to a message received from the base station, Layer 3 shall
29 indicate to Layer 2 that the type of the message is a response (see [4]).

30 When transmitting an autonomous message (i.e., a message that is not sent as a response
31 to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type
32 of the message is a request other than a registration request or a message transmission
33 request (see [4]).

34 Upon entering the *Mobile Station Order/Message Response Substate*, the mobile station
35 shall send the response message.

1 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
 2 Common Control Channel. If the mobile station declares a loss of the Paging Channel or
 3 the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the
 4 following:

- 5 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
 6 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
 7 user that the PACA call has been canceled.
- 8 • The mobile station shall declare an access attempt failure and update its
 9 registration variables as specified in 2.6.5.5.3.2.
- 10 • The mobile station shall disable its transmitter.
- 11 • The mobile station shall enter the *Mobile Station Idle State*.

12 If the mobile station receives confirmation of delivery of any message sent by the mobile
 13 station in this substate, it shall send a response in this substate if required, and shall then
 14 enter the *Mobile Station Idle State*.

15 If PACA_S is equal to enabled, the mobile station shall set PACA_CANCEL to '1' when the
 16 user directs the mobile station to cancel a PACA call.

17 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
 18 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
 19 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
 20 the message has been sent and acknowledged.

21 If Layer 3 receives a message with an indication from Layer 2 that an access attempt for a
 22 message being transmitted was not terminated as a result of processing the Layer 2 fields
 23 of the received message, the mobile station shall ignore the received message.

24 The following directed messages and orders can be received. If any field value of the
 25 message or order is outside its permissible range, the mobile station may send a *Mobile*
 26 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 27 1. *Authentication Challenge Message*: The mobile station shall respond to the message
 28 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 29 2. *Authentication Request Message*: The mobile station shall process the message and
 30 shall respond as specified in 2.3.12.5.2.
- 31 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
 32 message as specified in 2.3.12.1.5.
- 33 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
 34 specified in 2.6.11.5.
- 35 5. *Data Burst Message*
- 36 6. *Fast Call Setup Order*:
 37 • If ORDQ_r is equal to '00000000', the mobile station shall process the message
 38 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.

- If $ORDQ_R$ is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

7. *Feature Notification Message*

8. *Local Control Order*

9. *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 ($LCKRSN_{S-p}$ equals the least significant four bits of $ORDQ_R$). 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*.

10. *Maintenance Required Order*: The mobile station shall record the reason for the *Maintenance Required Order* in the mobile station's semi-permanent memory ($MAINTRSN_{S-p}$ equals the least significant four bits of $ORDQ_R$). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

11. *Registration Accepted Order*: The mobile station shall perform the procedures as specified in 2.6.11.1.

12. *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 $TMSI_CODE_{S-p}$ 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).

13. *Retry Order*: The mobile station shall process the message 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', 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.

- 1 + The mobile station shall set $RETRY_DELAY_VALUE_S$ to the seven least
2 significant bits of $RETRY_DELAY_T$.
- 3 + The mobile station shall store the next system time 80 ms boundary +
4 $RETRY_DELAY_VALUE_S \times RETRY_DELAY_UNIT_S$ ms as
5 $RETRY_DELAY_S[RETRY_TYPE_T]$.
- 6 14. *Security Mode Command Message*: The mobile station shall perform the procedures
7 as specified in 2.6.11.4.
- 8 15. *Service Redirection Message*: The mobile station shall process the message as
9 follows:
- 10 • If the mobile station is directed to an unsupported operation mode or band
11 class, the mobile station shall respond with a *Mobile Station Reject Order* with
12 ORDQ equal to '00000110' (message requires a capability that is not supported
13 by the mobile station).
- 14 • If $DELETE_TMSI_T$ is equal to '1', the mobile station shall set all the bits of
15 $TMSI_CODE_{S-p}$ to '1'. The mobile station shall disable the full-TMSI timer.
- 16 • The mobile station shall set $RETURN_IF_FAIL_S = RETURN_IF_FAIL_T$.
- 17 • If $RECORD_TYPE_T$ is equal to '00000000', the mobile station shall enter the
18 *System Determination Substate* of the *Mobile Station Initialization State* with an
19 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
20 redirection record received in the message as $REDIRECT_REC_S$ and shall enter
21 the *System Determination Substate* of the *Mobile Station Initialization State* with a
22 redirection indication (see 2.6.1.1).
- 23 16. *SSD Update Message*: The mobile station shall respond to the message as specified
24 in 2.3.12.1.5.
- 25 17. *Status Request Message*: The mobile station shall disable the *System Access State*
26 timer and respond to the message. If $P_REV_IN_USE_S$ is less than or equal to
27 three, the mobile station shall respond with a *Status Response Message*. If
28 $P_REV_IN_USE_S$ is greater than three, the mobile station shall respond with an
29 *Extended Status Response Message*. If the message does not specify any
30 qualification information ($QUAL_INFO_TYPE_T$ is equal to '00000000'), the mobile
31 station shall include the requested information records in the response. If the
32 message specifies a band class ($QUAL_INFO_TYPE_T$ is equal to '00000001'), the
33 mobile station shall only include the requested information records for the
34 specified band class ($BAND_CLASS_T$) in the response. If the message specifies a
35 band class and an operating mode ($QUAL_INFO_TYPE_T$ is equal to '00000010'), the
36 mobile station shall only include the requested information records for the
37 specified band class ($BAND_CLASS_T$) and operating mode (OP_MODE_T) in the
38 response. If the message specifies a band class or a band class and an operating
39 mode which is not supported by the mobile station, the mobile station shall send a
40 *Mobile Station Reject Order* with ORDQ set to '00000110' (message requires a
41 capability that is not supported by the mobile station). If the response to this
42 message exceeds the allowable length, the mobile station shall send a *Mobile*

1 *Station Reject Order* with ORDQ set to '00001000' (response message would exceed
 2 the allowable length). If the message specifies an information record which is not
 3 supported by the mobile station for the specified band class and operating mode,
 4 the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to
 5 '00001001' (information record is not supported for the specified band class and
 6 operating mode).

7 18. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code
 8 as follows:

- 9 • The mobile station shall store the length of the TMSI zone field by setting
 10 ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r,
- 11 • The mobile station shall store the assigning TMSI zone number by setting the
 12 ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
 13 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- 14 • The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
 15 TMSI_CODE_r.

16 The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p}
 17 to TMSI_EXP_TIME_r. The mobile station shall disable the full-TMSI timer. The
 18 mobile station shall then respond with a *TMSI Assignment Completion Message*
 19 within T_{56m} seconds.

20 19. *User Zone Reject Message*

21 20. *Any other message*: If the mobile station receives any other message specified in
 22 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
 23 other messages.

24 2.6.3.5 Mobile Station Origination Attempt Substate

25 In this substate, the mobile station sends an *Origination Message*, *Call Recovery Request*
 26 *Message* or a *Reconnect Message*. If the mobile station sends a *Reconnect Message*, it shall
 27 set the ORIG_IND field of the message to '1'.

28 If directed by the user to transmit a Short Data Burst (see [30]) and the mobile station
 29 sends a *Reconnect Message* in assured mode in this substate, the mobile station may
 30 include a Short Data Burst in the *Reconnect Message* by setting the SDB_INCL field to '1', if
 31 all of the following conditions are true:

- 32 • SDB_SUPPORTED_s and SDB_IN_RCNM_IND_s are equal to '1', and
- 33 • ACCT is not enabled for the service option number associated with the Short Data
 34 Burst as follows:
 - 35 - The service option number associated with the Short Data Burst is not equal to
 36 any ACCT_SO entry in ACCT_SO_LIST, and
 - 37 - The service option group number of the service option associated with the Short
 38 Data Burst is not equal to any ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

39 The mobile station shall not send the *Reconnect Message* if RECONNECT_MSG_IND_s equals
 40 '0', if this message is not being sent to reconnect a dormant packet data service instance,

1 or the information that needs to be conveyed to the base station for the dormant packet
 2 data reconnection (PREV_SID, PREV_NID, PREV_PZID. See [42] for details) can not be
 3 carried in a *Reconnect Message*.

4 The mobile station shall not send the *Call Recovery Request Message* if CRRM_MSG_IND_S
 5 equals '0'.

6 If P_REV_IN_USE_S is greater than or equal to 11 and the *Origination Message* is being sent
 7 to perform packet data dormant handoff, the mobile station shall include all dormant
 8 packet data service instances (see [42]) up to the limit specified by
 9 MAX_ADD_SERV_INSTANCE_S.

10 If the base station responds to the *Origination Message*, *Call Recovery Request Message* or
 11 the *Reconnect Message* with an authentication request, the mobile station responds in this
 12 substate.

13 If a message received from the base station requires a Layer 2 acknowledgment and does
 14 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
 15 outstanding (see [4]).

16 If a message received from the base station requires a Layer 2 acknowledgment and also a
 17 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

18 When transmitting a response to a message received from the base station, Layer 3 shall
 19 indicate to Layer 2 that the type of the message is a response (see [4]).

20 When transmitting an autonomous message (i.e., a message that is not sent as a response
 21 to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type
 22 of the message is a request other than a registration request or a message transmission
 23 request (see [4]).

24 Upon entering the *Mobile Station Origination Attempt Substate*, the mobile station shall set
 25 RL_GAIN_ADJ_S to '0000', and perform the following:

- 26 • If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000'; otherwise set
 27 PLCM_TYPE_S to '0100'.
- 28 • The mobile station shall exit the *Mobile Station Origination Attempt Substate*, shall
 29 enter either the *Mobile Station Idle State* or the *System Determination Substate* with
 30 an ACCT blocked indication, and should indicate to the user that the call has
 31 terminated if all of the following conditions are true:
 - 32 - P_REV_IN_USE_S is greater than six,
 - 33 - ACCT_INCL_EMG_S is equal to '1' or the mobile station determines that the call is
 34 not an emergency call,
 - 35 - ACCT is enabled for the requested service option number, due to either of the
 36 following two conditions:
 - 37 + the requested service option number is equal to an ACCT_SO entry in
 38 ACCT_SO_LIST, or
 - 39 + the service option group number of the requested service option is equal to
 40 an ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

- 1 • If the substate was entered with an origination indication, the mobile station shall
2 send the *Origination Message*, *Call Recovery Request Message* or the *Reconnect*
3 *Message* as an r-csch request.
- 4 • If the substate was entered with a PACA response indication, the mobile station
5 shall send the *Origination Message* as an r-csch response using the access
6 procedures specified in 2.6.3.1. The mobile station shall include the dialed digits (if
7 any) from the previous origination attempt in the *Origination Message*.
- 8 • If the origination is a result of NDSS_ORIG_s being equal to enabled, the mobile
9 station shall include in the *Origination Message* the dialed digits (if any) recorded
10 from the previous origination attempt.
- 11 • If the mobile station has a stored service configuration (that is, parameters
12 conveyed by both the Service Configuration information record and the Non-
13 negotiable Service Configuration information record) and corresponding SYNC_ID
14 with associated SID and NID that are equal to the SID_s and NID_s respectively, and
15 USE_SYNC_ID_s is equal to '1', the mobile station may include the SYNC_ID field in
16 the *Origination Message* or the *Reconnect Message* and, if included, shall perform
17 the following:
- 18 - The mobile station shall set it to the SYNC_ID corresponding to the stored
19 service configuration. The mobile station shall store the value of the SYNC_ID
20 field in SYNC_ID_s.
- 21 - The mobile station shall set the SR_ID field of the *Origination Message* or the
22 *Reconnect Message* as follows:
- 23 + If the mobile station requests the restoration of a single service option
24 connection from the stored service configuration, the mobile station shall set
25 this field to the corresponding service reference identifier.
- 26 + Otherwise (that is, the mobile station requests the restoration of all the
27 service option connections from the stored service configuration), the mobile
28 station shall set this field to '111'.
- 29 • The mobile station shall include in the *Origination Message* as many of the dialed
30 digits as possible without exceeding the message capsule size. When calculating
31 the number of dialed digits to be included in the *Origination Message*, the mobile
32 station shall assume the following if P_REV_IN_USE_s is greater than three:
- 33 - The number of additional reported pilots (NUM_ADD_PILOTS) is equal to five
34 (see 2.6.3.1.7 and 2.7.1.3.1.3) so that up to five additional pilots may be
35 reported in any access probe, and
- 36 - The number of alternative service option numbers (NUM_ALT_SO) is less than or
37 equal to the maximum alternative service option numbers
38 (MAX_NUM_ALT_SO_s).
- 39 • If PACA_s is equal to enabled, the mobile station shall set the PACA_REORIG field of
40 the *Origination Message* to '1'; otherwise, the mobile station shall set the field to '0'.

1 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
2 Common Control Channel. The mobile station may perform an access probe handoff or an
3 access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a
4 loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during
5 an access attempt, the mobile station may perform an access probe handoff; otherwise, it
6 shall declare an access attempt failure and shall perform the following:

- 7 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
8 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 9 • If the mobile station is monitoring the Forward Common Control Channel, the
10 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 11 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
12 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
13 user that the PACA call has been canceled.
- 14 • If NDSS_ORIG_s is equal to enabled, the mobile station shall set NDSS_ORIG_s to
15 disabled, and should indicate to the user that the call origination is canceled.
- 16 • The mobile station shall update its registration variables as specified in 2.6.5.5.3.2.
- 17 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
18 *State*.

19 If the mobile station receives confirmation of delivery of any message sent by the mobile
20 station in this substate, the mobile station shall perform an access handoff if all of the
21 following conditions hold:

- 22 • The mobile station declares a loss of the Paging Channel or the Forward Common
23 Control Channel,
- 24 • The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2) and
25 there are pilots other than the active pilot in the access handoff list (see
26 2.6.3.1.3.2).

27 If the mobile station declares a loss of the Paging Channel or the Forward Common Control
28 Channel and does not perform an access handoff, the mobile station shall perform the
29 following:

- 30 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
31 SYS_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 32 • If the mobile station is monitoring the Forward Common Control Channel, the
33 mobile station shall set MC_RR_PAR_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL.
- 34 • If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
35 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
36 user that the PACA call has been canceled.
- 37 • If NDSS_ORIG_s is equal to enabled, the mobile station shall set NDSS_ORIG_s to
38 disabled and should indicate to the user that the call origination is canceled.
- 39 • The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
40 *State*.

1 If the mobile station receives confirmation of delivery of the *Origination Message*, *Call*
 2 *Recovery Request Message* or the *Reconnect Message*, the mobile station shall update its
 3 registration variables with respect to the base station to which the first access probe was
 4 transmitted after entering the *System Access State* as specified in 2.6.5.5.3.1.

5 The mobile station shall set and disable the *System Access State* timer as follows:

- 6 • The mobile station shall disable the timer whenever it begins an access attempt.
- 7 • The mobile station shall set the timer to T_{42m} seconds whenever it ends an access
 8 attempt.
- 9 • The mobile station shall disable the timer whenever it exits the *System Access State*.

10 If the *System Access State* timer expires while in this substate, the mobile station shall
 11 perform the following:

- 12 • If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and
 13 $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should indicate to the
 14 user that the PACA call has been canceled.
- 15 • If $NDSS_ORIG_S$ is equal to enabled, the mobile station shall set $NDSS_ORIG_S$ to
 16 disabled, and should indicate to the user that the call origination is canceled.
- 17 • If the mobile station is monitoring the Paging Channel, the mobile station shall set
 18 $SYS_PAR_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to NULL and enter the *Mobile Station*
 19 *Idle State*.
- 20 • If the mobile station is monitoring the Forward Common Control Channel, the
 21 mobile station shall set $MC_RR_PAR_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to NULL and
 22 enter the *Mobile Station Idle State*.

23 If the mobile station is directed by the user to disconnect the call, the mobile station shall
 24 perform the following actions:

- 25 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 26 access attempt in progress.
- 27 • The mobile station shall send the *Release Order* (normal release) in assured mode
 28 requiring confirmation of delivery.
- 29 • After receiving confirmation of delivery of the *Release Order*, the mobile station shall
 30 enter the *Mobile Station Idle State* (see 2.6.2.2) or the *System Determination Substate*
 31 of the *Mobile Station Initialization State* with a release indication (see 2.6.1.1).

32 If the mobile station is directed by the user to power off, the mobile station shall perform
 33 the following actions:

- 34 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 35 access attempt in progress.
- 36 • The mobile station shall send the *Release Order* (with power-down indication) in
 37 assured mode requiring confirmation of delivery.
- 38 • After receiving confirmation of delivery of the *Release Order*, the mobile station shall
 39 perform power-down registration procedures (see 2.6.5.1.2).

- 1 • The mobile station may power off.

2 If the mobile station receives a *Channel Assignment Message* or the *Extended Channel*
 3 *Assignment Message*, Layer 3 shall send a *dedicated channel assignment* indication to Layer
 4 2 (see [4]). If the mobile station has not received confirmation of delivery of the *Origination*
 5 *Message*, *Call Recovery Request Message* or the *Reconnect Message* before receiving the
 6 *Channel Assignment Message* or the *Extended Channel Assignment Message*, the mobile
 7 station shall update its registration variables with respect to the base station to which the
 8 first access probe was transmitted after entering the *System Access State*, as specified in
 9 2.6.5.5.3.1.

10 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
 11 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
 12 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
 13 the message has been sent and acknowledged.

14 If Layer 3 receives a message other than messages listed below:

- 15 • a *Channel Assignment Message*, or
 16 • *Extended Channel Assignment Message* with either DIRECT_CH_ASSIGN_IND field
 17 not included, or DIRECT_CH_ASSIGN_IND field included and set to '0'
 18 with an indication from Layer 2 that an access attempt for a message being transmitted
 19 was not terminated as a result of processing the Layer 2 fields of the received message, the
 20 mobile station shall ignore the received message.

21 The following directed messages and orders can be received. If any field value of the
 22 message or order is outside its permissible range, the mobile station may send a *Mobile*
 23 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 24 1. *Authentication Challenge Message*: The mobile station shall respond to the message
 25 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 26 2. *Authentication Request Message*: The mobile station shall process the message and
 27 shall respond as specified in 2.3.12.5.2.
- 28 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
 29 message as specified in 2.3.12.1.5.
- 30 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
 31 specified in 2.6.11.5.
- 32 5. *Channel Assignment Message*: The mobile station shall process the message as
 33 follows:
- 34 • If ASSIGN_MODE_T equals '000', the mobile station shall perform the following
 35 actions:
- 36 - The mobile station shall set CH_IND_S to '01'.
- 37 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
 38 FRAME_OFFSET_T), the message encryption mode indicator
 39 (ENCRYPT_MODE_S = ENCRYPT_MODE_T), and, if FREQ_INCL_T equals '1', the
 40 Frequency Assignment (CDMACH_S = CDMA_FREQ_T).

- 1 - If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled
2 and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should
3 indicate to the user that the PACA call is proceeding.
- 4 - If the mobile station is currently monitoring the Paging Channel, the mobile
5 station shall set $IDLE_BCCH_CHAN$ to '0'; otherwise, the mobile station shall
6 set $IDLE_BCCH_CHAN$ to '1'. The mobile station shall set
7 $IDLE_CDMA_CHAN$ to $CDMACH_S$, $IDLE_CDMABAND$ to $CDMABAND_S$,
8 $IDLE_SID$ to SID_S , $IDLE_NID$ to NID_S , and $IDLE_P_REV$ to P_REV_S .
- 9 - The mobile station shall initialize the $CODE_CHAN_LIST$ as described in
10 2.6.8, shall set $SERV_NEG_S$ to disabled, and shall enter the *Traffic Channel*
11 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel*
12 *State*.
- 13 • If $ASSIGN_MODE_r$ equals '001', the mobile station shall perform the following
14 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 - If a CDMA channel ($CDMA_FREQ$) is specified in the assignment, the mobile
19 station shall set $CDMACH_S = CDMA_FREQ_r$, tune to the new Frequency
20 Assignment, and measure the strength of each pilot listed in the assignment
21 using the Neighbor Set search procedures specified in 2.6.6.2.1 and
22 2.6.6.2.2.
- 23 - The mobile station shall set $CONFIG_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to
24 NULL (see 2.6.2.2) and shall set $PILOT_PN_S$ to the pilot PN sequence offset of
25 the strongest pilot in the list.
- 26 - If the mobile station has not stored configuration parameters for the Primary
27 Paging Channel of the new base station, or if the stored information is not
28 current (see 2.6.2.2), the mobile station shall set $SYS_PAR_MSG_SEQ_S$,
29 $NGHBR_LST_MSG_SEQ_S$, $EXT_NGHBR_LST_MSG_SEQ_S$,
30 $GEN_NGHBR_LST_MSG_SEQ_S$, $CHAN_LST_MSG_SEQ_S$,
31 $EXT_CHAN_LST_MSG_SEQ_S$, $FD_CHAN_LST_MSG_SEQ_S$,
32 $EXT_SYS_PAR_MSG_SEQ_S$, $USER_ZONE_ID_MSG_SEQ_S$,
33 $PRI_NGHBR_LST_MSG_SEQ_S$, $GLOB_SERV_REDIR_MSG_SEQ_S$,
34 $AP_PILOT_INFO_MSG_SEQ_S$, $AP_IDT_MSG_SEQ_S$, $AP_ID_TEXT_MSG_SEQ_S$,
35 $GOI_MSG_SEQ_S$, $FREQ_GOI_MSG_SEQ_S$, $ATIM_MSG_SEQ_S$ and
36 $EXT_GLOB_SERV_REDIR_MSG_SEQ_S$ to NULL.
- 37 - The mobile station shall set $PAGE_CHAN_S$ to '1' and $PAGECH_S$ to the
38 Primary Paging Channel. The mobile station shall then begin monitoring the
39 Primary Paging Channel of the selected base station.
- 40 - If $RESPOND_r$ is equal to '1', the mobile station shall enter the *Update*
41 *Overhead Information Substate* with an origination indication.

- 1 • If ASSIGN_MODE_R equals '100', the mobile station shall perform the following
2 actions:
- 3 - The mobile station shall set CH_IND_S to '01'.
- 4 - If GRANTED_MODE_R equals '00', and the multiplex option or radio
5 configuration specified in the DEFAULT_CONFIG field is not supported by
6 the mobile station, the mobile station shall send a *Mobile Station Reject Order*
7 with ORDQ field set to '00000110' (capability not supported by the mobile
8 station) and remain in *Mobile Station Origination Attempt Substate*.
- 9 - If FREQ_INCL_R equals '0', the mobile station shall perform the following
10 actions:
- 11 + The mobile station shall store the frame offset (FRAME_OFFSET_S =
12 FRAME_OFFSET_R), the message encryption mode indicator
13 (ENCRYPT_MODE_S = ENCRYPT_MODE_R), the granted mode
14 (GRANTED_MODE_S = GRANTED_MODE_R), and the default configuration
15 (DEFAULT_CONFIG_S = DEFAULT_CONFIG_R).
- 16 + The mobile station shall set SERV_NEG_S to enabled.
- 17 + If PACA_S is equal to enabled, the mobile station shall set PACA_S equal to
18 disabled and PACA_CANCEL to '0', shall disable the PACA state timer,
19 and should indicate to the user that the PACA call is proceeding.
- 20 + The mobile station shall initialize CODE_CHAN_LIST as described in
21 2.6.8.
- 22 + If the mobile station is currently monitoring the Paging Channel, the
23 mobile station shall set IDLE_BCCH_CHAN to '0'; otherwise, the mobile
24 station shall set IDLE_BCCH_CHAN to '1'. The mobile station shall set
25 IDLE_CDMA_CHAN to CDMACH_S, IDLE_CDMABAND to CDMABAND_S,
26 IDLE_SID to SID_S, IDLE_NID to NID_S, and IDLE_P_REV to P_REV_S.
- 27 + The mobile station shall then enter the *Traffic Channel Initialization*
28 *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 29 - If FREQ_INCL_R equals '1', the mobile station shall perform the following
30 actions:
- 31 + If the band class is not supported by the mobile station, the mobile
32 station shall send a *Mobile Station Reject Order* with ORDQ field set to
33 '00000110' (capability not supported by the mobile station) and remain
34 in the *Mobile Station Origination Attempt Substate*.
- 35 + If the band class is supported by the mobile station, the mobile station
36 shall perform the following actions:

- 1 ○ The mobile station shall store the frame offset ($FRAME_OFFSET_S =$
2 $FRAME_OFFSET_T$), the message encryption mode indicator
3 ($ENCRYPT_MODE_S = ENCRYPT_MODE_T$), the granted mode
4 ($GRANTED_MODE_S = GRANTED_MODE_T$), the default configuration
5 ($DEFAULT_CONFIG_S = DEFAULT_CONFIG_T$), the idle Frequency
6 Assignment ($IDLE_CDMA_CHAN = CDMACH_S$), the idle band class
7 ($IDLE_CDMABAND = CDMABAND_S$), the band class ($CDMABAND_S =$
8 $BAND_CLASS_T$), and the Frequency Assignment
9 ($CDMACH_S = CDMA_FREQ_T$).
- 10 ○ The mobile station shall set $SERV_NEG_S$ to enabled.
- 11 ○ If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to
12 disabled and $PACA_CANCEL$ to '0', shall disable the $PACA$ state
13 timer, and should indicate to the user that the $PACA$ call is
14 proceeding.
- 15 ○ The mobile station shall initialize the $CODE_CHAN_LIST$ as described
16 in 2.6.8.
- 17 ○ If the mobile station is currently monitoring the Paging Channel, the
18 mobile station shall set $IDLE_BCCH_CHAN$ to '0'; otherwise, the
19 mobile station shall set $IDLE_BCCH_CHAN$ to '1'. The mobile station
20 shall set $IDLE_SID$ to SID_S , $IDLE_NID$ to NID_S , and $IDLE_P_REV$ to
21 P_REV_S .
- 22 ○ The mobile station shall then tune to the new Frequency Assignment
23 and enter the *Traffic Channel Initialization Substate* of the *Mobile*
24 *Station Control on the Traffic Channel State*.
- 25 • If $ASSIGN_MODE_T$ equals '101', the mobile station shall perform the following
26 actions:
- 27 - If $FREQ_INCL_T$ equals '0', the mobile station shall perform the following
28 actions:
- 29 + If the message requires acknowledgment, the mobile station shall wait
30 until Layer 3 receives an indication from Layer 2 that the
31 acknowledgment to the message has been sent and acknowledged.
- 32 + The mobile station shall set $CONFIG_MSG_SEQ_S$ and $ACC_MSG_SEQ_S$ to
33 NULL (see 2.6.2.2) and shall set $PILOT_PN_S$ to the pilot PN sequence
34 offset of the strongest pilot in the list ($PILOT_PN_T$).

- 1 + If the mobile station has not stored configuration parameters for the
2 Primary Paging Channel of the new base station, or if the stored
3 information is not current (see 2.6.2.2), the mobile station shall set
4 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
5 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
6 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
7 FD_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
8 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
9 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
10 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
11 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
12 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 13 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
14 Primary Paging Channel. The mobile station shall then begin monitoring
15 the Primary Paging Channel of the selected base station.
- 16 + If RESPOND_r is equal to '1', the mobile station shall perform the
17 following:
- 18 ○ If the *Channel Assignment Message* does not require an
19 acknowledgment, the mobile station shall enter the *Update Overhead*
20 *Information Substate* with an origination indication within T_{34m}
21 seconds after receiving the *Channel Assignment Message*.
- 22 ○ If the *Channel Assignment Message* requires an acknowledgment, the
23 mobile station shall enter the *Update Overhead Information Substate*
24 with a page response retransmission indication within T_{34m} seconds
25 after Layer 3 receives an indication from Layer 2 that the
26 acknowledgment to the *Channel Assignment Message* has been sent
27 and acknowledged.
- 28 + If RESPOND_r is equal to '0', the mobile station shall perform the
29 following:
- 30 ○ If the *Channel Assignment Message* does not require an
31 acknowledgment, the mobile station shall enter the *Mobile Station Idle*
32 *State* within T_{34m} seconds after receiving the *Channel Assignment*
33 *Message*.
- 34 ○ If the *Channel Assignment Message* requires an acknowledgment, the
35 mobile station shall enter the *Mobile Station Idle State* within T_{34m}
36 seconds after Layer 3 receives an indication from Layer 2 that the
37 acknowledgment to the *Channel Assignment Message* has been sent
38 and acknowledged.
- 39 - If FREQ_INCL_r equals '1', the mobile station shall perform the following
40 actions:

- 1 + If the band class is not supported by the mobile station, the mobile
2 station shall send a *Mobile Station Reject Order* with ORDQ field set to
3 '00000110' (capability not supported by the mobile station) and remain
4 in the *Mobile Station Origination Attempt Substate*.
- 5 + If the band class is supported by the mobile station, the mobile station
6 shall perform the following actions:
- 7 ○ If the message requires acknowledgment, the mobile station shall
8 wait until Layer 3 receives an indication from Layer 2 that the
9 acknowledgment to the message has been sent and acknowledged.
 - 10 ○ The mobile station shall set CDMACH_s to CDMA_FREQ_r and
11 CDMABAND_s to BAND_CLASS_r. Then the mobile station shall tune
12 to the new Frequency Assignment, measure the strength of each pilot
13 listed in the assignment using the Neighbor Set search procedures
14 specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT_PN_s to the pilot PN
15 sequence offset of the strongest pilot in the list (PILOT_PN_r), and set
16 CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL (see 2.6.2.2).
 - 17 ○ If the mobile station has not stored configuration parameters for the
18 Primary Paging Channel of the new base station, or if the stored
19 information is not current (see 2.6.2.2), the mobile station shall set
20 SYS_PAR_MSG_SEQ_s, NGHBR_LST_MSG_SEQ_s,
21 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
22 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
23 FD_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
24 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
25 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
26 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
27 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
28 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
 - 29 ○ The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
30 Primary Paging Channel. The mobile station shall then begin
31 monitoring the Primary Paging Channel of the selected base station.
 - 32 ○ If RESPOND_r is equal to '1', the mobile station shall perform the
33 following:
 - 34 ◇ If the *Channel Assignment Message* does not require an
35 acknowledgment, the mobile station shall enter the *Update*
36 *Overhead Information Substate* with a page response
37 retransmission indication within T_{34m} seconds after receiving the
38 *Channel Assignment Message*.

- 1 ◇ If the *Channel Assignment Message* requires an acknowledgment,
 2 the mobile station shall enter the *Update Overhead Information*
 3 *Substate* with a page response retransmission indication within
 4 T_{34m} seconds after Layer 3 receives an indication from Layer 2
 5 that the acknowledgment to the *Channel Assignment Message* has
 6 been sent and acknowledged.
- 7 ○ If $RESPOND_r$ is equal to '0', the mobile station shall perform the
 8 following:
- 9 ◇ If the *Channel Assignment Message* does not require an
 10 acknowledgment, the mobile station shall enter the *Mobile Station*
 11 *Idle State* within T_{34m} seconds after receiving the *Channel*
 12 *Assignment Message*.
- 13 ◇ If the *Channel Assignment Message* requires an acknowledgment,
 14 the mobile station shall enter the *Mobile Station Idle State* within
 15 T_{34m} seconds after Layer 3 receives an indication from Layer 2
 16 that the acknowledgment to the *Channel Assignment Message* has
 17 been sent and acknowledged.

18 6. Data Burst Message

- 19 7. *Extended Channel Assignment Message*: If $P_REV_IN_USE_s$ is greater than or equal
 20 to 11, and $DIRECT_CH_ASSIGN_IND_r$ equals '1', the mobile station shall ignore the
 21 message. Otherwise, the mobile station shall process the message as follows:
- 22 • The mobile station shall set $RTC_NOM_PWR_USE_IND$ to '0'.
 - 23 • The mobile station shall set $DIRECT_CH_ASSIGN_RECOVER_IND_s$ to '0'.
 - 24 • If $ASSIGN_MODE_r$ equals '000', the mobile station shall perform the following
 25 actions:
 - 26 - If $PACA_s$ is equal to enabled, the mobile station shall set $PACA_s$ to disabled
 27 and $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should
 28 indicate to the user that the PACA call has been canceled.
 - 29 - If $GRANTED_MODE_r$ equals '00', and the multiplex option and radio
 30 configuration specified in the $DEFAULT_CONFIG$ field are not supported by
 31 the mobile station, the mobile station shall send a *Mobile Station Reject Order*
 32 with $ORDQ$ field set to '00000110' (capability not supported by the mobile
 33 station) and shall remain in the *Mobile Station Origination Attempt Substate*.
 - 34 - If $GRANTED_MODE_r$ is equal to '00' and $DEFAULT_CONFIG_r$ is not equal to
 35 '100', the mobile station shall send a *Mobile Station Reject Order* with $ORDQ$
 36 field set to '00001110' (RC does not match with $DEFAULT_CONFIG_r$) and
 37 shall remain in the *Mobile Station Origination Attempt Substate* if any of the
 38 following conditions is true:
 - 39 + $FOR_FCH_RC_r$ is not equal to the RC associated with
 40 $DEFAULT_CONFIG_r$ (see Table 3.7.2.3.2.21-2).

- 1 + REV_FCH_RC_T is not equal to the RC associated with
 2 DEFAULT_CONFIG_T (see Table 3.7.2.3.2.21-2).
- 3 - If the mobile station does not support either of the Fundamental
 4 Channel Radio Configurations (FOR_FCH_RC or REV_FCH_RC), the
 5 mobile shall send a *Mobile Station Reject Order* with the ORDQ field set to
 6 '00000110' (capability not supported by the mobile station) and remain
 7 in the *Mobile Station Origination Attempt Substate*.
- 8 - If PLCM_TYPE_T equals '0010' and IMSI_O is derived from IMSI_T, or if
 9 PLCM_TYPE_T equals '0011' and IMSI_O is derived from IMSI_M, the
 10 mobile station shall send a *Mobile Station Reject Order* with the ORDQ
 11 field set to '00011100' (PLCM_TYPE mismatch) and remain in the *Mobile
 12 Station Origination Attempt Substate*.
- 13 - The mobile station shall set CH_IND_S to '01'.
- 14 - If P_REV_IN_USE_S is equal to or greater than six, the mobile station shall
 15 store the Forward Fundamental Channel Radio Configuration
 16 (FOR_FCH_RC_S = FOR_FCH_RC_T) and the Reverse Fundamental Channel
 17 Radio Configuration (REV_FCH_RC_S = REV_FCH_RC_T)
- 18 - If FREQ_INCL_T equals '0', the mobile station shall perform the following
 19 actions:
- 20 + The mobile station shall store the frame offset (FRAME_OFFSET_S =
 21 FRAME_OFFSET_T), the message encryption mode indicator
 22 (ENCRYPT_MODE_S = ENCRYPT_MODE_T), the bypass indicator
 23 (BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_T), the
 24 granted mode (GRANTED_MODE_S = GRANTED_MODE_T), the default
 25 configuration (DEFAULT_CONFIG_S = DEFAULT_CONFIG_T), and the
 26 occurrences of PILOT_PN and PWR_COMB for each included member
 27 of the Active Set.
- 28 + If C_SIG_ENCRYPT_MODE is included, the mobile station shall set
 29 C_SIG_ENCRYPT_MODE_S to C_SIG_ENCRYPT_MODE_T.
- 30 + The mobile station shall perform the procedures in 2.6.11.2.
- 31 + The mobile station shall set SERV_NEG_S to enabled.
- 32 + If PACA_S is equal to enabled, the mobile station shall set PACA_S equal
 33 to disabled and PACA_CANCEL to '0', shall disable the PACA state
 34 timer, and should indicate to the user that the PACA call is
 35 proceeding.
- 36 + The mobile station shall initialize CODE_CHAN_LIST as described in
 37 2.6.8.

- 1 + The mobile station shall set FPC_FCH_INIT_SETPT_S to
2 FPC_FCH_INIT_SETPT_R, FPC_FCH_CURR_SETPT_S to
3 FPC_FCH_INIT_SETPT_S, FPC_FCH_FER_S to FPC_FCH_FER_R,
4 FPC_FCH_MIN_SETPT_S to FPC_FCH_MIN_SETPT_R,
5 FPC_FCH_MAX_SETPT_S to FPC_FCH_MAX_SETPT_R, and
6 FPC_PRI_CHAN_S to '0' if the mobile station supports any Radio
7 Configuration greater than 2.
8 + The mobile station shall set FPC_SUBCHAN_GAIN_S to
9 FPC_SUBCHAN_GAIN_R.
- 10 + The mobile station shall set REV_FCH_GATING_MODE_S to
11 REV_FCH_GATING_MODE_R.
- 12 + The mobile station shall set REV_PWR_CNTL_DELAY_S to
13 REV_PWR_CNTL_DELAY_R if REV_PWR_CNTL_DELAY_INCL_R is equal
14 to '1'.
15 + The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_R.
- 16 + The mobile station shall set PLCM_TYPE_S to PLCM_TYPE_R if
17 PLCM_TYPE_INCL_R is equal to '1'; otherwise, the mobile station shall
18 set PLCM_TYPE_S as follows:
- 19 ○ If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000';
20 otherwise set PLCM_TYPE_S to '0100'.
21 + The mobile station shall set PLCM_39_S to PLCM_39_R if PLCM_TYPE_R
22 is 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
25 mobile station shall set IDLE_BCCH_CHAN to '1'. The mobile station
26 shall set IDLE_CDMA_CHAN to CDMACH_S, IDLE_CDMABAND to
27 CDMABAND_S, IDLE_SID to SID_S, IDLE_NID to NID_S, and
28 IDLE_P_REV to P_REV_S.
- 29 + The mobile station shall then enter the *Traffic Channel Initialization*
30 *Substate* of the *Mobile Station Control on the Traffic Channel State*.
- 31 - If FREQ_INCL_R equals '1', the mobile station shall perform the following
32 actions:
- 33 + If the band class is not supported by the mobile station, the mobile
34 station shall send a *Mobile Station Reject Order* with ORDQ field set to
35 '00000110' (capability not supported by the mobile station) and
36 remain in the *Mobile Station Origination Attempt Substate*.
- 37 + If the band class is supported by the mobile station, the mobile
38 station shall perform the following actions:
- 39 ○ The mobile station shall store the frame offset (FRAME_OFFSET_S
40 = FRAME_OFFSET_R); the message encryption mode indicator
41 (ENCRYPT_MODE_S = ENCRYPT_MODE_R); the bypass indicator

- 1 (BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r); the
 2 granted mode (GRANTED_MODE_s = GRANTED_MODE_r); the
 3 default configuration (DEFAULT_CONFIG_s =
 4 DEFAULT_CONFIG_r); the idle Frequency Assignment
 5 (IDLE_CDMA_CHAN = CDMACH_s); the idle band class
 6 (IDLE_CDMABAND = CDMABAND_s); the band class
 7 (CDMABAND_s = BAND_CLASS_r); the Frequency Assignment
 8 (CDMACH_s = CDMA_FREQ_r); and the occurrences of PILOT_PN
 9 and PWR_COMB_IND for each included member of the Active Set.
- 10 ○ The mobile station shall perform the procedures in 2.6.11.2.
 - 11 ○ The mobile station shall set SERV_NEG_s to enabled.
 - 12 ○ The mobile station shall initialize CODE_CHAN_LIST as described
 13 in 2.6.8.
 - 14 ○ The mobile station shall set FPC_FCH_INIT_SETPT_s to
 15 FPC_FCH_INIT_SETPT_r, FPC_FCH_CURR_SETPT_s to
 16 FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to FPC_FCH_FER_r,
 17 FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
 18 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r, and
 19 FPC_PRI_CHAN_s to '0' if the mobile station supports any Radio
 20 Configuration greater than 2.
 - 21 ○ The mobile station shall set FPC_SUBCHAN_GAIN_s to
 22 FPC_SUBCHAN_GAIN_r.
 - 23 ○ The mobile station shall set RLGAIN_ADJ_s to RLGAIN_ADJ_r.
 - 24 ○ The mobile station shall set REV_FCH_GATING_MODE_s to
 25 REV_FCH_GATING_MODE_r.
 - 26 ○ The mobile station shall set REV_PWR_CNTL_DELAY_s to
 27 REV_PWR_CNTL_DELAY_r if REV_PWR_CNTL_DELAY_INCL_r is
 28 equal to '1'.
 - 29 ○ The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r if
 30 PLCM_TYPE_INCL_r is equal to '1'; otherwise, the mobile station
 31 shall set PLCM_TYPE_s as follows:
 - 32 ○ If P_REV_IN_USE_s is less than 11, set PLCM_TYPE_s to '0000';
 33 otherwise set PLCM_TYPE_s to '0100'.
 - 34 ○ The mobile station shall set PLCM_39_s to PLCM_39_r if
 35 PLCM_TYPE_r is equal to '0001'.
 - 36 ○ If the mobile station is currently monitoring the Paging Channel,
 37 the mobile station shall set IDLE_BCCH_CHAN to '0'; otherwise,
 38 the mobile station shall set IDLE_BCCH_CHAN to '1'. The mobile
 39 station shall set IDLE_SID to SID_s, IDLE_NID to NID_s,
 40 IDLE_P_REV to P_REV_s.

- 1 ○ The mobile station shall then tune to the new Frequency
2 Assignment and enter the *Traffic Channel Initialization Substate* of
3 the *Mobile Station Control on the Traffic Channel State*.
- 4 • If ASSIGN_MODE_r equals '001', the mobile station shall perform the following
5 actions:
- 6 - If FREQ_INCL_r 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_s and ACC_MSG_SEQ_s to
12 NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence
13 offset of the strongest pilot in the list (PILOT_PN_r).
- 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_s, NGHBR_LST_MSG_SEQ_s,
18 EXT_NGHBR_LST_MSG_SEQ_s, GEN_NGHBR_LST_MSG_SEQ_s,
19 CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
20 FD_CHAN_LST_MSG_SEQ_s, EXT_SYS_PAR_MSG_SEQ_s,
21 USER_ZONE_ID_MSG_SEQ_s, PRI_NGHBR_LST_MSG_SEQ_s,
22 GLOB_SERV_REDIR_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
23 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
24 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
25 EXT_GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
- 26 + The mobile station shall set PAGE_CHAN_s to '1' and PAGECH_s to the
27 Primary Paging Channel. If the mobile station was monitoring Forward
28 Common Control Channel, the mobile station shall set the PRAT_s to '00'.
29 The mobile station shall then begin monitoring the Primary Paging
30 Channel of the selected base station.
- 31 + If RESPOND_r is equal to '1', the mobile station shall perform the
32 following:
- 33 ○ If the *Extended Channel Assignment Message* does not require an
34 acknowledgment, the mobile station shall enter the *Update Overhead*
35 *Information Substate* with an origination indication within T_{34m}
36 seconds after receiving the *Extended Channel Assignment Message*.
- 37 ○ If the *Extended Channel Assignment Message* requires an
38 acknowledgment, the mobile station shall enter the *Update Overhead*
39 *Information Substate* with an origination indication within T_{34m}
40 seconds after Layer 3 receives an indication from Layer 2 that the
41 acknowledgment to the *Extended Channel Assignment Message* has
42 been sent and acknowledged.

- 1 - If $FREQ_INCL_r$ equals '1', the mobile station shall perform the following
2 actions:
- 3 + If the band class is not supported by the mobile station, the mobile
4 station shall send a *Mobile Station Reject Order* with $ORDQ$ field set to
5 '00000110' (capability not supported by the mobile station) and remain
6 in the *Mobile Station Origination Attempt Substate*.
- 7 + If the band class is supported by the mobile station, the mobile station
8 shall perform the following actions:
- 9 ○ If the message requires acknowledgment, the mobile station shall
10 wait until Layer 3 receives an indication from Layer 2 that the
11 acknowledgment to the message has been sent and acknowledged.
- 12 ○ The mobile station shall set $CDMACH_s$ to $CDMA_FREQ_r$ and
13 $CDMABAND_s$ to $BAND_CLASS_r$. Then the mobile station shall tune
14 to the new Frequency Assignment, measure the strength of each pilot
15 listed in the assignment using the Neighbor Set search procedures
16 specified in 2.6.6.2.1 and 2.6.6.2.2, set $PILOT_PN_s$ to the pilot PN
17 sequence offset of the strongest pilot in the list ($PILOT_PN_r$), and set
18 $CONFIG_MSG_SEQ_s$ and $ACC_MSG_SEQ_s$ to NULL (see 2.6.2.2).
- 19 ○ If the mobile station has not stored configuration parameters for the
20 Primary Paging Channel of the new base station, or if the stored
21 information is not current (see 2.6.2.2), the mobile station shall set
22 $SYS_PAR_MSG_SEQ_s$, $NGHBR_LST_MSG_SEQ_s$,
23 $EXT_NGHBR_LST_MSG_SEQ_s$, $GEN_NGHBR_LST_MSG_SEQ_s$,
24 $CHAN_LST_MSG_SEQ_s$, $EXT_CHAN_LST_MSG_SEQ_s$,
25 $FD_CHAN_LST_MSG_SEQ_s$, $EXT_SYS_PAR_MSG_SEQ_s$,
26 $USER_ZONE_ID_MSG_SEQ_s$, $PRI_NGHBR_LST_MSG_SEQ_s$,
27 $GLOB_SERV_REDIR_MSG_SEQ_s$, $AP_PILOT_INFO_MSG_SEQ_s$,
28 $AP_IDT_MSG_SEQ_s$, $AP_ID_TEXT_MSG_SEQ_s$, $GOI_MSG_SEQ_s$,
29 $FREQ_GOI_MSG_SEQ_s$, $ATIM_MSG_SEQ_s$ and
30 $EXT_GLOB_SERV_REDIR_MSG_SEQ_s$ to NULL.
- 31 ○ The mobile station shall set $PAGE_CHAN_s$ to '1' and $PAGECH_s$ to the
32 Primary Paging Channel. If the mobile station was monitoring
33 Forward Common Control Channel, the mobile station shall set the
34 $PRAT_s$ to '00'. The mobile station shall then begin monitoring the
35 Primary Paging Channel of the selected base station.
- 36 ○ If $RESPOND_r$ is equal to '1', the mobile station shall perform the
37 following:
- 38 ◇ If the *Extended Channel Assignment Message* does not require an
39 acknowledgment, the mobile station shall enter the *Update*
40 *Overhead Information Substate* with an origination indication
41 within T_{34m} seconds after receiving the *Extended Channel*
42 *Assignment Message*.

- 1 ◇ If the *Extended Channel Assignment Message* requires an
2 acknowledgment, the mobile station shall enter the *Update*
3 *Overhead Information Substate* with an origination indication
4 within T_{34m} seconds after Layer 3 receives an indication from
5 Layer 2 that the acknowledgment to the *Extended Channel*
6 *Assignment Message* has been sent and acknowledged.
- 7 • If ASSIGN_MODE_r equals '100', the mobile station shall perform the following
8 actions:
 - 9 - If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled
10 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
11 indicate to the user that the PACA call has been canceled.
 - 12 - If GRANTED_MODE_r equals '00' and the multiplex option and radio
13 configuration specified in the DEFAULT_CONFIG_r field are not supported by
14 the mobile station, the mobile station shall send a *Mobile Station Reject Order*
15 with ORDQ field set to '00000110' (capability not supported by the mobile
16 station) and shall remain in the *Mobile Station Origination Attempt Substate*.
 - 17 - If GRANTED_MODE_r equals '11', P_REV_IN_USE_s is less than 11, and the
18 mobile station did not include a SYNC_ID field in the *Origination Message* or
19 the *Reconnect Message* that was transmitted in this substate, the mobile
20 station shall send a *Mobile Station Reject Order* with ORDQ field set to
21 '00000110' (capability not supported by the mobile station) and shall remain
22 in the *Mobile Station Origination Attempt Substate*.
 - 23 - If SYNC_ID_INCL_r is included and equals '1' and the mobile station does not
24 have stored service configuration corresponding to SYNC_ID_r for the current
25 SID_s and NID_s pair, the mobile station shall send a *Mobile Station Reject*
26 *Order* with ORDQ field set to '00011011' (Requested stored service
27 configuration is not available) and shall remain in the *Mobile Station*
28 *Origination Attempt Substate*.
 - 29 - If GRANTED_MODE_r equals '11', SR_ID_RESTORE_r is not equal to '111',
30 and a service option connection record corresponding to SR_ID_RESTORE_r
31 is not contained in the stored service configuration, the mobile station shall
32 send a *Mobile Station Reject Order* with ORDQ field set to '00000110'
33 (capability not supported by the mobile station) and shall remain in the
34 *Mobile Station Origination Attempt Substate*.
 - 35 - If GRANTED_MODE_r equals '00' and DEFAULT_CONFIG_r is not equal to
36 '100', the mobile station shall send a *Mobile Station Reject Order* with ORDQ
37 field set to '00001110' (RC does not match with DEFAULT_CONFIG) and
38 shall remain in the *Mobile Station Origination Attempt Substate* if one of the
39 following conditions is true:
 - 40 + FOR_RC_r is not equal to the Radio Configuration associated with
41 DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.

- 1 + REV_RC_r is not equal to the Radio Configuration associated with
 2 DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.
- 3 - If the mobile station does not support either of the Radio Configurations
 4 (FOR_RC or REV_RC), the mobile station shall send a *Mobile Station Reject*
 5 *Order* with the ORDQ field set to '00000110' (capability not supported by the
 6 mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
- 7 - If CH_IND_r = '01' and the mobile station does not support the Fundamental
 8 Channel, the mobile station shall send a *Mobile Station Reject Order* with the
 9 ORDQ field set to '00000110' (capability not supported by the mobile
 10 station) and remain in the *Mobile Station Origination Attempt Substate*.
- 11 - If CH_IND_r = '10' and the mobile station does not support the Dedicated
 12 Control Channel, the mobile station shall send a *Mobile Station Reject Order*
 13 with the ORDQ field set to '00000110' (capability not supported by the
 14 mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
- 15 - If CH_IND_r = '11' and the mobile station does not support the Dedicated
 16 Control Channel and Fundamental Channel concurrently, the mobile station
 17 shall send a *Mobile Station Reject Order* with the ORDQ field set to
 18 '00000110' (capability not supported by the mobile station) and remain in
 19 the *Mobile Station Origination Attempt Substate*.
- 20 - If FREQ_INCL_r equals '1' and if the band class (BAND_CLASS_r) is not
 21 supported by the mobile station, the mobile station shall send a *Mobile*
 22 *Station Reject Order* with ORDQ field set to '00000110' (capability not
 23 supported by the mobile station) and remain in the *Mobile Station Origination*
 24 *Attempt Substate*.
- 25 - If PLCM_TYPE_r equals '0010' and IMSI_O is derived from IMSI_T, or if
 26 PLCM_TYPE_r equals '0011' and IMSI_O is derived from IMSI_M, the mobile
 27 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
 28 '00011100' (PLCM_TYPE mismatch) and remain in the *Mobile Station*
 29 *Origination Attempt Substate*.
- 30 - If FUNDICATED_BCNC_IND_r is included and set to 1, and the mobile
 31 station does not support the BCNC reception on the Forward Fundicated
 32 Channels assigned in this message, the mobile station shall send a *Mobile*
 33 *Station Reject Order* with the ORDQ field set to '00000110' (capability not
 34 supported by the mobile station) and remain in the *Mobile Station Origination*
 35 *Attempt Substate*.
- 36 - If the mobile station does not send a Mobile Station Reject Order as specified
 37 above, it shall continue to perform the actions specified below.
- 38 - The mobile station shall set
- 39 + IDLE_CDMABAND = CDMABAND_s
- 40 + IDLE_CDMACH = CDMACH_s
- 41 - If FREQ_INCL_r equals '1', the mobile station shall set

- 1 + CDMABAND_S = BAND_CLASS_T
- 2 + CDMACH_S = CDMA_FREQ_T
- 3 - The mobile station shall store the bypass indicator
4 (BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_T).
- 5 - The mobile station shall store granted mode (GRANTED_MODE_S =
6 GRANTED_MODE_T). If GRANTED_MODE_T equals '11', the mobile station
7 shall perform the following:
- 8 + The mobile station shall store service reference identifier to be restored
9 (SR_ID_RESTORE_S = SR_ID_RESTORE_T).
- 10 + If SR_ID_RESTORE_T equals '000', the mobile station shall store bitmap of
11 service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_S =
12 SR_ID_RESTORE_BITMAP_T).
- 13 - If SYNC_ID_INCL_T is included and equals '1', the mobile station shall store
14 the service configuration synchronization identifier (SYNC_ID_S = SYNC_ID_T).
- 15 - The mobile station shall store the default configuration (DEFAULT_CONFIG_S
16 = DEFAULT_CONFIG_T).
- 17 - The mobile station shall store the Forward Traffic Channel Radio
18 Configuration (FOR_RC_S = FOR_RC_T) and the Reverse Traffic Channel Radio
19 Configuration (REV_RC_S = REV_RC_T).
- 20 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
21 FRAME_OFFSET_T).
- 22 - The mobile station shall store the message encryption mode indicator
23 (ENCRYPT_MODE_S = ENCRYPT_MODE_T).
- 24 - The mobile station shall perform the procedures in 2.6.11.2.
- 25 - The mobile station shall store the Forward power control subchannel relative
26 gain (FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_T).
- 27 - The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_T.
- 28 - The mobile station shall set REV_FCH_GATING_MODE_S to
29 REV_FCH_GATING_MODE_T.
- 30 - The mobile station shall set REV_PWR_CNTL_DELAY_S to
31 REV_PWR_CNTL_DELAY_T if REV_PWR_CNTL_DELAY_INCL_T is equal to '1'.
- 32 - If 3XFL_1XRL_INCL_T is equal to '1', the mobile station shall set
33 1XRL_FREQ_OFFSET_S to 1XRL_FREQ_OFFSET_T.
- 34 - The mobile station shall set PLCM_TYPE_S to PLCM_TYPE_T if
35 PLCM_TYPE_INCL_T is equal to '1'; otherwise, the mobile station shall set
36 PLCM_TYPE_S as follows:
- 37 + If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000'; otherwise
38 set PLCM_TYPE_S to '0100'.

- 1 - The mobile station shall set $PLCM_{39s}$ to $PLCM_{39r}$ if $PLCM_TYPE_r$ is equal
2 to '0001'.
- 3 - The mobile station shall set $EARLY_RL_TRANSMIT_IND_s$ to
4 $EARLY_RL_TRANSMIT_IND_r$.
- 5 - If $FIXED_PREAMBLE_TRANSMIT_IND_r$ is included, the mobile station shall
6 set $FIXED_PREAMBLE_TRANSMIT_IND_s$ to
7 $FIXED_PREAMBLE_TRANSMIT_IND_r$; otherwise, the mobile station shall set
8 $FIXED_PREAMBLE_TRANSMIT_IND_s$ to '0'. If
9 $FIXED_PREAMBLE_TRANSMIT_IND_s$ equals '1', the mobile station shall set
10 $FIXED_NUM_PREAMBLE_s$ to $FIXED_NUM_PREAMBLE_r$.
- 11 - If $TX_PWR_LIMIT_INCL_r$ is set to '1', the mobile station shall perform the
12 following:
- 13 + If the mobile station is being assigned to operate in the 1915MHz –
14 1920MHz block of the PCS band, the mobile station shall store the
15 transmit power limit $TX_PWR_LIMIT_s = (TX_PWR_LIMIT_r - 30dB)$;
- 16 + Otherwise, the mobile station shall set $TX_PWR_LIMIT_s$ to the limit
17 defined in [11] for the target base station.
- 18 - The mobile station shall store the channel indicator ($CH_IND_s = CH_IND_r$)
19 and the mobile station shall perform the following actions:
- 20 + If CH_IND_r equals '01', the mobile station shall set
21 $FPC_FCH_INIT_SETPT_s$ to $FPC_FCH_INIT_SETPT_r$,
22 $FPC_FCH_CURR_SETPT_s$ to $FPC_FCH_INIT_SETPT_s$, $FPC_FCH_FER_s$ to
23 $FPC_FCH_FER_r$, $FPC_FCH_MIN_SETPT_s$ to $FPC_FCH_MIN_SETPT_r$,
24 $FPC_FCH_MAX_SETPT_s$ to $FPC_FCH_MAX_SETPT_r$, and $FPC_PRI_CHAN_s$
25 to '0' if the mobile station supports any Radio Configuration greater than
26 2. Then for each included member of the Active Set, the mobile station
27 shall store the following:
- 28 ○ Set the $PILOT_PN$ field to $PILOT_PN_r$.
- 29 ○ Set the $ADD_PILOT_REC_INCL$ field to $ADD_PILOT_REC_INCL_r$. If
30 $ADD_PILOT_REC_INCL_r$ equals '1', the mobile station shall store the
31 following:
- 32 ◇ Set the $PILOT_REC_TYPE$ field of $PILOT_REC$ to
33 $PILOT_REC_TYPE_r$.
- 34 ◇ If $PILOT_REC_TYPE_r$ equals '000', the mobile station shall set the
35 TD_POWER_LEVEL field of $PILOT_REC$ to $TD_POWER_LEVEL_r$
36 and set the TD_MODE field of $PILOT_REC$ to TD_MODE_r .
- 37 ◇ If $PILOT_REC_TYPE_r$ is equal to '001', the mobile station shall
38 – Set the AUX_PILOT_QOF field of $PILOT_REC$ to QOF_r .

- 1 — If ADD_INFO_INCL_{2r} is equal to '1', set the AUX_PILOT_QOF2
- 2 field of PILOT_REC to QOF_{2r} and set the
- 3 AUX_PILOT_WALSH_CODE₂ field of PILOT_REC to
- 4 AUX_PILOT_WALSH_{2r} with the Walsh Code length specified
- 5 by WALSH_LENGTH_{2r}; otherwise, set the AUX_PILOT_QOF2
- 6 field of PILOT_REC to QOF_r and set the
- 7 AUX_PILOT_WALSH_CODE₂ field of PILOT_REC to
- 8 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 9 WALSH_LENGTH_r.
- 10 ○ Set the PWR_COMB_IND field to PWR_COMB_IND_r.
- 11 ○ Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- 12 ○ Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 13 + If CH_IND_r equals '01' and 3X_FCH_INFO_INCL_r equals '1', for each
- 14 included member of the Active Set, the mobile station store the following:
- 15 ○ If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
- 16 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
- 17 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
- 18 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
- 19 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
- 20 ○ If 3X_FCH_HIGH_INCL_r equals '1', set the QOF_MASK_ID_FCH_HIGH
- 21 field to QOF_MASK_ID_FCH_HIGH_r and the
- 22 CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
- 23 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
- 24 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
- 25 CODE_CHAN_FCH_r.
- 26 + If CH_IND_r equals '10', the mobile station shall set
- 27 FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
- 28 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_CURR_SETPT_r,
- 29 FPC_DCCH_FER_s to FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to
- 30 FPC_DCCH_MIN_SETPT_r, FPC_DCCH_MAX_SETPT_s to
- 31 FPC_DCCH_MAX_SETPT_r, FUNDICATED_BCNC_IND_s to
- 32 FUNDICATED_BCNC_IND_r, and FPC_PRI_CHAN_s to '1' if the mobile
- 33 station supports any Radio Configuration greater than 2. Then for each
- 34 included member of the Active Set, the mobile station shall store the
- 35 following:
- 36 ○ Set the PILOT_PN to PILOT_PN_r.
- 37 ○ Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL. If
- 38 ADD_PILOT_REC_INCL is equal to '1', the mobile station shall store
- 39 the following:
- 40 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
- 41 PILOT_REC_TYPE_r.

- 1 ◇ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
2 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
3 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 4 ◇ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall
5 — Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
6 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
7 AUX_PILOT_WALSH_r with the Walsh Code length specified by
8 WALSH_LENGTH_r.
- 9 ◇ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
10 — Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
11 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
12 AUX_WALSH_r with the Walsh Code length specified by
13 WALSH_LENGTH_r.
14 — Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
15 AUX_TD_POWER_LEVEL_r.
16 — Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 17 ◇ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
18 — Set the SR3_PRIMARY_PILOT field of PILOT_REC to
19 SR3_PRIMARY_PILOT_r.
20 — Set the SR3_PILOT_POWER1 field of PILOT_REC to
21 SR3_PILOT_POWER1_r.
22 — Set the SR3_PILOT_POWER2 field of PILOT_REC to
23 SR3_PILOT_POWER2_r.
- 24 ◇ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
25 — Set the SR3_PRIMARY_PILOT field of PILOT_REC to
26 SR3_PRIMARY_PILOT_r.
27 — Set the SR3_PILOT_POWER1 field of PILOT_REC to
28 SR3_PILOT_POWER1_r.
29 — Set the SR3_PILOT_POWER2 field of PILOT_REC to
30 SR3_PILOT_POWER2_r.
31 — Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
32 — Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
33 AUX_PILOT_WALSH_r with the Walsh Code length specified by
34 WALSH_LENGTH_r.

- 1 + If CH_IND_r equals '10', and FUNDICATED_BCNC_IND_r equals '1', for
2 each included member of the Active Set, the mobile station shall store
3 the following:
- 4 ○ Set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r.
 - 5 ○ Set FOR_CPCSCH_s to FOR_CPCSCH_r.
- 6 + If CH_IND_r equals '11', the mobile station shall set
7 FPC_FCCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
8 FPC_FCH_CURR_SETPT_s to FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to
9 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
10 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r,
11 FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
12 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s,
13 FPC_DCCH_FER_s to FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to
14 FPC_DCCH_MIN_SETPT_r, FPC_DCCH_MAX_SETPT_s to
15 FPC_DCCH_MAX_SETPT_r, FPC_PRI_CHAN_s to FPC_PRI_CHAN_r, and
16 FUNDICATED_BCNC_IND_s to FUNDICATED_BCNC_IND_r. Then for each
17 included member of the Active Set, the mobile station shall store the
18 following:
- 19 ○ Set the PILOT_PN to PILOT_PN_r.
 - 20 ○ Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC. If
21 ADD_PILOT_REC_INCL is equal to '1', the mobile station shall store
22 the following:
 - 23 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
24 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
27 and 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.

- 1 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 2 ◇ If PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:
 - 3 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
 - 4 SR3_PRIMARY_PILOT_r.
 - 5 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
 - 6 SR3_PILOT_POWER1_r.
 - 7 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
 - 8 SR3_PILOT_POWER2_r.
 - 9 ◇ If PILOT_REC_TYPE_r is equal to ‘100’, the mobile station shall:
 - 10 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
 - 11 SR3_PRIMARY_PILOT_r.
 - 12 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
 - 13 SR3_PILOT_POWER1_r.
 - 14 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
 - 15 SR3_PILOT_POWER2_r.
 - 16 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
 - 17 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
 - 18 AUX_PILOT_WALSH_r with the Walsh Code length specified by
 - 19 WALSH_LENGTH_r.
 - 20 – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1
 - 21 field of PILOT_REC to QOF1_r and set the
 - 22 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
 - 23 AUX_PILOT_WALSH1_r with the Walsh Code length specified
 - 24 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
 - 25 field of PILOT_REC to QOF_r and set the
 - 26 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
 - 27 AUX_PILOT_WALSH_r with the Walsh Code length specified by
 - 28 WALSH_LENGTH_r.
 - 29 – If ADD_INFO_INCL2_r is equal to ‘1’, set the AUX_PILOT_QOF2
 - 30 field of PILOT_REC to QOF2_r and set the
 - 31 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
 - 32 AUX_PILOT_WALSH2_r with the Walsh Code length specified
 - 33 by WALSH_LENGTH2_r; otherwise, set the AUX_PILOT_QOF2
 - 34 field of PILOT_REC to QOF_r and set the
 - 35 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
 - 36 AUX_PILOT_WALSH_r with the Walsh Code length specified by
 - 37 WALSH_LENGTH_r.
 - 38 ○ Set the PWR_COMB_IND field to PWR_COMB_IND_r
 - 39 ○ Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.

- 1 ○ Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
- 2 ○ Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCH_r.
- 3 ○ Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCH_r.
- 4 + If CH_IND_r equals '11' and 3X_FCH_INFO_INCL_r equals '1', for each
- 5 included member of the Active Set, the mobile station store the following:
- 6 ○ If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
- 7 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
- 8 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
- 9 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
- 10 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
- 11 ○ If 3X_FCH_HIGH_INCL_r equals '1', set the QOF_MASK_ID_FCH_HIGH
- 12 field to QOF_MASK_ID_FCH_HIGH_r and the
- 13 CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
- 14 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
- 15 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
- 16 CODE_CHAN_FCH_r.
- 17 + If CH_IND_r equals '11' and FUNDICATED_BCNC_IND_r equals '1', the
- 18 mobile station shall:
- 19 ○ Set REV_FCH_ASSIGNED_s to REV_FCH_ASSIGNED_r.
- 20 + If CH_IND_r equals '11' and FUNDICATED_BCNC_IND_r equals '1', the
- 21 mobile station shall set FCH_BCNC_IND to '1'; otherwise, the mobile
- 22 station shall set FCH_BCNC_IND to '0'.
- 23 + If CH_IND_r equals '11', FUNDICATED_BCNC_IND_r equals '1', and
- 24 FOR_CPCCH_INFO_INCL_r is included and is set to '1', for each included
- 25 member of the Active Set, the mobile station shall store the following:
- 26 ○ Set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r.
- 27 ○ Set FOR_CPCSCH_s to FOR_CPCSCH_r.
- 28 + If CH_IND_r equals '11', FUNDICATED_BCNC_IND_r equals '1', and
- 29 ADD_PLCM_FOR_FCH_INCL_r is included and is set to '1', the mobile
- 30 station shall store the following:
- 31 ○ Set ADD_PLCM_FOR_FCH_TYPE_s to ADD_PLCM_FOR_FCH_TYPE_r.
- 32 ○ Set ADD_PLCM_FOR_FCH_39_s to ADD_PLCM_FOR_FCH_39_r if
- 33 ADD_PLCM_FOR_FCH_TYPE_r is equal to '1'.
- 34 + If CH_IND_r equals '11' and 3X_DCCH_INFO_INCL_r equals '1', for each
- 35 included member of the Active Set, the mobile station store the following:

- 1 ○ If 3X_DCCH_LOW_INCL_T equals '1', set the
2 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW_T
3 and the CODE_CHAN_DCCH_LOW field to
4 CODE_CHAN_DCCH_LOW_T. Otherwise, set the
5 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH_T and the
6 CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH_T.
- 7 ○ If 3X_DCCH_HIGH_INCL_T equals '1', set the
8 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGH_T
9 and the CODE_CHAN_DCCH_HIGH field to
10 CODE_CHAN_DCCH_HIGH_T. Otherwise, set the
11 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCH_T and the
12 CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCH_T.
- 13 - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8,
14 and shall set SERV_NEG_S to enabled.
- 15 - If the mobile station is currently monitoring the Paging Channel, the mobile
16 station shall set IDLE_BCCH_CHAN to '0'; otherwise, the mobile station shall
17 set IDLE_BCCH_CHAN to '1'. The mobile station shall set IDLE_SID to SID_S,
18 IDLE_NID to NID_S, and IDLE_P_REV to P_REV_S.
- 19 - If FREQ_INCL_T equals '1', the mobile station shall then tune to the new
20 frequency assignment.
- 21 - The mobile station shall then enter the *Traffic Channel Initialization Substate*
22 of the *Mobile Station Control on the Traffic Channel State*.
- 23 • If ASSIGN_MODE_T equals '101', the mobile station shall perform the following
24 actions:
- 25 - If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled
26 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
27 indicate to the user that the PACA call has been canceled.
- 28 - If GRANTED_MODE_T equals '11', P_REV_IN_USE_S is less than 11, and the
29 mobile station did not include a SYNC_ID field in the *Origination Message* or
30 the *Reconnect Message* that was transmitted in this substate, the mobile
31 station shall send a *Mobile Station Reject Order* with ORDQ field set to
32 '0000110' (capability not supported by the mobile station) and shall remain
33 in the *Mobile Station Origination Attempt Substate*.
- 34 - If SYNC_ID_INCL_T is included and equals '1' and the mobile station does not
35 have stored service configuration corresponding to SYNC_ID_T for the current
36 SID_S and NID_S pair, the mobile station shall send a *Mobile Station Reject*
37 *Order* with ORDQ field set to '00011011' (Requested stored service
38 configuration is not available) and shall remain in the *Mobile Station*
39 *Origination Attempt Substate*.
- 40 - If GRANTED_MODE_T equals '11', SR_ID_RESTORE_T is not equal to '111', and
41 a service option connection record corresponding to SR_ID_RESTORE_T is not
42 contained in the stored service configuration, the mobile station shall send a

- 1 *Mobile Station Reject Order* with ORDQ field set to '00000110' (capability not
 2 supported by the mobile station) and shall remain in the *Mobile Station*
 3 *Origination Attempt Substate*.
- 4 - If the mobile station does not support any of the specified Radio
 5 Configurations (FOR_PDCH_RC, FOR_FCH_DCCH_RC or
 6 REV_FCH_DCCH_RC), the mobile station shall send a *Mobile Station Reject*
 7 *Order* with the ORDQ field set to '00000110' (capability not supported by the
 8 mobile station) and remain in the *Mobile Station Origination Attempt Substate*.
- 9 - If EXT_CH_IND_r signals the allocation of a F-FCH or R-FCH and the mobile
 10 station does not support Fundamental Channel, the mobile station 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 *Mobile*
 13 *Station Origination Attempt Substate*.
- 14 - If EXT_CH_IND_r signals the allocation of a F-DCCH or R-DCCH and the
 15 mobile station does not support the Dedicated Control Channel, the mobile
 16 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
 17 '00000110' (capability not supported by the mobile station) and remain in
 18 the *Mobile Station Origination Attempt Substate*.
- 19 - If FREQ_INCL_r equals '1' and if the band class (BAND_CLASS_r) is not
 20 supported by the mobile station, the mobile station shall send a *Mobile*
 21 *Station Reject Order* with ORDQ field set to '00000110' (capability not
 22 supported by the mobile station) and remain in the *Mobile Station Origination*
 23 *Attempt Substate*.
- 24 - If PLCM_TYPE_r equals '0010' and IMSI_O is derived from IMSI_T, or if
 25 PLCM_TYPE_r equals '0011' and IMSI_O is derived from IMSI_M, the mobile
 26 station shall send a *Mobile Station Reject Order* with the ORDQ field set to
 27 '00011100' (PLCM_TYPE mismatch) and remain in the *Mobile Station*
 28 *Origination Attempt Substate*.
- 29 - If FUNDICATED_BCNC_IND_r is included and set to 1, and the mobile
 30 station does not support BCNC reception on the Forward Fundicated
 31 Channels assigned in this message, the mobile station shall send a *Mobile*
 32 *Station Reject Order* with the ORDQ field set to '00000110' (capability not
 33 supported by the mobile station) and remain in the *Mobile Station Origination*
 34 *Attempt Substate*.
- 35 - If the mobile station does not send a *Mobile Station Reject Order* as specified
 36 above, it shall continue to perform the actions specified below.
- 37 - Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to
 38 the MAC layer.
- 39 - If FREQ_INCL_r equals '1', the mobile station shall set
 40 + CDMABAND_s = BAND_CLASS_r
 41 + CDMACH_s = CDMA_FREQ_r

- 1 - The mobile station shall store the bypass indicator
2 (BYPASS_ALERT_ANSWER_S = BYPASS_ALERT_ANSWER_T).
- 3 - The mobile station shall store the granted mode indicator
4 (GRANTED_MODE_S = GRANTED_MODE_T). If GRANTED_MODE_T equals '11',
5 the mobile station shall perform the following:
- 6 + The mobile station shall store the service reference identifier to be
7 restored (SR_ID_RESTORE_S = SR_ID_RESTORE_T).
- 8 + If SR_ID_RESTORE_T equals '000', the mobile station shall store bitmap of
9 service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_S =
10 SR_ID_RESTORE_BITMAP_T).
- 11 + If SYNC_ID_INCL_T is included and equals '1', the mobile station shall
12 store the service configuration synchronization identifier (SYNC_ID_S =
13 SYNC_ID_T).
- 14 - The mobile station shall store the frame offset (FRAME_OFFSET_S =
15 FRAME_OFFSET_T).
- 16 - The mobile station shall store the message encryption mode indicator
17 (ENCRYPT_MODE_S = ENCRYPT_MODE_T).
- 18 - The mobile station shall perform the following procedures in the order listed
19 below:
- 20 + If D_SIG_ENCRYPT_MODE_T is included, the mobile station shall perform
21 the following:
- 22 o If D_SIG_ENCRYPT_MODE_T is equal to '000', the mobile station shall
23 set D_SIG_ENCRYPT_MODE_S to C_SIG_ENCRYPT_MODE_S;
24 otherwise, the mobile station shall set D_SIG_ENCRYPT_MODE_S to
25 D_SIG_ENCRYPT_MODE_T, ENC_KEY_S to the most recently generated
26 CMEAKEY in the mobile station associated with AUTHR of the
27 *Origination Message*, and EXT_ENCRYPT_SEQ[0] and
28 EXT_ENCRYPT_SEQ[1] to 256 × ENC_SEQ_H (the ENC_SEQ_H field
29 in the *Origination Message*).
- 30 + If ENC_KEY_SIZE_T is included, the mobile station shall set
31 ENC_KEY_SIZE_S to ENC_KEY_SIZE_T.
- 32 + If C_SIG_ENCRYPT_MODE is included, the mobile station shall set
33 C_SIG_ENCRYPT_MODE_S to C_SIG_ENCRYPT_MODE_T.
- 34 - The mobile station shall set EXT_CH_IND_S to EXT_CH_IND_T.
- 35 - The mobile station shall set CH_IND_S to '00'.
- 36 - If EXT_CH_IND_T signals the allocation of a F-FCH or a F-DCCH, the mobile
37 station shall store the Forward power control subchannel relative gain
38 [FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_T].
- 39 - The mobile station shall set RLGAIN_ADJ_S to RLGAIN_ADJ_T.

- 1 - The mobile station shall set $PLCM_TYPE_S$ to $PLCM_TYPE_R$ if
2 $PLCM_TYPE_INCL_R$ is equal to '1'; otherwise, the mobile station shall set
3 $PLCM_TYPE_S$ as follows:
- 4 + If $P_REV_IN_USE_S$ is less than 11, set $PLCM_TYPE_S$ to '0000'; otherwise
5 set $PLCM_TYPE_S$ to '0100'.
- 6 - The mobile station shall set $PLCM_39_S$ to $PLCM_39_R$ if $PLCM_TYPE_R$ is equal
7 to '0001'.
- 8 - The mobile station shall set $FUNDICATED_BCMC_IND_S$ to
9 $FUNDICATED_BCMC_IND_R$. If $FUNDICATED_BCMC_IND_R$ equals '1' and the
10 $EXT_CH_IND_R$ signals the allocation of a F-FCH, the mobile station shall set
11 FCH_BCMC_IND to '1'; otherwise, the mobile station shall set
12 FCH_BCMC_IND to '0'.
- 13 - If $FUNDICATED_BCMC_IND_R$ equals '1' and $ADD_PLCM_FOR_FCH_INCL_R$ is
14 included and is set to '1', the mobile station shall store the following:
- 15 + Set $ADD_PLCM_FOR_FCH_TYPE_S$ to $ADD_PLCM_FOR_FCH_TYPE_R$.
- 16 + Set $ADD_PLCM_FOR_FCH_39_S$ to $ADD_PLCM_FOR_FCH_39_R$ if
17 $ADD_PLCM_FOR_FCH_TYPE_R$ is equal to '1'.
- 18 - The mobile station shall set $REV_FCH_GATING_MODE_S$ to
19 $REV_FCH_GATING_MODE_R$.
- 20 - The mobile station shall set $REV_PWR_CNTL_DELAY_S$ to
21 $REV_PWR_CNTL_DELAY_R$ if $REV_PWR_CNTL_DELAY_INCL_R$ is equal to '1'.
- 22 - The mobile station shall set $FULL_CI_FEEDBACK_IND_S$ to
23 $FULL_CI_FEEDBACK_IND_R$.
- 24 - If $EXT_CH_IND_R$ equals '01000', the mobile station shall set
25 $FOR_CPCCH_RATE_S$ to $FOR_CPCCH_RATE_R$, and
26 $FOR_CPCCH_UPDATE_RATE_S$ to $FOR_CPCCH_UPDATE_RATE_R$; otherwise,
27 the mobile station shall set $FOR_CPCCH_RATE_S$ to '00', and
28 $FOR_CPCCH_UPDATE_RATE_S$ to '00'.
- 29 - The mobile station shall set $REV_CQICH_FRAME_OFFSET_S$ to
30 $REV_CQICH_FRAME_OFFSET_R$.
- 31 - The mobile station shall set $REV_CQICH_REPS_S$ to $REV_CQICH_REPS_R$.
- 32 - The mobile station shall set $REV_ACKCH_REPS_S$ to $REV_ACKCH_REPS_R$.
- 33 - The mobile station shall set $FOR_PDCH_RC_S$ to $FOR_PDCH_RC_R$.
- 34 - If $EXT_CH_IND_R$ signals the allocation of a R-PDCH, the mobile station shall
35 set $REV_PDCH_RC_S$ to $REV_PDCH_RC_R$.
- 36 - If $EXT_CH_IND_R$ signals the allocation of a F-FCH, the mobile station shall
37 set $FOR_FCH_RC_S$ to $FOR_FCH_DCCH_RC_R$.
- 38 - If $EXT_CH_IND_R$ signals the allocation of a F-DCCH, the mobile station shall
39 set $FOR_DCCH_RC_S$ to $FOR_FCH_DCCH_RC_R$.

- 1 - If EXT_CH_IND_r signals the allocation of a R-FCH, the mobile station shall
2 set REV_FCH_RC_s to REV_FCH_DCCH_RC_r.
- 3 - If EXT_CH_IND_r signals the allocation of a R-DCCH, the mobile station shall
4 set REV_DCCH_RC_s to REV_FCH_DCCH_RC_r.
- 5 - If EXT_CH_IND_r signals the allocation of a F-FCH and a F-DCCH, the mobile
6 station shall set FPC_PRI_CHAN_s to FPC_PRI_CHAN_r.
- 7 - If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall
8 set FPC_FCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
9 FPC_FCH_CURR_SETPT_s to FPC_FCH_INIT_SETPT_s, FPC_FCH_FER_s to
10 FPC_FCH_FER_r, FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
11 FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r.
- 12 - If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile station shall
13 set FPC_DCCH_INIT_SETPT_s to FPC_DCCH_INIT_SETPT_r,
14 FPC_DCCH_CURR_SETPT_s to FPC_DCCH_INIT_SETPT_s, FPC_DCCH_FER_s to
15 FPC_DCCH_FER_r, FPC_DCCH_MIN_SETPT_s to FPC_DCCH_MIN_SETPT_r,
16 FPC_DCCH_MAX_SETPT_s to FPC_DCCH_MAX_SETPT_r.
- 17 - If EARLY_RL_TRANSMIT_IND_r is included, the mobile station shall set
18 EARLY_RL_TRANSMIT_IND_s to EARLY_RL_TRANSMIT_IND_r; otherwise, the
19 mobile station shall set EARLY_RL_TRANSMIT_IND_s to '0'.
- 20 - If FIXED_PREAMBLE_TRANSMIT_IND_r is included, the mobile station shall
21 set FIXED_PREAMBLE_TRANSMIT_IND_s to
22 FIXED_PREAMBLE_TRANSMIT_IND_r; otherwise, the mobile station shall set
23 FIXED_PREAMBLE_TRANSMIT_IND_s to '0'. If
24 FIXED_PREAMBLE_TRANSMIT_IND_s equals '1', the mobile station shall set
25 FIXED_NUM_PREAMBLE_s to FIXED_NUM_PREAMBLE_r.
- 26 - If TX_PWR_LIMIT_INCL_r is set to '1', the mobile station shall perform the
27 following:
- 28 + If the mobile station is being assigned to operate in the 1915MHz –
29 1920MHz block of the PCS band, the mobile station shall store the
30 transmit power limit TX_PWR_LIMIT_s = (TX_PWR_LIMIT_r - 30dB);
- 31 + Otherwise, the mobile station shall set TX_PWR_LIMIT_s to the limit
32 defined in [11] for the target base station.
- 33 - If FOR_PDCH_PARAMS_INCL_r is equal to '1', the mobile station shall set
34 FOR_PDCH_COMMON_PARAMS_s = '0'; otherwise, if
35 FOR_PDCH_COMMON_PARAMS_s is equal to '0', the mobile station shall send
36 a *Mobile Station Reject Order* with ORDQ equal to '00000011' (message
37 structure not acceptable) and remain in the current state.
- 38 - If FOR_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile station
39 shall set RLGAIN_ACKCH_PILOT_s to RLGAIN_ACKCH_PILOT_r, and
40 RLGAIN_CQICH_PILOT_s to RLGAIN_CQICH_PILOT_r.

- 1 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
2 NUM_SOFT_SWITCHING_FRAMES_s to NUM_SOFT_SWITCHING_FRAMES_r +
3 1, and NUM_SOFTER_SWITCHING_FRAMES_s to
4 NUM_SOFTER_SWITCHING_FRAMES_r + 1.
- 5 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '1', the mobile
6 station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
7 NUM_SOFT_SWITCHING_FRAMES_CHM_r + 1, and
8 NUM_SOFTER_SWITCHING_FRAMES_CHM_s to
9 NUM_SOFTER_SWITCHING_FRAMES_CHM_r + 1.
- 10 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '0', the mobile
11 station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
12 NUM_SOFT_SWITCHING_FRAMES_r + 1, and
13 NUM_SOFTER_SWITCHING_FRAMES_CHM_s to
14 NUM_SOFTER_SWITCHING_FRAMES_r + 1.
- 15 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
16 NUM_SOFT_SWITCHING_SLOTS_s according to Table 3.7.2.3.2.21-9 based on
17 the value of NUM_SOFT_SWITCHING_SLOTS_r.
- 18 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
19 NUM_SOFTER_SWITCHING_SLOTS_s according to Table 3.7.2.3.2.21-9 based
20 on the value of NUM_SOFTER_SWITCHING_SLOTS_r.
- 21 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '1', the mobile
22 station shall:
- 23 + Set NUM_SOFT_SWITCHING_SLOTS_CHM_s according to Table
24 3.7.2.3.2.21-9 based on the value of
25 NUM_SOFT_SWITCHING_SLOTS_CHM_r.
- 26 + Set NUM_SOFTER_SWITCHING_SLOTS_CHM_s according to Table
27 3.7.2.3.2.21-9 based on the value of
28 NUM_SOFTER_SWITCHING_SLOTS_CHM_r.
- 29 - If CHM_SWITCHING_PARMS_INCL_r is included and equal to '0', the mobile
30 station shall:
- 31 + Set NUM_SOFT_SWITCHING_SLOTS_CHM_s according to Table
32 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS_r.
- 33 + Set NUM_SOFTER_SWITCHING_SLOTS_CHM_s according to Table
34 3.7.2.3.2.21-9 based on the value of
35 NUM_SOFTER_SWITCHING_SLOTS_r.
- 36 - If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station shall set
37 PDCH_SOFT_SWITCHING_DELAY_s to PDCH_SOFT_SWITCHING_DELAY_r +
38 1, and PDCH_SOFTER_SWITCHING_DELAY_s to
39 PDCH_SOFTER_SWITCHING_DELAY_r + 1.
- 40 - If TX_DISABLED_TIMER_INCL_r is equal to '1', the mobile station shall set
41 TX_DISABLED_TIMER_s to TX_DISABLED_TIMER_r; otherwise, the mobile
42 station shall set TX_DISABLED_TIMER_s to T_{81m}.

- 1 - If EXT_CH_IND_r signals the allocation of a R-PDCH, the mobile station shall:
- 2 + Set FOR_GCH_ASSIGNED_s to FOR_GCH_ASSIGNED_r.
- 3 + Set FOR_RCCH_ASSIGNED_s to FOR_RCCH_ASSIGNED_r.
- 4 + If FOR_RCCH_ASSIGNED_s is equal to '1', the mobile station shall:
- 5 ○ Set FOR_RCCH_DRC_MODE_s to FOR_RCCH_DRC_MODE_r.
- 6 ○ Set FOR_RCCH_REPETITION_s to FOR_RCCH_REPETITION_r.
- 7 ○ Set FOR_RCCH_UPDATE_RATE_s to FOR_RCCH_UPDATE_RATE_r.
- 8 + If FOR_ACKCH_ASSIGNED_r is equal to '1', the mobile station shall set
- 9 FOR_ACKCH_MODE_s to FOR_ACKCH_MODE_r.
- 10 + If FOR_ACKCH_COMB_SEL_r is included, the mobile station shall set
- 11 FOR_ACKCH_COMB_SEL_s to FOR_ACKCH_COMB_SEL_r; otherwise, the
- 12 mobile station shall set FOR_ACKCH_COMB_SEL_s to '0'.
- 13 + If REV_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile
- 14 station shall perform the following:
- 15 ○ The mobile station shall set RLGAIN_SPICH_PILOT_s to
- 16 RLGAIN_SPICH_PILOT_r.
- 17 ○ The mobile station shall set RLGAIN_REQCH_PILOT_s to
- 18 RLGAIN_REQCH_PILOT_r.
- 19 ○ The mobile station shall set RLGAIN_PDCCH_PILOT_s to
- 20 RLGAIN_PDCCH_PILOT_r.
- 21 + If REV_PDCH_PARAMS_1_INCL_r is included and equal to '1', the mobile
- 22 station shall perform the following:
- 23 ○ The mobile station shall set REV_PDCH_TABLE_SEL_s to
- 24 REV_PDCH_TABLE_SEL_r.
- 25 ○ The mobile station shall set REV_PDCH_MAX_AUTO_TPR_s to
- 26 REV_PDCH_MAX_AUTO_TPR_r.
- 27 - Otherwise, the mobile station shall:
- 28 + Set FOR_GCH_ASSIGNED_s to NULL.
- 29 + Set FOR_RCCH_ASSIGNED_s to NULL.
- 30 - For each included member of the Active Set, the mobile station shall store
- 31 the following:
- 32 + Set the PILOT_PN field to PILOT_PN_r.
- 33 + Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
- 34 ADD_PILOT_REC_INCL_r equals '1', the mobile station shall store the
- 35 following:
- 36 ○ Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPE_r.

- 1 ○ If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
2 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r and
3 set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 4 ○ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall.
5 Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
6 Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
7 AUX_PILOT_WALSH_r with the Walsh Code length specified by
8 WALSH_LENGTH_r.
- 9 ○ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
10 Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
11 Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
12 AUX_WALSH_r with the Walsh Code length specified by
13 WALSH_LENGTH_r.
14 Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
15 AUX_TD_POWER_LEVEL_r.
16 Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 17 ○ Set FOR_PDCH_INCL_s to FOR_PDCH_INCL_r.
- 18 ○ If FOR_PDCH_INCL_r is equal to '1', the mobile station shall perform
19 the following:
20 ◇ If FOR_PDCH_PARMS_INCL_r is equal to '1', the mobile station
21 shall store the following parameters:
22 — The mobile station shall set WALSH_TABLE_ID_s to
23 WALSH_TABLE_ID_r.
24 — The mobile station shall set NUM_PDCCH_s to NUM_PDCCH_r.
25 — The mobile station shall set FOR_PDCCH_WALSH_s[i] to the ith
26 occurrence of FOR_PDCCH_WALSH_r.
27 ◇ The mobile station shall set MAC_ID_s to MAC_ID_r.
28 ◇ The mobile station shall set REV_CQICH_COVER_s to
29 REV_CQICH_COVER_r.
30 ◇ If EXT_CH_IND_r signals the allocation of a F-CPCCH, the mobile
31 station shall set FOR_CPCCH_WALSH_s to
32 FOR_CPCCH_WALSH_r, and FOR_CPCSCH_s to FOR_CPCSCH_r.
33 ◇ The mobile station shall store FOR_PDCCH_WALSH_s[i] to the ith
34 occurrence of FOR_PDCCH_WALSH_r.
35 ○ The mobile station shall set PWR_COMB_IND_s to PWR_COMB_IND_r.
- 36 ○ If PDCH_GROUP_IND_INCL_r is equal to '1', the mobile station shall
37 set PDCH_GROUP_IDENTIFIER_s as follows:

- 1 ◇ If this is the first pilot in the list that has a F-PDCH assignment,
2 the mobile station shall perform the following:
- 3 — The mobile station shall set PDCH_GROUP_IDENTIFIERS_s to
4 '000';
- 5 ◇ Otherwise, the mobile station shall perform the following:
- 6 — If PDCH_GROUP_IND_r is set to '1', the mobile station shall set
7 PDCH_GROUP_IDENTIFIERS_s to the same value as that of the
8 previous pilot in the list that has a F-PDCH assigned;
9 otherwise, the mobile station shall set
10 PDCH_GROUP_IDENTIFIERS_s to the value one greater than
11 that of the previous pilot in the list that has a F-PDCH
12 assigned.
- 13 ○ Otherwise, the mobile station shall perform the following:
- 14 ◇ If this is the first pilot in the list that has a F-PDCH assignment,
15 the mobile station shall perform the following:
- 16 — The mobile station shall set PDCH_GROUP_IDENTIFIERS_s to
17 '000';
- 18 ◇ Otherwise, the mobile station shall perform the following:
- 19 — If F-PDCH is assigned for this pilot, the mobile station shall
20 perform the following:
- 21 a. If PWR_COMB_IND_r is set to '1', and there are no pilots
22 between this pilot and the previous pilot in the list that
23 has a F-PDCH assigned, the mobile station shall set
24 PDCH_GROUP_IDENTIFIERS_s to the same value as that of
25 the previous pilot in the list that has a F-PDCH assigned.
- 26 b. If PWR_COMB_IND_r is set to '1', and all pilots between
27 this pilot and the previous pilot in the list that has a F-
28 PDCH assigned have PWR_COMB_IND set to '1', the
29 mobile station shall set PDCH_GROUP_IDENTIFIERS_s to
30 the same value as that of the previous pilot in the list that
31 has a F-PDCH assigned.
- 32 c. Otherwise, the mobile station shall set
33 PDCH_GROUP_IDENTIFIERS_s to the value one greater than
34 that of the previous pilot in the list.
- 35 — Otherwise, the mobile station shall set
36 PDCH_GROUP_IDENTIFIERS_s to NULL.
- 37 ○ If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station
38 shall set CODE_CHAN_FCH_s to CODE_CHAN_FCH_r, and
39 QOF_MASK_ID_FCH_s to QOF_MASK_ID_FCH_r.

- 1 ○ If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile
2 station shall set CODE_CHAN_DCCH_s to CODE_CHAN_DCCH_r, and
3 QOF_MASK_ID_DCCH_s to QOF_MASK_ID_DCCH_r.
- 4 ○ If FOR_PDCH_INCL_r is equal to '1', EXT_CH_IND_r signals the
5 allocation of a R-PDCH, and FOR_ACKCH_ASSIGNED_r is equal to '1',
6 the mobile station shall set FOR_ACKCH_WALSH_INDEX_s to
7 FOR_ACKCH_WALSH_INDEX_r, and FOR_ACKSCH_INDEX_s to
8 FOR_ACKSCH_INDEX_r.
- 9 ○ If FOR_RCCH_INCL_r is included and set to '1', the mobile station
10 shall do the following:
- 11 ◇ Set FOR_RCCH_WALSH_INDEX_s to FOR_RCCH_WALSH_INDEX_r.
- 12 ◇ Set FOR_RCSCH_INDEX_s to FOR_RCSCH_INDEX_r.
- 13 ○ If FOR_PDCH_INCL_r is equal to '1', and if FOR_GCH_ASSIGNED_r is
14 included and set to '1', the mobile station shall perform the following;
- 15 ◇ Set NUM_FOR_GCH_s to NUM_FOR_GCH_r, and
- 16 ◇ For each of the NUM_FOR_GCH_s occurrences of
17 FOR_GCH_WALSH_INDEX_r, the mobile station shall set
18 FOR_GCH_WALSH_INDEX_s[j] to FOR_GCH_WALSH_INDEX_r[j].
- 19 ○ Otherwise, the mobile station shall perform the following:
- 20 ◇ Set NUM_FOR_GCH_s to 0, and
- 21 ◇ Set FOR_GCH_WALSH_INDEX_s to NULL.
- 22 - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8,
23 and shall set SERV_NEG_s to enabled.
- 24 - If FREQ_INCL_r equals '1', the mobile station shall then tune to the new
25 frequency assignment.
- 26 - The mobile station shall then enter the *Traffic Channel Initialization Substate*
27 of the *Mobile Station Control on the Traffic Channel State*.
- 28 8. *Feature Notification Message*: If RELEASE_r is equal to '1', the mobile station shall
29 enter the *Mobile Station Idle State* or the *System Determination Substate* of the *Mobile*
30 *Station Initialization State* with a release indication (see 2.6.1.1).
- 31 9. *Intercept Order*: The mobile station shall enter the *Mobile Station Idle State*.
- 32 10. *Local Control Order*
- 33 11. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and
34 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-
35 permanent memory (LCKRSN_P_{s-p} equals the least significant four bits of ORDQ_r).
36 The mobile station should notify the user of the locked condition. The mobile
37 station shall enter the *System Determination Substate* of the *Mobile Station*
38 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System*
39 *Access State* again until after the next mobile station power-up or until it has

- 1 received an *Unlock Order*. This requirement shall take precedence over any other
2 mobile station requirement specifying entry to the *System Access State*.
- 3 12. *Maintenance Required Order*: The mobile station shall record the reason for the
4 *Maintenance Required Order* in the mobile station's semi-permanent memory
5 (MAINTRSN_{s-p} equals the least significant four bits of ORDQ_r). The mobile station
6 shall remain in the unlocked condition. The mobile station should notify the user of
7 the maintenance required condition.
- 8 13. *PACA Message*: If P_REV_IN_USE_s is less than or equal to four and the mobile
9 station does not support PACA capability, the mobile station shall send a *Mobile*
10 *Station Reject Order* with the ORDQ field set to '00000110' (message requires a
11 capability that is not supported by the mobile station); otherwise, the mobile station
12 shall process the message as follows:
- 13 • If PACA_s is equal to disabled, the mobile station shall perform the following
14 actions:
 - 15 - If the purpose of the message is to respond to an *Origination Message*
16 (PURPOSE_r is equal to '0000'), the mobile station shall perform the following
17 actions:
 - 18 + The mobile station shall set PACA_s to enabled and shall set PACA_SID_s
19 to SID_s.
 - 20 + The mobile station shall set the PACA state timer to the duration shown
21 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_s.
 - 22 + The mobile station should indicate to the user that the call has been
23 queued as a PACA call, and should indicate the current queue position
24 (Q_POS_r) of the call.
 - 25 + The mobile station shall enter the *Mobile Station Idle State*.
 - 26 - If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal
27 to '0011'), the mobile station shall perform the following actions:
 - 28 + The mobile station shall set PACA_s to disabled and PACA_CANCEL to '0',
29 shall disable the PACA state timer, and should indicate to the user that
30 the PACA call has been canceled.
 - 31 + The mobile station shall enter the *Mobile Station Idle State*.
 - 32 - If the purpose of the message is anything else (PURPOSE_r is not equal to
33 '0000' or '0011'), the mobile station shall ignore the message. The mobile
34 station shall remain in the *Mobile Station Origination Attempt Substate*.
 - 35 • If PACA_s is equal to enabled, the mobile station shall perform the following
36 actions:
 - 37 - If the purpose of the message is to respond to an *Origination Message*
38 (PURPOSE_r is equal to '0000'), the mobile station shall perform the following
39 actions:

- 1 + The mobile station should indicate to the user that the PACA call is still
2 queued, and should indicate to the user the current queue position
3 (Q_POS_r) of the call.
- 4 + The mobile station shall set the PACA state timer to the duration shown
5 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_s.
- 6 + The mobile station shall enter the *Mobile Station Idle State*.
- 7 - If the purpose of the message is to provide the queue position of the PACA
8 call (PURPOSE_r is equal to '0001'), the mobile station shall perform the
9 following actions:
- 10 + The mobile station should indicate to the user that the PACA call is still
11 queued, and should indicate the current queue position (Q_POS_r) of the
12 call.
- 13 + The mobile station shall set the PACA state timer to the duration shown
14 in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_s.
- 15 + The mobile station shall enter the *Mobile Station Idle State*.
- 16 - If the purpose of the message is to instruct the mobile station to re-originate
17 the PACA call (PURPOSE_r is equal to '0010'), the mobile station shall remain
18 in the *Mobile Station Origination Attempt Substate*.
- 19 - If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal
20 to '0011'), the mobile station shall perform the following actions:
- 21 + The mobile station shall set PACA_s to disabled, shall disable the PACA
22 state timer, and should indicate to the user that the PACA call has been
23 canceled.
- 24 + The mobile station shall enter the *Mobile Station Idle State*.
- 25 14. *Registration Accepted Order*: The mobile station shall perform the procedures as
26 specified in 2.6.11.1.
- 27 15. *Registration Rejected Order*: This order indicates that normal service is not available
28 on this system. The mobile station shall disable the full-TMSI timer. If the received
29 order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set
30 all the bits of the TMSI_CODE_{s-p} to '1'. The mobile station shall enter the *System*
31 *Determination Substate* of the *Mobile Station Initialization State* with a registration
32 rejected indication (see 2.6.1.1).
- 33 16. *Release Order* or *Service Status Order*: If NDSS_ORIG_s is equal to enabled, the
34 mobile station shall set NDSS_ORIG_s to disabled, and should indicate to the user
35 that the call origination has been canceled. The mobile station shall enter the
36 *Mobile Station Idle State* or the *System Determination Substate* of the *Mobile Station*
37 *Initialization State* with a release indication (see 2.6.1.1). If the mobile station enters
38 the *Mobile Station Idle State*, and if PACA_s is equal to enabled, the mobile station
39 shall set PACA_s to disabled and PACA_CANCEL to '0', shall disable the PACA state
40 timer, and should indicate to the user that the PACA call has been canceled.

- 1 17. *Reorder Order*: If NDSS_ORIG_S is equal to enabled, the mobile station shall set
 2 NDSS_ORIG_S to disabled, and should indicate to the user that the call origination
 3 has been canceled. If PACA_S is equal to enabled, the mobile station shall set PACA_S
 4 to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and
 5 should indicate to the user that the PACA call has been canceled. The mobile
 6 station shall enter the *Mobile Station Idle State*.
- 7 18. *Retry Order*: The mobile station shall process the order as follows:
- 8 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
 9 RETRY_DELAY_S[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
 10 '011', '100', or '101'.
 - 11 • If RETRY_TYPE_R is equal to '001', '100', or '101', then the mobile station shall
 12 perform the following:
 - 13 - If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set
 14 RETRY_DELAY_S[RETRY_TYPE_R] to 0.
 - 15 - If RETRY_DELAY_R is not equal to '00000000', the mobile station shall set
 16 RETRY_DELAY_S as follows:
 - 17 + If the most significant bit of the RETRY_DELAY_R is '0', set
 18 RETRY_DELAY_UNIT_S to 1000ms. If the most significant bit of the
 19 RETRY_DELAY_R is '1', set RETRY_DELAY_UNIT_S to 60000ms.
 - 20 + The mobile station shall set RETRY_DELAY_VALUE_S to the seven least
 21 significant bits of RETRY_DELAY_R.
 - 22 + The mobile station shall store the next system time 80 ms boundary +
 23 RETRY_DELAY_VALUE_S × RETRY_DELAY_UNIT_S ms as
 24 RETRY_DELAY_S[RETRY_TYPE_R].
 - 25 + If RETRY_TYPE_R is equal to '001' or '101', and NDSS_ORIG_S is equal to
 26 enabled, the mobile station shall set NDSS_ORIG_S to disabled and
 27 should indicate to the user that the call origination has been canceled. If
 28 PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled
 29 and PACA_CANCEL to '0', shall disable the PACA state timer, and should
 30 indicate to the user that the PACA call has been canceled.
 - 31 + If RETRY_TYPE_R is equal to '001' or '101', the mobile station shall enter
 32 the *Mobile Station Idle State*.
- 33 19. *Security Mode Command Message*: The mobile station shall perform the procedures
 34 as specified in 2.6.11.4.
- 35 20. *Service Redirection Message*: The mobile station shall process the message as
 36 follows:
- 37 • If the mobile station is directed to an unsupported operation mode or band
 38 class, the mobile station shall respond with a *Mobile Station Reject Order* with
 39 ORDQ equal to '00000110' (message requires a capability that is not supported
 40 by the mobile station).

- 1 • If DELETE TMSI_r is equal to '1', the mobile station shall set all the bits of
2 TMSI_CODE_{s-p} to '1'.
- 3 • The mobile station shall disable the full-TMSI timer.
- 4 • The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
- 5 • If RECORD_TYPE_r is '00000000', the mobile station shall set RETURN_IF_FAIL_s
6 = RETURN_IF_FAIL_r, and enter the *System Determination Substate* of the *Mobile*
7 *Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise:
- 8 - if REDIRECT_TYPE_r is '0', the mobile station shall store the redirection
9 record received in the message as REDIRECT_REC_s and shall enter the
10 System Determination Substate of the *Mobile Station Initialization State* with
11 a redirection indication (see 2.6.1.1).
- 12 - if REDIRECT_TYPE_r is '1', the mobile station shall store the redirection
13 record received in the message as REDIRECT_REC_s and shall enable
14 NDSS_ORIG_s, and shall record the dialed digits (if any). The mobile station
15 shall enter the System Determination Substate of the *Mobile Station*
16 *Initialization State* with a redirection indication (see 2.6.1.1).
- 17 21. *SSD Update Message*: The mobile station shall respond to the message as specified
18 in 2.3.12.1.5.
- 19 22. *Status Request Message*: The mobile station shall disable the *System Access State*
20 timer and respond to the message. If P_REV_IN_USE_s is less than or equal to three,
21 the mobile station shall respond with a *Status Response Message*. If
22 P_REV_IN_USE_s is greater than three, the mobile station shall respond with an
23 *Extended Status Response Message*. If the message does not specify any
24 qualification information (QUAL_INFO_TYPE_r is equal to '00000000'), the mobile
25 station shall include the requested information records in the response. If the
26 message specifies a band class (QUAL_INFO_TYPE_r is equal to '00000001'), the
27 mobile station shall only include the requested information records for the specified
28 band class (BAND_CLASS_r) in the response. If the message specifies a band class
29 and an operating mode (QUAL_INFO_TYPE_r is equal to '00000010'), the mobile
30 station shall only include the requested information records for the specified band
31 class (BAND_CLASS_r) and operating mode (OP_MODE_r) in the response. If the
32 message specifies a band class or a band class and an operating mode which are
33 not supported by the mobile station, the mobile station shall send a *Mobile Station*
34 *Reject Order* with ORDQ set to '00000110' (message requires a capability that is not
35 supported by the mobile station). If the response to this message exceeds the
36 allowable length, the mobile station shall send a *Mobile Station Reject Order* with
37 ORDQ set to '00001000' (response message would exceed the allowable length). If
38 the message specifies an information record which is not supported by the mobile
39 station for the specified band class and operating mode, the mobile station shall
40 send a *Mobile Station Reject Order* with ORDQ set to '00001001' (information record
41 is not supported for the specified band class and operating mode).

1 23. *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_{s-p} to TMSI_ZONE_LEN_r,
- 5 • The mobile station shall store the assigning TMSI zone number by setting the
6 ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
7 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- 8 • The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
9 TMSI_CODE_r.

10 The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p}
11 to TMSI_EXP_TIME_r. 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_{56m} seconds.

14 24. *User Zone Reject Message*

15 25. *BCMC Order*: The mobile station shall process this message as follows:

- 16 • If ORDQ_r is set to '00000000', the mobile station shall perform the following for
17 each of the BCMC flows that the base station is responding to:
 - 18 - If CLEAR_ALL_RETRY_DELAY_r equals '1', the mobile station shall delete the
19 currently stored BCMC Retry Delay List.
 - 20 - If CLEAR_RETRY_DELAY_r equals '1', the mobile station shall delete the entry
21 in the BCMC_RETRY_DELAY_LIST_s[i] corresponding to BCMC_FLOW_ID
22 (See section 2.6.13.11) in this message.
 - 23 - If ALL_BCMC_REASON_r or BCMC_REASON_r equals '0000', Layer 3 shall
24 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
25 *FLOW_NOT_AVAILABLE, reason_ind=CURRENT_SYS)* for each of the
26 corresponding BCMC_FLOW_ID to the BCMC Service Layer.
 - 27 - If ALL_BCMC_REASON_r or BCMC_REASON_r equals '0001', Layer 3 shall
28 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
29 *FLOW_NOT_TRANSMITTED, reason_ind=CURRENT_SYS)* for each of the
30 corresponding BCMC_FLOW_ID to the BCMC Service Layer.
 - 31 - If BCMC_REASON_r equals '0010' for any of the flows or
32 ALL_BCMC_REASON_r equals '0010', the mobile station shall enable the
33 BCMC wait timer with a value of BSPM_WAIT_TIME seconds, shall enter the
34 *Mobile Station Idle State* and shall wait for an updated *BCMC Service*
35 *Parameters Message* as specified in 2.6.13.1.
 - 36 - If ALL_BCMC_REASON_r or BCMC_REASON_r equals '0011', Layer 3 shall
37 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = SUCCESS, cause =*
38 *REGISTRATION_ACCEPTED, reason_ind = CURRENT_SYS)* for each of the
39 corresponding BCMC_FLOW_ID to the BCMC Service Layer.

- 1 - If ALL_BCMC_REASON_r or BCMC_REASON_r equals '0100', Layer 3 shall
2 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause=*
3 *AUTHORIZATION_FAILURE, reason_ind = CURRENT_SYS)* for each of the
4 corresponding BCMC_FLOW_ID to the BCMC Service Layer.
- 5 - If ALL_BCMC_REASON_r or BCMC_REASON_r equals '0101', the mobile
6 station shall perform the following:
- 7 + Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID,*
8 *result=FAILURE, cause= RETRY_DELAY, reason_ind=CURRENT_SYS)* for
9 each of the corresponding BCMC_FLOW_ID to the BCMC Service Layer.
- 10 + For each of the corresponding BCMC_FLOW_ID, if there is a
11 BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID which is same as
12 BCMC_FLOW_ID (See section 2.6.13.11), the mobile station shall set
13 BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to current system time
14 plus ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY_r; otherwise, the
15 mobile station shall add new BCMC_RETRY_DELAY_LIST_s[i] to the
16 BCMC Retry Delay List and shall set
17 BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID to the BCMC_FLOW_ID,
18 BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to current system time
19 plus ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY_r.
- 20 - If the base station indicates BCMC_REASON (indicated via
21 ALL_BCMC_REASON_r/BCMC_REASON_r) of '0000', '0001', '0011', '0100', or
22 '0101' for all of the flows requested, the mobile station shall enter the *Mobile*
23 *Station Idle State*.

24 26. General Extension Message: The mobile station shall process this message as
25 specified in section 2.6.18.

26 27. *Any other message*: If the mobile station receives any other message specified in
27 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
28 other messages.

29 If the mobile station performs an access probe handoff or access handoff and receives any
30 of the following messages, it shall process the message as specified in 2.6.3.1.3:

- 31 • If the mobile station is currently monitoring the Paging Channel:
- 32 1. *System Parameters Message*
- 33 2. *Access Parameters Message*
- 34 3. *Neighbor List Message*
- 35 4. *Extended System Parameters Message*
- 36 5. *Extended Neighbor List Message*
- 37 6. *General Neighbor List Message*
- 38 7. *Global Service Redirection Message*
- 39 8. *Extended Global Service Redirection Message*

- 1 • If the mobile station is currently monitoring the Primary Broadcast Control
2 Channel:
- 3 1. *ANSI-41 System Parameters Message*
- 4 2. *Enhanced Access Parameters Message*
- 5 3. *Universal Neighbor List Message*
- 6 4. *MC-RR Parameters Message*
- 7 5. *Extended Global Service Redirection Message*

8 2.6.3.6 Registration Access Substate

9 In this substate, the mobile station sends a *Registration Message*. If the base station
10 responds with an authentication request, the mobile station responds in this substate.

11 Upon entering the *Registration Access Substate*, the mobile station shall send the
12 *Registration Message*.

13 If a message received from the base station requires a Layer 2 acknowledgment and does
14 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
15 outstanding (see [4]).

16 If a message received from the base station requires a Layer 2 acknowledgment and also a
17 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

18 When transmitting a response to a message received from the base station, Layer 3 shall
19 indicate to Layer 2 that the type of the message is a response (see [4]).

20 When transmitting an autonomous message (i.e., a message that is not sent as a response
21 to a message received from the base station) other than the *Registration Message*, Layer 3
22 shall indicate to Layer 2 that the type of the message is a request other than a registration
23 request or a message transmission request (see [4]).

24 When transmitting an autonomous *Registration Message* (i.e., it is not sent as a response to
25 a *Registration Request Order* received from the base station), Layer 3 shall indicate to Layer
26 2 that the type of the message is a request that is a registration (see [4]).

27 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
28 Common Control Channel. If the mobile station declares a loss of the Paging Channel or
29 the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the
30 following:

- 31 • If $PACA_S$ is equal to enabled, the mobile station shall set $PACA_S$ to disabled and
32 $PACA_CANCEL$ to '0', shall disable the PACA state timer, and should indicate to the
33 user that the PACA call has been canceled.
- 34 • The mobile station shall declare an access attempt failure and update its
35 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*.

1 If the mobile station receives confirmation of delivery of any message sent by the mobile
2 station in this substate, it shall then enter the *Mobile Station Idle State* unless:

- 3 • If the registration access was initiated due to a user direction to power down, the
4 mobile station shall update registration variables as specified in 2.6.5.5.3.3 and
5 may power down.
- 6 • If the mobile station has included the ENC_SEQ_H field in the *Registration Message*.
- 7 • If a message received from the base station requires a response, the mobile station
8 shall send a response to the message in this substate.

9 If the mobile station receives confirmation of delivery of the *Registration Message*, the
10 mobile station shall update its registration variables as specified in 2.6.5.5.3.1.

11 If the mobile station is directed by the user to originate a call, the mobile station may
12 process the origination request as follows:

- 13 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
14 access attempt in progress.
- 15 • If PACA_S is equal to enabled, the mobile station shall set PACA_S to disabled and
16 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the
17 user that the PACA call has been canceled.
- 18 • The mobile station shall enter the *Mobile Station Origination Attempt Substate* with
19 an origination indication.

20 If PACA_S is equal to enabled, the mobile station shall set PACA_CANCEL to '1' when the
21 user directs the mobile station to cancel a PACA call.

22 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
23 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
24 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
25 the message has been sent and acknowledged.

26 If Layer 3 receives a message other than message listed below:

- 27 • *Extended Channel Assignment Message* with DIRECT_CH_ASSIGN_IND field
28 included and set to '1'

29 with an indication from Layer 2 that an access attempt for a message being transmitted
30 was not terminated as a result of processing the Layer 2 fields of the received message, the
31 mobile station shall ignore the received message.

32 The following directed messages and orders can be received. If any field value of the
33 message or order is outside its permissible range, the mobile station may send a *Mobile*
34 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 35 1. *Authentication Challenge Message*: If the registration access was initiated due to a
36 user direction to power down, the mobile station shall ignore the message;
37 otherwise, the mobile station shall respond to the message as specified in
38 2.3.12.1.4, regardless of the value of AUTH_S.

- 1 2. *Authentication Request Message*: The mobile station shall process the message and
2 shall respond as specified in 2.3.12.5.2.
- 3 3. *Base Station Challenge Confirmation Order*: If the registration access was initiated
4 due to a user direction to power down, the mobile station shall ignore the message;
5 otherwise, the mobile station shall respond to the message as specified in
6 2.3.12.1.5.
- 7 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
8 specified in 2.6.11.5.
- 9 5. *Data Burst Message*
- 10 6. *Feature Notification Message*
- 11 7. *Local Control Order*
- 12 8. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and
13 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-
14 permanent memory (LCKRSN_{P-s-p} equals the least significant four bits of ORDQ_r).
15 The mobile station should notify the user of the locked condition. The mobile
16 station shall enter the *System Determination Substate* of the *Mobile Station*
17 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System*
18 *Access State* again until after the next mobile station power-up or until it has
19 received an *Unlock Order*. This requirement shall take precedence over any other
20 mobile station requirement specifying entry to the *System Access State*.
- 21 9. *Maintenance Required Order*: The mobile station shall record the reason for the
22 *Maintenance Required Order* in the mobile station's semi-permanent memory
23 (MAINTRSN_{S-p} equals the least significant four bits of ORDQ_r). The mobile station
24 shall remain in the unlocked condition. The mobile station should notify the user of
25 the maintenance required condition.
- 26 10. *PACA Message*: If P_REV_IN_USE_s is less than or equal to four and the mobile
27 station does not support PACA capability, the mobile station shall send a *Mobile*
28 *Station Reject Order* with the ORDQ field set to '00000110' (message requires a
29 capability that is not supported by the mobile station); otherwise, the mobile station
30 shall process the message as follows:
- 31 If PACA_s is equal to disabled, the mobile station shall send a *Mobile Station Reject*
32 *Order* with the ORDQ field set to '00000010' (message not accepted in this state).
- 33 If PACA_s is equal to enabled, the mobile station shall perform the following:
- 34 • If the purpose of the message is to respond to an *Origination Message*
35 (PURPOSE_r is equal to '0000'), the mobile station shall send a *Mobile Station*
36 *Reject Order* with the ORDQ field set to '00000010' (message not accepted in this
37 state).
 - 38 • If the purpose of the message is to provide the queue position of the PACA call
39 (PURPOSE_r is equal to '0001'), the mobile station shall set the PACA state timer
40 to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of

- 1 PACA_TIMEOUT_s, should indicate to the user that the PACA call is still queued,
2 and should indicate to the user the current queue position (Q_POS_r) of the call.
- 3 • If the purpose of the message is to instruct the mobile station to re-originate the
4 PACA call (PURPOSE_r is equal to '0010'), Layer 3 shall send an L2-
5 Supervision.Request primitive to Layer 2 to abort any access attempt in
6 progress, shall set the PACA state timer to the duration shown in Table
7 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_s, and shall enter
8 the *Mobile Station Origination Attempt Substate* with a PACA response indication.
 - 9 • If the purpose of the message is to cancel the PACA call (PURPOSE_r is equal to
10 '0011'), the mobile station shall set PACA_s to disabled and PACA_CANCEL to '0',
11 shall disable the PACA state timer, and should indicate to the user that the
12 PACA call has been canceled.
- 13 11. *Registration Accepted Order*: The mobile station shall perform the procedures
14 specified in 2.6.11.1
- 15 12. *Registration Rejected Order*: This order indicates that normal service is not available
16 on this system. The mobile station shall disable the full-TMSI timer. If the received
17 order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set
18 all the bits of the TMSI_CODE_{s-p} to '1'. The mobile station shall enter the *System*
19 *Determination Substate* of the *Mobile Station Initialization State* with a registration
20 rejected indication (see 2.6.1.1).
- 21 13. *Release Order*: If NDSS_ORIG_s is equal to enabled, the mobile station shall set
22 NDSS_ORIG_s to disabled, and should indicate to the user that the call origination
23 has been canceled. The mobile station shall enter the *Mobile Station Idle State* or
24 the *System Determination Substate* of the *Mobile Station Initialization State* with a
25 release indication (see 2.6.1.1). If the mobile station enters the *Mobile Station Idle*
26 *State*, and if PACA_s is equal to enabled, the mobile station shall set PACA_s to
27 disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should
28 indicate to the user that the PACA call has been canceled.
- 29 14. *Retry Order*: The mobile station shall process the message as follows:
- 30 • If RETRY_TYPE_r is equal to '000', the mobile station shall set
31 RETRY_DELAY_s[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
32 '011', '100', or '101'.
 - 33 • If RETRY_TYPE_r is equal to '001', '100', or '101', the mobile station shall perform
34 the following:
 - 35 - If RETRY_DELAY_r is equal to '00000000', then the mobile station shall set
36 RETRY_DELAY_s[RETRY_TYPE_r] to 0.
 - 37 - If RETRY_DELAY_r is not equal to '00000000', the mobile station shall set
38 RETRY_DELAY_s[RETRY_TYPE_r] as follows:
 - 39 + If the most significant bit of the RETRY_DELAY_r is '0', set
40 RETRY_DELAY_UNIT_s to 1000ms. If the most significant bit of the
41 RETRY_DELAY_r is '1', set RETRY_DELAY_UNIT_s to 60000ms.

- 1 + The mobile station shall set $RETRY_DELAY_VALUE_S$ to the seven least
2 significant bits of $RETRY_DELAY_T$.
- 3 + The mobile station shall store the next system time 80 ms boundary +
4 $RETRY_DELAY_VALUE_S \times RETRY_DELAY_UNIT_S$ ms as
5 $RETRY_DELAY_S[RETRY_TYPE_T]$.
- 6 15. *Security Mode Command Message*: The mobile station shall perform the procedures
7 as specified in 2.6.11.4.
- 8 16. *Service Redirection Message*: The mobile station shall process the message as
9 follows:
- 10 • If the mobile station is directed to an unsupported operation mode or band
11 class, the mobile station shall respond with a *Mobile Station Reject Order* with
12 ORDQ equal to '00000110' (message requires a capability that is not supported
13 by the mobile station).
- 14 • If $DELETE_TMSI_T$ is equal to '1', the mobile station shall set all the bits of
15 $TMSI_CODE_{S-p}$ to '1'. The mobile station shall disable the full-TMSI timer.
- 16 • The mobile station shall set $RETURN_IF_FAIL_S = RETURN_IF_FAIL_T$.
- 17 • If $RECORD_TYPE_T$ is equal to '00000000', the mobile station shall enter the
18 *System Determination Substate* of the *Mobile Station Initialization State* with an
19 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
20 redirection record received in the message as $REDIRECT_REC_S$ and shall enter
21 the *System Determination Substate* of the *Mobile Station Initialization State* with a
22 redirection indication (see 2.6.1.1).
- 23 17. *SSD Update Message*: If the registration access was initiated due to a user direction
24 to power down, the mobile station shall ignore the message. Otherwise, the mobile
25 station shall respond to the message as specified in 2.3.12.1.5.
- 26 18. *Status Request Message*: The mobile station shall disable the *System Access State*
27 timer and respond to the message. If $P_REV_IN_USE_S$ is less than or equal to three,
28 the mobile station shall respond with a *Status Response Message*. If
29 $P_REV_IN_USE_S$ is greater than three, the mobile station shall respond with an
30 *Extended Status Response Message*. If the message does not specify any
31 qualification information ($QUAL_INFO_TYPE_T$ is equal to '00000000'), the mobile
32 station shall include the requested information records in the response. If the
33 message specifies a band class ($QUAL_INFO_TYPE_T$ is equal to '00000001'), the
34 mobile station shall only include the requested information records for the specified
35 band class ($BAND_CLASS_T$) in the response. If the message specifies a band class
36 and an operating mode ($QUAL_INFO_TYPE_T$ is equal to '00000010'), the mobile
37 station shall only include the requested information records for the specified band
38 class ($BAND_CLASS_T$) and operating mode (OP_MODE_T) in the response.
- 39 If the message specifies a band class or a band class and an operating mode which
40 are not supported by the mobile station, the mobile station shall send a *Mobile*
41 *Station Reject Order* with ORDQ set to '00000110' (message requires a capability
42 that is not supported by the mobile station). If the response to this message

1 exceeds the allowable length, the mobile station shall send a *Mobile Station Reject*
 2 *Order* with ORDQ set to '00001000' (response message would exceed the allowable
 3 length). If the message specifies an information record which is not supported by
 4 the mobile station for the specified band class and operating mode, the mobile
 5 station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001'
 6 (information record is not supported for the specified band class and operating
 7 mode).

8 19. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code
 9 as follows:

- 10 • The mobile station shall store the length of the TMSI zone field by setting
 11 ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r;
- 12 • The mobile station shall store the assigning TMSI zone number by setting the
 13 ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
 14 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- 15 • The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
 16 TMSI_CODE_r.

17 The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p}
 18 to TMSI_EXP_TIME_r. The mobile station shall disable the full-TMSI timer. The
 19 mobile station shall then respond with a *TMSI Assignment Completion Message*
 20 within T_{56m} seconds.

21 20. *User Zone Reject Message*

22 21. *General Page Message* or *Universal Page Message*: If the mobile station receives a
 23 mobile-station-addressed page, the mobile station may determine if there is a page
 24 match (see 2.6.2.3). If a match is declared, the mobile station shall perform the
 25 following:

- 26 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 27 access attempt in progress.
- 28 • The mobile station shall enter the *Page Response Substate*.

29 22. *Extended Channel Assignment Message*: If the DIRECT_CH_ASSIGN_IND_r is
 30 included and is set to '1', the mobile station shall perform the following:

- 31 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 32 access attempt in progress.
- 33 • The mobile station shall process the message as specified in section 2.6.3.3.

34 Otherwise, the mobile station shall ignore this message.

35 23. *Fast Call Setup Order*

- 36 • If ORDQ_r is equal to '00000000', the mobile station shall process the message
 37 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 38 • If ORDQ_r is equal to '00000001', the mobile station shall process the message
 39 as specified in 2.6.12.1.

1 24. General Extension Message: The mobile station shall process this message as
2 specified in section 2.6.18.

3 25. *Any other message*: If the mobile station receives any other message specified in
4 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
5 other messages.

6 2.6.3.7 Mobile Station Message Transmission Substate

7 In this substate, the mobile station sends a *Data Burst Message*, a *Device Information*
8 *Message*, a *Radio Environment Message*, or a *Fast Call Setup Order*. If the base station
9 responds with an authentication request, the mobile station responds in this substate.

10 Support of this substate is optional.

11 If a message received from the base station requires a Layer 2 acknowledgment and does
12 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
13 outstanding (see [4]).

14 If a message received from the base station requires a Layer 2 acknowledgment and also a
15 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

16 When transmitting a response to a message received from the base station, Layer 3 shall
17 indicate to Layer 2 that the type of the message is a response (see [4]).

18 When transmitting an autonomous message (i.e., a message that is not sent as a response
19 to a message received from the base station) other than the *Data Burst Message*, Layer 3
20 shall indicate to Layer 2 that the message is a request other than a registration request or
21 a message transmission request (see [4]).

22 When transmitting an autonomous *Data Burst Message*, Layer 3 shall indicate to Layer 2
23 that the type of the message is a request that is a message transmission (see [4]).

24 The mobile station shall not send any Short Data Burst (see [30], [42]) until the maximum
25 of the system time stored in $RETRY_DELAY_s[100]$ and $RETRY_DELAY_s[101]$.

26 Upon entering the *Mobile Station Message Transmission Substate*, the mobile station shall
27 transmit the message as follows:

- 28 • The mobile station shall exit the *Mobile Station Message Transmission Substate*,
29 shall enter either the *Mobile Station Idle State* or the *System Determination Substate*
30 with an ACCT blocked indication, and should indicate to the user that the message
31 transmission has terminated if all of the following conditions are true:
 - 32 - $P_REV_IN_USE_s$ is greater than six,
 - 33 - ACCT is enabled for the service option number associated with the *Data Burst*
34 *Message*, due to either of the following two conditions:
 - 35 + The service option number associated with the *Data Burst Message* is equal
36 to an ACCT_SO entry in ACCT_SO_LIST, or
 - 37 + The service option group number of the service option associated with the
38 *Data Burst Message* is equal to an ACCT_SO_GRP entry in
39 ACCT_SO_GRP_LIST.

- 1 • If the mobile station entered this substate with a message transmission indication,
2 the mobile station shall transmit the *Data Burst Message* to the base station.
- 3 • If the mobile station entered this substate with a hook status indication, the mobile
4 station shall set the autonomous message timer equal to AUTO_MSG_INTERVAL_s
5 and shall start the timer. The mobile station shall transmit the Device Information
6 Message to the base station, with the RECORD_TYPE field of the message set to
7 00100000 and the Hook Indicator field set to the current hook status.
- 8 • If the mobile station entered this substate with a radio environment report
9 indication, the mobile station shall transmit the *Radio Environment Message* to the
10 base station in assured mode, and increment RER_COUNT upon receiving
11 confirmation of delivery. If, after incrementing, RER_COUNT is equal to
12 RER_MAX_NUM_MSG_s, the mobile station shall set RER_MODE_ENABLED to NO. If
13 RER_MODE_ENABLED is set to NO and TKZ_MODE_PENDING is equal to YES, the
14 mobile station shall perform the following:
- 15 - Set TKZ_MODE_ENABLED to YES and TKZ_MODE_PENDING to NO.
- 16 - If TKZ_SID_s is equal to SID_s, TKZ_NID_s is equal to NID_s, and
17 TKZ_MODE_SUPPORTED_s is equal to '1', initialize the tracking zone list
18 (TKZ_LIST) to contain TKZ_ID_s; otherwise, initialize the tracking zone list to
19 NULL.
- 20 - Enable the tracking zone update timer with an initial value of infinity if
21 TKZ_UPDATE_PRD_s is equal to '1111'; otherwise, the mobile station shall enable
22 the tracking zone update timer with an initial value of $2^{TKZ_UPDATE_PRD_s} + 6$
23 seconds.
- 24 • If the mobile station entered this substate with a tracking zone indication, the
25 mobile station shall perform the following:
- 26 - The mobile station shall transmit the *Radio Environment Message* to the base
27 station.
- 28 - If the mobile station receives confirmation of delivery of *Radio Environment*
29 *Message*, the mobile station shall add TKZ_ID_s to TKZ_LIST. For all entries of
30 TKZ_LIST whose TKZ timer is not active, other than TKZ_ID_s, enable the TKZ
31 timer with the duration specified by TKZ_TIMER_s. If TKZ_LIST contains more
32 than TKZ_LIST_LEN_s + 1 entries, the entry with active TKZ timer with smallest
33 remaining TKZ timer value shall be removed from the list before adding the new
34 entry.
- 35 - The mobile station shall increment TKZ_COUNT upon receiving confirmation of
36 delivery. If, after incrementing, TKZ_COUNT is equal to TKZ_MAX_NUM_MSG_s,
37 the mobile station shall disable the tracking zone update timer and set
38 TKZ_MODE_ENABLED to NO.
- 39 • If the mobile station entered this substate with a fast call setup indication, the
40 mobile station shall transmit the *Fast Call Setup Order* (ORDQ = '00000000') to the
41 base station as follows:

- 1 - If the mobile station requests operation in the reduced slot cycle mode, the
2 mobile station shall set the RSC_MODE_IND field to '1' and perform the
3 following:
4 + Set RSC_MODE_ENABLED to YES.
5 + Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as
6 specified in 2.7.3.6, and store the system time specified by these fields as
7 RSC_END_TIME.
8 + Set the RSCI field as specified in 2.7.3.6 and store it as RSCI_s; if RSCI_s is
9 equal to '0111', set SLOTTED_s to NO.
10 + Set IGNORE_QPCH_s to '1'.
- 11 - Otherwise, the mobile station shall set the RSC_MODE_IND field to '0'.
- 12 • While in this substate, the mobile station shall monitor the Paging Channel or the
13 Forward Common Control Channel. If the mobile station declares a loss of the
14 Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8), the
15 mobile station shall perform the following:
- 16 - If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and
17 PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to
18 the user that the PACA call has been canceled.
- 19 - The mobile station shall declare an access attempt failure and update its
20 registration variables as specified in 2.6.5.5.3.2.
- 21 - The mobile station shall disable its transmitter and enter the *Mobile Station Idle*
22 *State*.

23 If the mobile station receives confirmation of any message sent by the mobile station in this
24 substate, it shall send a response in this substate if required and shall then enter the
25 *Mobile Station Idle State*.

26 If PACA_s is equal to enabled, the mobile station shall set PACA_CANCEL to '1' when the
27 user directs the mobile station to cancel a PACA call.

28 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
29 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
30 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
31 the message has been sent and acknowledged.

32 If Layer 3 receives a message other than message listed below:

- 33 • *Extended Channel Assignment Message* with DIRECT_CH_ASSIGN_IND field
34 included and set to '1'

35 with an indication from Layer 2 that an access attempt for a message being transmitted
36 was not terminated as a result of processing the Layer 2 fields of the received message, the
37 mobile station shall ignore the received message.

38 The following directed messages and orders can be received. If any field value of the
39 message or order is outside its permissible range, the mobile station may send a *Mobile*
40 *Station Reject Order* with ORDQ equal to '00000100' (message field not in valid range).

- 1 1. *Authentication Challenge Message*: The mobile station shall respond to the message
2 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 3 2. *Authentication Request Message*: The mobile station shall process the message and
4 shall respond as specified in 2.3.12.5.2.
- 5 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
6 message as specified in 2.3.12.1.5.
- 7 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
8 specified in 2.6.11.5.
- 9 5. *Data Burst Message*
- 10 6. *Local Control Order*
- 11 7. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and
12 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-
13 permanent memory (LCKRSN_{P_{s-p}} equals the least significant four bits of ORDQ_T).
14 The mobile station should notify the user of the locked condition. The mobile
15 station shall enter the *System Determination Substate* of the *Mobile Station*
16 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System*
17 *Access State* again until after the next mobile station power-up or until it has
18 received an *Unlock Order*. This requirement shall take precedence over any other
19 mobile station requirement specifying entry to the *System Access State*.
- 20 8. *Maintenance Required Order*: The mobile station shall record the reason for the
21 *Maintenance Required Order* in the mobile station's semi-permanent memory
22 (MAINTRSN_{S-p} equals the least significant four bits of ORDQ_T). The mobile station
23 shall remain in the unlocked condition. The mobile station should notify the user of
24 the maintenance required condition.
- 25 9. *PACA Message*: If P_REV_IN_USE_S is less than or equal to four and the mobile
26 station does not support PACA capability, the mobile station shall send a *Mobile*
27 *Station Reject Order* with the ORDQ field set to '00000110' (message requires a
28 capability that is not supported by the mobile station); otherwise, the mobile station
29 shall process the message as follows:
- 30 If PACA_S is equal to disabled, the mobile station shall send a *Mobile Station Reject*
31 *Order* with the ORDQ field set to '00000010' (message not accepted in this state).
32 If PACA_S is equal to enabled, the mobile station shall perform the following:
- 33 • If the purpose of the message is to respond to an *Origination Message*
34 (PURPOSE_T is equal to '0000'), the mobile station shall send a *Mobile Station*
35 *Reject Order* with the ORDQ field set to '00000010' (message not accepted in this
36 state).
 - 37 • If the purpose of the message is to provide the queue position of the PACA call
38 (PURPOSE_T is equal to '0001'), the mobile station shall set the PACA state timer
39 to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of
40 PACA_TIMEOUT_S, should indicate to the user that the PACA call is still queued,
41 and should indicate to the user the current queue position (Q_POS_T) of the call.

- 1 • If the purpose of the message is to instruct the mobile station to re-originate the
2 PACA call (PURPOSE_R is equal to '0010'), Layer 3 shall send an L2-
3 Supervision.Request primitive to Layer 2 to abort any access attempt in
4 progress, shall set the PACA state timer to the duration shown in Table
5 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUT_S, and shall enter
6 the *Mobile Station Origination Attempt Substate* with a PACA response indication.
- 7 • If the purpose of the message is to cancel the PACA call (PURPOSE_R is equal to
8 '0011'), the mobile station shall set PACA_S to disabled and PACA_CANCEL to '0',
9 shall disable the PACA state timer, and should indicate to the user that the
10 PACA call has been canceled.
- 11 10. *Registration Accepted Order*: The mobile station shall perform the procedures as
12 specified in 2.6.11.1.
- 13 11. *Registration Rejected Order*: This order indicates that normal service is not available
14 on this system. The mobile station shall disable the full-TMSI timer. If the received
15 order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set
16 all the bits of the TMSI_CODE_{S-p} to '1'. The mobile station shall enter the *System*
17 *Determination Substate* of the *Mobile Station Initialization State* with a registration
18 rejected indication (see 2.6.1.1).
- 19 12. *Retry Order*: The mobile station shall process the message as follows:
- 20 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
21 RETRY_DELAY_S[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
22 '011', '100', or '101'.
- 23 • If RETRY_TYPE_R is equal to '001', '100', or '101', the mobile station shall perform
24 the following:
- 25 - If RETRY_DELAY_R is equal to '00000000', then the mobile station shall set
26 RETRY_DELAY_S[RETRY_TYPE_R] to 0.
- 27 - If RETRY_DELAY_R is not equal to '00000000', the mobile station shall set
28 RETRY_DELAY_S[RETRY_TYPE_R] as follows:
- 29 + If the most significant bit of the RETRY_DELAY_R is '0', set
30 RETRY_DELAY_UNIT_S to 1000ms. If the most significant bit of the
31 RETRY_DELAY_R is '1', set RETRY_DELAY_UNIT_S to 60000ms.
- 32 + The mobile station shall set RETRY_DELAY_VALUE_S to the seven least
33 significant bits of RETRY_DELAY_R.
- 34 + The mobile station shall store the next system time 80 ms boundary +
35 RETRY_DELAY_VALUE_S × RETRY_DELAY_UNIT_S ms as
36 RETRY_DELAY_S[RETRY_TYPE_R].
- 37 13. *Security Mode Command Message*: The mobile station shall perform the procedures
38 as specified in 2.6.11.4.
- 39 14. *Service Redirection Message*: The mobile station shall process the message as
40 follows:

- 1 • If the mobile station is directed to an unsupported operation mode or band
2 class, the mobile station shall respond with a *Mobile Station Reject Order* with
3 ORDQ equal to '00000110' (message requires a capability that is not supported
4 by the mobile station).
- 5 • If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of
6 TMSI_CODE_{s-p} to '1'. The mobile station shall disable the full-TMSI timer.
- 7 • The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
- 8 • If RECORD_TYPE_r is equal to '00000000', the mobile station shall enter the
9 *System Determination Substate* of the *Mobile Station Initialization State* with an
10 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
11 redirection record received in the message as REDIRECT_REC_s and shall enter
12 the *System Determination Substate* of the *Mobile Station Initialization State* with a
13 redirection indication (see 2.6.1.1).
- 14 15. *SSD Update Message*: The mobile station shall respond to the message as specified
15 in 2.3.12.1.5.
- 16 16. *Status Request Message*: The mobile station shall disable the *System Access State*
17 timer and respond to the message. If P_REV_IN_USE_s is less than or equal to three,
18 the mobile station shall respond with a *Status Response Message*. If
19 P_REV_IN_USE_s is greater than three, the mobile station shall respond with an
20 *Extended Status Response Message*. If the message does not specify any
21 qualification information (QUAL_INFO_TYPE_r is equal to '00000000'), the mobile
22 station shall include the requested information records in the response. If the
23 message specifies a band class (QUAL_INFO_TYPE_r is equal to '00000001'), the
24 mobile station shall only include the requested information records for the specified
25 band class (BAND_CLASS_r) in the response. If the message specifies a band class
26 and an operating mode (QUAL_INFO_TYPE_r is equal to '00000010'), the mobile
27 station shall only include the requested information records for the specified band
28 class (BAND_CLASS_r) and operating mode (OP_MODE_r) in the response.
- 29 If the message specifies a band class or a band class and an operating mode which
30 is not supported by the mobile station, the mobile station shall send a *Mobile*
31 *Station Reject Order* with ORDQ set to '00000110' (message requires a capability
32 that is not supported by the mobile station). If the response to this message
33 exceeds the allowable length, the mobile station shall send a *Mobile Station Reject*
34 *Order* with ORDQ set to '00001000' (response message would exceed the allowable
35 length). If the message specifies an information record which is not supported by
36 the mobile station for the specified band class and operating mode, the mobile
37 station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001'
38 (information record is not supported for the specified band class and operating
39 mode).
- 40 17. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code
41 as follows:

- 1 • The mobile station shall store the length of the TMSI zone field by setting
2 ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r,
- 3 • The mobile station shall store the assigning TMSI zone number by setting the
4 ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
5 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- 6 • The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
7 TMSI_CODE_r.

8 The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIME_{s-p}
9 to TMSI_EXP_TIME_r. The mobile station shall disable the full-TMSI timer. The
10 mobile station shall then respond with a *TMSI Assignment Completion Message*
11 within T_{56m} seconds.

12 18. *General Page Message* or *Universal Page Message*: If the mobile station receives a
13 mobile-station-addressed page, the mobile station may determine whether there is a
14 page match (see 2.6.2.3). If a match is declared, the mobile station shall perform
15 the following:

- 16 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
17 access attempt in progress.
- 18 • If the mobile station entered this substate with a message transmission
19 indication, the mobile station may store the *Data Burst Message* for later
20 transmission.
- 21 • The mobile station shall enter the *Page Response Substate*.

22 19. *Extended Channel Assignment Message*: If the DIRECT_CH_ASSIGN_IND_r is
23 included and is set to '1', the mobile station shall perform the following:

- 24 • If the mobile station entered this substate with a message transmission
25 indication, the mobile station may store the *Data Burst Message* for later
26 transmission.
- 27 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
28 access attempt in progress.
- 29 • The mobile station shall process the message as specified in section 2.6.3.3.

30 Otherwise, the mobile station shall ignore this message.

31 20. *Fast Call Setup Order*:

- 32 • If ORDQ_r is equal to '00000000', the mobile station shall process the message
33 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 34 • If ORDQ_r is equal to '00000001', the mobile station shall process the message
35 as specified in 2.6.12.1.

36 21. *General Extension Message*: The mobile station shall process this message as
37 specified in section 2.6.18.

1 22. *Any other message*: If the mobile station receives any other message specified in
2 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
3 other messages.

4 2.6.3.8 PACA Cancel Substate

5 In this substate, the mobile station sends a *PACA Cancel Message*. If the base station
6 responds with an authentication request, the mobile station responds in this substate.

7 Upon entering the *PACA Cancel Substate*, the mobile station shall transmit the *PACA*
8 *Cancel Message*.

9 If a message received from the base station requires a Layer 2 acknowledgment and does
10 not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is
11 outstanding (see [4]).

12 If a message received from the base station requires a Layer 2 acknowledgment and also a
13 Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

14 When transmitting a response to a message received from the base station, Layer 3 shall
15 indicate to Layer 2 that the type of the message is a response (see [4]).

16 When transmitting an autonomous message (i.e., a message that is not sent as a response
17 to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type
18 of the message is a request other than a registration request or a message transmission
19 request (see [4]).

20 While in this substate, the mobile station shall monitor the Paging Channel or the Forward
21 Common Control Channel. If the mobile station declares a loss of the Paging Channel or
22 the Forward Common Control Channel (see 2.6.3.1.8), it shall declare an access attempt
23 failure and update its registration variables as specified in 2.6.5.5.3.2, disable its
24 transmitter and enter the *Mobile Station Idle State*. If the mobile station receives
25 confirmation of any message sent by the mobile station in this substate, it shall send a
26 response in this substate if required and shall then enter the *Mobile Station Idle State*.

27 If the mobile station is to exit the *System Access State* as a result of processing Layer 3
28 fields of a message requiring an acknowledgment, the mobile station shall exit the *System*
29 *Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
30 the message has been sent and acknowledged.

31 If Layer 3 receives a message other than message listed below:

- 32 • *Extended Channel Assignment Message* with DIRECT_CH_ASSIGN_IND field
33 included and set to '1'

34 with an indication from Layer 2 that an access attempt for a message being transmitted
35 was not terminated as a result of processing the Layer 2 fields of the received message, the
36 mobile station shall ignore the received message.

37 The following directed messages and orders can be received. If any field value of the
38 message or order is outside its permissible range, the mobile station may send a *Mobile*
39 *Station Reject Order* with ORDQ equal to '0000100' (message field not in valid range).

- 1 1. *Authentication Challenge Message*: The mobile station shall respond to the message
2 as specified in 2.3.12.1.4, regardless of the value of AUTH_S.
- 3 2. *Authentication Request Message*: The mobile station shall process the message and
4 shall respond as specified in 2.3.12.5.2.
- 5 3. *Base Station Challenge Confirmation Order*: The mobile station shall respond to the
6 message as specified in 2.3.12.1.5.
- 7 4. *Base Station Reject Order*: The mobile station shall perform the procedures as
8 specified in 2.6.11.5.
- 9 5. *Data Burst Message*
- 10 6. *Local Control Order*
- 11 7. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter and
12 record the reason for the *Lock Until Power-Cycled Order* in the mobile station's semi-
13 permanent memory (LCKRSN_{P_{s-p}} equals the least significant four bits of ORDQ_R).
14 The mobile station should notify the user of the locked condition. The mobile
15 station shall enter the *System Determination Substate* of the *Mobile Station*
16 *Initialization State* with a lock indication (see 2.6.1.1), and shall not enter the *System*
17 *Access State* again until after the next mobile station power-up or until it has
18 received an *Unlock Order*. This requirement shall take precedence over any other
19 mobile station requirement specifying entry to the *System Access State*.
- 20 8. *Maintenance Required Order*: The mobile station shall record the reason for the
21 *Maintenance Required Order* in the mobile station's semi-permanent memory
22 (MAINTRSN_{S-p} equals the least significant four bits of ORDQ_R). The mobile station
23 shall remain in the unlocked condition. The mobile station should notify the user of
24 the maintenance required condition.
- 25 9. *PACA Message*: The mobile station shall send a *Mobile Station Reject Order* with the
26 ORDQ field set to '0000010' (message not accepted in this state).
- 27 10. *Registration Accepted Order*: The mobile station shall perform the procedures as
28 specified in 2.6.11.1.
- 29 11. *Registration Rejected Order*: This order indicates that normal service is not available
30 on this system. The mobile station shall disable the full-TMSI timer. If the received
31 order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set
32 all the bits of the TMSI_CODE_{S-p} to '1'. The mobile station shall enter the *System*
33 *Determination Substate* of the *Mobile Station Initialization State* with a registration
34 rejected indication (see 2.6.1.1).
- 35 12. *Retry Order*: The mobile station shall process the message as follows:
 - 36 • If RETRY_TYPE_R is equal to '000', the mobile station shall set
37 RETRY_DELAY_S[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010',
38 '011', '100', or '101'.
 - 39 • If RETRY_TYPE_R is equal to '001', '100', or '101', the mobile station shall perform
40 the following:

- 1 - If $RETRY_DELAY_r$ is equal to '00000000', then the mobile station shall set
2 $RETRY_DELAY_s[RETRY_TYPE_r]$ to 0.
- 3 - If $RETRY_DELAY_r$ is not equal to '00000000', the mobile station shall set
4 $RETRY_DELAY_s[RETRY_TYPE_r]$ as follows:
- 5 + If the most significant bit of the $RETRY_DELAY_r$ is '0', set
6 $RETRY_DELAY_UNIT_s$ to 1000ms. If the most significant bit of the
7 $RETRY_DELAY_r$ is '1', set $RETRY_DELAY_UNIT_s$ to 60000ms.
- 8 + The mobile station shall set $RETRY_DELAY_VALUE_s$ to the seven least
9 significant bits of $RETRY_DELAY_r$.
- 10 + The mobile station shall store the next system time 80 ms boundary +
11 $RETRY_DELAY_VALUE_s \times RETRY_DELAY_UNIT_s$ ms as
12 $RETRY_DELAY_s[RETRY_TYPE_r]$.
- 13 13. *Security Mode Command Message*: The mobile station shall perform the procedures
14 as specified in 2.6.11.4.
- 15 14. *Service Redirection Message*: The mobile station shall process the message as
16 follows:
- 17 • If the mobile station is directed to an unsupported operation mode or band
18 class, the mobile station shall respond with a *Mobile Station Reject Order* with
19 ORDQ equal to '00000110' (message requires a capability that is not supported
20 by the mobile station).
- 21 • If $DELETE_TMSI_r$ is equal to '1', the mobile station shall set all the bits of
22 $TMSI_CODE_{s-p}$ to '1'. The mobile station shall disable the full-TMSI timer.
- 23 • The mobile station shall set $RETURN_IF_FAIL_s = RETURN_IF_FAIL_r$.
- 24 • If $RECORD_TYPE_r$ is equal to '00000000', the mobile station shall enter the
25 *System Determination Substate* of the *Mobile Station Initialization State* with an
26 NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
27 redirection record received in the message as $REDIRECT_REC_s$ and shall enter
28 the *System Determination Substate* of the *Mobile Station Initialization State* with a
29 redirection indication (see 2.6.1.1).
- 30 15. *SSD Update Message*: The mobile station shall respond to the message as specified
31 in 2.3.12.1.5.
- 32 16. *Status Request Message*: The mobile station shall disable the *System Access State*
33 timer and respond to the message. If $P_REV_IN_USE_s$ is less than or equal to three,
34 the mobile station shall respond with a *Status Response Message*. If
35 $P_REV_IN_USE_s$ is greater than three, the mobile station shall respond with an
36 *Extended Status Response Message*. If the message does not specify any
37 qualification information ($QUAL_INFO_TYPE_r$ is equal to '00000000'), the mobile
38 station shall include the requested information records in the response. If the
39 message specifies a band class ($QUAL_INFO_TYPE_r$ is equal to '00000001'), the
40 mobile station shall only include the requested information records for the specified
41 band class ($BAND_CLASS_r$) in the response. If the message specifies a band class

1 and an operating mode ($QUAL_INFO_TYPE_r$ is equal to '00000010'), the mobile
 2 station shall only include the requested information records for the specified band
 3 class ($BAND_CLASS_r$) and operating mode (OP_MODE_r) in the *Status Response*
 4 *Message*.

5 If the message specifies a band class or a band class and an operating mode which
 6 is not supported by the mobile station, the mobile station shall send a *Mobile*
 7 *Station Reject Order* with ORDQ set to '00000110' (message requires a capability
 8 that is not supported by the mobile station). If the response to this message
 9 exceeds the allowable length, the mobile station shall send a *Mobile Station Reject*
 10 *Order* with ORDQ set to '00001000' (response message would exceed the allowable
 11 length). If the message specifies an information record which is not supported by
 12 the mobile station for the specified band class and operating mode, the mobile
 13 station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001'
 14 (information record is not supported for the specified band class and operating
 15 mode).

16 17. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and code
 17 as follows:

- 18 • The mobile station shall store the length of the TMSI zone field by setting
 19 $ASSIGNING_TMSI_ZONE_LEN_{s-p}$ to $TMSI_ZONE_LEN_r$,
- 20 • The mobile station shall store the assigning TMSI zone number by setting the
 21 $ASSIGNING_TMSI_ZONE_LEN_{s-p}$ least significant octets of
 22 $ASSIGNING_TMSI_ZONE_{s-p}$ to $TMSI_ZONE_r$, and
- 23 • The mobile station shall store the TMSI code by setting $TMSI_CODE_{s-p}$ to
 24 $TMSI_CODE_r$.

25 The mobile station shall set the TMSI expiration time by setting $TMSI_EXP_TIME_{s-p}$
 26 to $TMSI_EXP_TIME_r$. The mobile station shall disable the full-TMSI timer. The
 27 mobile station shall then respond with a *TMSI Assignment Completion Message*
 28 within T_{56m} seconds.

29 18. *General Page Message or Universal Page Message*: If the mobile station receives a
 30 mobile-station-addressed page, the mobile station may determine whether there is a
 31 page match (see 2.6.2.3). If a match is declared, the mobile station shall perform
 32 the following:

- 33 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 34 access attempt in progress.
- 35 • The mobile station shall enter the *Page Response Substate*.

36 19. *Extended Channel Assignment Message*: If the $DIRECT_CH_ASSIGN_IND_r$ is
 37 included and is set to '1', the mobile station shall perform the following:

- 38 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any
 39 access attempt in progress.
- 40 • The mobile station shall process the message as specified in section 2.6.3.3.

1 Otherwise, the mobile station shall ignore this message.

2 20. *Fast Call Setup Order*:

- 3 • If $ORDQ_R$ is equal to '00000000', the mobile station shall process the message
4 and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
- 5 • If $ORDQ_R$ is equal to '00000001', the mobile station shall process the message
6 as specified in 2.6.12.1.

7 21. *General Extension Message*: The mobile station shall process this message as
8 specified in section 2.6.18.

9 22. *Any other message*: If the mobile station receives any other message specified in
10 Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
11 other messages.

12 2.6.4 Mobile Station Control on the Traffic Channel State

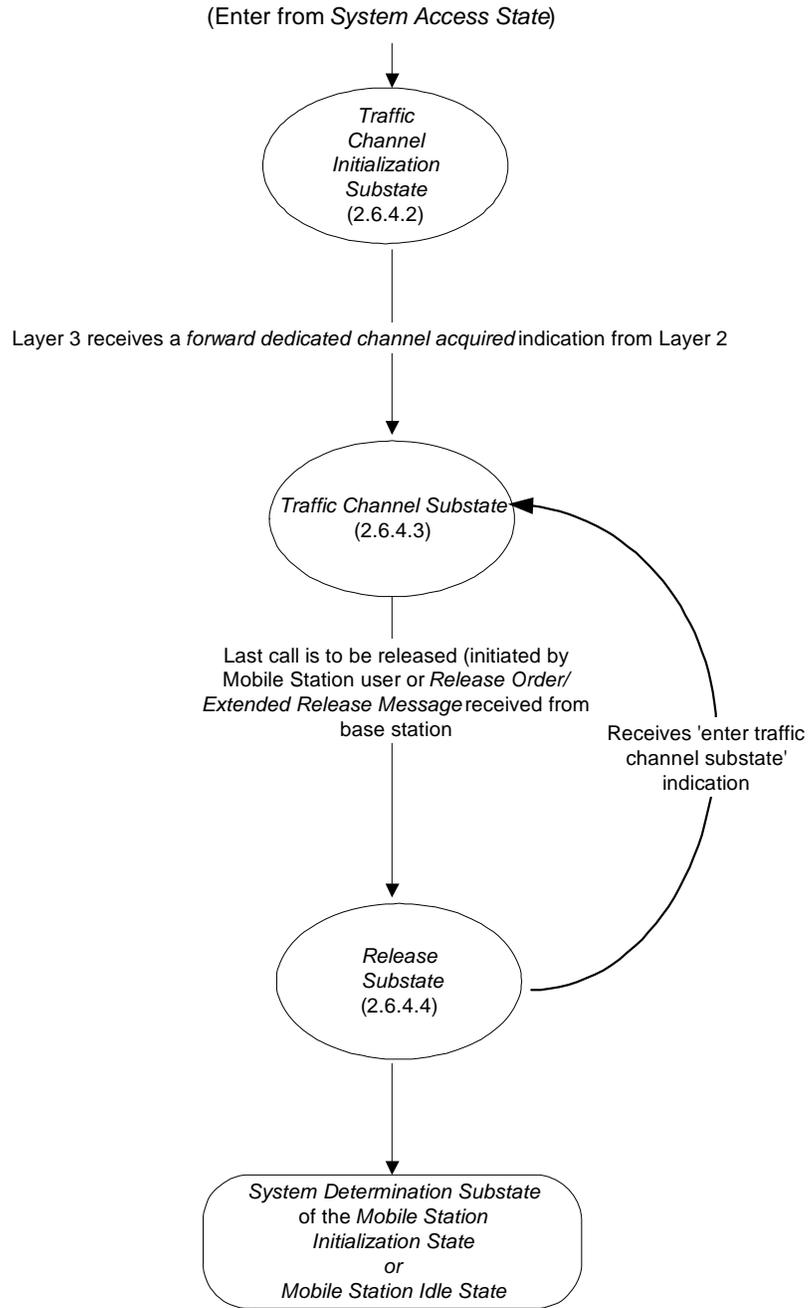
13 In this state, the mobile station communicates with the base station using the Forward and
14 Reverse Traffic Channels.

15 As illustrated in Figure 2.6.4-1, the *Mobile Station Control on the Traffic Channel State*
16 consists of the following substates:

- 17 • *Traffic Channel Initialization Substate* - In this substate, the mobile station verifies
18 that it can receive the Forward Traffic Channel and begins transmitting on the
19 Reverse Traffic Channel.
- 20 • *Traffic Channel Substate* - In this substate, the mobile station exchanges Traffic
21 Channel frames with the base station in accordance with the current service
22 configuration. The mobile station may perform the gating operation of Reverse Pilot
23 Channel. While in this substate, one or more Call Control instances can be
24 activated (see 2.6.10).
- 25 • *Release Substate* - In this substate, the mobile station disconnects the calls and the
26 physical channels.

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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_s as FPC_MODE_s except during the forward
6 Supplemental Channel assignment interval. During the forward Supplemental Channel
7 assignment interval, the mobile station uses FPC_MODE_SCH_s as FPC_MODE_s.

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.⁵⁷

13 The mobile station shall maintain the following frame counters:

- 14 • A counter (TOT_FRAMES_s) for the total number of frames received on the Forward
15 Fundamental Channel.
- 16 • A counter (BAD_FRAMES_s) for the number of bad frames detected on the Forward
17 Fundamental Channel.
- 18 • A counter (DCCH_TOT_FRAMES_s) 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_s) 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_s is equal to '1':

- 26 • A counter (SCH_TOT_FRAMES_s) for the number of frames received on the assigned
27 Supplemental Channel.
- 28 • A counter (SCH_BAD_FRAMES_s) 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 frame
31 or at least one 5ms frame is received from the Forward Fundamental Channel or Dedicated
32 Control Channel:

- 33 • If the received frame is from the Fundamental Channel and if any of the following
34 conditions is true

⁵⁷ Periodic reporting and threshold reporting may be independently enabled or disabled by the base station.

- 1 - RC 11 or RC 12 is not assigned on the forward fundamental channel
2 - or if RC 11 or RC 12 is assigned on the forward fundamental channel and this is
3 a guaranteed transmission frame,
4 then the mobile station shall perform the following:
- 5 - Increment TOT_FRAMES_S by 1.
6 - If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile
7 station shall increment BAD_FRAMES_S by 1.
8 • If the received frame is from the Forward Dedicated Control Channel, the mobile
9 station shall perform the following:
- 10 - Increment DCCH_TOT_FRAMES_S by 1.
11 - If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile
12 station shall increment DCCH_BAD_FRAMES_S by 1.
13 • If either of the following conditions is true:
- 14 - PWR_THRESH_ENABLE_S is equal to '1' and if one of the following conditions is
15 true:
16 + If the mobile station is to perform the primary inner loop estimation on the
17 received Forward Fundamental Channel [FPC_PRI_CHAN_S = '0'], and
18 BAD_FRAMES_S is equal to PWR_REP_THRESH_S or
19 + If the mobile station is to perform the primary inner loop estimation on the
20 received Forward Dedicated Control Channel [FPC_PRI_CHAN_S = '1'], and
21 DCCH_BAD_FRAMES_S is equal to PWR_REP_THRESH_S.
- 22 or
- 23 - PWR_PERIOD_ENABLE_S is equal to '1' and if one of the following conditions is
24 true:
25 + If the mobile station is to perform the primary inner loop estimation on the
26 received Forward Fundamental Channel [FPC_PRI_CHAN_S = '0'], and
27 TOT_FRAMES_S is equal to $\lfloor (2^{(PWR_REP_FRAMES_S/2)} \times 5) \rfloor$, or
28 + If the mobile station is to perform the primary inner loop estimation on the
29 received Forward Dedicated Control Channel [FPC_PRI_CHAN_S = '1'], and
30 DCCH_TOT_FRAMES_S is equal to $\lfloor (2^{(PWR_REP_FRAMES_S/2)} \times 5) \rfloor$,
- 31 then the mobile station shall send a *Power Measurement Report Message* to the base
32 station. The mobile station should send the *Power Measurement Report Message* in
33 unassured mode. After sending a *Power Measurement Report Message*, the mobile
34 station shall set TOT_FRAMES_S, BAD_FRAMES_S to zero, and if the Dedicated
35 Control Channel is assigned, shall set DCCH_TOT_FRAMES_S and
36 DCCH_BAD_FRAMES_S to zero. The mobile station shall not increment the counters
37 for a period of PWR_REP_DELAY_S × 4 frames following the first transmission of the
38 message.

- 1 • If $FPC_PRI_CHAN_S$ is equal to '0' and TOT_FRAMES_S is equal to
2 $\lfloor (2(PWR_REP_FRAMES_S/2) \times 5) \rfloor$, the mobile station shall perform the following:
- 3 - Set TOT_FRAMES_S and BAD_FRAMES_S to zero.
- 4 - Set $DCCH_TOT_FRAMES_S$ and $DCCH_BAD_FRAMES_S$ to zero, if the Dedicated
5 Control Channel is assigned.
- 6 • If $FPC_PRI_CHAN_S$ is equal to '1' and $DCCH_TOT_FRAMES_S$ is equal to
7 $\lfloor (2(PWR_REP_FRAMES_S/2) \times 5) \rfloor$, the mobile station shall set
8 TOT_FRAMES_S , BAD_FRAMES_S , $DCCH_TOT_FRAMES_S$, and $DCCH_BAD_FRAMES_S$
9 to zero.

10 For each received frame from an assigned Supplemental Channel, the mobile station shall
11 perform the following, if $FOR_SCH_FER_REP_S$ is equal to '1':

- 12 • Increment $SCH_TOT_FRAMES_S$ by 1.
- 13 • If the received frame is bad, increment $SCH_BAD_FRAMES_S$ by 1.

14 At the end of a burst on each assigned Supplemental Channel, if $FOR_SCH_FER_REP_S$ is
15 equal to '1', the mobile station shall report the total number of frames received on this
16 Supplemental Channel ($SCH_TOT_FRAMES_S$) and the bad frames detected
17 ($SCH_BAD_FRAMES_S$) with the fields $SCH_PWR_MEAS_FRAMES$ and
18 $SCH_ERRORS_DETECTED$ in the *Power Measurement Report Message* respectively. After
19 sending the *Power Measurement Report Message* for the Supplemental Channel, the mobile
20 station shall set $SCH_TOTAL_FRAMES_S$ and $SCH_BAD_FRAMES_S$ of the reported SCH to
21 zero.

22 If both Forward Fundamental Channel and the Forward Dedicated Control Channel are
23 assigned to the mobile station, the mobile station shall perform the following:

- 24 • The mobile station shall set $FPC_DELTA_SETPT_S$ to $(FPC_FCH_CURR_SETPT_S -$
25 $FPC_DCCH_CURR_SETPT_S)$.
- 26 • For each received frame, if $|FPC_FCH_CURR_SETPT_S - FPC_DCCH_CURR_SETPT_S$
27 $- FPC_DELTA_SETPT_S|$ is equal to or greater than its assigned threshold
28 $FPC_SETPT_THRESH_S$, the mobile station shall send the *Outer Loop Report Message*
29 requiring acknowledgment to the base station, and the mobile station shall then set
30 $FPC_DELTA_SETPT_S$ to $(FPC_FCH_CURR_SETPT_S - FPC_DCCH_CURR_SETPT_S)$.

31 For each of the supplemental channels assigned to the mobile station and FPC_MODE_S is
32 set to '000', the mobile station shall perform the following:

- 33 • The mobile station shall set $FPC_DELTA_SCH_SETPT_S$ to
34 $(FPC_FCH_CURR_SETPT_S - FPC_SCH_CURR_SETPT_S)$ if $FPC_PRI_CHAN_S$ is equal to
35 '0'.
- 36 • The mobile station shall set $FPC_DELTA_SCH_SETPT_S$ to
37 $(FPC_DCCH_CURR_SETPT_S - FPC_SCH_CURR_SETPT_S)$ if $FPC_PRI_CHAN_S$ is equal
38 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 $(FPC_FCH_CURR_SETPT_s - FPC_SCH_CURR_SETPT_s)$.
- 7 • For each received frame, if $FPC_PRI_CHAN_s$ is equal to '1' and
 8 $|FPC_DCCH_CURR_SETPT_s - FPC_SCH_CURR_SETPT_s -$
 9 $FPC_DELTA_SCH_SETPT_s|$ is equal to or greater than its assigned threshold
 10 $FPC_SETPT_THRESH_SCH_s$, the mobile station shall send the *Outer Loop Report*
 11 *Message* in assured mode, and the mobile station shall then set
 12 $FPC_DELTA_SCH_SETPT_s$ to $(FPC_DCCH_CURR_SETPT_s -$
 13 $FPC_SCH_CURR_SETPT_s)$.

14 If the Supplemental channels are assigned to the mobile station and FPC_MODE_s is set to
 15 '001', '010', '101', or '110', for each additional Forward Supplemental Channel other than
 16 the Forward Supplemental Channel specified by $FPC_SEC_CHAN_s$, the mobile station shall
 17 perform the following:

- 18 • The mobile station shall set $FPC_DELTA_SCH_SETPT_s$ to
 19 $(FPC_SCH_CURR_SETPT_s[FPC_SEC_CHAN_s] - FPC_SCH_CURR_SETPT_s)$ for the
 20 Supplemental Channel.
- 21 • For each received frame, if $|FPC_SCH_CURR_SETPT_s[FPC_SEC_CHAN_s] -$
 22 $FPC_SCH_CURR_SETPT_s - FPC_DELTA_SCH_SETPT_s|$ is equal to or greater than
 23 its assigned threshold $FPC_SETPT_THRESH_SCH_s$, the mobile station shall send
 24 the *Outer Loop Report Message* in assured mode, and the mobile station shall then
 25 set $FPC_DELTA_SCH_SETPT_s$ to $(FPC_SCH_CURR_SETPT_s[FPC_SEC_CHAN_s] -$
 26 $FPC_SCH_CURR_SETPT_s)$.

27 2.6.4.1.1.1 Forward Traffic Channel Power Control Initialization

28 To initialize Forward Traffic Channel power control, the mobile station shall set
 29 TOT_FRAMES_s , BAD_FRAMES_s , $DCCH_TOT_FRAMES_s$, and $DCCH_BAD_FRAMES_s$ to zero.
 30 The mobile station shall initialize the frame counters $SCH_TOT_FRAMES_s$ and
 31 $SCH_BAD_FRAMES_s$ for each assigned Supplemental Channel to zero. The mobile station
 32 shall initialize $FOR_SCH_FER_REP_s$ to zero.

33 2.6.4.1.1.2 Processing the Power Control Parameters Message

34 The mobile station shall store the following parameters from the *Power Control Parameters*
 35 *Message*:

- 36 • Power control reporting threshold ($PWR_REP_THRESH_s = PWR_REP_THRESH_r$)
 37 • Power control reporting frame count ($PWR_REP_FRAMES_s = PWR_REP_FRAMES_r$)
 38 • Threshold report mode indicator
 39 ($PWR_THRESH_ENABLE_s = PWR_THRESH_ENABLE_r$)

- 1 • Periodic report mode indicator
2 (PWR_PERIOD_ENABLE_S = PWR_PERIOD_ENABLE_T)
- 3 • Power report delay (PWR_REP_DELAY_S = PWR_REP_DELAY_T)

4 The mobile station shall set TOT_FRAMES_S and BAD_FRAMES_S to zero if FCH is assigned.
5 The mobile station shall set DCCH_TOT_FRAMES_S and DCCH_BAD_FRAMES_S 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_T is not supported by the mobile station.
- 13 • If the mobile station does not support Supplemental Channel and FPC_MODE_T is
14 set to the '001', '010', '101', or '110'.
- 15 • If PWR_CNTL_STEP_T 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_T is set to '1' and only the Fundamental Channel is assigned.
- 21 • FPC_PRI_CHAN_T 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_S =
25 PWR_CNTL_STEP_T).
- 26 • If FPC_INCL_T is equal to '1', the mobile station shall perform the following:
 - 27 - The mobile station shall set FPC_MODE_NO_SCH_S = FPC_MODE_T.
 - 28 - The mobile station shall set FPC_MODE_S = FPC_MODE_NO_SCH_S 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_S to FPC_PRI_CHAN_T
 - 31 - If FPC_OLPC_FCH_INCL is equal to '1', the mobile station shall:
 - 32 + Set FPC_FCH_FER_S to FPC_FCH_FER_T.
 - 33 + If FPC_FCH_MIN_SETPT_T is not equal to '11111111', set
34 FPC_FCH_MIN_SETPT_S to FPC_FCH_MIN_SETPT_T; otherwise, set
35 FPC_FCH_MIN_SETPT_S to FPC_FCH_CURR_SETPT_S.

- 1 + If FPC_FCH_MAX_SETPT_T is not equal to '11111111', set
2 FPC_FCH_MAX_SETPT_S to FPC_FCH_MAX_SETPT_T; otherwise, set
3 FPC_FCH_MAX_SETPT_S to FPC_FCH_CURR_SETPT_S.
- 4 - If FPC_OLPC_DCCH_INCL is equal to '1', the mobile station shall:
- 5 + Set FPC_DCCH_FER_S to FPC_DCCH_FER_T.
- 6 + If FPC_DCCH_MIN_SETPT_T is not equal to '11111111', set
7 FPC_DCCH_MIN_SETPT_S to FPC_DCCH_MIN_SETPT_T; otherwise, set
8 FPC_DCCH_MIN_SETPT_S to FPC_DCCH_CURR_SETPT_S.
- 9 + If FPC_DCCH_MAX_SETPT_T is not equal to '11111111', set
10 FPC_DCCH_MAX_SETPT_S to FPC_DCCH_MAX_SETPT_T; otherwise, set
11 FPC_DCCH_MAX_SETPT_S to FPC_DCCH_CURR_SETPT_S.
- 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_S to FPC_SEC_CHAN_T.
- 15 + Set FPC_BCMC_CHAN_S to FPC_BCMC_CHAN_T.
- 16 - If NUM_SUP_T is not equal to '00', for each Supplemental Channel included in the
17 message, the mobile station shall:
- 18 + Set SCH_ID_S to SCH_ID_T.
- 19 + Set FPC_SCH_FER_S[SCH_ID_S] to FPC_SCH_FER_T.
- 20 + If FPC_SCH_MIN_SETPT_T is not equal to '11111111', set
21 FPC_SCH_MIN_SETPT_S[SCH_ID_S] to FPC_SCH_MIN_SETPT_T; otherwise, set
22 FPC_SCH_MIN_SETPT_S[SCH_ID_S] to FPC_SCH_CURR_SETPT_S.
- 23 + If FPC_SCH_MAX_SETPT_T is not equal to '11111111', set
24 FPC_SCH_MAX_SETPT_S[SCH_ID_S] to FPC_SCH_MAX_SETPT_T; otherwise, set
25 FPC_SCH_MAX_SETPT_S[SCH_ID_S] to FPC_SCH_CURR_SETPT_S.
- 26 - If FPC_THRESH_INCL is equal to '1', the mobile station shall set
27 FPC_SETPT_THRESH_S to FPC_SETPT_THRESH_T.
- 28 - If FPC_THRESH_SCH_INCL is equal to '1', the mobile station shall set
29 FPC_SETPT_THRESH_SCH_S to FPC_SETPT_THRESH_SCH_T.
- 30 • If RPC_INCL_T 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 an
38 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_INCLT` is equal to '1', the mobile station shall set
22 `REV_SPICH_EP_SIZES` to `REV_SPICH_EP_SIZET+1`.
- 23 + If `REV_PDCH_PARAMS_INCLT` is equal to '1', the mobile station shall set
24 `REV_PDCH_NUM_ARQ_ROUNDS_NORMALS` to
25 `REV_PDCH_NUM_ARQ_ROUNDS_NORMALT+1`, and
26 `REV_PDCH_NUM_ARQ_ROUNDS_BOOSTS` to
27 `REV_PDCH_NUM_ARQ_ROUNDS_BOOSTT+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_INDT`.
- 33 • If `REV_CQICH_RATE_CHANGE_INCLT` is equal to '1', the mobile station shall set
34 `REV_CQICH_REPSS` to `REV_CQICH_REPST`. In addition, if
35 `RL_CQICH_ATT_ADJ_GAIN_INCLT` is equal to '1', the mobile station shall update the
36 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).
- 39 • If `SWITCHING_PARAMS_INCLT` is included and equal to '1', the mobile station shall
40 set `NUM_SOFT_SWITCHING_FRAMESS` to `NUM_SOFT_SWITCHING_FRAMEST + 1`,

- 1 and, NUM_SOFTER_SWITCHING_FRAMES_s to
2 NUM_SOFTER_SWITCHING_FRAMES_r + 1.
- 3 • If CHM_SWITCHING_PARMES_INCL is included and equal to '1', the mobile station
4 shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
5 NUM_SOFT_SWITCHING_FRAMES_CHM_r + 1, and
6 NUM_SOFTER_SWITCHING_FRAMES_CHM_s to
7 NUM_SOFTER_SWITCHING_FRAMES_CHM_r + 1.
 - 8 • If CHM_SWITCHING_PARMES_INCL is included and equal to '0', the mobile station
9 shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to
10 NUM_SOFT_SWITCHING_FRAMES_r + 1, and
11 NUM_SOFTER_SWITCHING_FRAMES_CHM_s to
12 NUM_SOFTER_SWITCHING_FRAMES_r + 1.
 - 13 • If REV_ACKCH_RATE_CHANGE_INCL_r is equal to '1', the mobile station shall set
14 REV_ACKCH_REPS_s to REV_ACKCH_REPS_r.
 - 15 • If REV_PDCH_MAX_PARMES_INCL_r is equal to '1', the base station shall set
16 REV_PDCH_MAX_AUTO_TPR_s to REV_PDCH_MAX_AUTO_TPR_r, and
17 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s to
18 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_r+1.
 - 19 • If REV_PDCH_PARMES_INCL_r is equal to '1', the mobile station shall set
20 REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s to
21 REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_r+1, and
22 REV_PDCH_NUM_ARQ_ROUNDS_BOOST_s to
23 REV_PDCH_NUM_ARQ_ROUNDS_BOOST_r+1.
- 24
25

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

1 Traffic Channel as follows:

- 2 • Sends null traffic on the Reverse Fundamental Channel, if the Fundamental
3 Channel is present.
- 4 • Sends signaling traffic on the Reverse Traffic Channel where r-dsch is mapped
5 to.

6 Associated with each service option connection are a service option, a Forward
7 Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service
8 option connection reference. The associated service option formally defines the way
9 in which traffic bits are processed by the mobile station and base station. The
10 associated Forward and Reverse Traffic Channel traffic types specify the types of
11 traffic used to support the service option. A service option can require the use of a
12 particular type of traffic, such as primary or secondary, or it can accept more than
13 one traffic type. A service option can be one-way, in which case it can be supported
14 on the Forward Traffic Channel only or the Reverse Traffic Channel only.

15 Alternatively, a service option can be two-way, in which case it can be supported on
16 the Forward and Reverse Traffic Channels simultaneously. Connected service
17 options can also invoke operation on Supplemental Code Channels in either one or
18 both of the Forward and Reverse Traffic Channels by negotiating a multiplex option
19 that supports operation on Supplemental Code Channels (see [3] for Multiplex
20 options applicable to Supplemental Code Channels), and by using the appropriate
21 Supplemental Code Channel related messages (i.e., the *Supplemental Channel*
22 *Request Message*, the *Supplemental Channel Assignment Message*, and the *General*
23 *Handoff Direction Message*). After Supplemental Code Channels have been assigned
24 by the base station, the connected service option can transmit primary and/or
25 secondary traffic on Supplemental Code Channels. Connected service options can
26 also invoke operation on Supplemental Channels in either one or both of the
27 Forward and Reverse Traffic Channels by negotiating a multiplex option that
28 supports operation on Supplemental Channels (see [3] for Multiplex Options
29 applicable to Supplemental Channel) and by using the appropriate Supplemental
30 Channel related messages (i.e., the *Supplemental Channel Request Mini Message*, the
31 *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental*
32 *Channel Assignment Mini Message*, the *Reverse Supplemental Channel Assignment*
33 *Mini Message*, and the *Universal Handoff Direction Message*). After Supplemental
34 Channels have been assigned by the base station, the connected service option can
35 transmit primary and/or secondary traffic on Supplemental Channels. The
36 associated service option connection reference provides a means for uniquely
37 identifying the service option connection. The reference serves to resolve ambiguity
38 when there are multiple service option connections in use.

39 The non-negotiable service configuration parameters are sent from the base station to the
40 mobile stations only, and consists of the following:

- 41 1. *Reverse Pilot Gating Rate*: This controls the way in which the reverse pilot is gated
42 on the Reverse Pilot Channel. The base station specifies the reverse pilot gating
43 rate to be used in the *Service Connect Message*, the *General Handoff Direction*
44 *Message*, and the *Universal Handoff Direction Message*.

- 1 2. *Forward and Reverse Power Control Parameters:* These consist of forward power
2 control operation mode, outer loop power control parameters (e.g. target frame error
3 rate, minimum E_b/N_t setpoint, and maximum E_b/N_t setpoint) for the Forward
4 Fundamental Channel and Forward Dedicated Control Channel, and Power Control
5 Subchannel indicator which indicates where the mobile station is to perform the
6 primary inner loop estimation and the base station is to multiplex the Power Control
7 Subchannel.
- 8 3. *Logical to Physical Mapping:* This is a table of logical to physical mapping entries,
9 consisting of service reference identifier, logical resource, physical resource, forward
10 flag, reverse flag, and priority.

11 The mobile station can request a default service configuration associated with a service
12 option at call origination, and can request new service configurations during Traffic
13 Channel operation. A requested service configuration can differ greatly from its
14 predecessor or can be very similar. For example, the mobile station can request a service
15 configuration in which all of the service option connections are different from those of the
16 existing configuration; or the mobile station can request a service configuration in which
17 the existing service option connections are maintained with only minor changes, such as a
18 different set of transmission rates or a different mapping of service option connections to
19 Forward and Reverse Traffic Channel traffic types.

20 If the mobile station requests a service configuration that is acceptable to the base station,
21 they both begin using the new service configuration. If the mobile station requests a
22 service configuration that is not acceptable to the base station, the base station can reject
23 the requested service configuration or propose an alternative service configuration. If the
24 base station proposes an alternative service configuration, the mobile station can accept or
25 reject the base station's proposed service configuration, or propose yet another service
26 configuration. This process, called service negotiation, ends when the mobile station and
27 the base station find a mutually acceptable service configuration, or when either the mobile
28 station or the base station rejects a service configuration proposed by the other.

29 It is also possible for the base station to request a default service configuration associated
30 with a service option when paging the mobile station and to request new service
31 configurations during Traffic Channel operation. The service negotiation proceeds as
32 described above, but with the roles of the mobile station and base station reversed.

33 For CDMA mode operation in Band Class 0, the mobile station and base station can also
34 use an alternative method for negotiating a service configuration known as service option
35 negotiation. Service option negotiation is similar to service negotiation, but offers less
36 flexibility for specifying the attributes of the service configuration. During service option
37 negotiation, the base station or the mobile station specifies only which service option is to
38 be used. There is no facility for explicitly specifying the multiplex options, traffic types or
39 transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction
40 with the service option. Instead, implicit service configuration attributes are assumed. In
41 particular, the Forward and Reverse multiplex options and transmission rates are assumed
42 to be the default multiplex options and transmission rates associated with the requested
43 service option, and the traffic type for both the Forward and Reverse Traffic Channels is

1 assumed to be primary traffic; furthermore, a service configuration established using
2 service option negotiation is restricted to having only a single service option connection.

3 At mobile station origination and termination, the type of negotiation to use, either service
4 negotiation or service option negotiation, is indicated in the *Channel Assignment Message*.
5 Service negotiation is always used after the mobile station receives an *Extended Channel*
6 *Assignment Message*. If a CDMA-to-CDMA hard handoff occurs during the call, the type of
7 negotiation to use following the handoff is indicated in the *Extended Handoff Direction*
8 *Message*, the *General Handoff Direction Message*, or the *Universal Handoff Direction*
9 *Message*.

10 For CDMA mode operation in band classes other than Band Class 0, only service
11 negotiation is to be used.

12 The following messages are used to support service negotiation:

- 13 1. *Service Request Message*: The mobile station can use this message to propose a
14 service configuration, or to accept or reject a service configuration proposed in a
15 *Service Response Message*. The base station can use this message to propose a
16 service configuration, or to reject a service configuration proposed in a *Service*
17 *Response Message*.
- 18 2. *Service Response Message*: The mobile station can use this message to accept or
19 reject a service configuration proposed in a *Service Request Message*, or to propose
20 an alternative service configuration. The base station can use this message to reject
21 a service configuration proposed in a *Service Request Message*, or to propose an
22 alternative service configuration.
- 23 3. *Service Connect Message*: The base station can use this message to accept a service
24 configuration proposed in a *Service Request Message* or *Service Response Message*,
25 and to instruct the mobile station to begin using the service configuration.
- 26 4. *Service Connect Completion Message*: The mobile station can use this message to
27 acknowledge the transition to a new service configuration.
- 28 5. *Service Option Control Message*: The mobile station and base station can use this
29 message to invoke service-option-specific functions.
- 30 6. *Extended Channel Assignment Message*: The base station can use this message to
31 accept or reject the initial service configuration proposed by the mobile station in an
32 *Origination Message* or a *Page Response Message*.

33 The following messages are used to support service option negotiation:

- 34 1. *Service Option Request Order*: The mobile station and base station can use this
35 message either to request a service option or to suggest an alternative service
36 option.
- 37 2. *Service Option Response Order*: The mobile station and base station can use this
38 message to accept or to reject a service option request.
- 39 3. *Service Option Control Order*: The mobile station and base station can use this
40 message to invoke service option specific functions.

1 The following messages are used to support both service negotiation and service option
2 negotiation:

- 3 1. *Origination Message*: The mobile station can use this message to propose an initial
4 service configuration.
- 5 2. *Channel Assignment Message*: The base station can use this message to accept or
6 to reject the initial service configuration proposed by the mobile station in an
7 *Origination Message* or a *Page Response Message* and to indicate which type of
8 negotiation, either service negotiation or service option negotiation, is to be used
9 during the call.
- 10 3. *Extended Handoff Direction Message*: The base station can use this message to
11 indicate which type of negotiation, either service negotiation or service option
12 negotiation, is to be used following a CDMA-to-CDMA hard handoff.
- 13 4. *General Handoff Direction Message*: The base station can use this message to
14 indicate which type of negotiation, either service negotiation or service option
15 negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base
16 station can use this message to accept a service configuration proposed in a *Service*
17 *Request Message* or *Service Response Message*. The base station can also use this
18 message to instruct the mobile station to begin using the service configuration.
- 19 5. *General Page Message* or *Universal Page Message*: The base station can use a
20 mobile-station-addressed page in a *General Page Message* or in a *Universal Page*
21 *Message* to propose an initial service configuration.
- 22 6. *Page Response Message*: The mobile station can use this message to accept or to
23 reject the initial service configuration proposed by the base station in a mobile-
24 station-addressed page, or to propose an alternative initial service configuration.
- 25 7. *Status Request Message*: The base station can use this message to request service
26 capability information from the mobile station.
- 27 8. *Status Response Message*: The mobile station can use this message to return the
28 service capability information requested by the base station in a *Status Request*
29 *Message*.
- 30 9. *Extended Status Response Message*: The mobile station can use this message to
31 return the service capability information requested by the base station in a *Status*
32 *Request Message*.
- 33 10. *Universal Handoff Direction Message*: The base station can use this message to
34 indicate which type of negotiation, either service negotiation or service option
35 negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base
36 station can use this message to accept a service configuration proposed in a *Service*
37 *Request Message* or *Service Response Message*. The base station can also use this
38 message to instruct the mobile station to begin using the service configuration.
- 39 11. *General Extension Message*: The mobile station shall process this message as
40 specified in section 2.6.18.

1 2.6.4.1.2.1 Use of Variables

2 2.6.4.1.2.1.1 Maintaining the Service Request Sequence Number

3 The mobile station shall maintain a service request sequence number variable,
4 $SERV_REQ_NUM_S$ for use with service negotiation. Upon entering the *Mobile Station*
5 *Control On the Traffic Channel State*, the mobile station shall set $SERV_REQ_NUM_S$ to 0.

6 Each time the mobile station sends a new *Service Request Message*, it shall set the
7 $SERV_REQ_SEQ$ field of the message to the current value of $SERV_REQ_NUM_S$, and shall
8 then set $SERV_REQ_NUM_S$ equal to $(SERV_REQ_NUM_S + 1)$ modulo 8.

9 2.6.4.1.2.1.2 Maintaining the Service Negotiation Indicator Variable

10 The mobile station shall maintain a service negotiation indicator variable, $SERV_NEG_S$, to
11 indicate which type of negotiation to use, either service negotiation or service option
12 negotiation. The mobile station shall set $SERV_NEG_S$ to enabled whenever service
13 negotiation is to be used, and shall set $SERV_NEG_S$ to disabled whenever service option
14 negotiation is to be used. The precise rules for setting $SERV_NEG_S$ are specified in 2.6.4.2
15 and 2.6.6.2.5.1.

16 For CDMA operation in band classes other than Band Class 0, the mobile station shall set
17 $SERV_NEG_S$ to enabled.

18 2.6.4.1.2.1.3 Maintaining the Service Option Request Number

19 The mobile station shall maintain a service option request number variable, SO_REQ_S , for
20 use with service option negotiation. The mobile station shall set SO_REQ_S to a special
21 value, NULL, if the mobile station does not have an outstanding service option request. If
22 the mobile station has an outstanding service option request, the mobile station shall set
23 SO_REQ_S to the number of the service option associated with the outstanding request.

24 2.6.4.1.2.1.4 Stored Service Configuration and Reconnection

25 This section provides an overview of how the mobile station and the base station may store
26 the service configuration and how the stored service configuration may be restored upon
27 re-establishing dedicated channels.

28 Upon establishing a call and entering the *Mobile Station Control on the Traffic Channel State*,
29 service negotiation procedures are performed as specified in 2.6.4.1.2.2 to establish a
30 mutually acceptable service configuration between the mobile station and the base station.
31 The service configuration consists of parameters specified via the Service Configuration
32 information record (see 3.7.5.7) and Non-Negotiable Service Configuration information
33 record (see 3.7.5.20). The mobile station and the base station may store the established
34 service configuration. This is done so that when the call is re-established, the stored service
35 configuration may be restored and without performing the service negotiation procedures.
36 In order to ensure that the service configuration restored at the mobile station and the base
37 station are identical (that is, the values of the service configuration parameters are
38 identical), a service configuration synchronization identifier (called $SYNC_ID$) is associated
39 with each stored service configuration. $SYNC_ID$ is a variable length identifier assigned by
40 the base station corresponding to a particular Service Configuration information record and

1 Non-negotiable Service Configuration information record. The SYNC_ID value is used by
 2 the base station to determine whether these two information records may be omitted from
 3 the *Service Connect Message*.

4 When P_REV_IN_USE_s is less than or equal to six, there is no requirement on storing the
 5 established service configuration for future use. In this case, when a call is re-established
 6 and the mobile station enters the *Mobile Station Control on the Traffic Channel State*, service
 7 configuration must be re-established by performing service negotiation procedures again.

8 When P_REV_IN_USE_s is greater than six, based on the value of SYNC_ID included by the
 9 mobile station in the *Origination Message*, *Page Response Message*, or *Enhanced Origination*
 10 *Message* the base station may not send the Service Configuration information record and
 11 the Non-negotiable Service Configuration information record over the air and instructs the
 12 mobile station to start using the stored information records corresponding to the SYNC_ID
 13 reported by the mobile station.

14 When P_REV_IN_USE_s is equal to or greater than nine, the mobile station is required to
 15 store minimum of four service configurations. Also, the stored service configuration can be
 16 restored incrementally as well. That is, if N service option connections are contained in the
 17 stored service configuration, then the mobile station can request to restore one of these
 18 service option connections upon establishing dedicated channels. This is achieved via the
 19 SR_ID field of the *Origination Message* or *Reconnect Message*. Once operating on the
 20 dedicated channels, the mobile station can request to restore additional service option
 21 connections via the *Enhanced Origination Message*. The base station in turn can grant the
 22 mobile station request via *Extended Channel Assignment Message*, *Service Connect*
 23 *Message*, or *Call Assignment Message*. If the base station uses *Extended Channel*
 24 *Assignment Message* to grant the mobile station request, then the base station is not
 25 required to send a *Service Connect Message*. During traffic channel operation, service
 26 option connections are to be restored only from the SYNC_ID that is currently in use (if
 27 any).

28 When P_REV_IN_USE_s is equal to or greater than 11, the base station can autonomously
 29 order the mobile station to restore a stored service configuration via the *Extended Channel*
 30 *Assignment Message* or *Service Connect Message* even when the mobile station has not
 31 requested to restore a service configuration, or when the mobile station has requested to
 32 restore a different service configuration. Additionally, the base station can signal the
 33 SYNC_ID value corresponding to the currently used service configuration using the
 34 *Universal Handoff Direction Message*.

35 2.6.4.1.2.2 Service Subfunctions

36 As illustrated in Figure 2.6.4.1.2.2-1, the mobile station supports service configuration and
 37 negotiation by performing the following set of service subfunctions:

- 38 • *Normal Service Subfunction* - While this subfunction is active, the mobile station
 39 processes service configuration requests from the user and from the base station.
- 40 • *Waiting for Service Request Message Subfunction* - While this subfunction is active,
 41 the mobile station waits to receive a *Service Request Message*.

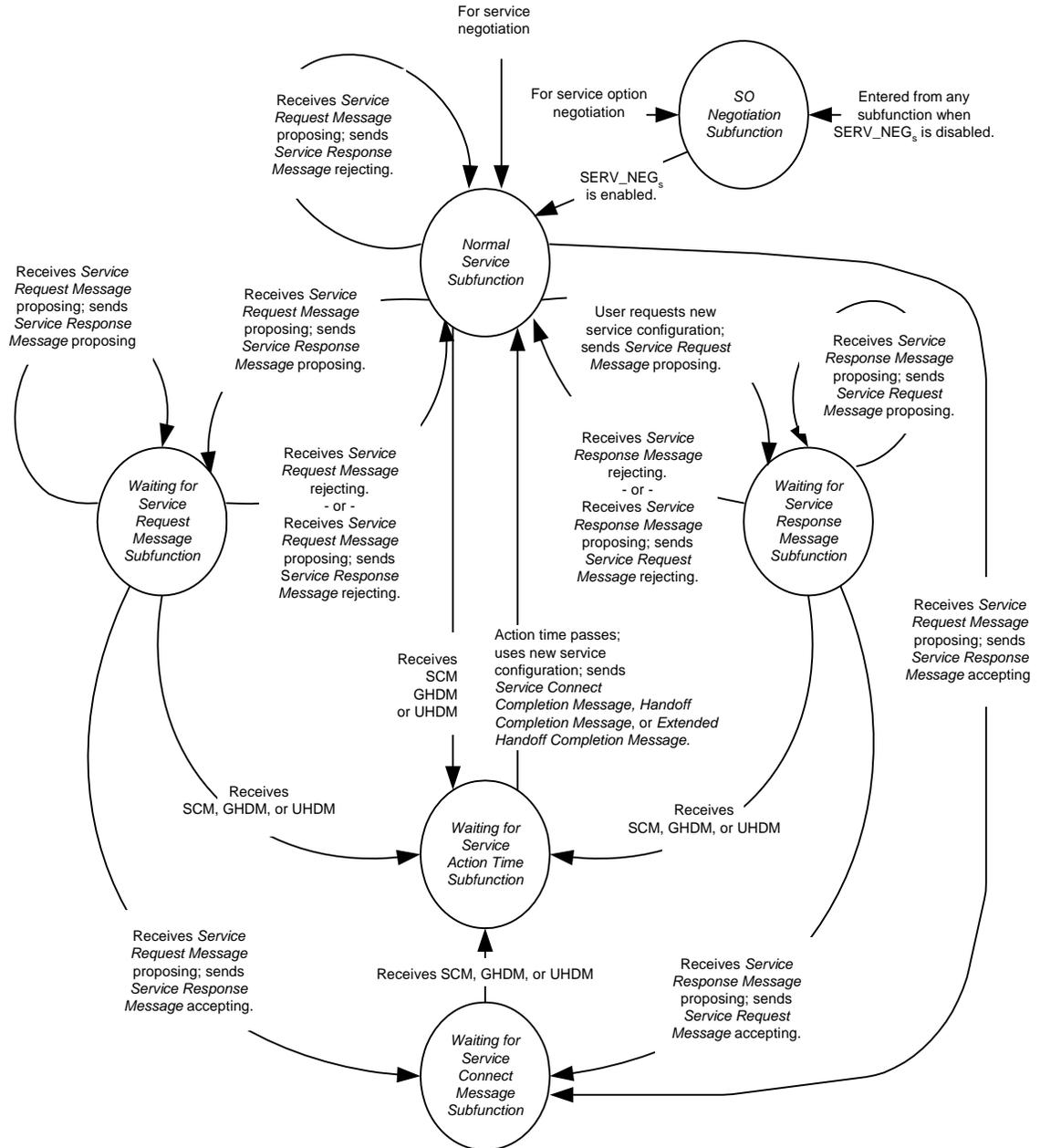
- 1 • *Waiting for Service Response Message Subfunction* - While this subfunction is active,
2 the mobile station waits to receive a *Service Response Message*.
- 3 • *Waiting for Service Connect Message Subfunction* - While this subfunction is active,
4 the mobile station waits to receive a *Service Connect Message*, a *General Handoff*
5 *Direction Message*, or a *Universal Handoff Direction Message* containing a service
6 configuration record.
- 7 • *Waiting for Service Action Time Subfunction* - While this subfunction is active, the
8 mobile station waits for the action time associated with a new service configuration
9 and then sends a *Service Connect Completion Message*, a *Handoff Completion*
10 *Message*, or an *Extended Handoff Completion Message*.
- 11 • *SO Negotiation Subfunction* - While this subfunction is active, the mobile station
12 supports service option negotiation with the base station. This subfunction is only
13 used while operating in Band Class 0.

14 The *SO Negotiation Subfunction* supports service option negotiation. All of the other service
15 subfunctions support service negotiation.

16 At any given time during Traffic Channel operation, only one of the service subfunctions is
17 active. For example, when the mobile station first enters the *Traffic Channel Initialization*
18 *Substate* of the *Mobile Station Control on the Traffic Channel State*, the *Normal Service*
19 *Subfunction*, the *Waiting for Service Connect Message Subfunction* or the *SO Negotiation*
20 *Subfunction* is active. Each of the other service subfunctions may become active in
21 response to various events which occur during the Traffic Channel substates. Typically,
22 the mobile station processes events pertaining to service configuration and negotiation in
23 accordance with the requirements for the active service subfunction, however, some Traffic
24 Channel substates do not allow for the processing of certain events pertaining to service
25 configuration and negotiation, or specify requirements for processing such events which
26 supersede the requirements of the active service subfunction.

27

28



- 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.

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Figure 2.6.4.1.2.2-1. Mobile Station Service Subfunctions

1 2.6.4.1.2.2.1 Normal Service Subfunction

2 While this subfunction is active, the mobile station processes service configuration
3 requests from the user and from the base station.

4 While the *Normal Service Subfunction* is active, the mobile station shall perform the
5 following:

- 6 • The mobile station shall process Forward and Reverse Traffic Channel frames in
7 accordance with the current service configuration. The mobile station shall discard
8 any Forward Traffic Channel frame which has a format that is not supported by the
9 mobile station. The mobile station may discard any type of Forward Traffic Channel
10 traffic that is not signaling traffic and is not part of the current service
11 configuration.
- 12 • To initiate service negotiation for a new service configuration, the mobile station
13 shall send a *Service Request Message* to propose the new service configuration. The
14 mobile station shall activate the *Waiting for Service Response Message Subfunction*.
- 15 • For any service option connection that is part of the current service configuration,
16 the mobile station may send a *Service Option Control Message* to invoke a service
17 option specific function in accordance with the requirements for the associated
18 service option.
- 19 • If $SERV_NEG_s$ changes from enabled to disabled (see 2.6.6.2.5.1), the mobile
20 station shall activate the *SO Negotiation Subfunction*.
- 21 • If the mobile station receives one of the following service negotiation messages, the
22 mobile station shall process the message according to the specified requirements:
 - 23 1. *Service Connect Message*: The mobile station shall perform the following:
 - 24 - If $USE_OLD_SERV_CONFIG_r$ equals '01' or '10', and if the mobile station
25 entered the *Mobile Station Control on the Traffic Channel State* due to
26 receiving an *Extended Channel Assignment Message* with
27 $GRANTED_MODE$ set to '11', the mobile station shall send a *Mobile*
28 *Station Reject Order* with the $ORDQ$ field set to '00010100' (stored
29 configuration already restored at channel assignment) within T_{56m}
30 seconds and shall not perform the rest of the procedures below.
 - 31 - If $USE_OLD_SERV_CONFIG_r$ equals '00', the mobile station shall
32 perform the following: If the mobile station accepts the service
33 configuration specified in the message, the mobile station shall activate
34 the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
35 station shall send a *Mobile Station Reject Order* ($ORDQ = '00000111'$)
36 within T_{56m} seconds.
 - 37 - If $USE_OLD_SERV_CONFIG_r$ equals '01', the mobile station shall
38 perform the following: If the mobile station accepts the service
39 configuration currently stored at the mobile station, the mobile station
40 shall activate the *Waiting for Service Action Time Subfunction*; otherwise,

- 1 the mobile station shall send a Mobile Station Reject Order (ORDQ =
2 '00000111') within T_{56m} seconds.
- 3 - If USE_OLD_SERV_CONFIG_r equals '10', the mobile station shall
4 perform the following: If the mobile station accepts the service
5 configuration resulting from updating the stored service configuration
6 with the service configuration received in this message, the mobile
7 station shall activate the Waiting for Service Action Time Subfunction;
8 otherwise, the mobile station shall send a Mobile Station Reject Order
9 (ORDQ = '00000111') within T_{56m} seconds.
- 10 - If USE_OLD_SERV_CONFIG_r equals '11', the mobile station shall
11 perform the following: if the mobile station accepts the service
12 configuration resulting from restoring the indicated service option
13 connection records from the stored service configuration and releasing
14 the indicated service option connection records from the current service
15 configuration, the mobile station shall activate the Waiting for Service
16 Action Time Subfunction; otherwise, the mobile station shall send a
17 *Mobile Station Reject Order* (ORDQ = '00000111') within T_{56m} seconds.
- 18 2. *Service Option Control Message*: If the service option connection specified by the
19 message is part of the current service configuration, and the service option
20 specified by the message is the same as the service option associated with the
21 service option connection, the mobile station shall interpret the action time of
22 the message as specified in 2.6.4.1.5, and shall process the message in
23 accordance with the requirements for the service option; otherwise, the mobile
24 station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within
25 T_{56m} seconds.
- 26 3. *Service Request Message*: The mobile station shall process the message as
27 follows:
- 28 - If the purpose of the message is to reject a proposed service configuration,
29 the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
30 '00000010') within T_{56m} seconds.
- 31 - If the purpose of the message is to propose a service configuration, the
32 mobile station shall process the message as follows:
- 33 + If the mobile station accepts the proposed service configuration, the
34 mobile station shall send a *Service Response Message* to accept the
35 proposed service configuration within T_{59m} seconds. The mobile station
36 shall activate the *Waiting for Service Connect Message Subfunction*.
- 37 + If the mobile station does not accept the proposed service configuration
38 and does not have an alternative service configuration to propose, the
39 mobile station shall send a *Service Response Message* to reject the
40 proposed service configuration within T_{59m} seconds.

- 1 + If the mobile station does not accept the proposed service configuration
2 and has an alternative service configuration to propose, the mobile
3 station shall send a *Service Response Message* to propose the alternative
4 service configuration within T_{59m} seconds. The mobile station shall
5 activate the *Waiting for Service Request Message Subfunction*.
- 6 4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject*
7 *Order* (ORDQ = '00000010') within T_{56m} seconds.
- 8 5. *General Handoff Direction Message*: If the SCR_INCLUDED field is included in
9 this message and is set to '1':
10 If the mobile station has not rejected this message, the mobile station shall
11 activate the *Waiting for Service Action Time Subfunction*.
- 12 6. *Universal Handoff Direction Message*: If the SCR_INCLUDED field is included
13 in 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 • If the mobile station receives one of the following service option negotiation
17 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
18 '00000010') within T_{56m} seconds:
19 1. *Service Option Request Order*
20 2. *Service Option Response Order*
21 3. *Service Option Control Order*

22 2.6.4.1.2.2.2 Waiting for Service Request Message Subfunction

23 While this subfunction is active, the mobile station waits to receive a *Service Request*
24 *Message*.

25 Upon activation of the *Waiting for Service Request Message Subfunction*, the mobile station
26 shall set the subfunction timer for T_{68m} seconds.

27 While the *Waiting for Service Request Message Subfunction* is active, the mobile station shall
28 perform the following:

- 29 • If the subfunction timer expires, the mobile station shall activate the *Normal Service*
30 *Subfunction*.
- 31 • The mobile station shall process Forward and Reverse Traffic Channel frames in
32 accordance with the current service configuration. The mobile station shall discard
33 any Forward Traffic Channel frame which has a format that is not supported by the
34 mobile station. The mobile station may discard any type of Forward Traffic Channel
35 traffic that is not signaling traffic and is not part of the current service
36 configuration.
- 37 • The mobile station shall not initiate service negotiation for a new service
38 configuration.

- 1 • For any service option connection that is part of the current service configuration,
2 the mobile station may send a *Service Option Control Message* to invoke a service
3 option specific function in accordance with the requirements for the associated
4 service option.
- 5 • If $SERV_NEG_S$ changes from enabled to disabled (see 2.6.6.2.5.1), the mobile
6 station shall activate the *SO Negotiation Subfunction*.
- 7 • If the mobile station receives one of the following service negotiation messages, the
8 mobile station shall process the message according to the specified requirements:
- 9 1. *Service Connect Message*: The mobile station shall perform the following:
- 10 - If $USE_OLD_SERV_CONFIG_r$ equals '01' or '10', and if the mobile station
11 entered the *Mobile Station Control on the Traffic Channel State* due to
12 receiving an *Extended Channel Assignment Message* with $GRANTED_MODE$
13 set to '11', the mobile station shall send a *Mobile Station Reject Order* with
14 the $ORDQ$ field set to '00010100' (stored configuration already restored at
15 channel assignment) within T_{56m} seconds, and shall activate the *Normal*
16 *Service Subfunction*.
- 17 - If $USE_OLD_SERV_CONFIG_r$ equals '00', the mobile station shall perform
18 the following: If the mobile station accepts the service configuration specified
19 in the message, the mobile station shall activate the *Waiting for Service*
20 *Action Time Subfunction*; otherwise, the mobile station shall send a *Mobile*
21 *Station Reject Order* ($ORDQ = '00000111'$) within T_{56m} seconds and shall
22 activate the *Normal Service Subfunction*.
- 23 - If $USE_OLD_SERV_CONFIG_r$ equals '01', the mobile station shall perform
24 the following: If the mobile station accepts the service configuration
25 currently stored at the mobile station, the mobile station shall activate the
26 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station
27 shall send a *Mobile Station Reject Order* ($ORDQ = '00000111'$) within T_{56m}
28 seconds and shall activate the *Normal Service Subfunction*.
- 29 - If $USE_OLD_SERV_CONFIG_r$ equals '10', the mobile station shall perform
30 the following: If the mobile station accepts the service configuration resulting
31 from updating the stored service configuration with the service configuration
32 received in this message, the mobile station shall activate the *Waiting for*
33 *Service Action Time Subfunction*; otherwise, the mobile station shall send a
34 *Mobile Station Reject Order* ($ORDQ = '00000111'$) within T_{56m} seconds and
35 shall activate the *Normal Service Subfunction*.
- 36 - If $USE_OLD_SERV_CONFIG_r$ equals '11', the mobile station shall perform
37 the following: if the mobile station accepts the service configuration resulting
38 from restoring the indicated service option connection records from the
39 stored service configuration and releasing the indicated service option
40 connection records from the current service configuration, the mobile station
41 shall activate the *Waiting for Service Action Time Subfunction*; otherwise,
42 the mobile station shall send a *Mobile Station Reject Order* ($ORDQ =$

- 1 ‘00000111’) within T_{56m} seconds and shall activate the *Normal Service*
2 *Subfunction*.
- 3 2. *Service Option Control Message*: If the service option connection specified by the
4 message is part of the current service configuration, and the service option
5 specified by the message is the same as the service option associated with the
6 service option connection, the mobile station shall interpret the action time of
7 the message as specified in 2.6.4.1.5, and shall process the message in
8 accordance with the requirements for the service option; otherwise, the mobile
9 station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000111’) within
10 T_{56m} seconds.
- 11 3. *Service Request Message*: The mobile station shall process the message as
12 follows:
- 13 - If the purpose of the message is to reject a proposed service configuration,
14 the mobile station shall activate the *Normal Service Subfunction*.
 - 15 - If the purpose of the message is to propose a service configuration, the
16 mobile station 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_{59m} 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_{59m} 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_{59m} seconds. The mobile station shall
30 reset the subfunction timer for T_{68m} seconds.
- 31 4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject*
32 *Order* (ORDQ = ‘00000010’) within T_{56m} seconds.
- 33 5. *General Handoff Direction Message*: If the SCR_INCLUDED field is included in
34 this message and is set to ‘1’:
35 If the mobile station has not rejected this message, the mobile station shall
36 activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
37 station shall activate the *Normal Service Subfunction*.
- 38 6. *Universal Handoff Direction Message*: If the SCR_INCLUDED field is included in
39 this message and is set to ‘1’:

1 If the mobile station has not rejected this message, the mobile station shall
 2 activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
 3 station shall activate the *Normal Service Subfunction*.

- 4 • If the mobile station receives one of the following service option negotiation
 5 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
 6 ‘00000010’) within T_{56m} seconds:
 - 7 1. *Service Option Request Order*
 - 8 2. *Service Option Response Order*
 - 9 3. *Service Option Control Order*

10 2.6.4.1.2.2.3 Waiting for Service Response Message Subfunction

11 While this subfunction is active, the mobile station waits to receive a *Service Response*
 12 *Message*.

13 Upon activation of the *Waiting for Service Response Message Subfunction*, the mobile station
 14 shall set the subfunction timer for T_{68m} seconds.

15 While the *Waiting for Service Response Message Subfunction* is active, the mobile station
 16 shall perform the following:

- 17 • If the subfunction timer expires, the mobile station shall activate the *Normal Service*
 18 *Subfunction*.
- 19 • The mobile station shall process Forward and Reverse Traffic Channel frames in
 20 accordance with the current service configuration. The mobile station shall discard
 21 any Forward Traffic Channel frame which has a format that is not supported by the
 22 mobile station. The mobile station may discard any type of Forward Traffic Channel
 23 traffic that is not signaling traffic and is not part of the current service
 24 configuration.
- 25 • The mobile station shall not initiate service negotiation for a new service
 26 configuration.
- 27 • For any service option connection that is part of the current service configuration,
 28 the mobile station may send a *Service Option Control Message* to invoke a service
 29 option specific function in accordance with the requirements for the associated
 30 service option.
- 31 • If SERV_NEG_s changes from enabled to disabled (see 2.6.6.2.5.1), the mobile
 32 station shall activate the *SO Negotiation Subfunction*.
- 33 • If the mobile station receives one of the following service negotiation messages, the
 34 mobile station shall process the message according to the specified requirements:
 - 35 1. *Service Connect Message*: The mobile station shall perform the following:
 - 36 - If USE_OLD_SERV_CONFIG_r equals ‘01’ or ‘10’, and if the mobile station
 37 entered the *Mobile Station Control on the Traffic Channel State* due to
 38 receiving an *Extended Channel Assignment Message* with GRANTED_MODE
 39 set to ‘11’, the mobile station shall send a *Mobile Station Reject Order* with

- 1 the ORDQ field set to '00010100' (stored configuration already restored at
 2 channel assignment) within T_{56m} seconds, and shall activate the *Normal*
 3 *Service Subfunction*.
- 4 - If USE_OLD_SERV_CONFIG_r equals '00', the mobile station shall perform
 5 the following: If the mobile station accepts the service configuration specified
 6 in the message, the mobile station shall activate the *Waiting for Service*
 7 *Action Time Subfunction*; otherwise, the mobile station shall send a *Mobile*
 8 *Station Reject Order* (ORDQ = '00000111') within T_{56m} seconds and shall
 9 activate the *Normal Service Subfunction*.
- 10 - If USE_OLD_SERV_CONFIG_r equals '01', the mobile station shall perform
 11 the following: If the mobile station accepts the service configuration
 12 currently stored at the mobile station, the mobile station shall activate the
 13 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station
 14 shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within T_{56m}
 15 seconds and shall activate the *Normal Service Subfunction*.
- 16 - If USE_OLD_SERV_CONFIG_r equals '10', the mobile station shall perform
 17 the following: If the mobile station accepts the service configuration resulting
 18 from updating the stored service configuration with the service configuration
 19 received in this message, the mobile station shall activate the *Waiting for*
 20 *Service Action Time Subfunction*; otherwise, the mobile station shall send a
 21 *Mobile Station Reject Order* (ORDQ = '00000111') within T_{56m} seconds and
 22 shall activate the *Normal Service Subfunction*.
- 23 - If USE_OLD_SERV_CONFIG_r equals '11', the mobile station shall perform
 24 the following: if the mobile station accepts the service configuration resulting
 25 from restoring the indicated service option connection records from the
 26 stored service configuration and releasing the indicated service option
 27 connection records from the current service configuration, the mobile station
 28 shall activate the *Waiting for Service Action Time Subfunction*; otherwise,
 29 the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
 30 '00000111') within T_{56m} seconds and shall activate the *Normal Service*
 31 *Subfunction*.
- 32 2. *Service Option Control Message*: If the service option connection specified by the
 33 message is part of the current service configuration, and the service option
 34 specified by the message is the same as the service option associated with the
 35 service option connection, the mobile station shall interpret the action time of
 36 the message as specified in 2.6.4.1.5, and shall process the message in
 37 accordance with the requirements for the service option; otherwise, the mobile
 38 station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within
 39 T_{56m} seconds.
- 40 3. *Service Request Message*: The mobile station shall process the message as
 41 follows:

- 1 - If the purpose of the message is to reject a proposed service configuration,
2 the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
3 '00000010') within T_{56m} seconds.
- 4 - If the purpose of the message is to propose a service configuration, the
5 mobile station shall discontinue processing the service configuration
6 requested by the user and shall process the message as follows:
7 + If the mobile station accepts the proposed service configuration, the
8 mobile station shall send a *Service Response Message* to accept the
9 proposed service configuration within T_{59m} seconds. The mobile station
10 shall activate the *Waiting for Service Connect Message Subfunction*.
11 + If the mobile station does not accept the proposed service configuration
12 and does not have an alternative service configuration to propose, the
13 mobile station shall send a *Service Response Message* to reject the
14 proposed service configuration within T_{59m} seconds. The mobile station
15 shall activate the *Normal Service Subfunction*.
16 + If the mobile station does not accept the proposed service configuration
17 and has an alternative service configuration to propose, the mobile
18 station shall send a *Service Response Message* to propose the alternative
19 service configuration within T_{59m} seconds. The mobile station shall
20 activate the *Waiting for Service Request Message Subfunction*.
- 21 4. *Service Response Message*: The mobile station shall process the message as
22 follows:
23 - If the service request sequence number (SERV_REQ_SEQ_r) from the message
24 does not match the sequence number of the *Service Request Message* for
25 which the mobile station is expecting a response, the mobile station shall
26 not process the other Layer 3 fields of the message.
27 - If the purpose of the message is to reject the service configuration proposed
28 in the corresponding *Service Request Message*, the mobile station shall
29 activate the *Normal Service Subfunction*. The mobile station may indicate to
30 the user that the requested service configuration has been rejected.
31 - If the purpose of the message is to propose a service configuration, the
32 mobile station shall process the message as follows:
33 + If the mobile station accepts the proposed service configuration, the
34 mobile station shall send a *Service Request Message* to accept the
35 proposed service configuration within T_{59m} seconds. The mobile station
36 shall activate the *Waiting for Service Connect Message Subfunction*.
37 + If the mobile station does not accept the proposed service configuration
38 and does not have an alternative service configuration to propose, the
39 mobile station shall send a *Service Request Message* to reject the
40 proposed service configuration within T_{59m} seconds. The mobile station
41 shall activate the *Normal Service Subfunction*.

- 1 + If the mobile station does not accept the proposed service configuration
2 and has an alternative service configuration to propose, the mobile
3 station shall send a *Service Request Message* to propose the alternative
4 service configuration within T_{59m} seconds. The mobile station shall
5 reset the subfunction timer for T_{68m} seconds.
- 6 5. *General Handoff Direction Message*: If the SCR_INCLUDED field is included in
7 this message and is set to '1':
8 If the mobile station has not rejected this message, the mobile station shall
9 activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
10 station shall activate the *Normal Service Subfunction*.
- 11 6. *Universal Handoff Direction Message*: If the SCR_INCLUDED field is included in
12 this message and is set to '1':
13 If the mobile station has not rejected this message, the mobile station shall
14 activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
15 station shall activate the *Normal Service Subfunction*.
- 16 • If the mobile station receives one of the following service option negotiation
17 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
18 '00000010') within T_{56m} seconds:
- 19 1. *Service Option Request Order*
20 2. *Service Option Response Order*
21 3. *Service Option Control Order*

22 2.6.4.1.2.2.4 Waiting for Service Connect Message Subfunction

23 While this subfunction is active, the mobile station waits to receive a *Service Connect*
24 *Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*
25 containing a service configuration record.

26 Upon activation of the *Waiting for Service Connect Message Subfunction*, the mobile station
27 shall set the subfunction timer for T_{65m} seconds.

28 While the *Waiting for Service Connect Message Subfunction* is active, the mobile station shall
29 perform the following:

- 30 • If the subfunction timer expires, the mobile station shall activate the *Normal Service*
31 *Subfunction*.
- 32 • The mobile station shall process Forward and Reverse Traffic Channel frames in
33 accordance with the current service configuration. The mobile station shall discard
34 any Forward Traffic Channel frame which has a format that is not supported by the
35 mobile station. The mobile station may discard any type of Forward Traffic Channel
36 traffic that is not signaling traffic and is not part of the current service
37 configuration.
- 38 • The mobile station shall not initiate service negotiation for a new service
39 configuration.

- 1 • For any service option connection that is part of the current service configuration,
2 the mobile station may send a *Service Option Control Message* to invoke a service
3 option specific function in accordance with the requirements for the associated
4 service option.
- 5 • If $SERV_NEG_S$ changes from enabled to disabled (see 2.6.6.2.5.1), the mobile
6 station shall activate the *SO Negotiation Subfunction*.
- 7 • If the mobile station receives one of the following service negotiation messages, the
8 mobile station shall process the message according to the specified requirements:
- 9 1. *Service Connect Message*: The mobile station shall perform the following:
- 10 - If $USE_OLD_SERV_CONFIG_r$ equals '01' or '10', and if the mobile station
11 entered the *Mobile Station Control on the Traffic Channel State* due to
12 receiving an *Extended Channel Assignment Message* with $GRANTED_MODE$
13 set to '11', the mobile station shall send a *Mobile Station Reject Order* with
14 the $ORDQ$ field set to '00010100' (stored configuration already restored at
15 channel assignment) within T_{56m} seconds, and shall activate the *Normal*
16 *Service Subfunction*.
- 17 - If $USE_OLD_SERV_CONFIG_r$ equals '00', the mobile station shall perform
18 the following: If the mobile station accepts the service configuration specified
19 in the message, the mobile station shall activate the *Waiting for Service*
20 *Action Time Subfunction*; otherwise, the mobile station shall send a *Mobile*
21 *Station Reject Order* ($ORDQ = '00000111'$) within T_{56m} seconds and shall
22 activate the *Normal Service Subfunction*.
- 23 - If $USE_OLD_SERV_CONFIG_r$ equals '01', the mobile station shall perform
24 the following: If the mobile station accepts the service configuration
25 currently stored at the mobile station, the mobile station shall activate the
26 *Waiting for Service Action Time Subfunction*; otherwise, the mobile station
27 shall send a *Mobile Station Reject Order* ($ORDQ = '00000111'$) within T_{56m}
28 seconds, and shall activate the *Normal Service Subfunction*.
- 29 - If $USE_OLD_SERV_CONFIG_r$ equals '10', the mobile station shall perform
30 the following: If the mobile station accepts the service configuration resulting
31 from updating the stored service configuration with the service configuration
32 received in this message, the mobile station shall activate the *Waiting for*
33 *Service Action Time Subfunction*; otherwise, the mobile station shall send a
34 *Mobile Station Reject Order* ($ORDQ = '00000111'$) within T_{56m} seconds, and
35 shall activate the *Normal Service Subfunction*.
- 36 - If $USE_OLD_SERV_CONFIG_r$ equals '11', the mobile station shall perform
37 the following: if the mobile station accepts the service configuration resulting
38 from restoring the indicated service option connection records from the
39 stored service configuration and releasing the indicated service option
40 connection records from the current service configuration, the mobile station
41 shall activate the *Waiting for Service Action Time Subfunction*; otherwise,
42 the mobile station shall send a *Mobile Station Reject Order* ($ORDQ =$

- 1 ‘00000111’) within T_{56m} seconds, and shall activate the *Normal Service*
2 *Subfunction*.
- 3 2. *Service Option Control Message*: If the service option connection specified by the
4 message is part of the current service configuration, and the service option
5 specified by the message is the same as the service option associated with the
6 service option connection, the mobile station shall interpret the action time of
7 the message as specified in 2.6.4.1.5, and shall process the message in
8 accordance with the requirements for the service option; otherwise, the mobile
9 station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000111’) within
10 T_{56m} seconds.
- 11 3. *Service Request Message*: The mobile station shall process the message as
12 follows:
- 13 - If the purpose of the message is to reject a proposed service configuration,
14 the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
15 ‘00000010’) within T_{56m} seconds.
- 16 - If the purpose of the message is to propose a service configuration, the
17 mobile station shall process the message as follows:
- 18 + If the mobile station accepts the proposed service configuration, the
19 mobile station shall send a *Service Response Message* to accept the
20 proposed service configuration within T_{59m} seconds. The mobile station
21 shall reset the subfunction timer for T_{65m} seconds.
- 22 + If the mobile station does not accept the proposed service configuration
23 and does not have an alternative service configuration to propose, the
24 mobile station shall send a *Service Response Message* to reject the
25 proposed service configuration within T_{59m} seconds. The mobile station
26 shall activate the *Normal Service Subfunction*.
- 27 + If the mobile station does not accept the proposed service configuration
28 and has an alternative service configuration to propose, the mobile
29 station shall send a *Service Response Message* to propose the alternative
30 service configuration within T_{59m} seconds. The mobile station shall
31 activate the *Waiting for Service Request Message Subfunction*.
- 32 4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject*
33 *Order* (ORDQ = ‘00000010’) within T_{56m} seconds.
- 34 5. *General Handoff Direction Message*: If the SCR_INCLUDED field is included in
35 this message and is set to ‘1’:
36 If the mobile station has not rejected this message, the mobile station shall
37 activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile
38 station shall activate the *Normal Service Subfunction*.
- 39 6. *Universal Handoff Direction Message*: If the SCR_INCLUDED field is included in
40 this message and is set to ‘1’:

1 If the mobile station has not rejected this message, the mobile station shall
 2 activate *the Waiting for Service Action Time Subfunction*; otherwise, the mobile
 3 station shall activate the *Normal Service Subfunction*.

- 4 • If the mobile station receives one of the following service option negotiation
 5 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
 6 ‘00000010’) within T_{56m} seconds:
 - 7 1. *Service Option Request Order*
 - 8 2. *Service Option Response Order*
 - 9 3. *Service Option Control Order*

10 2.6.4.1.2.2.5 Waiting for Service Action Time Subfunction

11 While this subfunction is active, the mobile station waits for the action time associated with
 12 a new service configuration. If the action time was specified by a *Service Connect Message*,
 13 the mobile station shall send the *Service Connect Completion Message* at the action time.

14 While the *Waiting for Service Action Time Subfunction* is active, the mobile station shall
 15 perform the following:

- 16 • Prior to the action time associated with the *Service Connect Message*, *General*
 17 *Handoff Direction Message* (containing a service configuration record), or *Universal*
 18 *Handoff Direction Message* (containing a service configuration record), the mobile
 19 station shall process Forward and Reverse Traffic Channel frames in accordance
 20 with the current service configuration. The mobile station shall discard any
 21 Forward Traffic Channel frame which has a format that is not supported by the
 22 mobile station. The mobile station may discard any type of Forward Traffic Channel
 23 traffic that is not signaling traffic and is not part of the current service
 24 configuration.
- 25 • At the action time associated with the *Service Connect Message*, *General Handoff*
 26 *Direction Message* (containing a service configuration record) or *Universal Handoff*
 27 *Direction Message* (containing a service configuration record), the mobile station
 28 shall perform the following⁵⁸:
 - 29 - If this is a *Service Connect Message* and $USE_TYPE0_PLCM_r$ equals ‘1’, the
 30 mobile station shall perform the following:

⁵⁸ 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 + If P_REV_IN_USE_S is less than 11, set PLCM_TYPE_S to '0000'; otherwise set
2 PLCM_TYPE_S to '0100'.
- 3 + The mobile station shall use the Public Long Code Mask derived from
4 PLCM_TYPE_S as specified in 2.3.6.
- 5 - If this is a *Service Connect Message* with USE_OLD_SERV_CONFIG_R equals '01',
6 the mobile station shall perform the following:
- 7 + If SYNC_ID_INCL_R is included and set to '1', the SYNC_ID_R indicates the
8 stored service configuration to be restored; otherwise, the SYNC_ID conveyed
9 by the mobile station indicates the stored service configuration to be
10 restored.
- 11 + The Call Control instance identified by NULL shall also be identified by the
12 connection reference assigned to the first service option connection in the
13 stored Service Configuration information record.
- 14 + For each service option connection (with corresponding connection reference
15 CON_REF_j) in the stored service configuration record, if any, except for the
16 first one, Layer 3 shall instantiate a Call Control instance (as specified in
17 2.6.10) with a 'restore indication'. The mobile station shall identify each of
18 these Call Control instances by the corresponding CON_REF_i.
- 19 + The mobile station shall begin to use the stored service configuration
20 corresponding to this SYNC_ID as the current service configuration as
21 specified in 2.6.4.1.2.2.5.2 and shall begin to process Forward and Reverse
22 Traffic Channel frames accordingly. The mobile station shall send a *Service*
23 *Connect Completion Message* within T_{56m} seconds after the action time.
- 24 + The mobile station shall store the synchronization identifier corresponding to
25 the stored service configuration as SYNC_ID_S.
- 26 + The mobile station shall exit this subfunction and activate the *Normal*
27 *Service Subfunction*.
- 28 - If this is a *Service Connect Message* with USE_OLD_SERV_CONFIG_R equals '10',
29 the mobile station shall perform the following:
- 30 + If SYNC_ID_INCL_R is included and set to '1' and
31 SYNC_ID_BS_INITIATED_IND_R is set to '1', the SYNC_ID_R indicates the stored
32 service configuration to be restored; otherwise, the SYNC_ID conveyed by the
33 mobile station indicates the stored service configuration to be restored.
- 34 + The mobile station shall update the stored service configuration with the
35 received service configuration as follows:
- 36 ○ The mobile station shall restore the stored service configuration as
37 specified in 2.6.4.1.2.2.5.2.
- 38 ○ The mobile station shall process the received Service Configuration
39 Record as specified in 2.6.4.1.12.

- 1 ○ The mobile station shall process the received Non-negotiable Service
2 Configuration Record as specified in 2.6.4.1.13.
- 3 + For each service option connection (with corresponding connection reference
4 CON_REF_i) in the stored service configuration record, if any, except for the
5 first one, Layer 3 shall instantiate a Call Control instance (as specified in
6 2.6.10) with a 'restore indication'. The mobile station shall identify each of
7 these Call Control instances by the corresponding CON_REF_i.
- 8 + The mobile station shall begin to use the updated service configuration as
9 the current service configuration and shall begin to process Forward and
10 Reverse Traffic Channel frames accordingly. The mobile station shall send a
11 *Service Connect Completion Message* within T_{56m} seconds after the action
12 time.
- 13 + If SYNC_ID_INCL_r is set to '1' and SYNC_ID_BS_INITIATED_IND_r is set to '0',
14 the mobile station shall perform the following::
- 15 ○ The mobile station shall store the synchronization identifier received
16 from the base station (SYNC_ID_s = SYNC_ID_r).
- 17 ○ The mobile station shall store the new service configuration
18 corresponding to SYNC_ID_s as specified in 2.6.4.1.2.2.5.1.
19 Otherwise, the mobile station shall set SYNC_ID_s to NULL.
- 20 + The mobile station shall exit this subfunction and activate the *Normal*
21 *Service Subfunction*.
- 22 - If this is a *Service Connect Message* with USE_OLD_SERV_CONFIG_r equals '11',
23 the mobile station shall perform the following:
- 24 + If the SYNC_ID_INCL field is included in this message and set to '1', the
25 SYNC_ID included in this message indicates the stored service configuration
26 to be restored; otherwise, the SYNC_ID conveyed by the mobile station
27 indicates the stored service configuration to be restored.
- 28 ○ Prior to this message, if an *Extended Channel Assignment Message* with
29 GRANTED_MODE set to '11' was not received and a *Service Connect*
30 *Message*, *General Handoff Direction Message* (with service configuration),
31 or *Universal Handoff Direction Message* (with service configuration) was
32 not successfully received or accepted by the mobile station since entering
33 the *Traffic Channel Substate*, the mobile station shall perform the
34 following:
- 35 ◇ The mobile station shall begin to use the service configuration which
36 was stored by the mobile station when it left the *Mobile Station*
37 *Control on the Traffic Channel State* as the current service
38 configuration as specified in 2.6.4.1.2.2.5.2 where only the service
39 option connection record corresponding to SR_ID_r received in the
40 *Service Connect Message* shall be restored.

- 1 ◇ The Call Control instance identified by NULL shall also be identified
2 by the connection reference assigned to the restored service option
3 connection.
- 4 ◇ The mobile station shall begin to process Forward and Reverse Traffic
5 Channel frames accordingly with the restored service configuration.
6 The mobile station shall send a *Service Connect Completion Message*
7 within T_{56m} seconds after the action time.
- 8 ◇ The mobile station shall store the synchronization identifier
9 corresponding to the stored service configuration as $SYNC_ID_S$.
- 10 ◇ The mobile station shall exit this subfunction and activate the *Normal*
11 *Service Subfunction*.
- 12 ○ Otherwise, the mobile station shall perform the following at the action
13 time of this message:
- 14 ◇ The mobile station shall restore the indicated service option
15 connection record(s) from the stored service configuration as
16 specified in 2.6.4.1.2.2.5.2, where the service option connection
17 records to be restored are determined as follows:
- 18 — If SR_ID_T equals '111', the mobile station shall restore all
19 remaining service option connection records. Otherwise, if SR_ID_T
20 equals '000', the mobile station shall restore service option
21 connection records corresponding to SR_ID_S indicated by
22 $SR_ID_RESTORE_BITMAP_T$ received in this message; otherwise
23 the mobile station shall restore the service option connection
24 record corresponding to the SR_ID_T received in this message.
- 25 — Layer 3 shall instantiate a Call Control instance (as specified in
26 2.6.10) for each of the restored service option connections with a
27 'restore indication' and Layer 3 shall identify each of these Call
28 Control instances by the value of the CON_REF field
29 corresponding to the restored service option connection.
- 30 — The mobile station shall perform the following:
- 31 a. If SR_ID_T equals '111', the mobile station shall disable the
32 enhanced origination timers corresponding to each *Enhanced*
33 *Origination Message* sent with $SYNC_ID_INCL$ field set to '1'
34 and shall remove the corresponding TAG value from the list
35 $TAG_OUTSTANDING_LIST$.
- 36 b. Otherwise, the mobile station shall disable the enhanced
37 origination timer corresponding to the *Enhanced Origination*
38 *Message* with SR_ID field set to either '111' or to the SR_ID_T
39 value received in this message and shall remove the

- 1 + If P_REV_IN_USE_s is greater than six, the Non-Negotiable Service
2 Configuration information record is not included in this message, and the
3 value of SR_ID corresponding to the logical resource of '0000' in the
4 LOGICAL_TO_PHYSICAL_MAPPING_TABLE is NULL, the mobile station shall
5 set this SR_ID field to the value specified in the Service Configuration
6 information record.
- 7 + If CC_INFO_INCL_r equals '1', then for each of the NUM_CALLS_ASSIGN_r
8 occurrences of the call control parameters included in the message, the
9 mobile station shall perform the following:
- 10 ○ If RESPONSE_IND_r equals '1', and TAG_r matches any of the TAG values
11 contained in the list TAG_OUTSTANDING_LIST, the Layer 3 shall
12 instantiate a Call Control instance (as specified in 2.6.10). The mobile
13 station shall identify this Call Control instance by CON_REF_r. The mobile
14 station shall disable the enhanced origination timer associated with
15 TAG_r and remove the TAG value specified by TAG_r from the list
16 TAG_OUTSTANDING_LIST.
- 17 ○ If RESPONSE_IND_r equals '0', the mobile station shall store the bypass
18 indicator (BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r) and
19 the Layer 3 shall instantiate a Call Control instance (as specified in
20 2.6.10). The mobile station shall identify this Call Control instance by
21 CON_REF_r.
- 22 + The mobile station shall exit this subfunction and activate the *Normal*
23 *Service Subfunction*.
- 24 • The mobile station shall not initiate service negotiation for a new service
25 configuration.
- 26 • For any service option connection that is part of the current or pending service
27 configuration, the mobile station may send a *Service Option Control Message* to
28 invoke a service option specific function in accordance with the requirements for the
29 associated service option.
- 30 • If SERV_NEG_s changes from enabled to disabled (see 2.6.6.2.5.1), the mobile
31 station shall activate the *SO Negotiation Subfunction*.
- 32 • If the mobile station receives one of the following service negotiation messages, the
33 mobile station shall process the message according to the specified requirements:
- 34 1. *Service Connect Message*: The mobile station shall send a *Mobile Station Reject*
35 *Order* (ORDQ = '00000010') within T_{56m} seconds.
- 36 2. *Service Option Control Message*: If the service option connection specified by the
37 message is part of the current or pending service configuration, and the service
38 option specified by the message is the same as the service option associated
39 with the service option connection, the mobile station shall interpret the action
40 time of the message as specified in 2.6.4.1.5, and shall process the message in
41 accordance with the requirements for the service option; otherwise, the mobile

- 1 station shall send a *Mobile Station Reject Order* (ORDQ = '00000111') within
 2 T_{56m} seconds.
- 3 3. *Service Request Message*: The mobile station shall send a *Mobile Station Reject*
 4 *Order* (ORDQ = '00000010') within T_{56m} seconds.
- 5 4. *Service Response Message*: The mobile station shall send a *Mobile Station Reject*
 6 *Order* (ORDQ = '00000010') within T_{56m} seconds.
- 7 5. *General Handoff Direction Message*: If the SCR_INCLUDED field is included in
 8 this message and is set to '1':
 9 If the mobile station has not rejected this message, the mobile station shall
 10 remain in this subfunction until the action time specified in the message, and
 11 shall perform the following:
- 12 - The mobile station shall not perform the above procedures for the previous
 13 message. But the call assignments from the previous message (if any) shall
 14 take effect at the action time of the previous message.
 - 15 - The mobile station shall perform the above procedures for this message (that
 16 is, begin to use the service configuration specified by the *General Handoff*
 17 *Direction Message*) at the action time of this message.
- 18 6. *Universal Handoff Direction Message*: If the SCR_INCLUDED field is included in
 19 this message and is set to '1':
 20 If the mobile station has not rejected this message, the mobile station shall
 21 remain in this subfunction until the action time specified in the message, and
 22 shall perform the following:
- 23 - The mobile station shall not perform the above procedures for the previous
 24 message. But the call assignments from the previous message (if any) shall
 25 take effect at the action time of the previous message.
 - 26 - The mobile station shall perform the above procedures for this message (that
 27 is, begin to use the service configuration and call assignments (if any)
 28 specified by the *Universal Handoff Direction Message*) at the action time of
 29 this message.
- 30 • If the mobile station receives one of the following service option negotiation
 31 messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
 32 '00000010') within T_{56m} seconds:
 - 33 1. *Service Option Request Order*
 - 34 2. *Service Option Response Order*
 - 35 3. *Service Option Control Order*

36 2.6.4.1.2.2.5.1 Storing a Service Configuration with SYNC_ID

37 The mobile station shall set NUM_SYNC_ID_SUPPORTED as follows:

- 1 • If the mobile station has not reported the Capability Information information record
2 with the ADD_NUM_SYNC_ID field, the mobile station shall set
3 NUM_SYNC_ID_SUPPORTED to four.
- 4 • If the mobile station has reported the Capability Information information record
5 with the ADD_NUM_SYNC_ID field, the mobile station shall set
6 NUM_SYNC_ID_SUPPORTED to five plus the value of the ADD_NUM_SYNC_ID field
7 included in the Capability Information information record.

8 The mobile station shall be capable of storing a minimum of NUM_SYNC_ID_SUPPORTED
9 service configurations along with their corresponding SYNC_ID, SID and NID.

10 Two SYNC_IDs are considered to be equal if and only if both the length and value of the
11 SYNC_IDs is equal.

12 The mobile station shall use the following procedure in the order listed below to store the
13 current service configuration when it is associated with a SYNC_ID:

- 14 • If the mobile station has a stored service configuration associated with SID_s, NID_s
15 and SYNC_ID_s, then the mobile station shall delete the stored service configuration.
- 16 • If the number of stored service configurations is NUM_SYNC_ID_SUPPORTED or
17 more, the mobile station shall not delete the (NUM_SYNC_ID_SUPPORTED - 1)
18 most recently used⁵⁹ service configuration(s) and corresponding synchronization
19 identifier(s), SID(s), NID(s).
- 20 • The mobile station shall store the current service configuration (that is, parameters
21 conveyed by both the Service Configuration information record and the Non-
22 negotiable Service Configuration information record) and the SYNC_ID_s
23 corresponding to the current service configuration along with SID_s and NID_s.

24 2.6.4.1.2.2.5.2 Restoring a stored Service Configuration based on SYNC_ID

25 When restoring a stored service configuration based on SYNC_ID, the mobile station shall
26 restore only those parameters defined in the current P_REV_IN_USE_s.

27 2.6.4.1.2.2.6 SO Negotiation Subfunction

28 The *SO Negotiation Subfunction* is only supported for mobile stations operating in Band
29 Class 0.

30 Service option negotiation is not supported for P_REV_IN_USE_s greater than six.

31 Upon activation of the *SO Negotiation Subfunction*, the mobile station shall delete from the
32 current service configuration any service option connection which does not use primary
33 traffic on both the Forward and Reverse Traffic Channels and the Layer 3 shall terminate
34 the corresponding Call Control instances. The Call Control instance corresponding to the
35 service option connection which uses primary traffic, if any, shall be identified by NULL.

⁵⁹ 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 While the *SO Negotiation Subfunction* is active, the mobile station shall perform the
2 following:

- 3 • If the current service configuration includes a service option connection, the mobile
4 station shall process the received primary traffic bits in accordance with the
5 requirements for the service option associated with the service option connection;
6 otherwise, the mobile station shall discard the received primary traffic bits.
- 7 • If the current service configuration includes a service option connection, the mobile
8 station shall transmit primary traffic bits in accordance with the requirements for
9 the service option associated with the service option connection; otherwise, the
10 mobile station shall transmit null traffic on the Reverse Fundamental Channel, if
11 the Fundamental Channel is present or transmit power control bits on the Reverse
12 Pilot Channel, if only the Dedicated Control Channel is present.
- 13 • If the current service configuration includes a service option connection, the mobile
14 station may send a *Service Option Control Order* to invoke a service option specific
15 function in accordance with the requirements for the service option associated with
16 the service option connection.
- 17 • To initiate service option negotiation, the mobile station shall set SO_REQ_s to the
18 number of the requested service option and shall send a *Service Option Request*
19 *Order* containing the requested service option number.
- 20 • If $SERV_NEG_s$ changes from disabled to enabled (see 2.6.6.2.5.1), the mobile
21 station shall set SO_REQ_s to NULL and shall activate the *Normal Service*
22 *Subfunction*.
- 23 • If the mobile station receives a *Service Option Request Order*, it shall process the
24 order as follows:
 - 25 - If the mobile station accepts the requested service option, the mobile station
26 shall set SO_REQ_s to NULL and shall send a *Service Option Response Order*
27 accepting the requested service option within T_{58m} seconds. The mobile station
28 shall interpret the message action time of the *Service Option Request Order* in
29 accordance with the requirements for the requested service option and the
30 mobile station shall begin using the service configuration implied by the
31 requested service option in accordance with those requirements. The implied
32 service configuration shall include the default Forward and Reverse multiplex
33 options and radio configurations associated with the requested service option,
34 and shall include one service option connection for which the service option
35 connection reference is 1, the service option is the requested service option, and
36 the Forward and Reverse Traffic Channel types are both primary traffic. If a Call
37 Control instance currently exists, the Layer 3 shall use this Call Control
38 instance for a new service option connection; otherwise, the Layer 3 shall
39 instantiate a Call Control instance (as specified in 2.6.10) and this Call Control
40 instance shall be identified by both a connection reference with a value of 1 and
41 a default identifier with a value of NULL.
 - 42 - If the mobile station does not accept the requested service option and has an
43 alternative service option to request, the mobile station shall set SO_REQ_s to the

- 1 alternative service option number and shall send a *Service Option Request Order*
2 requesting the alternative service option within T_{58m} seconds.
- 3 - If the mobile station does not accept the requested service option and does not
4 have an alternative service option to request, the mobile station shall set
5 SO_REQ_s to NULL and shall send a *Service Option Response Order* to reject the
6 request within T_{58m} seconds. The mobile station shall continue to use the
7 current service configuration.
- 8 • If the mobile station receives a *Service Option Response Order*, it shall process the
9 order as follows:
- 10 - If the service option number specified in the order is equal to SO_REQ_s , the
11 mobile station shall set SO_REQ_s to NULL. The mobile station shall interpret
12 the message action time of the *Service Option Response Order* in accordance with
13 the requirements for the specified service option, and the mobile station shall
14 begin using the service configuration implied by the specified service option in
15 accordance with those requirements. The implied service configuration shall
16 include the default Forward and Reverse multiplex options and radio
17 configurations associated with the specified service option, and shall include
18 one service option connection for which the service option connection reference
19 is 1, the service option is the specified service option, and the Forward and
20 Reverse Traffic Channel types are both primary traffic. If a Call Control instance
21 currently exists, the Layer 3 shall use this Call Control instance for a new
22 service option connection; otherwise, the Layer 3 shall instantiate a Call Control
23 instance (as specified in 2.6.10) and this Call Control instance shall be identified
24 by both a connection reference with a value of 1 and a default identifier with a
25 value of NULL.
- 26 - If the order indicates a service option rejection, the mobile station shall set
27 SO_REQ_s to NULL. The mobile station shall continue to use the current service
28 configuration.
- 29 - If the order does not indicate a service option rejection and the service option
30 specified in the order is not equal to SO_REQ_s , the mobile station shall set
31 SO_REQ_s to NULL and shall send a *Mobile Station Reject Order* (ORDQ =
32 '00000100') within T_{58m} seconds. The mobile station shall continue to use the
33 current service configuration.
- 34 • If the mobile station receives a *Service Option Control Order*, it shall process the
35 order as follows:
- 36 - If the current service configuration includes a service option connection, the
37 mobile station shall interpret the message action time of the *Service Option*
38 *Control Order* in accordance with the requirements for the service option
39 associated with the service option connection and the mobile station shall
40 process the *Service Option Control Order* in accordance with those requirements;
- 41 - otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ =
42 '00000001') within T_{56m} seconds.

- 1 • If the mobile station receives one of the following service negotiation messages, the
2 mobile station shall send a *Mobile Station Reject Order* (ORDQ = '00000010') within
3 T_{56m} seconds:

- 4 1. *Service Connect Message*
5 2. *Service Option Control Message*
6 3. *Service Request Message*
7 4. *Service Response Message*

8 2.6.4.1.3 Ordering of Messages

9 The Layer 2 protocol does not guarantee delivery of messages in any order. If the mobile
10 station requires that the base station receive a set of messages in a certain order, the
11 mobile station shall send each message in assured mode requiring confirmation of delivery
12 and shall wait for the confirmation of delivery of each message before transmitting the next
13 message in the set.

14 2.6.4.1.4 Processing the In-Traffic System Parameters Message

15 The mobile station shall store the following parameters from the *In-Traffic System*
16 *Parameters Message*:

- 17 • System identification (SID_s = SID_r)
18 • Network identification (NID_s = NID_r)
19 • Search window size for the Active Set and the Candidate Set
20 (SRCH_WIN_A_s = SRCH_WIN_A_r)
21 • Search window size for the Neighbor Set (SRCH_WIN_N_s = SRCH_WIN_N_r)
22 • Search window size for the Remaining Set (SRCH_WIN_R_s = SRCH_WIN_R_r)
23 • Pilot detection threshold (T_ADD_s = T_ADD_r)
24 • Pilot drop threshold (T_DROP_s = T_DROP_r)
25 • Active Set versus Candidate Set comparison threshold (T_COMP_s = T_COMP_r)
26 • Drop timer value (T_TDROPS = T_TDROPR)
27 • Drop timer range value (T_TDROPRANGE_s = T_TDROPRANGE_r) if
28 T_TDROPRANGE_INCL_r is equal to '1'; otherwise, (T_TDROPRANGE_s = '0000')
29 • Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTED_s =
30 FOR_PDCH_SUPPORTED_r)
31 • Short Data Burst supported indicator (SDB_SUPPORTED_s = SDB_SUPPORTED_r)
32 • If included, permission for the mobile station to request QoS settings in the
33 *Origination Message, Origination Continuation Message, or Enhanced Origination*
34 *Message* (MOB_QOS_s = MOB_QOS_r)
35 • Mobile station initiated position location determination supported indicator
36 (MS_INIT_POS_LOC_SUP_IND_s = MS_INIT_POS_LOC_SUP_IND_r).

- 1 • PDCH Control Hold Mode supported indicator ($PDCH_CHM_SUPPORTED_S =$
2 $PDCH_CHM_SUPPORTED_T$) if included; otherwise, set $PDCH_CHM_SUPPORTED_S$ to
3 '0'.
- 4 • Reverse Packet Data Channel supported indicator ($REV_PDCH_SUPPORTED_S =$
5 $REV_PDCH_SUPPORTED_T$) if included; otherwise, set $REV_PDCH_SUPPORTED_S$ to
6 '0'.
- 7 • Channel configuration request allowed indicator ($USE_CH_CFG_RRM_S =$
8 $USE_CH_CFG_RRM_T$) if included; otherwise, set $USE_CH_CFG_RRM_S$ to '0'.
- 9 • Maximum age for retention of Neighbor Set members
10 ($NGHBR_MAX_AGE_S = NGHBR_MAX_AGE_T$)
- 11 • Protocol revision level ($P_REV_S = P_REV_T$), and protocol revision level currently in
12 use ($P_REV_IN_USE_S = \min(P_REV_S, MOB_P_REV_P$ of the current band class)
- 13 • Slope of the handoff add/drop criterion ($SOFT_SLOPE_S = SOFT_SLOPE_T$)
- 14 • Intercept of the handoff add criterion ($ADD_INTERCEPT_S = ADD_INTERCEPT_T$)
- 15 • Intercept of the handoff drop criterion ($DROP_INTERCEPT_S = DROP_INTERCEPT_T$)
- 16 • If included, neighbor pilot strength measurement threshold offset ($T_MULCHAN_S =$
17 $T_MULCHAN_T$)
- 18 • If included, Reverse Supplemental Code Channel beginning of transmission
19 preamble length ($BEGIN_PREAMBLE_S = BEGIN_PREAMBLE_T$)
- 20 • If included, Reverse Supplemental Code Channel discontinuous transmission
21 resumption preamble length ($RESUME_PREAMBLE_S = RESUME_PREAMBLE_T$)
- 22 • If included, Slotted Timer ($T_SLOTTED_S = T_SLOTTED_T$)
- 23 • If the mobile station supports packet data service options, the mobile station shall
24 store the packet data services zone identifier ($PACKET_ZONE_ID_S =$
25 $PACKET_ZONE_ID_T$).
- 26 • If the mobile station supports packet data service options and the
27 $PZ_HYST_ENABLED$ field is included, the mobile station shall store the packet zone
28 hysteresis enabled indicator ($PZ_HYST_ENABLED_S = PZ_HYST_ENABLED_T$);
29 otherwise, the mobile station shall set $PZ_HYST_ENABLED_S$ to '1'.
- 30 • If the $PZ_HYST_LIST_LEN$ field is included, the mobile station shall store the packet
31 zone hysteresis list length ($PZ_HYST_LIST_LEN_S = PZ_HYST_LIST_LEN_T$); otherwise,
32 the mobile station shall set $PZ_HYST_LIST_LEN_S$ to 4.
- 33 • If the $PZ_HYST_ACT_TIMER$ field is included, the mobile station shall store the
34 packet zone hysteresis activation timer ($PZ_HYST_ACT_TIMER_S =$
35 $PZ_HYST_ACT_TIMER_T$); otherwise, the mobile station shall set
36 $PZ_HYST_ACT_TIMER_S$ to 30 seconds.
- 37 • If the $PZ_HYST_TIMER_MUL$ field and the $PZ_HYST_TIMER_EXP$ field are included,
38 the mobile station shall store the packet zone hysteresis timer ($PZ_HYST_TIMER_S =$

- 1 PZ_HYST_TIMER_MUL_r × 8 ^ PZ_HYST_TIMER_EXPr); otherwise, the mobile station
 2 shall set PZ_HYST_TIMERs to 60 seconds.
- 3 • If ENC_SUPPORTED_r is equal to '1', the mobile station shall store:
 - 4 - Signaling encryption supported indicator (SIG_ENCRYPT_SUP_s =
 5 SIG_ENCRYPT_SUP_r)
 - 6 - User information encryption supported indicator (UI_ENCRYPT_SUP_s =
 7 UI_ENCRYPT_SUP_r)
 - 8 • Concurrent services supported indicator (CS_SUPPORTED_s = CS_SUPPORTED_r).
 - 9 • Maximum number of additional service reference identifiers allowed in origination
 10 (MAX_ADD_SERV_INSTANCES_s = MAX_ADD_SERV_INSTANCE_r), if included;
 11 otherwise, the mobile station shall set MAX_ADD_SERV_INSTANCES_s to 0.
 - 12 • Control Hold Mode supported indicator (CHM_SUPPORTED_s = CHM_SUPPORTED_r)
 13 if included; otherwise, the mobile station shall perform the following:
 - 14 - If P_REV_IN_USE_s is less than six, set CHM_SUPPORTED_s to '0'.
 - 15 - Otherwise, set CHM_SUPPORTED_s to '1'.
 - 16 • CDMA off time report supported indicator
 17 (CDMA_OFF_TIME_REP_SUP_IND_s = CDMA_OFF_TIME_REP_SUP_IND_r).
 - 18 • If CDMA_OFF_TIME_REP_SUP_IND_r is equal to '1', the mobile station shall store
 19 CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLD_s =
 20 CDMA_OFF_TIME_REP_THRESHOLD_r in units specified by
 21 CDMA_OFF_TIME_REP_UNIT_r).
 - 22 • The mobile station shall set BCMC_ON_TRAFFIC_SUP_s to
 23 BCMC_ON_TRAFFIC_SUP_r. If BCMC_ON_TRAFFIC_SUP_r is set to '1', the mobile
 24 station shall store AUTO_REQ_TRAF_ALLOWED_IND_s =
 25 AUTO_REQ_TRAF_ALLOWED_IND_r.

26 The mobile station shall determine its roaming status (see 2.6.5.3). The mobile station
 27 should indicate to the user whether the mobile station is roaming.

28 2.6.4.1.5 Message Action Times

29 A Forward Traffic Channel message without a USE_TIME field or with a USE_TIME field set
 30 to '0' has an implicit action time. A message that has its USE_TIME field set to '1' has an
 31 explicit action time that is specified in the ACTION_TIME field of the message.

32 A message with an explicit action time is called a pending message.

33 Unless otherwise specified, a message having an implicit action time shall take effect no
 34 later than the first 80 ms boundary (relative to System Time plus FRAME_OFFSET_s × 1.25
 35 ms) occurring at least 80 ms after the end of the frame containing the last bit of the
 36 message. A message with an explicit action time, except for a *Power Up Function Message*,
 37 shall take effect when System Time minus FRAME_OFFSET_s × 1.25 ms (in 80 ms units)
 38 modulo 64 becomes equal to the message's ACTION_TIME field. A *Power Up Function*
 39 *Message* shall take effect ACTION_TIME_FRAME frames after the time when System Time

1 minus $\text{FRAME_OFFSET}_s \times 1.25 \text{ ms}$ (in 80 ms units) modulo 64 becomes equal to the
 2 message's ACTION_TIME field. The difference in time between ACTION_TIME and the end
 3 of the frame containing the last bit of the message shall be at least 80 ms.

4 The mobile station shall support two pending messages at any given time, not including
 5 pending *Service Option Control Orders* or *Service Option Control Messages*. The number of
 6 pending *Service Option Control Orders* or *Service Option Control Messages* that the mobile
 7 station is required to support is specific to the service option (see the relevant service
 8 option description). In addition, the mobile station shall support one pending *Power Up*
 9 *Function Message*.

10 2.6.4.1.6 Long Code Transition Request Processing

11 The mobile station performs these procedures upon receiving a *Long Code Transition*
 12 *Request Order*.

13 If the *Long Code Transition Request Order* requests a transition to the private long code, and
 14 the mobile station is able to generate the private long code (see 2.3.12.3), and the mobile
 15 station accepts the request, the mobile station shall send a *Long Code Transition Response*
 16 *Order* (ORDQ = '00000011') within T_{56m} seconds. The mobile station shall use the private
 17 long code on both the Forward Traffic Channel and the Reverse Traffic Channel. The
 18 mobile station shall store the public long code mask and PLCM_TYPE_s currently in use and
 19 begin using the private long code at the explicit action time (see 2.6.4.1.5) specified in the
 20 message. At the action time of the message, the mobile station should indicate to the user
 21 that the voice privacy mode is active. If the *Long Code Transition Request Order* requests a
 22 private long code transition, and the mobile station is not able to generate the private long
 23 code or the mobile station does not accept the request, the mobile station shall send a *Long*
 24 *Code Transition Response Order* (ORDQ = '00000010') within T_{56m} seconds.

25 If the *Long Code Transition Request Order* requests a transition to the public long code and
 26 the mobile station accepts the request, the mobile station shall send a *Long Code Transition*
 27 *Response Order* (ORDQ = '00000010') within T_{56m} seconds. The mobile station shall use
 28 the public long code on both the Forward Traffic Channel and the Reverse Traffic Channel.
 29 The mobile station shall begin using the public long code that is stored previously, derived
 30 from PLCM_TYPE_s as specified in 2.3.6, at the explicit action time (see 2.6.4.1.5) specified
 31 in the message. At the action time of the message, the mobile station should indicate to
 32 the user that the voice privacy mode is inactive. If the *Long Code Transition Request Order*
 33 requests a public long code transition, and the mobile station does not accept the request,
 34 the mobile station shall send a *Long Code Transition Response Order* (ORDQ = '00000011')
 35 within T_{56m} seconds.

36 2.6.4.1.7 Power Up Function (PUF)

37 Figure 2.6.4.1.7-1 illustrates the general structure of a PUF attempt. A PUF pulse is the
 38 interval during which the mobile station transmits at the specified power level while
 39 executing the Power Up Function.

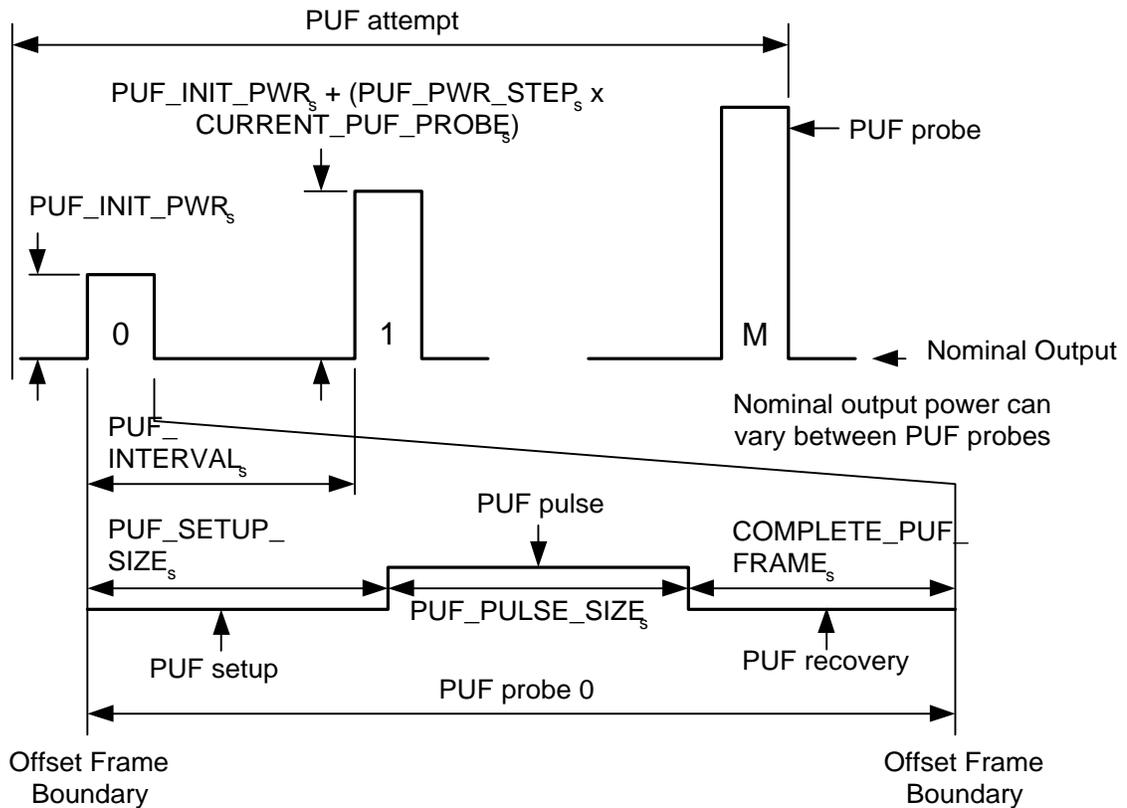
40 A PUF probe is one or more consecutive Traffic Channel frames. A PUF probe consists of
 41 three parts: PUF setup, PUF pulse, and PUF recovery. PUF_SETUP_SIZE is the duration of
 42 the PUF setup part, in power control groups. PUF_PULSE_SIZE is the duration of the PUF

1 pulse, in power control groups. The PUF recovery period occupies the remainder of the last
 2 frame of the PUF probe.

3 A PUF attempt is a sequence of PUF probes sent by the mobile station in response to a
 4 *Power Up Function Message*. A PUF attempt begins at an offset frame boundary within 80
 5 ms of the ACTION_TIME specified in the *Power Up Function Message*. A PUF attempt can
 6 be terminated in one of four ways:

- 7 • The mobile station receives a *Power Up Function Completion Message*.
- 8 • The mobile station has transmitted the maximum number of PUF probes specified
 9 in the *Power Up Function Message*.
- 10 • The mobile station has transmitted the maximum number of probes allowed at its
 11 maximum output power.
- 12 • The mobile station receives a new *Power Up Function Message*.

13



14

15

Figure 2.6.4.1.7-1. Structure of PUF Attempt

1

2 2.6.4.1.7.1 Processing the Power Up Function Message

3 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to
4 '0000110' (message requires a capability that is not supported by the mobile station) if
5 any of the following conditions are detected:

- 6 • PUF_FREQ_INCL_T is set to '1' and PUF_BAND_CLASS_T is not supported by the
7 mobile station.
- 8 • PUF_FREQ_INCL_T is set to '1' and the mobile station is unable to re-tune to the PUF
9 Target Frequency during (PUF_SETUP_SIZE_T + 1) power control groups.
- 10 • MOB_P_REV_P is not equal to five and the mobile station does not support the Power
11 Up Function.

12 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to
13 '00001100' (invalid Frequency Assignment), if the Frequency Assignment specified in the
14 message is the same as the Serving Frequency (PUF_FREQ_INCL_T is equal to '1',
15 PUF_BAND_CLASS_T is equal to CDMABAND_S and PUF_CDMA_FREQ_T is equal to
16 CDMACH_S).

17 If the mobile station is processing a PUF probe, the mobile station shall wait for the PUF
18 probe to complete. It shall then terminate the current PUF attempt. The mobile station
19 shall store the following parameters:

- 20 • Maximum number of PUF probes transmitted at full power level (MAX_PWR_PUF_S =
21 MAX_PWR_PUF_T + 1)
- 22 • Total number of PUF probes (TOTAL_PUF_PROBES_S = TOTAL_PUF_PROBES_T + 1)
- 23 • PUF interval (PUF_INTERVAL_S = PUF_INTERVAL_T)
- 24 • Number of PUF setup power control groups (PUF_SETUP_SIZE_S =
25 PUF_SETUP_SIZE_T + 1)
- 26 • Number of PUF pulse power control groups (PUF_PULSE_SIZE_S =
27 PUF_PULSE_SIZE_T + 1)
- 28 • Power increase of initial PUF pulse (PUF_INIT_PWR_S = PUF_INIT_PWR_T)
- 29 • Power increase for each successive PUF pulse (PUF_PWR_STEP_S = PUF_PWR_STEP_T)
- 30 • Frequency included indicator (PUF_FREQ_INCL_S = PUF_FREQ_INCL_T)

31 If PUF_FREQ_INCL_S equals '1', the mobile station shall store the following:

- 32 • PUF probe Target Frequency CDMA Channel number (PUF_TF_CDMACH_S =
33 PUF_CDMA_FREQ_T)
- 34 • PUF probe Target Frequency CDMA band class (PUF_TF_CDMABAND_S =
35 PUF_BAND_CLASS_T)

36 The mobile station shall set CURRENT_PUF_PROBE_S equal to 0.

37 The mobile station shall then begin the PUF attempt at the time specified in 2.6.4.1.7.2.

1 2.6.4.1.7.2 Power Up Function Procedures

2 The mobile station shall process the initial PUF probe beginning at the start of the frame
 3 which starts $ACTION_TIME_FRAME_T \times 20 \text{ ms} + FRAME_OFFSET_S \times 1.25 \text{ ms}$ after the
 4 System Time specified by $ACTION_TIME_T$. The mobile station shall process additional PUF
 5 probes beginning at intervals of $PUF_INTERVAL_S$ frames from the beginning of the initial
 6 PUF probe.

7 The mobile station shall transmit the PUF probes as described in 2.6.4.1.7.2.1 and
 8 2.6.4.1.7.2.2.

9 2.6.4.1.7.2.1 PUF Probe On Serving Frequency

10 The mobile station shall process each PUF probe as follows:

- 11 • The mobile station shall use closed loop power control procedures as specified in
 12 [2].
- 13 • The mobile station shall use the gated output procedures specified in [2].
- 14 • The mobile station shall control its mean output power as specified in [2].
- 15 • The mobile station shall monitor its output power during the PUF pulse, and should
 16 monitor its output power at least once during each power control group of the PUF
 17 pulse. If the mobile station detects that the transmit power level specified in [2] is
 18 equal to or greater than the maximum power output of the mobile station at any
 19 time during a PUF pulse, the mobile station shall decrement $MAX_PWR_PUF_S$ by
 20 one for that PUF pulse.
- 21 • The mobile station shall transmit the traffic channel preamble for the duration of
 22 the PUF probe on the Reverse Fundamental Channel.

23 After the processing of each PUF probe, the mobile station shall increment
 24 $CURRENT_PUF_PROBE_S$ by 1. If $MAX_PWR_PUF_S$ is equal to 0, the mobile station shall
 25 terminate the PUF attempt. If $CURRENT_PUF_PROBE_S$ equal to $TOTAL_PUF_PROBE_S$, the
 26 mobile station shall terminate the PUF attempt.

27 2.6.4.1.7.2.2 PUF Probe On PUF Target Frequency

28 The mobile station shall process each PUF probe as follows:

- 29 • The mobile station shall use closed loop power control procedures as specified in
 30 [2].
- 31 • The mobile station shall use the gated output procedures specified in [2].
- 32 • The mobile station shall control its mean output power as specified in [2].
- 33 • The mobile station shall store the following Serving Frequency parameters from its
 34 current configuration:
 - 35 - CDMA Band Class ($PUF_SF_CDMABAND_S = CDMABAND_S$)
 - 36 - Frequency assignment ($PUF_SF_CDMACH_S = CDMACH_S$)

- 1 • The mobile station shall monitor its output power during the PUF pulse, and should
2 monitor its output power at least once during each power control group of PUF
3 pulse. If the mobile station detects that the transmit power level specified in [2] is
4 equal to or greater than the maximum power output of the mobile station at any
5 time during a PUF pulse, the mobile station shall decrement the $MAX_PWR_PUF_S$
6 by one for that PUF pulse.
- 7 • At the beginning of the PUF probe, the mobile station shall disable its transmitter,
8 stop processing the Forward Supplemental Code Channel (if any), or the Forward
9 Supplemental Channel (if any), disable all corrections to the mobile station time
10 reference (see [2]), tune to the CDMA channel specified by $PUF_TF_CDMACH_S$, and
11 $PUF_TF_CDMABAND_S$ and re-enable its transmitter.
- 12 • The mobile station shall transmit the traffic channel preamble on the Reverse
13 Fundamental Channel during the PUF pulse at $PUF_TX_PWR_S$.
- 14 • The mobile station should disable its transmitter immediately after the end of the
15 PUF pulse, and shall disable its transmitter before the end of the first power control
16 group after the PUF pulse. It shall then tune to its assigned CDMA channel as
17 given by $CDMACH_S$ and $CDMABAND_S$.
- 18 • If the interval between the time that the mobile station tunes to the PUF Target
19 Frequency and the time that it re-tunes to the Serving Frequency is equal to or
20 greater than $(N_{2m} \times 0.02)$ seconds, the mobile station shall wait to receive a period
21 of $(N_{3m} \times 20)$ ms with sufficient signal quality on the physical channel
22 corresponding to $FPC_PRI_CHAN_S$.
- 23 • The mobile station shall then re-enable its transmitter and re-enable any
24 adjustments to the mobile station time reference.
- 25 • If the Forward Supplemental Code Channel assignment has not expired while the
26 mobile station has tuned to the PUF Target Frequency, then the mobile station shall
27 resume processing the Forward Supplemental Code Channels after re-tuning to the
28 Serving Frequency.
- 29 • If the Forward Supplemental Channel assignment has not expired while the mobile
30 station has tuned to the PUF Target Frequency, then the mobile station shall
31 resume processing the Forward Supplemental Channels after re-tuning to the
32 Serving Frequency.
- 33 • If the Reverse Supplemental Code Channel assignment has not expired while the
34 mobile station has tuned to the PUF Target Frequency, then the mobile station may
35 resume transmitting the Reverse Supplemental Code Channels after re-tuning to
36 the Serving Frequency.
- 37 • If the Reverse Supplemental Channel assignment has not expired while the mobile
38 station has tuned to the PUF Target Frequency, then the mobile station may resume
39 transmitting the Reverse Supplemental Code Channels after re-tuning to the
40 Serving Frequency.

41 After the processing of each PUF probe, the mobile station shall increment
42 $CURRENT_PUF_PROBE_S$ by one. If $MAX_PWR_PUF_S$ is equal to 0, the mobile station shall

1 terminate the PUF attempt. If $CURRENT_PUF_PROBE_S$ is equal to $TOTAL_PUF_PROBE_S$,
 2 the mobile station shall terminate the PUF attempt.

3 2.6.4.1.7.3 Processing the Power Up Function Completion Message

4 The mobile station shall terminate any PUF attempt no later than the completion of the
 5 current probe in progress and shall discard any pending *Power Up Function Message*. If
 6 LOC_IND_T is equal to '1', the mobile station may store the following parameters:

- 7 • Mobile Station Latitude ($MS_LAT_S = MS_LAT_T$)
- 8 • Mobile Station Longitude ($MS_LONG_S = MS_LONG_T$)
- 9 • Time stamp ($MS_LOC_TSTAMP_S = MS_LOC_TSTAMP_T$)

10 2.6.4.1.8 Forward Traffic Channel Supervision

11 When in the *Mobile Station Control on the Traffic Channel State*, the mobile station shall
 12 continuously monitor the Forward Channel, except:

- 13 • During a PUF probe in which it transmits on a PUF target frequency (see 2.6.4.1.7),
- 14 • During a search of pilots on a CDMA Candidate Frequency (see 2.6.6.2.8.3),

15 When a Forward Common Power Control Channel is not assigned, the mobile station shall
 16 perform the procedure described in 2.6.4.1.8.1. When a Forward Forward Common Power
 17 Control Channel is assigned, the mobile station shall perform the procedure described in
 18 2.6.4.1.8.2.

19 2.6.4.1.8.1 Forward Traffic Channel Supervision when a Forward Common Power Control 20 Channel is not assigned

21 The mobile station shall monitor the physical channel corresponding to $FPC_PRI_CHAN_S$ as
 22 follows:

- 23 • If $RESQ_ENABLED_S$ is equal to '1' and $FPC_PRI_CHAN_S$ is equal to '0', the mobile
 24 station shall perform the following:
 - 25 - While the mobile station's transmitter is enabled:
 - 26 + If the rescue attempt timer is not enabled and the mobile station detects a
 27 'forward link error' trigger as specified in 2.6.4.1.8.1.1, then the mobile
 28 station shall perform the following:
 - 29 ○ disable its transmitter, and
 - 30 ○ enable the rescue delay timer with an initial value of
 31 $(RESQ_DELAY_TIME_S \times 80)$ ms.
 - 32 + If the rescue attempt timer is enabled and the mobile station detects a 'good
 33 forward link' trigger as specified in 2.6.4.1.8.1.1, then the mobile station
 34 shall disable the rescue attempt timer, and shall resume Forward and
 35 Reverse Traffic Channel power control as specified in 2.6.4.1.1 and
 36 2.6.6.2.7.2, respectively.
 - 37 - While the mobile station's transmitter is disabled:

- 1 + If the mobile station did not disable its transmitter due to an
 2 acknowledgment failure and the mobile station detects a ‘good forward link’
 3 trigger as specified in 2.6.4.1.8.1.1, then the mobile station should re-enable
 4 its transmitter, and shall also perform the following:
- 5 ○ disable the rescue delay timer or rescue allowed timer, if either is
 6 enabled.
 - 7 ○ send a *Call Rescue Cancel Order* in assured mode, if the mobile station is
 8 not otherwise required to send an *Extended Pilot Strength Measurement*
 9 *Message*.
- 10 • Otherwise, the mobile station shall perform the following:
 - 11 - If the mobile station detects a ‘forward link error’ trigger as specified in
 12 2.6.4.1.8.1.1, it shall disable its transmitter.
 - 13 - Thereafter, if the mobile station detects a ‘good forward link’ trigger as specified
 14 in 2.6.4.1.8.1.1, then the mobile station should re-enable its transmitter.

15 The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be
 16 enabled when the mobile station first enables its transmitter when in the *Traffic Channel*
 17 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*. The fade
 18 timer shall be reset for T_{5m} seconds whenever the mobile station detects a ‘good forward
 19 link’ trigger as specified in 2.6.4.1.8.1.1. The mobile station shall disable the fade timer
 20 when it tunes to a PUF target frequency, and shall re-enable the fade timer at the end of
 21 the PUF probe. If the timer expires, the mobile station shall disable its transmitter and
 22 declare a loss of the Forward Traffic Channel. If $CRRM_MSG_IND_s$ equals ‘1’ and if no other
 23 access channel message is transmitted after loss of the Forward Traffic Channel, the mobile
 24 station may enter the *Update Overhead Information Substate* of the *System Access State* (see
 25 2.6.3) with an origination indication, within 20 seconds of the loss of the Forward Traffic
 26 Channel, to transmit the *Call Recovery Request Message*.

27 The mobile station also enables, disables, and resets the fade timer as described in
 28 2.6.6.2.8 and 2.6.6.2.10 when it performs a hard handoff or a periodic search.

29 2.6.4.1.8.1.1 Triggers

30 The mobile station shall detect ‘good forward link’ trigger as specified below:

- 31 • If RC11 or RC12 is used on Forward Link and blanking is enabled (i.e.
 32 FOR_FCH_BLANKING_DUTYCYCLE is set to value other than ‘000’), then the mobile
 33 station shall detect ‘good forward link’ trigger when any one of the following
 34 condition is met:
 - 35 - Mobile station receives a period of $(N_{3m} \times 20)$ ms with sufficient signal quality
 36 on the physical channel corresponding to FPC_PRI_CHAN_s.
 - 37 - Mobile station receives a N_{3m} consecutive guaranteed transmission frames with
 38 sufficient signal quality on the physical channel corresponding to
 39 FPC_PRI_CHAN_s.

- 1 • Otherwise, the mobile station shall detect ‘good forward link’ trigger when it receives
2 a period of $(N_{3m} \times 20)$ ms with sufficient signal quality on the physical channel
3 corresponding to $FPC_PRI_CHAN_S$.

4 The mobile station shall detect ‘forward link error’ trigger as specified below:

- 5 • If RC11 or RC12 is used on Forward Link and blanking is enabled (i.e.
6 $FOR_FCH_BLANKING_DUTYCYCLE$ is set to value other than ‘000’), then the mobile
7 station shall detect ‘forward link error’ trigger when it receives $FOR_N2M_IND_S$
8 consecutive guaranteed transmission frames with insufficient signal quality on the
9 physical channel corresponding to $FPC_PRI_CHAN_S$.
- 10 • Otherwise, the mobile station shall detect ‘forward link error’ trigger when it
11 receives a period of $(N_{2m} \times 20)$ ms with insufficient signal quality on the physical
12 channel corresponding to $FPC_PRI_CHAN_S$.

13 2.6.4.1.8.2 Forward Traffic Channel Supervision when a Forward Common Power Control 14 Channel is assigned

15 The mobile station shall monitor the Forward Common Power Control Channel as follows:

- 16 • If the mobile station receives a period of $(N_{16m} \times 1.25)$ ms with insufficient signal
17 quality on the Forward Common Power Control Subchannels assigned to this
18 mobile, it shall disable its transmitter.
- 19 • Thereafter, if the mobile station receives a period of $(N_{17m} \times 1.25)$ ms with
20 sufficient signal quality on the Forward Common Power Control Subchannels
21 assigned to this mobile, then the mobile station should re-enable its transmitter.

22 The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be
23 enabled when the mobile station first enables its transmitter when in the *Traffic Channel*
24 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*. The fade
25 timer shall be reset for T_{5m} seconds whenever the mobile station receives a period of $(N_{17m}$
26 $\times 1.25)$ ms with sufficient signal quality on the Forward Common Power Control
27 Subchannels assigned to this mobile. If the timer expires, the mobile station shall disable
28 its transmitter and declare a loss of the Forward Traffic Channel. If $CRRM_MSG_IND_S$
29 equals ‘1’ and if no other access channel message is transmitted after loss of the Forward
30 Traffic Channel, the mobile station may enter the *Update Overhead Information Substate* of
31 the *System Access State* (see 2.6.3) with an origination indication, within 20 seconds of the
32 loss of the Forward Traffic Channel, to transmit the *Call Recovery Request Message*.

33 The mobile station also enables, disables, and resets the fade timer as described in
34 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
35 periodic search.

36 Additionally, the mobile station shall perform a ping as follows:

- 37 • The mobile station shall establish a Forward Traffic Channel ping timer as follows:
- 38 - When the mobile station first enables its transmitter in the *Traffic Channel*
39 *Initialization Substate* of the *Mobile Station Control on the Traffic Channel State*,
40 the mobile station shall enable the Forward Traffic Channel ping timer and set it

1 to T_{78m} seconds.

- 2 - When the mobile station receives a message that assigns a F-CPCCH, the mobile
3 station shall enable the Forward Traffic Channel ping timer and set it to T_{78m}
4 seconds.
- 5 • When the mobile station receives a Physical Layer SDU destined for this mobile
6 station on the F-PDCH or on the shared F-DCCH (See [3]), the Forward Traffic
7 Channel ping timer shall be reset for T_{78m} seconds.
- 8 • When the Forward Traffic Channel ping timer expires, the mobile station shall send
9 a *L2 Acknowledgment Order* in assured mode if there is no other Layer 3 message to
10 be sent in assured mode available for transmission.

11 2.6.4.1.9 Processing the Extended Release Message and the Extended Release Mini 12 Message

- 13 • Upon receiving the *Extended Release Message* or the *Extended Release Mini*
14 *Message*, the mobile station shall process the message as follows:
 - 15 - If $USE_EXT_CH_IND_r$ is equal to '1', then the mobile station shall set
16 $USE_EXT_CH_IND_s$ to $USE_EXT_CH_IND_r$; otherwise, the mobile station shall
17 set $USE_EXT_CH_IND_s$ to '0'.
 - 18 - If the mobile station determines that the configuration specified by CH_IND_r or
19 $EXT_CH_IND_r$ is not valid (see Tables 3.7.3.3.2.34-1, and 3.7.3.3.2.34-3), the
20 mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to
21 '0000111' (message can not be handled by the current mobile station
22 configuration) and the mobile station shall not perform the remaining
23 procedures in this section.
 - 24 - If $USE_EXT_CH_IND_s$ is equal to '0' and CH_IND_r is equal to '111' or the
25 physical channels indicated by the two least significant bits of CH_IND_r includes
26 all the physical channels (FCH, DCCH, or both) currently being processed by the
27 mobile station, the Layer 3 shall send a "release indication" to all Call Control
28 instances and shall perform the following:
 - 29 + The mobile station shall set $TBR_RAND_SUPPR_ENABLE_s =$
30 $TBR_RAND_SUPPR_ENABLE_r$.
 - 31 + The mobile station shall set $TBR_RAND_WINDOW_s$ to
32 $TBR_RAND_WINDOW_r$.
 - 33 + Enter the *Release Substate* with a base station extended release indication if
34 the message is the *Extended Release Message*.
 - 35 + Enter the *Release Substate* with a base station extended release mini
36 message indication if the message is the *Extended Release Mini Message*.
 - 37 - Otherwise, the mobile station shall perform the following:
 - 38 + If the received message is the *Extended Release Message*, the mobile station
39 shall send an *Extended Release Response Message* to the base station. If the
40 received message is the *Extended Release Mini Message*, the mobile station

- 1 shall send an *Extended Release Response Mini Message* to the base station.
- 2 + If $USE_EXT_CH_IND_S$ is equal to '1', then the mobile station shall perform
- 3 the following:
- 4 ○ If $SWITCHING_PARMS_INCL_T$ is included and equal to '1', the mobile
- 5 station shall set $NUM_SOFT_SWITCHING_FRAMES_CHM_S$ to
- 6 $NUM_SOFT_SWITCHING_FRAMES_CHM_T + 1$, and
- 7 $NUM_SOFTER_SWITCHING_FRAMES_CHM_S$ to
- 8 $NUM_SOFTER_SWITCHING_FRAMES_CHM_T + 1$.
- 9 ○ If $EXT_CH_IND_T$ indicates that F-DCCH is assigned and F-FCH is not
- 10 assigned, the mobile station shall set $FPC_PRI_CHAN_S$ to '1' at the action
- 11 time of the message.
- 12 ○ If $EXT_CH_IND_T$ indicates that F-FCH is assigned and F-DCCH is not
- 13 assigned, the mobile station shall set $FPC_PRI_CHAN_S$ to '0' at the action
- 14 time of the message.
- 15 ○ If $EXT_CH_IND_T$ indicates that an R-FCH is to be released, then the
- 16 mobile station shall stop transmitting on R-FCH at the action time
- 17 specified by the message. If $EXT_CH_IND_T$ indicates that an F-FCH is to
- 18 be released, then the mobile station shall stop processing F-FCH at the
- 19 action time specified by the message.
- 20 ○ If $EXT_CH_IND_T$ indicates that an R-DCCH is to be released, then the
- 21 mobile station shall stop transmitting on R-DCCH at the action time
- 22 specified by the message. If $EXT_CH_IND_T$ indicates that an F-DCCH is
- 23 to be released, then the mobile station shall stop processing F-DCCH at
- 24 the action time specified by the message.
- 25 ○ If $EXT_CH_IND_T$ indicates that an R-PDCH is to be released, then the
- 26 mobile station shall stop transmitting on R-PDCH at the action time
- 27 specified by the message.
- 28 ○ If $GATING_RATE_INCL_T$ is equal to '1', the mobile station shall set
- 29 $PILOT_GATING_RATE_S = PILOT_GATING_RATE_T$ at the action time of the
- 30 message.
- 31 ○ If $PDCH_CONTROL_HOLD_T$ is equal to '1', the mobile station shall
- 32 perform the following:
- 33 ◇ Set $PILOT_GATING_USE_RATE$ to '1' and start the reverse pilot
- 34 gating and R-CQICH gating at $PILOT_GATING_RATE_S$ at the action
- 35 time of the message.
- 36 ◇ The mobile station shall cancel the forward and reverse supplemental
- 37 channel assignment, if any, at the action time of the message.

- 1 ○ The mobile station shall set $EXT_CH_IND_S$ to $EXT_CH_IND_R$.
- 2 + Otherwise ($USE_EXT_CH_IND_S$ is equal to '0'), the mobile station shall
- 3 perform the following:
- 4 ○ The mobile station shall update CH_IND_S as follows: If the least
- 5 significant bit of CH_IND_R equals '1', the mobile station shall set
- 6 $CH_IND_S = '10'$. If the second most significant bit of CH_IND_R equals '1',
- 7 the mobile station shall set $CH_IND_S = '01'$.
- 8 ○ If CH_IND_R is equal to '001' or '101', the mobile station shall set
- 9 $FPC_PRI_CHAN_S$ to '1' at the action time of the message.
- 10 ○ If CH_IND_R is equal to '010', the mobile station shall set $FPC_PRI_CHAN_S$
- 11 to '0' at the action time of the message.
- 12 ○ If the least significant bit of CH_IND_R equals '1', then the mobile station
- 13 shall stop transmitting on R-FCH and stop processing F-FCH, if
- 14 assigned, at the action time specified by the message.
- 15 ○ If the second most significant bit of CH_IND_R equals '1', then the mobile
- 16 station shall stop transmitting on R-DCCH and stop processing F-DCCH,
- 17 if assigned, at the action time specified by the message.
- 18 ○ If $GATING_RATE_INCL_R$ equals '1', the mobile station shall set
- 19 $PILOT_GATING_RATE_S = PILOT_GATING_RATE_R$ at the action time of the
- 20 message.
- 21 ○ If the most significant bit of CH_IND_R equals '1', the mobile station shall
- 22 set $PILOT_GATING_USE_RATE$ to '1'. The mobile station shall start the
- 23 reverse pilot gating at $PILOT_GATING_RATE_S$ at the action time of the
- 24 message. Furthermore, if the least significant bit of CH_IND_R equals '1'
- 25 (that is, the Fundamental Channel is being released), the mobile station
- 26 shall store the configuration used for the Fundamental Channel. The
- 27 mobile station shall cancel the forward and reverse supplemental
- 28 channel assignment, if any, at the action time of the message.
- 29 ○ If a Forward Packet Data Channel is assigned, the mobile station shall
- 30 perform the following:
- 31 ◇ Stop processing the Forward Packet Data Channel at the action time
- 32 specified by the message.
- 33 ◇ If a Reverse Packet Data Channel is assigned, the mobile station
- 34 shall stop transmitting on the Reverse Packet Data Channel at the
- 35 action time specified by the message.
- 36 ◇ If the two least significant bits of CH_IND_R is equal to '00', the mobile
- 37 station shall perform the following:

- 1 – If EXT_CH_IND_S signals the allocation of F-FCH and R-FCH, and
 2 does not signal allocation of F-DCCH nor R-DCCH, the mobile
 3 station shall set CH_IND_S = '01' at the action time specified by the
 4 message.
- 5 – If EXT_CH_IND_S signals the allocation of F-DCCH and R-DCCH,
 6 and does not signal allocation of F-FCH nor R-FCH, the mobile
 7 station shall set CH_IND_S = '10' at the action time specified by the
 8 message.
- 9 – If EXT_CH_IND_S signals the allocation of F-FCH, R-FCH, F-DCCH
 10 and R-DCCH, the mobile station shall set CH_IND_S = '11' at the
 11 action time specified by the message.

12 2.6.4.1.10 Processing the Resource Allocation Message and Resource Allocation Mini 13 Message

14 The mobile station shall process the *Resource Allocation Message* and the *Resource*
 15 *Allocation Mini Message* as follows:

- 16 • The mobile station shall set FPC_PRI_CHAN_S = FPC_PRI_CHAN_T at the action time
 17 of the message.
- 18 • If a F-PDCH is not assigned and the Fundamental Channel was previously
 19 established prior to transitioning to the *Control Hold Mode*, the mobile station shall
 20 start processing F-FCH and start transmitting on R-FCH at the action time of the
 21 message. The mobile station shall establish the Fundamental Channel with the
 22 same configuration as previously used, and shall set CH_IND_S to '11'.
- 23 • The mobile station shall set PILOT_GATING_USE_RATE to '0' and shall start the
 24 continuous reverse pilot at the action time of the message and, if a F-PDCH is
 25 assigned, the mobile station shall start the continuous R-CQICH as defined in [3].

26 2.6.4.1.11 Reserved

27 2.6.4.1.12 Processing the Service Configuration Record

28 The mobile station shall update the Service Configuration information record currently in
 29 use as follows:

- 30 • If P_REV_IN_USE_S is less than eight, the mobile station shall update the multiplex
 31 option information as follows:
 - 32 – The mobile station shall store the forward Fundamental Channel multiplex
 33 option [FOR_FCH_MUX_OPTION_S = FOR_MUX_OPTION_T].
 - 34 – The mobile station shall store the reverse Fundamental Channel multiplex
 35 option [REV_FCH_MUX_OPTION_S = REV_MUX_OPTION_T].
 - 36 – The mobile station shall store the forward Dedicated Control Channel multiplex
 37 option [FOR_DCCH_MUX_OPTION_S = FOR_MUX_OPTION_T].

- 1 - The mobile station shall store the reverse Dedicated Control Channel multiplex
2 option [REV_DCCH_MUX_OPTION_S = REV_MUX_OPTION_r].
- 3 • If P_REV_IN_USE_S is greater than or equal to eight, the mobile station shall update
4 the multiplex option information as follows:
- 5 - If FCH_DCCH_MUX_OPTION_IND is equal to '00':
- 6 + The mobile station shall store the forward Fundamental Channel multiplex
7 option (FOR_FCH_MUX_OPTION_S = FOR_MUX_OPTION_r).
- 8 + The mobile station shall store the forward Dedicated Control Channel
9 multiplex option (FOR_DCCH_MUX_OPTION_S = FOR_MUX_OPTION_r).
- 10 + The mobile station shall store the reverse Fundamental Channel multiplex
11 option (REV_FCH_MUX_OPTION_S = REV_MUX_OPTION_r).
- 12 + The mobile station shall store the reverse Dedicated Control Channel
13 multiplex option (REV_DCCH_MUX_OPTION_S = REV_MUX_OPTION_r).
- 14 - If FCH_DCCH_MUX_OPTION_IND is equal to '01':
- 15 + The mobile station shall store the forward Fundamental Channel multiplex
16 option (FOR_FCH_MUX_OPTION_S = FOR_MUX_OPTION_r).
- 17 + The mobile station shall store the reverse Fundamental Channel multiplex
18 option (REV_FCH_MUX_OPTION_S = REV_MUX_OPTION_r).
- 19 - If FCH_DCCH_MUX_OPTION_IND is equal to '10':
- 20 + The mobile station shall store the forward Dedicated Control Channel
21 multiplex option (FOR_DCCH_MUX_OPTION_S = FOR_MUX_OPTION_r).
- 22 + The mobile station shall store the reverse Dedicated Control Channel
23 multiplex option (REV_DCCH_MUX_OPTION_S = REV_MUX_OPTION_r).
- 24 - If FCH_DCCH_MUX_OPTION_IND is equal to '11':
- 25 + The mobile station shall store the forward Fundamental Channel multiplex
26 option (FOR_FCH_MUX_OPTION_S = FOR_MUX_OPTION_r).
- 27 + The mobile station shall store the reverse Fundamental Channel multiplex
28 option (REV_FCH_MUX_OPTION_S = REV_MUX_OPTION_r).
- 29 + The mobile station shall store the forward Dedicated Control Channel
30 multiplex option (FOR_DCCH_MUX_OPTION_S = FOR_DCCH_MUX_OPTION_r).
- 31 + The mobile station shall store the reverse Dedicated Control Channel
32 multiplex option (REV_DCCH_MUX_OPTION_S = REV_DCCH_MUX_OPTION_r).
- 33 • The mobile station shall store the set of number of bits per frame of the forward
34 Fundamental Channel and Dedicated Control Channel [FOR_NUM_BITS_S =
35 FOR_NUM_BITS_r].
- 36 • The mobile station shall store the set of number of bits per frame of the reverse
37 Fundamental Channel and Dedicated Control Channel [REV_NUM_BITS_S =
38 REV_NUM_BITS_r].

- 1 • If a service option connection has been omitted from the service option connection
2 records, the Layer 3 shall terminate the call control instance (currently existing or
3 pending instantiation) identified by the connection reference corresponding to the
4 omitted service option connection.
- 5 • If this is the first Service Configuration Record received from the base station in a
6 *Service Connect Message*, *General Handoff Direction Message*, or *Universal Handoff*
7 *Direction Message* and accepted by the mobile station since entering the *Traffic*
8 *Channel substate*, the mobile station shall also identify the Call Control instance
9 currently identified by NULL by the connection reference assigned to the first
10 service option connection, CON_REF_r; otherwise, the mobile station shall identify
11 the Call Control instance corresponding to the first service option connection listed
12 in this Service Configuration information record by the NULL identifier.
- 13 • The mobile station shall delete all instances of current service option connection
14 records. For each of the NUM_CON_REC_r occurrences of the service option
15 connection record (SO_CON_REC[i]), the mobile station shall perform the following:
- 16 - The mobile station shall store the service option connection reference
17 (SO_CON_REC_s[i].CON_REF = CON_REF_r).
- 18 - The mobile station shall store the service option
19 (SO_CON_REC_s[i].SERVICE_OPTION = SERVICE_OPTION_r).
- 20 - The mobile station shall store the forward traffic channel traffic type
21 (SO_CON_REC_s[i].FOR_TRAFFIC = FOR_TRAFFIC_r).
- 22 - The mobile station shall store the reverse traffic channel traffic type
23 (SO_CON_REC_s[i].REV_TRAFFIC = REV_TRAFFIC_r).
- 24 - The mobile station shall store the encryption mode indicator for user
25 information privacy (SO_CON_REC_s[i].UI_ENCRYPT_MODE =
26 UI_ENCRYPT_MODE_r).
- 27 - The mobile station shall store the service reference identifier
28 (SO_CON_REC_s[i].SR_ID = SR_ID_r).
- 29 - If RLP_INFO_INCL_r equals '1', the mobile station shall store the Radio Link
30 Protocol block of bits (SO_CON_REC_s[i].RLP_BLOB = RLP_BLOB_r).
- 31 - If QOS_PARAMS_INCL_r equals '1', the mobile station shall store the QoS
32 parameters block (SO_CON_REC_s[i].QOS_PARAMS = QOS_PARAMS_r).
- 33 • If FCH_CC_INCL_r equals '1', the mobile station shall perform the following:
- 34 - The mobile station shall store the indicator for 5ms frames on Fundamental
35 Channel as follows: if FCH_FRAME_SIZE_r equals '1', the mobile station shall set
36 FCH_5MS_FRAMES_s = '1'; otherwise, it is set to '0'.

- 1 - The mobile station shall store the Forward Fundamental Channel Radio
2 Configuration (FOR_FCH_RC_s = FOR_FCH_RC_r).
- 3 - The mobile station shall store the Reverse Fundamental Channel Radio
4 Configuration (REV_FCH_RC_s = REV_FCH_RC_r).
- 5 • If DCCH_CC_INCL_r equals '1', the mobile station shall perform the following:
- 6 - The mobile station shall store the indicator for 5ms frames on Dedicated Control
7 Channel as follows: If DCCH_FRAME_SIZE_r equals '10' or '11', the mobile
8 station shall set DCCH_5MS_FRAMES_s = '1'; otherwise, it is set to '0'.
- 9 - The mobile station shall store the Forward Dedicated Control Channel Radio
10 Configuration (FOR_DCCH_RC_s = FOR_DCCH_RC_r).
- 11 - The mobile station shall store the Reverse Dedicated Control Channel Radio
12 Configuration (REV_DCCH_RC_s = REV_DCCH_RC_r).
- 13 • If FOR_SCH_CC_INCL_r equals '1', the mobile station shall store the
14 NUM_FOR_SCH_r occurrences of the Forward Supplemental Channel channel
15 configuration records as follows:
- 16 - The mobile station shall store the Forward Supplemental Channel Identification
17 (FOR_SCH_ID[FOR_SCH_ID_r]_s = FOR_SCH_ID_r).
- 18 - The mobile station shall store the Forward Supplemental Channel Multiplex
19 Option (FOR_SCH_MUX[FOR_SCH_ID_r]_s = FOR_SCH_MUX_r).
- 20 - The mobile station shall store the Forward Supplemental Channel Radio
21 Configuration (FOR_SCH_RC[FOR_SCH_ID_r]_s = SCH_RC_r).
- 22 - The mobile station shall store the Forward Supplemental Channel Coding Type
23 (FOR_SCH_CODING[FOR_SCH_ID_r]_s = CODING_r).
- 24 + If FRAME_40_USED_r and FRAME_80_USED_r are both equal to '0', the
25 mobile station shall set FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '00'
26 (i.e., 20 ms frame length).
- 27 - If FRAME_40_USED_r is equal to '1', the mobile station shall set
28 FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '01' (i.e., 40 ms frame length).
- 29 - If FRAME_80_USED_r is equal to '1', the mobile station shall set
30 FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '10' (i.e., 80 ms frame length).
- 31 - F_MAX_RATE_IDX_s[FOR_SCH_ID_r] = MAX_RATE_r.
- 32 • If REV_SCH_CC_INCL_r equals '1', the mobile station shall store the NUM_REV_SCH_r
33 occurrences of the Reverse Supplemental Channel channel configuration records as
34 follows:
- 35 - The mobile station shall store the Reverse Supplemental Channel Identification
36 (REV_SCH_ID[REV_SCH_ID_r]_s = REV_SCH_ID_r).
- 37 - The mobile station shall store the Reverse Supplemental Channel Multiplex
38 Option (REV_SCH_MUX[REV_SCH_ID_r]_s = REV_SCH_MUX_r).

- 1 - The mobile station shall store the Reverse Supplemental Channel Radio
2 Configuration (REV_SCH_RC[REV_SCH_ID_r]_s = SCH_RC_r).
- 3 - The mobile station shall store the Reverse Supplemental Channel Coding Type
4 (REV_SCH_CODING[REV_SCH_ID_r]_s = CODING_r).
- 5 - If FRAME_40_USED_r and FRAME_80_USED_r are both equal to '0', the mobile
6 station shall set REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '00' (i.e., 20 ms
7 frame length).
- 8 - If FRAME_40_USED_r is equal to '1', the mobile station shall set
9 REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '01' (i.e., 40 ms frame length).
- 10 - If FRAME_80_USED_r is equal to '1', the mobile station shall set
11 REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '10' (i.e., 80 ms frame length).
- 12 - R_MAX_RATE_IDX_s[REV_SCH_ID_r] = MAX_RATE_r.
- 13 • If FOR_PDCH_CC_INCL_r equals '1', the mobile station shall perform the following:
- 14 - The mobile station shall store the Forward Packet Data Channel multiplex
15 option (FOR_PDCH_MUX_OPTION_s = FOR_PDCH_MUX_OPTION_r).
- 16 - The mobile station shall store the Forward Packet Data Channel Radio
17 Configuration (FOR_PDCH_RC_s = FOR_PDCH_RC_r).
- 18 • If REV_PDCH_CC_INCL_r equals '1', the mobile station shall store the following:
- 19 - The Reverse Packet Data Channel multiplex option for the higher data rates
20 (REV_PDCH_MUX_OPTION_HIGH_RATE_s =
21 REV_PDCH_MUX_OPTION_HIGH_RATE_r).
- 22 - The Reverse Packet Data Channel multiplex option for the lower data rates
23 (REV_PDCH_MUX_OPTION_LOW_RATE_s =
24 REV_PDCH_MUX_OPTION_LOW_RATE_r).
- 25 - The Reverse Packet Data Channel Radio Configuration (REV_PDCH_RC_s =
26 REV_PDCH_RC_r).

27 2.6.4.1.13 Processing the Non-Negotiable Service Configuration Record

28 The mobile station shall update the Non-Negotiable Service Configuration information
29 record currently in use as follows:

- 30 • If FPC_INCL_r equals '1', the mobile station shall perform the following:
- 31 - The mobile station shall store the Power Control Subchannel indicator
32 (FPC_PRI_CHAN_s = FPC_PRI_CHAN_r).
- 33 - The mobile station shall store the forward power control operation mode
34 (FPC_MODE_NO_SCH_s = FPC_MODE_r).
- 35 - The mobile station shall set FPC_MODE_s = FPC_MODE_NO_SCH_s if there is no
36 forward Supplemental Channel assignment in progress (see 2.6.6.2.5.1.1).
- 37 - If FPC_OLPC_FCH_INCL_r equals '1', the mobile station shall perform the
38 following:

- 1 + The mobile station shall store the Fundamental Channel target Frame Error
2 Rate ($FPC_FCH_FER_s = FPC_FCH_FER_r$).
- 3 + The mobile station shall store the minimum Fundamental Channel Outer
4 Loop E_b/N_t setpoint ($FPC_FCH_MIN_SETPT_s = FPC_FCH_MIN_SETPT_r$).
- 5 + The mobile station shall store the maximum Fundamental Channel Outer
6 Loop E_b/N_t setpoint ($FPC_FCH_MAX_SETPT_s = FPC_FCH_MAX_SETPT_r$).
- 7 - If $FPC_OLPC_DCCH_INCL_r$ equals '1', the mobile station shall perform the
8 following:
- 9 + The mobile station shall store the Dedicated Control Channel target Frame
10 Error Rate ($FPC_DCCH_FER_s = FPC_DCCH_FER_r$).
- 11 + The mobile station shall store the minimum Dedicated Control Channel
12 Outer Loop E_b/N_t setpoint ($FPC_DCCH_MIN_SETPT_s =$
13 $FPC_DCCH_MIN_SETPT_r$).
- 14 + The mobile station shall store the maximum Dedicated Control Channel
15 Outer Loop E_b/N_t setpoint ($FPC_DCCH_MAX_SETPT_s =$
16 $FPC_DCCH_MAX_SETPT_r$).
- 17 • If $GATING_RATE_INCL_r$ equals '1', the mobile station shall store the Reverse Pilot
18 Channel gating rate ($PILOT_GATING_RATE_s = PILOT_GATING_RATE_r$).
- 19 - If $FOR_SCH_INCL_r$ equals '1', the mobile station shall store the $NUM_FOR_SCH_r$
20 occurrences of the Forward Supplemental Channel information as follows:
- 21 - The mobile station shall store the Forward Supplemental Channel Multiframe
22 Offset ($FOR_SCH_FRAME_OFFSET[FOR_SCH_ID_r]_s =$
23 $FOR_SCH_FRAME_OFFSET_r$).
- 24 • If $REV_SCH_CC_INCL_r$ equals '1', the mobile station shall store the $NUM_REV_SCH_r$
25 occurrences of the Reverse Supplemental Channel information as follows:
- 26 - The mobile station shall store the Reverse Supplemental Channel Multiframe
27 Offset ($REV_SCH_FRAME_OFFSET[REV_SCH_ID_r]_s =$
28 $REV_SCH_FRAME_OFFSET_r$).
- 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_r equals '00' and P_REV_IN_USE_s is greater than six and an F-PDCH
2 is not assigned, the mobile station shall reset the Logical-to-Physical Mapping to
3 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_r equals '00' and P_REV_IN_USE_s is equal to or less than six, the
8 mobile station shall reset the Logical-to-Physical Mapping to their default values
9 as follows:
- 10 + Default number of Logical-to-Physical Mapping entries
11 (NUM_LPM_ENTRIES_s = '0100').
- 12 + Default Table(0) Logical-to-Physical Mapping service reference identifier
13 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].SR_ID_s = '000').
- 14 + Default Table(0) Logical-to-Physical Mapping logical resource identifier
15 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].LOGICAL_RESOURCE_s =
16 '0001'].
- 17 + Default Table(0) Logical-to-Physical Mapping physical resource identifier:
- 18 ○ If CH_IND_s is equal to '01' or '11', the mobile station shall set
19 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCE_s to
20 '0000'.
- 21 ○ If CH_IND_s is equal to '10', the mobile station shall set
22 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCE_s to
23 '0001'.
- 24 + Default Table(0) Logical-to-Physical Mapping forward mapping indicator
25 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].FORWARD_FLAG_s = '1').
- 26 + Default Table(0) Logical-to-Physical Mapping reverse mapping indicator
27 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].REVERSE_FLAG_s = '1').
- 28 + Default Table(0) Logical-to-Physical Mapping priority
29 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PRIORITY_s = '0000').
- 30 + Default Table(1) Logical-to-Physical Mapping service reference identifier
31 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].SR_ID_s = '001').
- 32 + Default Table(1) Logical-to-Physical Mapping logical resource identifier
33 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].LOGICAL_RESOURCE_s =
34 '0000').
- 35 + Default Table(1) Logical-to-Physical Mapping physical resource identifier:
- 36 ○ If CH_IND_s is equal to '01' or '11', the mobile station shall set
37 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCE_s to
38 '0000'.

- 1 ○ If CH_IND_s is equal to '10', the mobile station shall set
2 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCE_s to
3 '0001'.
- 4 + Default Table(1) Logical-to-Physical Mapping forward mapping indicator
5 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].FORWARD_FLAG_s = '1').
- 6 + Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
7 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].REVERSE_FLAG_s = '1').
- 8 + Default Table(1) Logical-to-Physical Mapping priority
9 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PRIORITY_s = '0000').
- 10 + Default Table(2) Logical-to-Physical Mapping service reference identifier
11 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].SR_ID_s = '001').
- 12 + Default Table(2) Logical-to-Physical Mapping logical resource identifier
13 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].LOGICAL_RESOURCE_s =
14 '0000').
- 15 + Default Table(2) Logical-to-Physical Mapping physical resource identifier
16 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PHYSICAL_RESOURCE_s to
17 '0010').
- 18 + Default Table(2) Logical-to-Physical Mapping forward mapping indicator
19 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].FORWARD_FLAG_s = '1').
- 20 + Default Table(2) Logical-to-Physical Mapping reverse mapping indicator
21 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].REVERSE_FLAG_s = '1').
- 22 + Default Table(2) Logical-to-Physical Mapping priority
23 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PRIORITY_s = '0000').
- 24 + Default Table(3) Logical-to-Physical Mapping service reference identifier
25 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].SR_ID_s = '001').
- 26 + Default Table(3) Logical-to-Physical Mapping logical resource identifier
27 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].LOGICAL_RESOURCE_s =
28 '0000').
- 29 + Default Table(3) Logical-to-Physical Mapping physical resource identifier
30 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].PHYSICAL_RESOURCE_s to
31 '0011').
- 32 + Default Table(3) Logical-to-Physical Mapping forward mapping indicator
33 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].FORWARD_FLAG_s = '1').
- 34 + Default Table(3) Logical-to-Physical Mapping reverse mapping indicator
35 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].REVERSE_FLAG_s = '1').
- 36 + Default Table(3) Logical-to-Physical Mapping priority
37 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].PRIORITY_s = '0000').

- 1 - If LPM_IND_r 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 the
5 number of Logical-to-Physical Mapping entries (NUM_LPM_ENTRIES_s =
6 NUM_LPM_ENTRIES_r). For each ith record of the NUM_LPM_ENTRIES_r 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_s =
11 SR_ID_r).
- 12 + The mobile station shall store the Logical-to-Physical Mapping logical
13 resource identifier
14 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].LOGICAL_RESOURCE_s =
15 LOGICAL_RESOURCE_r).
- 16 + The mobile station shall store the Logical-to-Physical Mapping Physical
17 Channel
18 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].PHYSICAL_RESOURCE_s =
19 PHYSICAL_RESOURCE_r).
- 20 + The mobile station shall store the Logical-to-Physical Mapping forward
21 mapping indicator
22 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].FORWARD_FLAG_s =
23 FORWARD_FLAG_r).
- 24 + The mobile station shall store the Logical-to-Physical Mapping reverse
25 mapping indicator
26 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REVERSE_FLAG_s =
27 REVERSE_FLAG_r).
- 28 + The mobile station shall store the Logical-to-Physical Mapping priority
29 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].PRIORITY_s = PRIORITY_r).
- 30 - If LPM_IND_r equals '10', the mobile station shall use the Logical-to-Physical
31 Mapping currently in use.
- 32 • For each of the NUM_REC_r 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_s [SR_ID_r] = SDB_SO_OMIT_r).
- 37 • The mobile station shall store the following:
- 38 - USE_FLEX_NUM_BITS_s = USE_FLEX_NUM_BITS_r
- 39 - USE_VAR_RATE_s = USE_VAR_RATE_r

- 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_S = '0000'.
- 6 - RDCCH_NBIT_TABLE_IDS = '0000'.
- 7 - FDCCH_NBITS_IDX_S = '0000'.
- 8 • If VAR_TABLES_INCL_r 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_s[VAR_RATE_TABLE_ID_r][NUM_BITS_IDX_r] = MASK_r;
- 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 ○ For i=1, ..., row,
- 19 If the *i*th bit position in MASK_s[FSCH_VAR_TABLE_IDS[1]][row] is equal to
- 20 '1', then the mobile station shall set
- 21 VAR_FSCH_RATE_OFFSET_s[1][row][i] to i,
- 22 otherwise, the mobile shall set VAR_FSCH_RATE_OFFSET_s[1][row][i] to
- 23 '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 ○ For i=1, ..., row,
- 28 If the *i*th bit position in MASK_s[FSCH_VAR_TABLE_IDS[2]][row] is equal to
- 29 '1', then the mobile station shall set
- 30 VAR_FSCH_RATE_OFFSET_s[2][row][i] to i,
- 31 otherwise, the mobile shall set VAR_FSCH_RATE_OFFSET_s[2][row][i] to
- 32 '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 ○ For i=1, ..., row,

- 1 If the i^{th} bit position in $\text{MASK}_s[\text{RSCH_VAR_TABLE_ID}_s[1]][\text{row}]$ is equal to
2 '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 $\text{VAR_RSCH_RATE_OFFSET}_s[1][\text{row}][i]$ to
5 '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^{th} bit position in $\text{MASK}_s[\text{RSCH_VAR_TABLE_ID}_s[2]][\text{row}]$ is equal to
11 '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 $\text{VAR_RSCH_RATE_OFFSET}_s[2][\text{row}][i]$ to
14 '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 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 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 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_r
- 2 - RSCH_LTU_TAB_IDS[1] = RSCH0_LTU_TAB_ID_r
- 3 - RSCH_LTU_TAB_IDS[2] = RSCH1_LTU_TAB_ID_r
- 4 • Else (if USE_OLD_LTU_MAPPING_r 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_r 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_r 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_s[PARTITION_TABLE_ID_r][CATEGORY_r].MUX_HEADER_LEN =
- 18 MUX_HEADER_LEN_r
- 19 + PART_TAB_s[PARTITION_TABLE_ID_r][CATEGORY_r].MUX_HEADER =
- 20 MUX_HEADER_r
- 21 + PART_TAB_s[PARTITION_TABLE_ID_r][CATEGORY_r]. NUM_PARTITIONS =
- 22 NUM_PARTITIONS_r
- 23 + For i=1, ..., NUM_PARTITIONS+1; the mobile station shall store the
- 24 following:
- 25 ○ PART_TAB_s[PARTITION_TABLE_ID_r][CATEGORY_r]. PARTITION_SR_ID[i] =
- 26 SR_ID_r
- 27 ○ PART_TAB_s[PARTITION_TABLE_ID_r][CATEGORY_r]. PARTITION_NBITS[i] =
- 28 SRV_NUM_BITS_r
- 29 • Else (if PARTITION_TABLES_INCL_r is included and is equal to '0'), the mobile
- 30 station shall use the previously stored values for the PART_TAB_s.
- 31 • If USE_OLD_PART_MAPPING_r is included and is equal to '0', then the mobile station
- 32 shall store the following:
- 33 - FFCH_PART_TAB_IDS = FFCH_PART_TAB_ID_r
- 34 - RFCH_PART_TAB_IDS = RFCH_PART_TAB_ID_r
- 35 - FDCCH_PART_TAB_IDS = FDCCH_PART_TAB_ID_r
- 36 - RDCCH_PART_TAB_IDS = RDCCH_PART_TAB_ID_r

- 1 • If USE_FLEX_NUM_BITS_S is equal to '0', then the mobile station shall store the
2 following:
- 3 - FFCH_PART_TAB_ID_S = '000'
- 4 - RFCH_PART_TAB_ID_S = '000'
- 5 - FDCCH_PART_TAB_ID_S = '000'
- 6 - RDCCH_PART_TAB_ID_S = '000'
- 7 • If SWITCHING_PARAMS_INCL_T is included and equal to '1', set
8 NUM_SOFT_SWITCHING_FRAMES_CHM_S to
9 NUM_SOFT_SWITCHING_FRAMES_CHM_T + 1, and
10 NUM_SOFT_SWITCHING_FRAMES_CHM_S to
11 NUM_SOFT_SWITCHING_FRAMES_CHM_T + 1.
- 12 • If RPC_INCL_T 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 an
20 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 ○ R-REQCH
- 33 ○ R-SPICH
- 34 ○ R-PDCCH possibly for each encoder packet size, or for the boosted and
35 non boosted modes
- 36 ○ R-PDCH possibly for each encoder packet size, or for the boosted and
37 non boosted modes, or for each encoder packet size and transmission
38 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 offset
3 relative to the Reverse Pilot Channel power for the R-ACKCH.
- 4 + If REV_SPICH_ADJ_INCL_T is equal to '1', the mobile station shall set
5 REV_SPICH_EP_SIZE_S to REV_SPICH_EP_SIZE_T+1.
- 6 • The mobile station shall determine the BCMC Logical-to-Physical Mapping to be
7 used as follows:
- 8 - If BCMC_LPM_INCL_T equals '0', the mobile station shall delete the BCMC
9 Logical-to-Physical Mapping currently in use.
- 10 - If BCMC_LPM_IND_T 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*th 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 BCMC
20 flow identifier
21 (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BCMC_FLOW_ID_S = *i*th
22 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_S = PHYSICAL_RESOURCE_T).
- 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_S =
31 FORWARD_FLAG_T).
- 32 + The mobile station shall store the BCMC Logical-to-Physical Mapping reverse
33 mapping indicator
34 (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REVERSE_FLAG_S =
35 REVERSE_FLAG_T).
- 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_S =
39 BSR_ID_INCL_T).

- 1 + If the BSR_ID_INCL_r is set to '1', the mobile station shall store the following:
- 2 ○ BCMC Logical-to-Physical Mapping BSR_ID
- 3 (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BSR_ID_s =
- 4 BSR_ID_r).
- 5 + If the BSR_ID_INCL_r is set to '0', the mobile station shall store the following:
- 6 ○ BCMC Logical-to-Physical Mapping Forward Traffic Channel traffic type
- 7 (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].FOR_TRAFFIC_s =
- 8 FOR_TRAFFIC_r).
- 9 ○ BCMC Logical-to-Physical Mapping Reverse Traffic Channel traffic type
- 10 (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REV_TRAFFIC_s =
- 11 REV_TRAFFIC_r).
- 12 - If BCMC_LPM_IND_r 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_r is equal to '1', then the mobile station shall store the
- 28 following:
- 29 - If REV_PDCH_PARMS_1_INCL_r is equal to '1', the base station shall set:
- 30 + REV_PDCH_MAX_AUTO_TPR_s to REV_PDCH_MAX_AUTO_TPR_r, and
- 31 + REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s to
- 32 REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_r+1.
- 33 - If REV_PDCH_OPER_PARMS_INCL_r is equal to '1', the mobile station shall set:
- 34 + REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s =
- 35 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_r+1,
- 36 + REV_PDCH_DEFAULT_PERSISTENCE_s =
- 37 REV_PDCH_DEFAULT_PERSISTENCE_r,
- 38 + REV_PDCH_RESET_PERSISTENCE_s = REV_PDCH_RESET_PERSISTENCE_r,

- 1 + REV_PDCH_GRANT_PRECEDENCE_S = REV_PDCH_GRANT_PRECEDENCE_T.
- 2 + REV_PDCH_ALWAYS_ACK_FINAL_ROUND_S =
- 3 REV_PDCH_ALWAYS_ACK_FINAL_ROUND_T.
- 4 + REV_PDCH_MSIB_SUPPORTED_S = REV_PDCH_MSIB_SUPPORTED_T, and
- 5 + REV_PDCH_SOFT_SWITCHING_RESET_IND_S =
- 6 REV_PDCH_SOFT_SWITCHING_RESET_IND_T.
- 7 - REV_PDCH_BOOST_PARAMS_INCL_S to REV_PDCH_BOOST_PARAMS_INCL_T.
- 8 - If REV_PDCH_BOOST_PARAMS_INCL_S is equal to '1', the base station shall set
- 9 REV_PDCH_NUM_ARQ_ROUNDS_BOOST_S to
- 10 REV_PDCH_NUM_ARQ_ROUNDS_BOOST_T+1, and
- 11 REV_PDCH_BOOST_OVERSHOOT_S to REV_PDCH_BOOST_OVERSHOOT_T.
- 12 - REV_REQCH_ENABLED_S to REV_REQCH_ENABLED_T.
- 13 - If REV_REQCH_ENABLED_S is equal to '0', the mobile station shall set
- 14 REV_PDCH_REQCH_TRIGGER_S to NULL.
- 15 - If REV_REQCH_ENABLED_S is equal to '1', the mobile station shall set
- 16 REV_REQCH_PARAMS_INCL_S to REV_REQCH_PARAMS_INCL_T; otherwise, the
- 17 mobile station shall set REV_REQCH_PARAMS_INCL_S to '0'.
- 18 - If REV_REQCH_PARAMS_INCL_S is equal to '1', the mobile station shall store the
- 19 following:
- 20 + REV_REQCH_QUICK_REPEAT_ALLOWED_S to
- 21 REV_REQCH_QUICK_REPEAT_ALLOWED_T.
- 22 + REV_REQCH_POWER_REPORTS_PARAMS_INCL_S to
- 23 REV_REQCH_POWER_REPORTS_PARAMS_INCL_T.
- 24 + If REV_REQCH_POWER_REPORTS_PARAMS_INCL_S is equal to '1', the mobile
- 25 station shall store the following:
- 26 ○ REV_REQCH_POWER_HEADROOM_INCREASE_S to
- 27 REV_REQCH_POWER_HEADROOM_INCREASE_T.
- 28 ○ REV_REQCH_POWER_HEADROOM_DECREASE_S to
- 29 REV_REQCH_POWER_HEADROOM_DECREASE_T.
- 30 ○ REV_REQCH_HEADROOM_DURATION_S to
- 31 REV_REQCH_HEADROOM_DURATION_T.
- 32 ○ REV_REQCH_MAX_POWER_UPDATE_DURATION_S to
- 33 REV_REQCH_MAX_POWER_UPDATE_DURATION_T.
- 34 - REV_PDCH_CRC_PARAMS_INCL_S to REV_PDCH_CRC_PARAMS_INCL_T.
- 35 - If REV_PDCH_CRC_PARAMS_INCL_S is equal to '1', the mobile station shall store
- 36 the following:
- 37 + REV_PDCH_INIT_TARGET_TPR_S to REV_PDCH_INIT_TARGET_TPR_T.

- 1 + REV_PDCH_MAX_TARGET_TPR_s to REV_PDCH_MAX_TARGET_TPR_r.
- 2 + REV_PDCH_QUICK_START_THRESH_s to
- 3 REV_PDCH_QUICK_START_THRESH_r.
- 4 + The mobile station shall set (k = 0).
- 5 + For i = 1 to (11 × (REV_PDCH_EP_MAP_LEN_r + 1)), if
- 6 REV_PDCH_EP_MAP_r[i]=1, the mobile station shall set:
- 7 o (k = k+1),
- 8 o REV_PDCH_STEP_UP_s[i] to (the kth occurrence of
- 9 REV_PDCH_STEP_UP_r)/32, and
- 10 o REV_PDCH_STEP_DOWN_s[i] to (the kth occurrence of
- 11 REV_PDCH_STEP_UP_r)/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_r[i]=0, the mobile station shall set
- 15 o REV_PDCH_BOOST_ALLOWED_s[i] to NULL , and
- 16 o REV_PDCH_AUTO_ALLOWED_s[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_s[i] to the kth occurrence of
- 20 REV_PDCH_BOOST_ALLOWED_r, and
- 21 o REV_PDCH_AUTO_ALLOWED_s[i] to the kth occurrence of
- 22 REV_PDCH_AUTO_ALLOWED_r
- 23 - If REV_REQCH_PARAMS_INCL_s is equal to '1', for i = 0 to 6, if
- 24 REV_PDCH_SR_ID_MAP_r[i]= '0', the mobile station shall set:
- 25 + REV_REQCH_USE_DEFAULT_TAB_s[i] to NULL,
- 26 + REV_PDCH_BUFFER_SIZE_s[i] to NULL,
- 27 + REV_REQCH_BUF_QUANT_PARM_1_s[i] to NULL,
- 28 + REV_REQCH_BUF_QUANT_PARM_2_s[i] to NULL,
- 29 + REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_MIN_DURATION to NULL,
- 30 + REV_PDCH_REQCH_TRIGGER_s[i]. REV_REQCH_USE_POWER_REPORTS to
- 31 NULL,
- 32 + REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_BUFFER_REPORTS to
- 33 NULL,

- 1 + REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_WATERMARKS to
2 NULL,
- 3 - The mobile station shall set (k = 0).
- 4 - If REV_REQCH_PARAMS_INCL_s 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 ○ i < 7, and REV_PDCH_SR_ID_MAP[i]='1', or
- 8 ○ i=7,
- 9 the mobile station shall perform the following:
- 10 ○ The mobile station shall set (k = k+1).
- 11 ○ The mobile station shall set
12 REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_MIN_DURATION to
13 REV_REQCH_MIN_DURATION_r × 16, using the kth occurrence of
14 REV_REQCH_MIN_DURATION_r;
- 15 ○ The mobile station shall set REV_PDCH_REQCH_TRIGGER_s[i].
16 REV_REQCH_USE_POWER_REPORTS to the kth occurrence of
17 REV_REQCH_USE_POWER_REPORTS_r;
- 18 ○ The mobile station shall set
19 REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_BUFFER_REPORT
20 S to the kth occurrence of REV_REQCH_USE_BUFFER_REPORTS_r;
- 21 ○ The mobile station shall set
22 REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_WATERMARKS to
23 the kth occurrence of REV_REQCH_USE_WATERMARKS_r;
- 24 ○ If any of the following conditions are true,
- 25 ◇ REV_PDCH_REQCH_TRIGGER_s[i].
26 REV_REQCH_USE_BUFFER_REPORTS is equal to '1'.
- 27 ◇ REV_PDCH_REQCH_TRIGGER_s[i].
28 REV_REQCH_USE_POWER_REPORTS is equal to '1'.
- 29 ◇ REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_WATERMARKS
30 is equal to '1'.
- 31 The mobile station shall perform the following:
- 32 ◇ The mobile station shall set REV_REQCH_USE_DEFAULT_TAB_s[i] to
33 the kth occurrence of REV_REQCH_USE_DEFAULT_TAB_r.

- 1 ◇ If REV_REQCH_USE_DEFAULT_TAB_s[i] is equal to '000', then, for j =
2 1 to 13, the mobile station shall set REV_PDCH_BUFFER_SIZE_s[i][j]
3 to
4 $2 \times \text{REV_REQCH_BUF_QUANT_PARAM_1}_r \times j^2 +$
5 $\text{REV_REQCH_BUF_QUANT_PARAM_2}_r \times j,$
6 using the kth occurrences of REV_REQCH_BUF_QUANT_PARAM_1_r,
7 and REV_REQCH_BUF_QUANT_PARAM_2_r.
- 8 ◇ If REV_REQCH_USE_DEFAULT_TAB_s[i] is not equal to '000', then, for
9 j = 1 to 13, the mobile station shall set
10 REV_PDCH_BUFFER_SIZE_s[i][j] to the buffer size value specified in
11 the jth row of the buffer size table corresponding to
12 REV_REQCH_USE_DEFAULT_TAB_s[i].
- 13 ○ If REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_WATERMARKS is
14 equal to '1', the mobile station shall store the following:
- 15 ◇ REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_HIGH_WATERMARK
16 to $\text{REV_REQCH_HIGH_WATERMARK_1}_r \times$
17 $8^{\text{REV_REQCH_HIGH_WATERMARK_2}_r}$, using the kth occurrences of
18 REV_REQCH_HIGH_WATERMARK_1_r and
19 REV_REQCH_HIGH_WATERMARK_2_r.
- 20 ◇ REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_LOW_WATERMARK
21 to $\text{REV_REQCH_LOW_WATERMARK_1}_r \times$
22 $8^{\text{REV_REQCH_LOW_WATERMARK_2}_r}$, using the kth occurrences of
23 REV_REQCH_LOW_WATERMARK_1_r and
24 REV_REQCH_LOW_WATERMARK_2_r.
- 25 ◇ REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_CEILING to
26 $\text{REV_REQCH_CEILING_1}_r \times 8^{\text{REV_REQCH_CEILING_2}_r}$,
27 using the kth occurrences of REV_REQCH_CEILING_1_r and
28 REV_REQCH_CEILING_2_r.
- 29 ◇ REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_FLOOR_s[i] to
30 $\text{REV_REQCH_FLOOR_1}_r \times 8^{\text{REV_REQCH_FLOOR_2}_r}$,
31 using the kth occurrences of REV_REQCH_FLOOR_1_r, and
32 REV_REQCH_FLOOR_2_r.

33 2.6.4.1.14 Processing the Security Mode Command Message

34 The mobile station shall process the received *Security Mode Command Message* as follows:

- 35 • The mobile station shall set D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r.
- 36 • If MSG_INTEGRITY_SUP is set to '0', the mobile station shall perform the following:
- 37 - If D_SIG_ENCRYPT_MODE_r is not equal to '000', the mobile station shall
38 perform the following:
- 39 + Set ENCRYPT_MODE_s to '11'

- 1 + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
2 (the CMEAKEY is associated with the AUTHR of the *Origination Message* or
3 *Page Response Message*, or the CMEAKEY associated with the AUTHU
4 generated during Unique Challenge-Response procedure as described in
5 2.3.12.1.4).
- 6 + Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- 7 + Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
8 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
9 NEW_SSEQ_H if either of the following conditions is true:
- 10 ○ The NEW_SSEQ_H field is included in the last *Origination Message* or
11 *Page Response Message* and TX_EXT_SSEQ[0][KEY_ID] and
12 TX_EXT_SSEQ[1][KEY_ID] have not been initialized by the last *Channel*
13 *Assignment Message*, *Extended Channel Assignment Message*, or an
14 earlier f-dsch *Security Mode Command Message* (see 2.3.12.4.1.3).
- 15 ○ This message is a response to a *Security Mode Request Message* (see
16 2.3.12.4.1.3) that includes an NEW_SSEQ_H field.
- 17 • If MSG_INTEGRITY_SUP is set to '1' and CHANGE_KEYS_r is set to '1', the mobile
18 station shall perform the following:
- 19 - Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
- 20 - Set ENCRYPT_MODE_s to '11'.
- 21 - If KEY_ID is equal to '00' or '01', the mobile station shall perform the following:
22 + Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
23 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
24 NEW_SSEQ_H included in the *Origination Message*, *Page Response Message*,
25 or *Security Mode Request Message*).
- 26 + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
27 (the CMEAKEY is associated with the AUTHR of the *Origination Message* or
28 *Page Response Message*, or the CMEAKEY associated with the AUTHU
29 generated during the Unique Challenge-Response procedure as described in
30 2.3.12.1.4).
- 31 + Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- 32 + Set INT_KEY[KEY_ID] to the 128-bit pattern.
- 33 + Set LAST_2G_KEY_ID_s to KEY_ID.
- 34 - If KEY_ID is equal to '10' or '11', the mobile station shall perform the following:
35 + Set TX_EXT_SSEQ[0][KEY_ID][0], TX_EXT_SSEQ[1][KEY_ID],
36 RX_EXT_SSEQ[0][KEY_ID][0], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
37 NEW_SSEQ_H included in the *Authentication Response Message* or *Security*
38 *Mode Request Message*).
- 39 + Set ENC_KEY[KEY_ID] to the latest CK generated by AKA.

- 1 + Set INT_KEY[KEY_ID] to the latest IK generated by AKA.
- 2 + Set LAST_3G_KEY_ID_s to KEY_ID.
- 3 + If the mobile station supports R-UIM, then the mobile shall set USE_UAK_s to
- 4 USE_UAK_r; otherwise, the mobile station shall perform the following:
- 5 ○ Set USE_UAK_s to '0'.
- 6 ○ If USE_UAK_r is equal to '1', then the mobile station shall send a *Mobile*
- 7 *Station Reject Order* with ORDQ equal to '00010100' (UAK not
- 8 supported).
- 9 - Send a *Security Mode Completion Order*.
- 10 • For each of the service option connections specified by the CON_REF field included
- 11 in this message, the mobile station shall set the user information encryption mode
- 12 in the corresponding service option connection record (SO_CON_REC_s[i]) to
- 13 UI_ENCRYPT_MODE_r) (i.e., set SO_CON_REC_s[i].UI_ENCRYPT_MODE to
- 14 UI_ENCRYPT_MODE_r where SO_CON_REC_s[i].CON_REF = CON_REF_r).
- 15 • For each of the service option connections specified by the CON_REF field included
- 16 in this message, at the action time of the message the mobile station shall start
- 17 encrypting user information (e.g., voice and data) using the encryption algorithm
- 18 specified by SO_CON_REC_s[i].UI_ENCRYPT_MODE where
- 19 SO_CON_REC_s[i].CON_REF = CON_REF_r (see Table 3.7.4.5-1).
- 20 • If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to
- 21 ENC_KEY_SIZE_r.
- 22 • If ENC_KEY_SIZE_r is included and not set to reserved value and if current key
- 23 strength is greater than the desired key strength specified by ENC_KEY_SIZE_r
- 24 according to table 3.7.4.5-2, mobile station shall perform the key strength reduction
- 25 algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to
- 26 ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if
- 27 KEY_ID is equal to '00' or '01' and is 128 bit if KEY_ID is equal to '10' or '11'.
- 28 • If C_SIG_ENCRYPT_MODE is included, the mobile station shall set
- 29 C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.

30 2.6.4.1.15 Processing the Handoff Supplementary Information Solicit Message

31 If the mobile station receives a *Handoff Supplementary Information Solicit Message* from the

32 base station, it shall transmit a *Handoff Supplementary Information Notification Message* to

33 the base station. If the mobile station is capable of obtaining Overhead Messages of

34 neighboring sectors while in traffic channel state and if supplementary information for a

35 pilot requested in the *Handoff Supplementary Information Solicit Message* is available, then

36 the mobile station should include the supplementary information for this pilot.

37 2.6.4.2 Traffic Channel Initialization Substate

38 In this substate, the mobile station verifies that it can receive the Forward Traffic Channel

39 and begins transmitting on the Reverse Traffic Channel.

1 If this substate is entered from the *Traffic Channel Substate* of the *Mobile Station Control* on
 2 the *Traffic Channel State* with an Initialization Failure indication, the mobile station shall
 3 perform the procedures as specified in 2.6.4.2.1, and shall not perform any of the
 4 remaining procedures in this section.

5 Otherwise, upon entering the *Traffic Channel Initialization Substate*, the mobile station shall
 6 perform the following:

- 7 • The mobile station shall perform registration initialization as specified in
 8 2.6.5.5.4.1.
- 9 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the
 10 acknowledgment procedures as specified in [4].
- 11 • The mobile station shall initialize Forward Traffic Channel power control as
 12 specified in 2.6.4.1.1.1.
- 13 • The mobile station shall initialize the list TAG_OUTSTANDING_LIST to be empty.
- 14 • If P_REV_IN_USE_s is less than seven, the mobile station shall set CS_SUPPORTED_s
 15 to '0'.
- 16 • If P_REV_IN_USE_s is less than nine, the mobile station shall set
 17 FOR_PDCH_SUPPORTED_s to '0'.
- 18 • The mobile station shall set USE_ERAM_s to '0'.
- 19 • The mobile station shall set the following variables to their initial default values
 20 given below:
 - 21 - If the mobile station had included the FOR_PDCH Capability Type-specific fields
 22 in the *Origination Message* or *Page Response Message*, the mobile station shall
 23 store one plus the value included in the ACK_DELAY field of the message as
 24 ACK_DELAY and the value included in the NUM_ARQ_CHAN field of the
 25 message as NUM_ARQ_CHAN.
 - 26 - Default power control step size
 27 (PWR_CNTL_STEP_s = '000')
 - 28 - Default Reverse Supplemental Channel power offset adjustment relative to
 29 Reverse Pilot Channel power
 30 + RLGAIN_SCH_PILOT_s [0]= '000000'
 - 31 + RLGAIN_SCH_PILOT_s [1]= '000000'
 - 32 - Default Reverse Discontinuous Transmission Duration on Reverse
 33 Supplemental Code Channel (REV_DTX_DURATION_s = '0000')
 - 34 - Default Reverse Discontinuous Transmission Duration on Reverse
 35 Supplemental Channel (REV_SCH_DTX_DURATION_s = '0000')
 - 36 - Default channel on which the mobile station is to perform the primary inner
 37 loop estimation and the base station is to multiplex the Power Control
 38 Subchannel:

- 1 + If CH_IND_S is equal to '01' or if EXT_CH_IND_S indicates that F-FCH is
2 assigned and F-DCCH is not assigned, the mobile station shall set
3 FPC_PRI_CHAN_S to '0'.
- 4 + If CH_IND_S is equal to '10' or if EXT_CH_IND_S indicates that F-DCCH is
5 assigned and F-FCH is not assigned, the mobile station shall set
6 FPC_PRI_CHAN_S to '1'.
- 7 + If EXT_CH_IND_S indicates that neither F-FCH nor F-DCCH is assigned, the
8 mobile station shall set FPC_PRI_CHAN_S to NULL.
- 9 - Default forward power control operation mode used except during the forward
10 Supplemental Channel interval
11 (FPC_MODE_NO_SCH_S = '000')
- 12 - Default forward power control operation mode used during the forward
13 Supplemental Channel interval [set as follows:](#)
14 [If RC 8 is assigned on the reverse fundamental channel, or RC 11 or RC 12 is](#)
15 [assigned on the forward fundamental channel,](#)
16 [set \(FPC_MODE_SCH_S = '010'\)](#)
- 17 [Otherwise](#)
18 [set \(FPC_MODE_SCH_S = '000'\)](#)
- 19 - Default forward power control operation mode
20 (FPC_MODE_S = '000')
- 21 - Slotted timer (T_SLOTTED_S = T_{74m})
- 22 - Reduced slot cycle mode enabled indicator (RSC_MODE_ENABLED = NO).
- 23 - Radio environment reporting mode enabled indicator (RER_MODE_ENABLED =
24 NO).
- 25 - Tracking zone mode enabled indicator (TKZ_MODE_ENABLED = NO).
- 26 - Tracking zone mode pending indicator (TKZ_MODE_PENDING = NO).
- 27 - Default Reverse Pilot Channel gating (PILOT_GATING_USE_RATE='0')
- 28 - Default begin preamble for Reverse Supplemental Code Channels
29 (BEGIN_PREAMBLE_S = '000')
- 30 - Default resume preamble for Reverse Supplemental Code Channels
31 (RESUME_PREAMBLE_S = '000')
- 32 - Default start time for Reverse Supplemental Code Channel assignment
33 (REV_START_TIME_S = NULL)
- 34 - Default retry delays:
- 35 + RETRY_DELAY_S[010] = 0
- 36 + RETRY_DELAY_S[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/I₀ 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/I₀ threshold
38 (SF_TOTAL_EC_IO_THRESH_S = '11111')

- 1 - Default received power difference threshold
- 2 (DIFF_RX_PWR_THRESHS = '00000')

- 3 - Default maximum wait time on the CDMA Target Frequency
- 4 (TF_WAIT_TIMES = '1111')
- 5 - Default Candidate Frequency Search Set
- 6 (Candidate Frequency Search Set is empty)

- 7 - Default Candidate Frequency CDMA band
- 8 (CF_CDMABANDS = NULL)

- 9 - Default Candidate Frequency CDMA channel
- 10 (CF_CDMACHS = NULL)

- 11 - Default indicator for 5ms frames on Fundamental Channel
- 12 (FCH_5MS_FRAMES_S = '0')

- 13 - Default indicator for 5ms frames on Dedicated Control Channel
- 14 (DCCH_5MS_FRAMES_S = '0')

- 15 - Default start time unit for Supplemental Channel
- 16 (START_TIME_UNITS = '000')

- 17 - Default Forward Supplemental Channel FER report indicator
- 18 (FOR_SCH_FER_REPS = '0')

- 19 - Default Forward Supplemental Channel Configuration parameters:
- 20 + Set the Forward Supplemental Channel frame length
- 21 FOR_SCH_FRAME_LENGTHS[0] to NULL.
- 22 + Set the Forward Supplemental Channel Multiplex Option FOR_SCH_MUXS[0]
- 23 to NULL.
- 24 + Set the Forward Supplemental Channel Radio Configuration
- 25 FOR_SCH_RCS[0] to NULL.
- 26 + Set the Forward Supplemental Channel Coding Type FOR_SCH_CODINGS[0]
- 27 to NULL.
- 28 + Set QOF_IDS[0][SCCL_INDEX_S][i] to NULL, for all integer values of i from 0 to
- 29 15.
- 30 + Set FOR_SCH_CC_INDEX_S [0][SCCL_INDEX_S][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_LENGTHS[1] to NULL.
- 34 + Set the Forward Supplemental Channel Multiplex Option FOR_SCH_MUXS[1]
- 35 to NULL.
- 36 + Set the Forward Supplemental Channel Radio Configuration
- 37 FOR_SCH_RCS[1] to NULL.

- 1 + Set the Forward Supplemental Channel Coding Type FOR_SCH_CODING_s[1]
2 to NULL.
- 3 + Set QOF_IDS_s[1][SCCL_INDEX_s][i] to NULL, for all integer values of i from 0 to
4 15.
- 5 + Set FOR_SCH_CC_INDEX_s [1][SCCL_INDEX_s][i] to NULL, for all integer
6 values of i from 0 to 15.
- 7 - Call Origination Transaction Identifier
8 (TAG_s = '0000').
- 9 - Default Reverse Supplemental Channel Configuration parameters:
10 + REV_WALSH_IDS_s[0][0000] = 1
11 + REV_WALSH_IDS_s[0][0001] = 1
12 + REV_WALSH_IDS_s[0][0010] = 1
13 + REV_WALSH_IDS_s[0][0011] = 1
14 + REV_WALSH_IDS_s[0][0100] = 0
15 + REV_WALSH_IDS_s[0][0101] = 0
16 + REV_WALSH_IDS_s[0][0110] = 0
17 + REV_WALSH_IDS_s[1][0000] = 1
18 + REV_WALSH_IDS_s[1][0001] = 1
19 + REV_WALSH_IDS_s[1][0010] = 1
20 + REV_WALSH_IDS_s[1][0011] = 0
21 + REV_WALSH_IDS_s[1][0100] = 0
22 + REV_WALSH_IDS_s[1][0101] = 0
23 + REV_WALSH_IDS_s[1][0110] = 0
24 + Set the Reverse Supplemental Channel frame length
25 REV_SCH_FRAME_LENGTH_s[0] to NULL.
26 + Set the Reverse Supplemental Channel Multiplex Option REV_SCH_MUX_s[0]
27 to NULL.
28 + Set the Reverse Supplemental Channel Radio Configuration
29 REV_SCH_RC_s[0] to NULL.
30 + Set the Reverse Supplemental Channel Coding Type REV_SCH_CODING_s[0]
31 to NULL.
32 + Set the Reverse Supplemental Channel frame length
33 REV_SCH_FRAME_LENGTH_s[1] to NULL.
34 + Set the Reverse Supplemental Channel Multiplex Option REV_SCH_MUX_s[1]
35 to NULL.

- 1 + Set the Reverse Supplemental Channel Radio Configuration
2 REV_SCH_RC_S[1] to NULL.
- 3 + Set the Reverse Supplemental Channel Coding Type REV_SCH_CODING_S[1]
4 to NULL.
- 5 • If P_REV_IN_USE_S is greater than six and the ASSIGN_MODE_R 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:

10

11 **Table 2.6.4.2-1. Default Logical to Physical Mapping Table, ASSIGN_MODE_R equal to**
12 **'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

13 Where requirement 1 is as follows:

- 14 + The SR_ID field shall be set to NULL.

15 Requirement 2 is as follows:

- 16 + If CH_IND_S is equal to '01', the PHYSICAL_RESOURCE field shall be set to
17 '0000'.
- 18 + If CH_IND_S is equal to '10', the PHYSICAL_RESOURCE field shall be set to
19 '0001'.
- 20 + If CH_IND_S is equal to '11', there shall be two entries in the default LPM
21 table where the PHYSICAL_RESOURCE field shall be set to '0000' and '0001'
22 respectively.

23 Requirement 3 is as follows:

- 24 + If CH_IND_S is equal to '01':

- 1 ○ If the Radio Configuration in use is less than three, the
2 PHYSICAL_RESOURCE field shall be set to '0000'; otherwise, there shall
3 be three entries in the default LPM table where the
4 PHYSICAL_RESOURCE field shall be set to '0000', '0010', and '0011'
5 respectively.
- 6 + If CH_IND_s is equal to '10':
 - 7 ○ There shall be three entries in the default LPM table where the
8 PHYSICAL_RESOURCE field shall be set to '0001', '0010', and '0011'
9 respectively.
- 10 + If CH_IND_s is equal to '11':
 - 11 ○ There shall be four entries in the default LPM table where the
12 PHYSICAL_RESOURCE field shall be set to '0000', '0001', '0010', and
13 '0011' respectively.
- 14 • If the ASSIGN_MODE_r field of the *Extended Channel Assignment Message* is equal to
15 '101', then the mobile station shall initialize the logical to physical mapping table
16 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE) according to the requirements in Table
17 2.6.4.2-2:

18 **Table 2.6.4.2-2. Default Logical to Physical Mapping Table, ASSIGN_MODE_r equal to**
19 **'101'**

SR_ID	LOGICAL_RESOURCE	PHYSICAL_RESOURCE	FORWARD_FLAG	REVERSE_FLAG	PRIORITY
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

20 Where requirement 1 is as follows:

- 21 + The SR_ID field shall be set to NULL.

22 Requirement 2 is as follows:

- 23 + If EXT_CH_IND_s is equal to '00001', then there shall be two entries in the
24 default LPM table where the mobile station shall set:
 - 25 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
26 REVERSE_FLAG to '0' for the first entry, and
 - 27 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '0', and
28 REVERSE_FLAG to '1' for the second entry.

- 1 + If EXT_CH_IND_s is equal to '00010', then there shall be two entries in the
2 default LPM table where the mobile station shall set:
- 3 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
4 REVERSE_FLAG to '0' for the first entry, and
- 5 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
6 REVERSE_FLAG to '1' for the second entry.
- 7 + If EXT_CH_IND_s is equal to '00011', then the mobile station shall set
8 PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
9 REVERSE_FLAG to '1'.
- 10 + If EXT_CH_IND_s is equal to '00100', then the mobile station shall set
11 PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
12 REVERSE_FLAG to '1'.
- 13 + If EXT_CH_IND_s is equal to '00101', then there shall be two entries in the
14 default LPM table where the mobile station shall set:
- 15 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
16 REVERSE_FLAG to '1' for the first entry, and
- 17 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
18 REVERSE_FLAG to '1' for the second entry.
- 19 + If EXT_CH_IND_s is equal to '00110', then there shall be two entries in the
20 default LPM table where the mobile station shall set:
- 21 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
22 REVERSE_FLAG to '1' for the first entry, and
- 23 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
24 REVERSE_FLAG to '1' for the second entry.
- 25 + If EXT_CH_IND_s is equal to '01000', then the mobile station shall set
26 PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
27 REVERSE_FLAG to '1'.
- 28 + If EXT_CH_IND_s is equal to '01001', then there shall be two entries in the
29 default LPM table where the mobile station shall set:
- 30 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
31 REVERSE_FLAG to '1' for the first entry, and
- 32 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '0', and
33 REVERSE_FLAG to '1' for the second entry.
- 34 + If EXT_CH_IND_s is equal to '01010', then there shall be two entries in the
35 default LPM table where the mobile station shall set:
- 36 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
37 REVERSE_FLAG to '1' for the first entry, and
- 38 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
39 REVERSE_FLAG to '1' for the second entry.

- 1 + If EXT_CH_IND_s is equal to '01011', then there shall be two entries in the
2 default LPM table where the mobile station shall set:
- 3 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
4 REVERSE_FLAG to '1' for the first entry, and
- 5 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
6 REVERSE_FLAG to '1' for the second entry.
- 7 + If EXT_CH_IND_s is equal to '01100', then there shall be two entries in the
8 default LPM table where the mobile station shall set:
- 9 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
10 REVERSE_FLAG to '1' for the first entry, and
- 11 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
12 REVERSE_FLAG to '1' for the second entry.
- 13 + If EXT_CH_IND_s is equal to '01101', then there shall be three entries in the
14 default LPM table where the mobile station shall set:
- 15 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
16 REVERSE_FLAG to '1' for the first entry, and
- 17 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
18 REVERSE_FLAG to '1' for the second entry, and
- 19 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
20 REVERSE_FLAG to '1' for the third entry.
- 21 + If EXT_CH_IND_s is equal to '01110', then there shall be three entries in the
22 default LPM table where the mobile station shall set:
- 23 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
24 REVERSE_FLAG to '1' for the first entry, and
- 25 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
26 REVERSE_FLAG to '1' for the second entry, and
- 27 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
28 REVERSE_FLAG to '1' for the third entry.

29 Requirement 3 is as follows:

- 30 + If EXT_CH_IND_s is equal to '00001', then there shall be four entries in the
31 default LPM table where the mobile station shall set:
- 32 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '0', and
33 REVERSE_FLAG to '1' for the first entry,
- 34 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '0', and
35 REVERSE_FLAG to '1' for the second entry,
- 36 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '0', and
37 REVERSE_FLAG to '1' for the third entry, and

- 1 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
2 REVERSE_FLAG to '0' for the fourth entry.
- 3 + If EXT_CH_IND_s is equal to '00010', then there shall be four entries in the
4 default LPM table where the mobile station shall set:
- 5 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
6 REVERSE_FLAG to '1' for the first entry,
- 7 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '0', and
8 REVERSE_FLAG to '1' for the second entry,
- 9 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '0', and
10 REVERSE_FLAG to '1' for the third entry, and
- 11 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
12 REVERSE_FLAG to '0' for the fourth entry.
- 13 + If EXT_CH_IND_s is equal to '00011', then there shall be four entries in the
14 default LPM table where the mobile station shall set:
- 15 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
16 REVERSE_FLAG to '1' for the first entry,
- 17 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
18 REVERSE_FLAG to '1' for the second entry,
- 19 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
20 REVERSE_FLAG to '1' for the third entry, and
- 21 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
22 REVERSE_FLAG to '0' for the fourth entry.
- 23 + If EXT_CH_IND_s is equal to '00100', then there shall be four entries in the
24 default LPM table where the mobile station shall set:
- 25 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
26 REVERSE_FLAG to '1' for the first entry,
- 27 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
28 REVERSE_FLAG to '1' for the second entry,
- 29 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
30 REVERSE_FLAG to '1' for the third entry, and
- 31 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
32 REVERSE_FLAG to '0' for the fourth entry.
- 33 + If EXT_CH_IND_s is equal to '00101', then there shall be five entries in the
34 default LPM table where the mobile station shall set:
- 35 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
36 REVERSE_FLAG to '1' for the first entry,
- 37 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
38 REVERSE_FLAG to '1' for the second entry,

- 1 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
- 2 REVERSE_FLAG to '1' for the third entry,
- 3 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
- 4 REVERSE_FLAG to '1' for the fourth entry, and
- 5 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
- 6 REVERSE_FLAG to '0' for the fifth entry.
- 7 + If EXT_CH_IND_s is equal to '00110', then there shall be five entries in the
- 8 default LPM table where the mobile station shall set:
- 9 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
- 10 REVERSE_FLAG to '1' for the first entry,
- 11 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
- 12 REVERSE_FLAG to '1' for the second entry,
- 13 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
- 14 REVERSE_FLAG to '1' for the third entry,
- 15 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
- 16 REVERSE_FLAG to '1' for the fourth entry, and
- 17 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
- 18 REVERSE_FLAG to '0' for the fifth entry.
- 19 + If EXT_CH_IND_s is equal to '01000', then there shall be one entry in the
- 20 default LPM table where the mobile station shall set:
- 21 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
- 22 REVERSE_FLAG to '1' for the third entry:
- 23 + If EXT_CH_IND_s is equal to '01001', then there shall be two entries in the
- 24 default LPM table where the mobile station shall set:
- 25 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '0', and
- 26 REVERSE_FLAG to '1' for the first entry,
- 27 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
- 28 REVERSE_FLAG to '1' for the fourth entry.
- 29 + If EXT_CH_IND_s is equal to '01010', then there shall be four entries in the
- 30 default LPM table where the mobile station shall set:
- 31 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
- 32 REVERSE_FLAG to '1' for the first entry,
- 33 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
- 34 REVERSE_FLAG to '1' for the fourth entry.
- 35 + If EXT_CH_IND_s is equal to '01011', then there shall be four entries in the
- 36 default LPM table where the mobile station shall set:
- 37 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
- 38 REVERSE_FLAG to '1' for the first entry,

- 1 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
2 REVERSE_FLAG to '0' for the second entry,
- 3 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
4 REVERSE_FLAG to '0' for the third entry, and
- 5 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
6 REVERSE_FLAG to '1' for the fourth entry.
- 7 + If EXT_CH_IND_s is equal to '01100', then there shall be four entries in the
8 default LPM table where the mobile station shall set:
- 9 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
10 REVERSE_FLAG to '1' for the first entry,
- 11 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
12 REVERSE_FLAG to '0' for the second entry,
- 13 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
14 REVERSE_FLAG to '0' for the third entry, and
- 15 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
16 REVERSE_FLAG to '1' for the fourth entry.
- 17 + If EXT_CH_IND_s is equal to '01101', then there shall be five entries in the
18 default LPM table where the mobile station shall set:
- 19 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
20 REVERSE_FLAG to '1' for the first entry,
- 21 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
22 REVERSE_FLAG to '1' for the second entry,
- 23 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
24 REVERSE_FLAG to '0' for the third entry,
- 25 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
26 REVERSE_FLAG to '0' for the fourth entry, and
- 27 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
28 REVERSE_FLAG to '1' for the fifth entry.
- 29 + If EXT_CH_IND_s is equal to '01110', then there shall be five entries in the
30 default LPM table where the mobile station shall set:
- 31 ○ PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
32 REVERSE_FLAG to '1' for the first entry,
- 33 ○ PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
34 REVERSE_FLAG to '1' for the second entry,
- 35 ○ PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '1', and
36 REVERSE_FLAG to '0' for the third entry,
- 37 ○ PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '1', and
38 REVERSE_FLAG to '0' for the fourth entry, and

- 1 ○ PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
2 REVERSE_FLAG to '1' for the fifth entry.
- 3 • If P_REV_IN_USE_s is equal to or less than six, the mobile station shall initialize the
4 logical to physical mapping table (LOGICAL_TO_PHYSICAL_MAPPING_TABLE) as
5 follows:
- 6 - Default number of Logical-to-Physical Mapping entries
7 (NUM_LPM_ENTRIES_s = '0100')
- 8 - Default Table(0) Logical-to-Physical Mapping service reference identifier
9 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].SR_ID_s = '000')
- 10 - Default Table(0) Logical-to-Physical Mapping logical resource identifier
11 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].LOGICAL_RESOURCE_s = '0001')
- 12 - Default Table(0) Logical-to-Physical Mapping physical resource identifier:
13 + If CH_IND_s is equal to '01' or '11', the mobile station shall set
14 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCE_s to
15 '0000'.
16 + If CH_IND_s is equal to '10', the mobile station shall set
17 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCE_s to
18 '0001'.
- 19 - Default Table(0) Logical-to-Physical Mapping forward mapping indicator
20 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].FORWARD_FLAG_s = '1')
- 21 - Default Table(0) Logical-to-Physical Mapping reverse mapping indicator
22 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].REVERSE_FLAG_s = '1')
- 23 - Default Table(0) Logical-to-Physical Mapping priority
24 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PRIORITY_s = '0000')
- 25 - Default Table(1) Logical-to-Physical Mapping service reference identifier
26 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].SR_ID_s = '001')
- 27 - Default Table(1) Logical-to-Physical Mapping logical resource identifier
28 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].LOGICAL_RESOURCE_s = '0000')
- 29 - Default Table(1) Logical-to-Physical Mapping physical resource identifier:
30 + If CH_IND_s is equal to '01' or '11', the mobile station shall set
31 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCE_s to
32 '0000'.
33 + If CH_IND_s is equal to '10', the mobile station shall set
34 LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCE_s to
35 '0001'.
- 36 - Default Table(1) Logical-to-Physical Mapping forward mapping indicator
37 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].FORWARD_FLAG_s = '1')

- 1 - Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
2 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].REVERSE_FLAG_s = '1')
- 3 - Default Table(1) Logical-to-Physical Mapping priority
4 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PRIORITY_s = '0000')
- 5 - Default Table(2) Logical-to-Physical Mapping service reference identifier
6 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].SR_ID_s = '001')
- 7 - Default Table(2) Logical-to-Physical Mapping logical resource identifier
8 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].LOGICAL_RESOURCE_s = '0000')
- 9 - Default Table(2) Logical-to-Physical Mapping physical resource identifier
10 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PHYSICAL_RESOURCE_s to
11 '0010').
- 12 - Default Table(2) Logical-to-Physical Mapping forward mapping indicator
13 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].FORWARD_FLAG_s = '1')
- 14 - Default Table(2) Logical-to-Physical Mapping reverse mapping indicator
15 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].REVERSE_FLAG_s = '1')
- 16 - Default Table(2) Logical-to-Physical Mapping priority
17 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PRIORITY_s = '0000')
- 18 - Default Table(3) Logical-to-Physical Mapping service reference identifier
19 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].SR_ID_s = '001')
- 20 - Default Table(3) Logical-to-Physical Mapping logical resource identifier
21 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].LOGICAL_RESOURCE_s = '0000')
- 22 - Default Table(3) Logical-to-Physical Mapping physical resource identifier
23 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PHYSICAL_RESOURCE_s to
24 '0011').
- 25 - Default Table(3) Logical-to-Physical Mapping forward mapping indicator
26 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].FORWARD_FLAG_s = '1')
- 27 - Default Table(3) Logical-to-Physical Mapping reverse mapping indicator
28 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].REVERSE_FLAG_s = '1')
- 29 - Default Table(3) Logical-to-Physical Mapping priority
30 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].PRIORITY_s = '0000')
- 31 • If BCMC_ON_TRAFFIC_SUP_s is set to '1', the mobile station shall set
32 AUTO_REQ_TRAF_ALLOWED_IND_s to '1'.
- 33 • The mobile station shall disable the T_{MS_Slotted} timer, and set SLOTTED_s to YES.
- 34 • The mobile station shall set REV_SPICH_EP_SIZE_s to 5.
- 35 • If FOR_PDCH_PARAMS_INCL_s is equal to '0', the mobile station shall perform the
36 following:
- 37 - The mobile station shall set RLGAIN_ACKCH_PILOT_s to 0.
- 38 - The mobile station shall set RLGAIN_CQICH_PILOT_s to 0.

- 1 • If REV_PDCH_PARMS_INCL_s is equal to '0', the mobile station shall perform the
2 following:
- 3 - The mobile station shall set RLGAIN_SPICH_PILOT_s to 0.
4 - The mobile station shall set RLGAIN_REQCH_PILOT_s to 0.
5 - The mobile station shall set RLGAIN_PDCCH_PILOT_s to 0.
6 - The mobile station shall set REV_PDCH_MAX_AUTO_TPR_s to 8 (1dB).
7 - The mobile station shall set
8 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s to 9.
9 - The mobile station shall set REV_PDCH_DEFAULT_PERSISTENCE_s to '0'.
10 - The mobile station shall set REV_PDCH_RESET_PERSISTENCE_s to '0'.
11 - The mobile station shall set REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s to 3.
12 - The mobile station shall set REV_PDCH_NUM_ARQ_ROUNDS_BOOST_s to 3.
13 - The mobile station shall set REV_PDCH_MSIB_SUPPORTED_s to '0'.
14 - The mobile station shall set REV_PDCH_SOFT_SWITCHING_RESET_IND_s to '0'.
15 - The mobile station shall set REV_PDCH_TABLE_SEL_s to '0'.
16 • The mobile station shall set REV_PDCH_BUFFER_SIZE_s to NULL.
17 • For i = 0 to 7, the mobile station shall set_s to
18 REV_REQCH_BUF_QUANT_PARM_1_s[i] to NULL and
19 REV_REQCH_BUF_QUANT_PARM_2_s[i] to NULL.
20 • The mobile station shall set REV_REQCH_POWER_HEADROOM_INCREASE_s to
21 NULL.
22 • The mobile station shall set REV_REQCH_USE_POWER_REPORTS_s to NULL.
23 • The mobile station shall set REV_REQCH_POWER_HEADROOM_DECREASE_s to
24 NULL.
25 • The mobile station shall set REV_REQCH_HEADROOM_DURATION_s to NULL.
26 • The mobile station shall set REV_REQCH_MAX_POWER_UPDATE_DURATION_s to
27 NULL.
28 • The mobile station shall set REV_PDCH_INIT_TARGET_TPR_s to 0 (0dB).
29 • The mobile station shall set REV_PDCH_MAX_TARGET_TPR_s to 0 (0dB).
30 • The mobile station shall set REV_PDCH_QUICK_START_THRESH_s to 72 (9dB).
31 • The mobile station shall set REV_REQCH_QUICK_REPEAT_ALLOWED_s to NULL.
32 • The mobile station shall set REV_PDCH_GRANT_PRECEDENCE_s to '1'.
33 • The mobile station shall set REV_PDCH_ALWAYS_ACK_FINAL_ROUND_s to '0'.
34 • For i = 1 to (11 × (REV_PDCH_EP_MAP_LEN_r + 1)), the mobile station shall perform
35 the following:

- 1 - If $i \leq 11$, the mobile station shall perform the following:
- 2 + The mobile station shall set $REV_PDCH_STEP_UP_S[i]$ and
- 3 $REV_PDCH_STEP_DOWN_S[i]$ as specified on the i^{th} row of Table 2.6.4.2-3.
- 4 - Otherwise, the mobile station shall set $REV_PDCH_STEP_UP_S[i]$ to 0, and it shall
- 5 set $REV_PDCH_STEP_DOWN_S[i]$ to 0.
- 6 • For $i = 0$ to 6, the mobile station shall perform the following:
- 7 - $REV_PDCH_BOOST_ALLOWED[i]_S$ to '0'.
- 8 - $REV_PDCH_AUTO_ALLOWED[i]_S$ to '1'.
- 9 • The mobile station shall set $REV_REQCH_ENABLED_S$ to '0'.
- 10 • The mobile station shall set $REV_PDCH_REQCH_TRIGGER_S$ to NULL.
- 11 • The mobile station shall set $REV_PDCH_BOOST_OVERSHOOT_S$ to 0.

12 **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

- 13 • The mobile station shall set $USE_CH_CFG_RRM_S$ to '0'.
- 14 • If the $ASSIGN_MODE_R$ field from the *Channel Assignment Message* equals '000', the
- 15 mobile station shall set $SERV_NEG_S$ to disabled.
- 16 • If the $ASSIGN_MODE_R$ field from the *Channel Assignment Message* equals '100', the
- 17 mobile station shall set $SERV_NEG_S$ to enabled.
- 18 • [If RC 8 is assigned on the reverse fundamental channel, or RC 11 or RC 12 is](#)
- 19 [assigned on the forward fundamental channel,](#) the mobile station shall initialize
- 20 RC parameters as described in section 2.6.16.
- 21 • The mobile station shall determine the service configuration as follows:
- 22 - If $SERV_NEG_S$ equals disabled, the initial service configuration shall include
- 23 Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse
- 24 Traffic Channels, and shall include no service option connections.

- 1 - If $SERV_NEG_S$ equals enabled, and if $GRANTED_MODE_S$ equals '00', the initial
2 service configuration shall include the multiplex option and radio configuration
3 for the Forward and Reverse Traffic Channels as specified by
4 $DEFAULT_CONFIG_S$, and shall include no service option connections.
- 5 - If $SERV_NEG_S$ equals enabled and $GRANTED_MODE_S$ equals '01' or '10':
- 6 + If the mobile station enters the *Traffic Channel Initialization Substate* because
7 of receiving the *Channel Assignment Message*, the initial service
8 configuration shall include the default Forward and Reverse Traffic Channel
9 multiplex options and transmission rates corresponding to the service option
10 requested by the mobile station in the *Origination Message*, in the case of a
11 mobile station originated call, or the *Page Response Message*, in the case of
12 a mobile station terminated, and shall include no service option connections.
- 13 + If the mobile station enters the *Traffic Channel Initialization Substate* because
14 of receiving the *Extended Channel Assignment Message*, the initial service
15 configuration shall include the default Forward and Reverse Traffic Channel
16 multiplex options that are derived from the radio configurations
17 corresponding to the Table 3.7.2.3.2.21-7, and shall include no service
18 option connections.
- 19 - If $SERV_NEG_S$ equals enabled and $GRANTED_MODE_S$ equals '11', the mobile
20 station shall begin to use the stored service configuration corresponding to
21 $SYNC_ID_S$ as the current service configuration and shall begin to process
22 Forward and Reverse Traffic Channel frames accordingly. The set of service
23 option connections to be restored are determined as follows:
- 24 + If $SR_ID_RESTORE_S$ equals '111', the mobile station shall restore all the
25 service option connections from the stored service configuration.
- 26 + If $SR_ID_RESTORE_S$ equals '000', the mobile station shall restore the service
27 option connections indicated by $SR_ID_RESTORE_BITMAP_S$ from the stored
28 service configuration.
- 29 + Otherwise, the mobile station shall restore the service option connection
30 corresponding to $SR_ID_RESTORE_S$ from the stored service configuration.
- 31 - If $SERV_NEG_S$ equals disabled, the mobile station shall perform the following:
- 32 + If the call is mobile station originated and the *Origination Message* requests a
33 special service option, the mobile station shall set SO_REQ_S to the special
34 service option number.
- 35 + If the call is mobile station originated and the *Origination Message* does not
36 request a special service option, the mobile station shall set SO_REQ_S to 1
37 (the default service option number).
- 38 + If the call is mobile station terminated, the mobile station shall set SO_REQ_S
39 to the service option number requested in the *Page Response Message*.

40 While in the *Traffic Channel Initialization Substate*, the mobile station shall perform the
41 following:

- 1 • The mobile station shall monitor Forward Traffic Channels associated with one or
2 more pilots in the Active Set.
- 3 • The mobile station shall perform pilot strength measurements as specified in
4 2.6.6.2.2, but shall not send *Pilot Strength Measurement Messages* or *Extended Pilot*
5 *Strength Measurement Messages*.
- 6 • The mobile station shall perform registration timer maintenance as specified in
7 2.6.5.5.4.2.
- 8 • If the bits of TMSI_CODE_{s-p} are not all equal to '1' and if System Time (in 80 ms
9 units) exceeds TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set all the bits of
10 TMSI_CODE_{s-p} to '1' within T_{66m} seconds.
- 11 • If the full-TMSI timer expires or has expired, the mobile station shall set all the bits
12 of TMSI_CODE_{s-p} to '1'. The mobile station shall update the registration variables
13 as described in 2.6.5.5.2.5.
- 14 • If the Forward Packet Data Channel is assigned, whenever the mobile station
15 transmitter is disabled, the MS shall set FPDCH_DTX_INDICATOR_s to '1'.
- 16 • If the Forward Packet Data Channel is assigned, whenever the mobile station
17 transmitter is enabled, the mobile station shall perform the following procedures:
18 - The MS shall set FPDCH_DTX_INDICATOR_s to '0'.
19 - If the mobile station transmitter has been disabled for at least
20 TX_DISABLED_TIMER_s, the mobile station shall send SIG-
21 HandoffPDCH.Indication (handoff_type = ASSIGN) primitive to the MAC layer.

22 If the mobile station does not support the assigned CDMA Channel (see [2]) or all of the
23 assigned Forward Traffic code channels (see [2]), the mobile station shall enter the *System*
24 *Determination Substate* of the *Mobile Station Initialization State* with an error indication (see
25 2.6.1.1).

26 If the mobile station supports the assigned CDMA Channel and the assigned Forward
27 Traffic code channels, the mobile station shall perform the following:

- 28 • The mobile station shall tune to the assigned CDMA Channel.
- 29 • The mobile station shall set its code channel for the assigned Forward Traffic code
30 channel.
- 31 • The mobile station shall set its Forward and Reverse Traffic Channel frame offsets
32 to the assigned frame offset as determined by FRAME_OFFSET_s.
- 33 • The mobile station shall set its Forward and Reverse Traffic Channel long code
34 masks to the public long code mask (see [2]).

35 If all of the following conditions are true:

- 36 • F-CPCCH is assigned, and
- 37 • EARLY_RL_TRANSMIT_IND_s equals '1',

38 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 • If CH_IND_s equals '00', the mobile station shall commence R-CQICH reporting as
- 5 specified in [2].
- 6 • If the mobile station receives a period of (N_{18m} × 1.25) ms with sufficient signal
- 7 quality on the Forward Common Power Control Subchannel assigned to this mobile
- 8 station within T_{79m} seconds after entering this substate, the mobile station shall
- 9 perform the following additional functions while it remains in the *Traffic Channel*
- 10 *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_{18m} × 1.25) ms with sufficient
- 18 signal quality on the Forward Common Power Control Subchannel assigned to this
- 19 mobile station within T_{79m} seconds after entering this substate, the mobile station
- 20 shall perform the 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 assigned, and
- 28 • EARLY_RL_TRANSMIT_IND_s equals '0', or EARLY_RL_TRANSMIT_IND_s equals '1'
- 29 and the T_{79m} timer has expired,.

30 the mobile station shall perform the following:

- 31 • If the mobile station receives a period of (N_{18m} × 1.25) ms with sufficient signal
- 32 quality on the Forward Common Power Control Subchannel assigned to this mobile
- 33 station within T_{50m} seconds after entering this substate, the mobile station shall
- 34 perform the following additional functions while it remains in the *Traffic Channel*
- 35 *Initialization Substate*:
- 36 - The mobile station shall perform Forward Traffic Channel supervision as
- 37 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
- 38 mobile station shall enter the *System Determination Substate* of the *Mobile*
- 39 *Station Initialization State* with a system lost indication (see 2.6.1.1).

- 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
3 [2], and Layer 3 shall send an *acquiring dedicated channel* indication to Layer 2
4 (see [4]).
- 5 - If CH_IND_s equals '00', the mobile station shall commence R-CQICH reporting
6 as specified in [2].
- 7 - The mobile station shall process Forward Traffic Channel signaling traffic and
8 shall discard other types of Forward Traffic Channel traffic.
- 9 - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating
10 an acknowledgment failure, the mobile station shall perform the following:
- 11 + If the Direct Channel Assignment call setup procedure was used and
12 DIRECT_CH_ASSIGN_RECOVER_IND_s is set to '1', the mobile station shall
13 perform the following:
- 14 o If any of the following conditions is met:
- 15 ◇ The mobile station is able to select the last pilot mobile station was
16 monitoring before entering *Mobile Station Control on the Traffic*
17 *Channel State* and the pilot has sufficient signal strength, or
- 18 ◇ The mobile station is able to select a pilot with sufficient signal
19 strength that is listed in NGHBR_REC_LIST, the ACCESS_ENTRY_HO
20 field of the NGHBR_REC corresponding to the selected pilot is equal
21 to '1' and the mobile station has sufficient information to monitor
22 BCCH or PCH from base station corresponding to the selected pilot.
- 23 Then the mobile station shall enter the Update Overhead Information
24 Substate of the System Access State with a direct channel assignment
25 failure indication on the selected pilot.
- 26 o Otherwise, the mobile station shall enter the System Determination
27 Substate of the Mobile Station Initialization State with a system lost
28 indication (see 2.6.1.1).
- 29 + Otherwise, the mobile station shall disable its transmitter and enter the
30 *System Determination Substate* of the *Mobile Station Initialization State* with a
31 system lost indication (see 2.6.1.1).
- 32 • If the mobile station does not receive a period of ($N_{18m} \times 1.25$) ms with sufficient
33 signal quality on the Forward Common Power Control Subchannel assigned to this
34 mobile station within T_{50m} seconds after entering this substate, the mobile station
35 shall perform the following:
- 36 • If the Direct Channel Assignment call setup procedure was used and
37 DIRECT_CH_ASSIGN_RECOVER_IND_s is set to '1', the mobile station shall perform
38 the following:
- 39 - If any of the following conditions is met:

- 1 + The mobile station is able to select the last pilot mobile station was
2 monitoring before entering *Mobile Station Control on the Traffic Channel State*
3 and the pilot has sufficient signal strength, or
- 4 + The mobile station is able to select a pilot with sufficient signal strength that
5 is listed in NGHBR_REC_LIST, and the ACCESS_ENTRY_HO field of the
6 NGHBR_REC corresponding to the selected pilot is equal to '1' and the
7 mobile station has sufficient information to monitor BCCH or PCH from base
8 station corresponding to the selected pilot.

9 Then the mobile station shall enter the *Update Overhead Information Substate* of
10 the *System Access State* with a direct channel assignment failure indication on
11 the selected pilot.

- 12 - Otherwise, the mobile station shall enter the *System Determination Substate* of
13 the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).
- 14 • Otherwise, the mobile station shall enter the *System Determination Substate* of the
15 *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

16 If all of the following conditions are true:

- 17 • F-CPCCH is not assigned, and
18 • EARLY_RL_TRANSMIT_IND_S equals '1',

19 the mobile station shall perform the following:

- 20 • The mobile station shall adjust its transmit power as specified in [2].
- 21 • The mobile station shall transmit the Traffic Channel preamble as specified in [2],
22 and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see
23 [4]).
- 24 • If CH_INDs equals '00', the mobile station shall commence R-CQICH reporting as
25 specified in [2].
- 26 • If the mobile station receives a period of ($N_{5m} \times 20$) ms with sufficient signal quality
27 on the physical channel corresponding to FPC_PRI_CHAN_S within T_{79m} seconds
28 after entering this substate, the mobile station shall perform the following additional
29 functions while it remains in the *Traffic Channel Initialization Substate*:
- 30 - The mobile station shall perform Forward Traffic Channel supervision as
31 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
32 mobile station shall enter the *System Determination Substate* of the *Mobile*
33 *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 34 - The mobile station shall process Forward Traffic Channel signaling traffic and
35 shall discard other types of Forward Traffic Channel traffic.
- 36 • If the mobile station does not receive a period of ($N_{5m} \times 20$) ms with sufficient signal
37 quality on the physical channel corresponding to FPC_PRI_CHAN_S within T_{79m}
38 seconds after entering this substate, the mobile station shall perform the following:
- 39 - The mobile station shall disable its transmitter.

- 1 - The mobile station shall discard any messages queued for transmission, and
2 those messages received and pending processing.
- 3 - The mobile station shall remain in this substate and perform the procedures
4 below.

5 If all of the following conditions are true:

- 6 • F-CPCCH is not assigned, and
7 • EARLY_RL_TRANSMIT_IND_s equals '0', or EARLY_RL_TRANSMIT_IND_s equals '1'
8 and the T_{79m} timer has expired,

9 the mobile station shall perform the following:

- 10 • If the mobile station receives a period of (N_{5m} × 20) ms with sufficient signal quality
11 on the physical channel corresponding to FPC_PRI_CHAN_s within T_{50m} seconds
12 after entering this substate, the mobile station shall perform the following additional
13 functions while it remains in the *Traffic Channel Initialization Substate*:
- 14 - The mobile station shall perform Forward Traffic Channel supervision as
15 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
16 mobile station shall enter the *System Determination Substate* of the *Mobile
17 Station Initialization State* with a system lost indication (see 2.6.1.1).
- 18 - The mobile station shall adjust its transmit power as specified in [2].
- 19 - The mobile station shall transmit the Traffic Channel preamble as specified in
20 [2], and Layer 3 shall send an *acquiring dedicated channel* indication to Layer 2
21 (see [4]).
- 22 - If CH_IND_s equals '00', the mobile station shall commence R-CQICH reporting
23 as specified in [2].
- 24 - The mobile station shall process Forward Traffic Channel signaling traffic and
25 shall discard other types of Forward Traffic Channel traffic.
- 26 - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating
27 an acknowledgment failure, the mobile station shall perform the following:
- 28 + If the Direct Channel Assignment call setup procedure was used and
29 DIRECT_CH_ASSIGN_RECOVER_IND_s is set to '1', the mobile station shall
30 perform the following:
- 31 ○ If any of the following conditions is met:
- 32 ◇ The mobile station is able to select the last pilot mobile station was
33 monitoring before entering *Mobile Station Control on the Traffic
34 Channel State* and the pilot has sufficient signal strength, or

- 1 ◇ The mobile station is able to select a pilot with sufficient signal
2 strength that is listed in NGHBR_REC_LIST, and the
3 ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the
4 selected pilot is equal to '1' and the mobile station has sufficient
5 information to monitor BCCH or PCH from base station
6 corresponding to the selected pilot.

7 Then the mobile station shall enter the *Update Overhead Information*
8 *Substate* of the *System Access State* with a direct channel assignment
9 failure indication on the selected pilot.

- 10 ○ Otherwise, the mobile station shall enter the *System Determination*
11 *Substate* of the *Mobile Station Initialization State* with a system lost
12 indication (see 2.6.1.1).

13 + Otherwise, the mobile station shall disable its transmitter and enter the
14 *System Determination Substate* of the *Mobile Station Initialization State* with a
15 system lost indication (see 2.6.1.1).

- 16 • If the mobile station does not receive a period of $(N_{5m} \times 20)$ ms with sufficient
17 signal quality on the physical channel corresponding to FPC_PRI_CHAN_s within
18 T_{50m} seconds after entering this substate, the mobile station shall perform the
19 following:

- 20 • If the Direct Channel Assignment call setup procedure was used and
21 DIRECT_CH_ASSIGN_RECOVER_IND_s is set to '1', the mobile station shall perform
22 the following:

23 - If all of the following conditions are met:

24 + The mobile station is able to select the last pilot mobile station was
25 monitoring before entering *Mobile Station Control on the Traffic Channel State*
26 and the pilot has sufficient signal strength, or

27 + The mobile station is able to select a pilot with sufficient signal strength that
28 is listed in NGHBR_REC_LIST, and the ACCESS_ENTRY_HO field of the
29 NGHBR_REC corresponding to the selected pilot is equal to '1' and the
30 mobile station has sufficient information to monitor BCCH or PCH from base
31 station corresponding to the selected pilot.

32 Then the mobile station shall enter the *Update Overhead Information*
33 *Substate* of the *System Access State* with a direct channel assignment failure
34 indication on the selected pilot.

35 - Otherwise, the mobile station shall enter the *System Determination Substate* of
36 the *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

- 37 • Otherwise, the mobile station shall enter the *System Determination Substate* of the
38 *Mobile Station Initialization State* with a system lost indication (see 2.6.1.1).

39 The mobile station shall then perform the procedures specified in 2.6.4.2.2.

1 2.6.4.2.1 Return to Traffic Channel Initialization Substate with Initialization Failure
2 Indication

3 If F-CPCCH is assigned, the mobile station shall perform the following:

- 4 • The mobile station shall perform the following functions while it remains in the
5 *Traffic Channel Initialization Substate*:
 - 6 - The mobile station shall perform Forward Traffic Channel supervision as
7 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
8 mobile station shall enter the *System Determination Substate* of the *Mobile*
9 *Station Initialization State* with a system lost indication (see 2.6.1.1).
 - 10 - The mobile station shall continue transmitting the Traffic Channel preamble as
11 specified in [2], the mobile station shall continue R-CQICH reporting as specified
12 in [2], and Layer 3 shall send an *acquiring dedicated channel* indication to Layer
13 2 (see [4]).
 - 14 - The mobile station shall process Forward Traffic Channel signaling traffic and
15 shall discard other types of Forward Traffic Channel traffic.
 - 16 - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating
17 an acknowledgment failure, the mobile station shall perform the following:
 - 18 + If the Direct Channel Assignment call setup procedure was used and
19 DIRECT_CH_ASSIGN_RECOVER_IND_s is set to '1', the mobile station shall
20 perform the following:
 - 21 ○ If any of the following conditions is met:
 - 22 ◇ The mobile station is able to select the last pilot mobile station was
23 monitoring before entering *Mobile Station Control on the Traffic*
24 *Channel State* and the pilot has sufficient signal strength, or
 - 25 ◇ The mobile station is able to select a pilot with sufficient signal
26 strength that is listed in NGHBR_REC_LIST, and the
27 ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the
28 selected pilot is equal to '1' and the mobile station has sufficient
29 information to monitor BCCH or PCH from base station
30 corresponding to the selected pilot.
 - 31 Then the mobile station shall enter the *Update Overhead Information*
32 *Substate* of the *System Access State* with a direct channel assignment
33 failure indication on the selected pilot.
 - 34 ○ Otherwise, the mobile station shall enter the *System Determination*
35 *Substate* of the *Mobile Station Initialization State* with a system lost
36 indication (see 2.6.1.1).
 - 37 + Otherwise, the mobile station shall disable its transmitter and enter the
38 *System Determination Substate* of the *Mobile Station Initialization State* with a
39 system lost indication (see 2.6.1.1).

40 If F-CPCCH is not assigned, the mobile station shall perform the following:

- 1 • The mobile station shall perform the following functions while it remains in the
2 *Traffic Channel Initialization Substate*:
- 3 - The mobile station shall perform Forward Traffic Channel supervision as
4 specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the
5 mobile station shall enter the *System Determination Substate* of the *Mobile*
6 *Station Initialization State* with a system lost indication (see 2.6.1.1).
- 7 - The mobile station shall continue transmitting the Traffic Channel preamble as
8 specified in [2], and Layer 3 shall send an *acquiring dedicated channel* indication
9 to Layer 2 (see [4]). Furthermore, if CH_IND_s equals '00', the mobile station
10 shall continue R-CQICH reporting 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_s is set to '1', the mobile station shall
17 perform the following:
- 18 ○ 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 ○ 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 a
36 system lost indication (see 2.6.1.1).
- 37 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_{51m} 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 $DIRECT_CH_ASSIGN_RECOVER_IND_S$ 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
 - + 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.

- 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).

After the first occurrence of receiving a period of $(N_{5m} \times 20)$ ms with sufficient signal quality on the physical channel corresponding to $FPC_PRI_CHAN_S$ or a period of $(N_{18m} \times 1.25)$ ms with sufficient signal quality on the Forward Common Power Control Subchannel assigned to this mobile station, if one of the following conditions is met:

- Layer 3 has received a *forward dedicated channel acquired* indication from Layer 2 within T_{51m} seconds after the transmitter was last enabled, or
- The mobile station supports transmission of fixed Traffic Channel preamble, and $FIXED_PREAMBLE_TRANSMIT_IND_S$ equals '1', and the mobile station has transmitted the Traffic Channel preamble for the duration corresponding to $FIXED_NUM_PREAMBLE_S$ as specified by the Table 3.7.2.3.2.21-13

the mobile station shall perform the following:

- If CH_IND_S is equal to '01', the mobile station shall begin transmitting on the Reverse Fundamental Channel.

- 1 • If CH_IND_s is equal to '11' and FUNDICATED_BCMC_IND_s equals '0', or if CH_IND_s
2 is equal to '11' and FUNDICATED_BCMC_IND_s equals '1' and
3 REV_FCH_ASSIGNED_s is equal to '1', the mobile station shall begin transmitting on
4 the Reverse Fundamental Channel.
- 5 • If CH_IND_s is equal to '10' or '11', the mobile station shall begin transmitting on the
6 Reverse Dedicated Control Channel when the mobile station has user data or
7 signaling traffic to send on the Reverse Dedicated Control Channel.
- 8 • If CH_IND_s equals '00', the mobile station shall perform the following:
- 9 - If EXT_CH_IND_s signals the allocation of a R-FCH, the mobile station shall
10 begin transmitting on the Reverse Fundamental Channel.
- 11 - If EXT_CH_IND_s signals the allocation of a R-DCCH, the mobile station shall
12 begin transmitting on the Reverse Dedicated Control Channel when the mobile
13 station has user data or signaling traffic to send on the Reverse Dedicated
14 Control Channel.
- 15 - If EXT_CH_IND_s signals the allocation of a R-PDCH, the mobile station shall
16 begin transmitting on the Reverse Packet Data Channel when the mobile station
17 has user data or signaling traffic to send on the Reverse Packet Data Channel.
- 18 • If SERV_NEG_s equals disabled, the mobile station shall activate the *SO Negotiation*
19 *Subfunction*.
- 20 • If SERV_NEG_s equals enabled and the GRANTED_MODE_s is '00', '01', or '11', the
21 mobile station shall activate the *Normal Service Subfunction*.
- 22 • If SERV_NEG_s equals enabled and the GRANTED_MODE_s is '10', the mobile station
23 shall activate the *Waiting for Service Connect Message Subfunction*.
- 24 • The mobile station shall perform the following:
- 25 - If SERV_NEG_s equals enabled and GRANTED_MODE_s is equal to '11', the
26 mobile station shall perform the following:
- 27 + The mobile station shall restore the stored service configuration as specified
28 in 2.6.4.1.2.2.5.2.
- 29 + For the first service option connection (with corresponding connection
30 reference CON_REF_j) listed in this stored Service Configuration information
31 record, Layer 3 shall instantiate a Call Control instance (as specified in
32 2.6.10) with the received BYPASS_ALERT_ANSWER_s. The mobile station
33 shall identify this Call Control instances by the corresponding CON_REF_j
34 and also identify this Call Control instance by the NULL identifier.

- 1 + For each of the remaining service option connection (with corresponding
2 connection reference CON_REF_i) that will be restored from the stored service
3 configuration record, Layer 3 shall instantiate a Call Control instance (as
4 specified in 2.6.10) with a 'restore indication'. The mobile station shall
5 identify each of these Call Control instances by the corresponding
6 CON_REF_i.
- 7 + The mobile station shall store the synchronization identifier corresponding to
8 the restored service configuration as SYNC_ID_S.
- 9 - Otherwise, the mobile station shall perform the following:
- 10 + If the BCMC_ORIG_ONLY_IND field is not included or is included and set to
11 '0' in the *Origination Message*, *Page Response Message*, or *Reconnect*
12 *Message*, the Layer 3 shall instantiate a Call Control instance (as specified in
13 2.6.10) for each service instance being initiated.
- 14 + The Layer 3 shall assign a default identifier of NULL to the Call Control
15 instance corresponding to the SR_ID field of the *Origination Message*, *Page*
16 *Response Message*, or *Reconnect Message*.
- 17 + If P_REV_IN_USE_S is greater than or equal to 11, the mobile station shall set
18 a call control timer to a value of T_{42m} seconds.
- 19 • The Layer 3 shall enter the *Traffic Channel Substate*.

20 2.6.4.3 Traffic Channel Substate

21 In this substate, the mobile station may exchange Traffic Channel frames with the base
22 station in accordance with the current service configuration. The mobile station may
23 perform the gating operation of Reverse Pilot Channel.

24 The mobile station can be in the *Active Mode* or *Control Hold Mode* while in this substate.

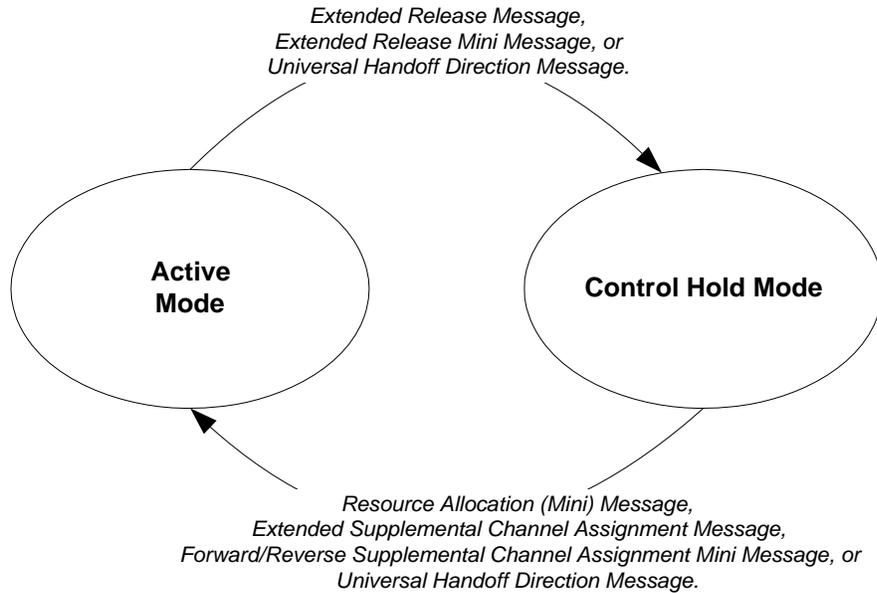
25 The following are the attributes when the mobile station is in the *Active Mode* of *Traffic*
26 *Channel Substate*:

- 27 • PILOT_GATING_USE_RATE is set to '0' (i.e., the reverse pilot (r-pich) is not gated).
28 • Flow of data traffic is permitted by the Multiplex Sublayer.

29 The following are the attributes when the mobile station is in the *Control Hold Mode* of
30 *Traffic Channel Substate*:

- 31 • PILOT_GATING_USE_RATE is set to '1'.
32 • The reverse pilot (r-pich) may be gated (if PILOT_GATING_RATE_S is not equal to
33 '00').
34 • If a Forward Packet Data Channel is not assigned, then the flow of data traffic is
35 blocked by the Multiplex Sublayer.
36 • If a Forward Packet Data Channel is assigned, then the flow of both data traffic and
37 signaling traffic is blocked by the Multiplex Sublayer.

- 1 Figure 2.6.4.3-1 shows the valid transitions between the modes of a *Traffic Channel Substate*
- 2 when a F-PDCH is not assigned in Control Hold Mode and the over-the-air Upper
- 3 Layer Signaling Messages that trigger transitions between these modes.



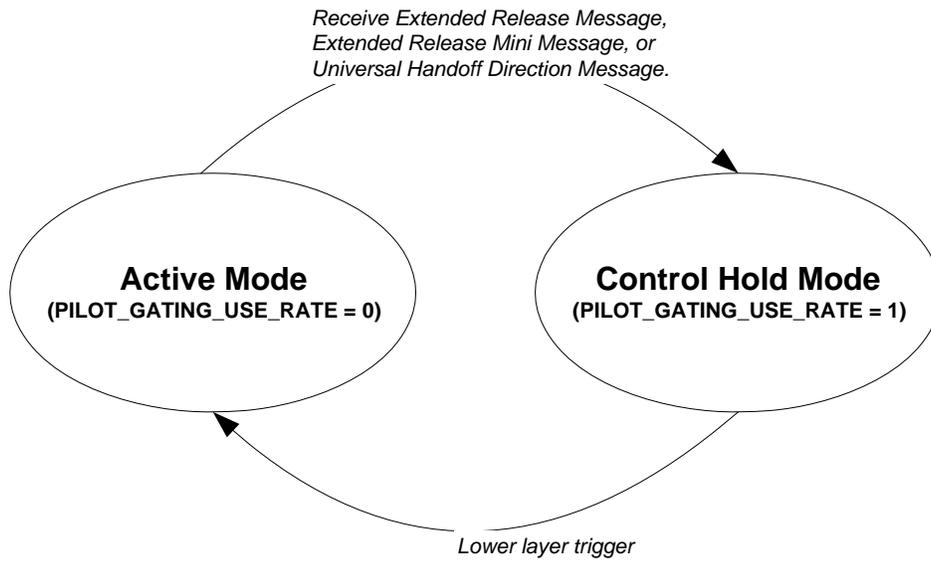
Note: The mode transition occurs when the fields are set appropriately

4

5 **Figure 2.6.4.3-1. Mobile Station Modes When a F-PDCH is not Assigned in Control**
6 **Hold Mode**

6

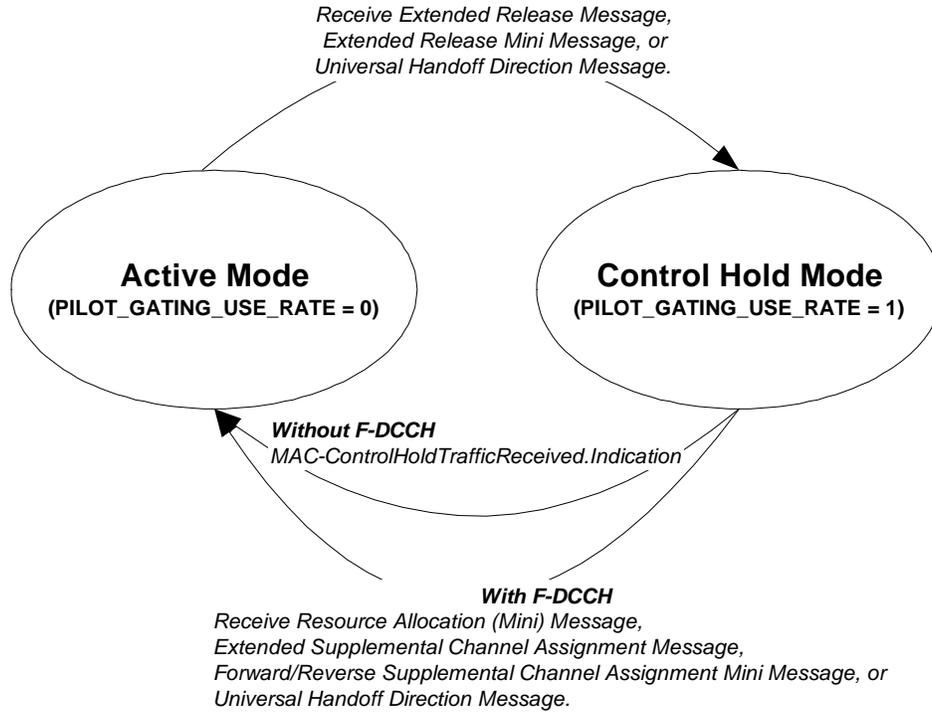
- 7 Figures 2.6.4.3-2 and 2.6.4.3-3 show the valid transitions between the modes of a *Traffic*
- 8 *Channel Substate* when a F-PDCH is assigned in Control Hold Mode and the triggers that
- 9 cause transitions between these modes.



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.
- 36 • If the mobile station receives SIG-RemoveFPDCHLeg.Request(*index*), then, at the
37 first 20 ms boundary (relative to System Time plus FRAME_OFFSET_s × 1.25 ms)
38 occurring at least 20 ms after the reception of this indication, for the specified
39 member of the F-PDCH reduced active set indicated by *index*, where *index* is the
40 index of the member in the F-PDCH reduced active set, the mobile station shall
41 perform the following procedures:

- 1 - the mobile station shall set FOR_PDCH_INCL_s to '0', and remove this pilot from
2 the F-PDCH reduced active set, and
- 3 - if this is the last pilot in the F-PDCH reduced active set, Layer 3 shall send SIG-
4 HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC layer.
- 5 • If the mobile station is directed by the user to request a new service configuration,
6 the mobile station shall initiate service negotiation or service option negotiation in
7 accordance with the requirements for the active service subfunction (see
8 2.6.4.1.2.2).
- 9 • The mobile station may send a *Service Option Control Message* or *Service Option*
10 *Control Order* to invoke a service option specific function in accordance with the
11 requirements for the active service subfunction (see 2.6.4.1.2.2).
- 12 • If the mobile station is directed by the user to request a private long code transition
13 and has the long code mask (see 2.3.12.3), the mobile station shall send a *Long*
14 *Code Transition Request Order* (ORDQ = '00000001') in assured mode.
- 15 • If the mobile station is directed by the user to request a public long code transition,
16 the mobile station shall send a *Long Code Transition Request Order* (ORDQ =
17 '00000000') in assured mode.
- 18 • If the mobile station supports BCMC operation, it shall perform the procedures as
19 specified in 2.6.13.
- 20 • If the mobile station is directed by the user to originate a call or if the mobile station
21 is to monitor BCMC on traffic channel, the mobile station shall perform the
22 following:
- 23 - If this is an emergency call origination, the mobile station shall perform the
24 following:
- 25 + If it can be indicated to the base station within an existing Call Control
26 instance, the mobile station shall send an indication to this Call Control
27 instance that the user has originated an emergency call.
- 28 + Otherwise, the mobile station shall perform the following:
- 29 ○ For each service instance being initiated in the *Enhanced Origination*
30 *Message*, the mobile station shall perform the following:
- 31 ◇ increment the stored value of TAG_s to the next unused integer value,
32 ◇ add TAG_s to the list TAG_OUTSTANDING_LIST,
33 ◇ associate the TAG_s value to the corresponding service instance. and
34 ◇ set an enhanced origination timer associated with TAG_s to a value of
35 T_{42m} seconds.
- 36 ○ The mobile station shall send an *Enhanced Origination Message* to the
37 base station, with the TAG or ADD_TAG field of each call included in the
38 message set to its associated TAG_s.

- 1 ○ Upon sending the *Enhanced Origination Message* and prior to receiving a
2 Layer 3 response from the base station, if the mobile station is directed
3 by the user to cancel this call, the mobile station shall perform the
4 following:
- 5 ◇ The mobile station shall send a *Call Cancel Message* to the base
6 station, with each TAG or ADD_TAG field included in the message set
7 to the TAG value in the list TAG_OUTSTANDING_LIST corresponding
8 to the call(s) being cancelled.
- 9 ◇ The mobile station shall remove the TAG field corresponding to each
10 call being cancelled from the list TAG_OUTSTANDING_LIST.
- 11 + If the enhanced origination timer expires, the mobile station shall remove
12 the associated TAG field corresponding to this call from
13 TAG_OUTSTANDING_LIST.
- 14 - Otherwise, the mobile station shall perform the following:
- 15 + If this is a packet data call origination⁶⁰, the mobile station shall first
16 determine the following conditions:
- 17 ○ If RETRY_DELAY_s[001] is not 0, the mobile station shall not send the
18 *Enhanced Origination Message* until after the system time stored in
19 RETRY_DELAY_s[001].
- 20 ○ If RETRY_DELAY_s[101] is not 0, the mobile station shall not send the
21 *Enhanced Origination Message* until after the system time stored in
22 RETRY_DELAY_s[101].
- 23 + If this contains BCMC origination, the mobile station shall determine the
24 following conditions:
- 25 ○ If BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY is not zero for the
26 BCMC flow corresponding to
27 BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID, the mobile station shall
28 not include the BCMC flow (See section 2.6.13.11) in the *Enhanced*
29 *Origination Message* until after the system time stored in
30 BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY.
- 31 + If the above conditions do not prohibit the mobile station from sending an
32 *Enhanced Origination Message* at this time, the mobile station shall perform
33 the following:

⁶⁰ 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 P_REV_IN_USE_S is greater than or equal to 11 and the *Enhanced*
2 *Origination Message* is being sent to perform packet data dormant
3 handoff, the mobile station shall include all dormant packet data service
4 instances (see [42]) up to the limit specified by
5 MAX_ADD_SERV_INSTANCE_S.
- 6 ○ For each service instance being initiated in the *Enhanced Origination*
7 *Message*, the mobile station shall perform the following:
- 8 ◇ increment the stored value of TAG_S to the next unused integer value,
9 ◇ add TAG_S to the list TAG_OUTSTANDING_LIST,
10 ◇ associate the TAG_S value to the corresponding service instance, and
11 ◇ set an enhanced origination timer associated with TAG_S to a value of
12 T_{42m} seconds.
- 13 ○ The mobile station shall send an *Enhanced Origination Message* to the
14 base station, with the TAG or ADD_TAG field of each call included in the
15 message set to its associated TAG_S.
- 16 + Upon sending the *Enhanced Origination Message* and prior to receiving a
17 Layer 3 response from the base station, if the mobile station is directed by
18 the user to cancel this call, the mobile station shall perform the following:
- 19 ○ The mobile station shall send a *Call Cancel Message* to the base station,
20 with each TAG or ADD_TAG field included in the message set to the TAG
21 value in the list TAG_OUTSTANDING_LIST corresponding to the call(s)
22 being cancelled.
- 23 ○ The mobile station shall disable the enhanced origination timer and shall
24 remove the TAG field corresponding to each call being cancelled from the
25 list TAG_OUTSTANDING_LIST.
- 26 + If the enhanced origination timer expires, the mobile station shall remove
27 the associated TAG field from TAG_OUTSTANDING_LIST.
- 28 • If the Layer 3 receives a “call release request” from a Call Control instance, Layer 3
29 shall perform the following:
- 30 • If there are no other active or pending calls, the Layer 3 shall enter the *Release*
31 *Substate* with a mobile station release indication (see 2.6.4.4).
- 32 - Otherwise, the mobile station shall perform the following:
- 33 + The mobile station shall send a Service Request Message, Resource Release
34 *Request Message*, or a *Resource Release Request Mini Message* to the base
35 station requesting to release the service option connection.
- 36 + If the mobile station sends a Resource Release Request Message or a
37 *Resource Release Request Mini Message*, it shall set the purge service
38 indicator field to ‘0’.

- 1 • If the Layer 3 receives a request to release a BCMC call [*BCMC-Stop-*
2 *Monitor.Request(BCMC_FLOW_ID)*] from Upper Layer, Layer 3 shall perform the
3 following:
- 4 - If there are no other active or pending calls, the Layer 3 shall enter the *Release*
5 *Substate* with a mobile station release indication (see 2.6.4.4).
- 6 - Otherwise, the mobile station shall send a *Resource Release Request Message* to
7 the base station requesting to release the BCMC flow (See section 2.6.13.11).
- 8 • If the Layer 3 receives a “call inactive indication” from a Call Control instance, Layer
9 3 shall perform the following:
- 10 - If there are no other active or pending calls, the Layer 3 shall enter the *Release*
11 *Substate* with a service inactive indication (see 2.6.4.4).
- 12 - Otherwise, the mobile station shall perform the following:
- 13 + The mobile station shall send a Service Request Message, Resource Release
14 Request Message, or a Resource Release Request Mini Message to the base
15 station requesting to release the service option connection and purge the
16 service.
- 17 + If the mobile station sends a Resource Release Request Message or a
18 Resource Release Request Mini Message, it shall set the purge service
19 indicator field to ‘1’.
- 20 • If the mobile station is directed by the user to power down, the Layer 3 shall send a
21 “release indication” to all Call Control instances, and shall enter the *Release*
22 *Substate* with a power-down indication (see 2.6.4.4).
- 23 • If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an
24 acknowledgment failure, then:
- 25 - If $RESQ_ENABLED_S$ is equal to ‘1’ and $FPC_PRI_CHAN_S$ is equal to ‘0’, the
26 mobile station shall perform the following:
27 + disable its transmitter, and
28 + enable the rescue delay timer with an initial value of $(RESQ_DELAY_TIME_S \times$
29 80) ms.
- 30 - Otherwise, the layer 3 shall terminate all Call Control instances, and the mobile
31 station shall disable its transmitter and shall enter the *System Determination*
32 *Substate* of the *Mobile Station Initialization State* with a system lost indication (see
33 2.6.1.1).
- 34 • The mobile station shall perform the following:
- 35 - The mobile station may send the *Resource Request Message* or *Resource Request*
36 *Mini Message* in accordance with requirements for the currently connected
37 service option whenever $RETRY_DELAY_S[RETRY_TYPE]$ is equal to 0, where,
38 $RETRY_TYPE$ is equal to ‘010’.

- 1 - The mobile station shall not send the *Resource Request Message* or *Resource*
2 *Request Mini Message* whenever $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is set to *infinity*,
3 where, RETRY_TYPE is equal to '010'.
- 4 - If USE_CH_CFG_RRM_s is equal to '0', the mobile station shall set CH_IND_INCL
5 to '0' in the *Resource Request Message* and *Resource Request Mini Message*;
6 otherwise, the mobile station may request a channel configuration in the
7 *Resource Request Message* or *Resource Request Mini Message*.
- 8 - If $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is not 0 or *infinity*, the mobile station shall not
9 send the *Resource Request Message* or *Resource Request Mini Message* until
10 after the system time stored in $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$, where,
11 RETRY_TYPE is equal to '010'.
- 12 - The mobile station may send the *Supplemental Channel Request Message* or
13 *Supplemental Channel Request Mini Message* whenever
14 $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is set to '0', where, RETRY_TYPE is equal to '011'.
- 15 - The mobile station shall not send the *Supplemental Channel Request Message* or
16 *Supplemental Channel Request Mini Message* whenever
17 $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is set to *infinity*, where, RETRY_TYPE is equal to
18 '011'.
- 19 • If $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is not 0 or *infinity*, the mobile station shall not
20 send the *Supplemental Channel Request Message* or *Supplemental Channel Request*
21 *Mini Message* until after the system time stored in $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$,
22 where, RETRY_TYPE is equal to '011'.
- 23 • The mobile station shall not send a Short Data Burst (see [30], [42]) whenever
24 $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is set to *infinity*, where, RETRY_TYPE is equal to
25 '100' or '101'.
- 26 • If $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ is not 0 or *infinity*, where, RETRY_TYPE is equal to
27 '100' or '101', the mobile station shall not send a Short Data Burst (see [30], [42])
28 until the maximum of the system time stored in $\text{RETRY_DELAY}_s[100]$ and
29 $\text{RETRY_DELAY}_s[101]$.
- 30 – At the system time stored in $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$, the mobile station
31 shall reset $\text{RETRY_DELAY}_s[\text{RETRY_TYPE}]$ to 0, where RETRY_TYPE is equal to
32 '001', '010', '011', '100' or '101'.
- 33 • The mobile station may send a *Resource Release Request Message* or a *Resource*
34 *Release Request Mini Message* to request for reverse pilot gating operation to be
35 performed or to request a service option connection to be disconnected. The mobile
36 station may send a *Resource Release Request Message* to request one or more
37 BCMC flows to be disconnected.
- 38 • The mobile station may send a *Shared Channel Configuration Order* ($\text{ORDQ} =$
39 '00000000') to request for R-FCH assignment. The mobile station may send a
40 *Shared Channel Configuration Order* ($\text{ORDQ} =$ '00000001') to request release of the
41 R-FCH.

- 1 • When the Reverse Packet Data Channel is assigned, the mobile station shall not
2 send a *Supplemental Channel Request Message* or *Supplemental Channel Request*
3 *Mini Message* containing a request for Reverse Supplemental Channel assignment.
- 4 • The mobile station may enter the *Release Substate* with a service inactive indication
5 (see 2.6.4.4) if the service corresponding to the packet data service option instance
6 is inactive at the mobile station.
- 7 • If Layer 3 receives a “substate timer expired indication” from a Call Control
8 instance, the Layer 3 shall perform the following:
 - 9 - If there are no other active or pending calls, the Layer 3 shall terminate this Call
10 Control instance; and the mobile station shall disable its transmitter and enter
11 the *System Determination Substate* of the *Mobile Station Initialization State* with a
12 system lost indication (see 2.6.1.1).
 - 13 - Otherwise, the mobile station shall send a *Service Request Message*, *Resource*
14 *Release Request Message*, or a *Resource Release Request Mini Message*.
- 15 • If there are no active or pending calls, the Layer 3 shall enter the *Release Substate*
16 with a mobile station release indication.
- 17 • If Layer 3 receives a ‘message rejected indication’ from a Call Control instance,
18 mobile station shall send a *Mobile Station Reject Order* (ORDQ set to the applicable
19 reason code as determined from Table 2.7.3-1) within T_{56m} seconds as follows:
 - 20 - If $P_REV_IN_USE_s$ is equal to or greater than seven, the mobile station shall
21 include the CON_REF_INCL field with this message and shall perform the
22 following: if the corresponding Call Control instance is identified by NULL, the
23 mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or
24 set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection
25 reference of the service option connection corresponding to this Call Control
26 instance; otherwise, the mobile station shall set the CON_REF_INCL field of the
27 message to ‘1’ and the CON_REF field of the message to the connection
28 reference of the service option connection corresponding to this Call Control
29 instance.
- 30 • If Layer 3 is requested by the upper layers to query base station identification
31 number, SID, NID, and LAT/LONG related information for one or more pilots, and
32 $PILOT_INFO_REQ_SUPPORTED_s$ equals ‘1’, mobile station shall send a *Base Station*
33 *Status Request Message* with a “Pilot Information” record type to the base station.
- 34 • If the mobile station needs to suspend its CDMA Traffic Channel processing for
35 applications other than a PUF probe, hard handoff, or periodic search, then, prior to
36 suspending its CDMA Traffic Channel processing, the mobile station shall perform
37 the following:
 - 38 - If $CDMA_OFF_TIME_REP_SUP_IND_s$ is equal to ‘1’ and the total time it needs to
39 suspend processing the CDMA Traffic Channel is longer than
40 $CDMA_OFF_TIME_REP_THRESHOLD_s$, the mobile station shall send a *CDMA*

1 *Off Time Report Message*. Otherwise, the mobile shall not send a *CDMA Off Time*
2 *Report Message*.

- 3 • The mobile station may send a *CDMA Off Time Report Message* with
4 CDMA_OFF_TIME_ENABLE set to '0' to cancel a previously reported CDMA Traffic
5 Channel processing suspension.
- 6 • The mobile station shall update RC_PARAMS_RECORD_s as described in section
7 2.6.17.
- 8 • If the mobile station performs a hard handoff, it shall initialize RC parameters as
9 described in section 2.6.16.
- 10 • If the mobile station receives R-SCH burst assignment with RC08, then the mobile
11 station shall perform the following:
 - 12 - Set REV_FCH_BLANKING_DUTYCYCLE_IN_USE to '000' at the start time of the
13 burst assignment.
 - 14 - Set REV_FCH_BLANKING_DUTYCYCLE_IN_USE to
15 REV_FCH_BLANKING_DUTYCYCLE_s at the end of the burst assignment.
- 16 • If the mobile station receives a message which is included in the following list and
17 every message field value is within its permissible range, the mobile station shall
18 process the message as described below and in accordance with the message's
19 action time (see 2.6.4.1.5).
 - 20 1. *Alert With Information Message*: If P_REV_IN_USE_s is less than seven, the Layer
21 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3
22 shall deliver this message to the Call Control instance identified by NULL.
 - 23 2. *Reserved*
 - 24 3. *Audit Order*
 - 25 4. *Authentication Challenge Message*: The Layer 3 shall send a "reset waiting for
26 order substate timer indication" to all Call Control instances. The mobile
27 station shall process the message and shall respond as specified in 2.3.12.1.4
28 within T_{32m} seconds, regardless of the value of AUTH_s.
 - 29 5. *Authentication Request Message*: The mobile station shall process the message
30 and shall respond as specified in 2.3.12.5.2.
 - 31 6. *Base Station Challenge Confirmation Order*: The Layer 3 shall send a "reset
32 waiting for order substate timer indication" to all Call Control instances. The
33 mobile station shall process the message and shall respond with an *SSD*
34 *Update Confirmation Order* or *SSD Update Rejection Order* as specified in
35 2.3.12.1.5 within T_{32m} seconds.
 - 36 7. *Base Station Status Response Message*: The Layer 3 shall deliver the
37 information contained in this message to the Upper Layer entity that requested
38 for this information.
 - 39 8. *Call Assignment Message*: The mobile station shall process this message as

1 follows:

- 2 - If RESPONSE_IND_r equals '1', then for each of the TAG_r or ADD_TAG_r fields
 3 that matches any of the TAG values contained in the list
 4 TAG_OUTSTANDING_LIST, the mobile station shall perform the following:
- 5 + If ACCEPT_IND_r or ADD_ACCEPT_IND_r associated with the TAG_r or
 6 ADD_TAG_r equals '0', the mobile station shall disable the enhanced
 7 origination timer associated with TAG_r and shall remove the TAG value
 8 specified by TAG_r from the list TAG_OUTSTANDING_LIST.
- 9 + If ACCEPT_IND_r or ADD_ACCEPT_IND_r associated with the TAG_r or
 10 ADD_TAG_r equals '1' and USE_OLD_SERV_CONFIG_r field associated
 11 with this TAG is not set to '1', the mobile station shall perform the
 12 following:
- 13 ○ If there already exists or currently pending instantiation a Call
 14 Control instance identified by CON_REF_r or ADD_CON_REF_r
 15 associated with the TAG_r or ADD_TAG_r, the mobile station shall send
 16 a *Mobile Station Reject Order* with ORDQ field set to '00010010' (a call
 17 control instance is already present with the specified identifier), with
 18 the CON_REF field of the order set to the CON_REF_r or
 19 ADD_CON_REF_r.
- 20 ○ Otherwise, Layer 3 shall instantiate a Call Control instance (as
 21 specified in 2.6.10) at the action time of the message. The mobile
 22 station shall identify this Call Control instance by CON_REF_r or
 23 ADD_CON_REF_r associated with the TAG_r or ADD_TAG_r. If a service
 24 option connection corresponding to this call has not been
 25 established, the mobile station should wait for the base station to
 26 initiate service negotiation to establish the service option connection.
- 27 ○ The mobile station shall disable the enhanced origination timer
 28 corresponding to this TAG and shall remove the TAG value from the
 29 list TAG_OUTSTANDING_LIST.
- 30 + If ACCEPT_IND_r equals '1' and USE_OLD_SERV_CONFIG_r field is
 31 included and is set to '1', the mobile station shall perform the following:
- 32 ○ At the action time of this message, the mobile station shall restore
 33 the indicated service option connection record(s) from the stored
 34 service configuration, where the service option connection records to
 35 be restored are determined as follows:
- 36 ○ If SR_ID_r equals '111', the mobile station shall restore all remaining
 37 service option connection records from the stored service
 38 configuration; otherwise, the mobile station shall restore the service
 39 option connection record corresponding to the SR_ID_r received in this
 40 message.

- 1 ○ Layer 3 shall instantiate a Call Control instance (as specified in
2 2.6.10) for each of the restored service option connections with a
3 ‘restore indication’ and Layer 3 shall identify each of these Call
4 Control instances by the value of the CON_REF field corresponding to
5 the restored service option connection.
- 6 ○ The mobile station shall disable the enhanced origination timer
7 corresponding to TAG_r and shall remove the TAG value specified by
8 TAG_r from the list TAG_OUTSTANDING_LIST.
- 9 - If RESPONSE_IND_r equals ‘1’, then for each of the and TAG_r or ADD_TAG_r
10 fields that does not match with any of the TAG values contained in the list
11 TAG_OUTSTANDING_LIST, the mobile station shall send a *Mobile Station*
12 *Reject Order* with ORDQ field set to ‘00010011’ (TAG received does not
13 match TAG stored), with the TAG field of the order set to the TAG_r or
14 ADD_TAG_r, and the CON_REF field of the order set to CON_REF_r or
15 ADD_CON_REF_r.
- 16 - If RESPONSE_IND_r equals ‘0’ and USE_OLD_SERV_CONFIG_r field is not
17 included or is included and is set to ‘0’, the mobile station shall perform the
18 following for each of the CON_REF_r or ADD_CON_REF_r:
- 19 + If there already exists or currently pending instantiation a Call Control
20 instance identified by CON_REF_r or ADD_CON_REF_r, the mobile station
21 shall send a *Mobile Station Reject Order* with ORDQ field set to
22 ‘00010010’ (a call control instance is already present with the specified
23 identifier), with the CON_REF field of the order set to the CON_REF_r or
24 ADD_CON_REF_r.
- 25 + Otherwise, if the mobile station does not accept this call assignment, the
26 mobile station shall send a *Mobile Station Reject Order* with ORDQ field
27 set to ‘00010000’ (call assignment not accepted), with the CON_REF field
28 of the order set to the CON_REF_r or ADD_CON_REF_r.
- 29 + Otherwise, at the action time of the message, the mobile station shall
30 store the bypass indicator (BYPASS_ALERT_ANSWER_s =
31 BYPASS_ALERT_ANSWER_r) and the Layer 3 shall instantiate a Call
32 Control instance (as specified in 2.6.10). The mobile station shall
33 identify this Call Control instance by the CON_REF_r or ADD_CON_REF_r.
34 If a service option connection corresponding to this call has not been
35 established, the mobile station should wait for the base station to initiate
36 service negotiation to establish the service option connection.
- 37 - If RESPONSE_IND_r equals ‘0’ and USE_OLD_SERV_CONFIG_r field is
38 included and is set to ‘1’, the mobile station shall perform the following:
- 39 + At the action time of this message, the mobile station shall restore the
40 indicated service option connection record(s) from the stored service
41 configuration, where the service option connection records to be restored
42 are determined as follows:

- 1 ○ If SR_ID_r equals '111', the mobile station shall restore all remaining
2 service option connection records from the stored service
3 configuration; otherwise, the mobile station shall restore the service
4 option connection record corresponding to the SR_ID_r received in this
5 message.
- 6 + If SR_ID_r equals '111', the mobile station shall perform the following:
- 7 ○ For the first remaining service option connection (with corresponding
8 connection reference CON_REF_i) listed in this stored Service
9 Configuration information record, Layer 3 shall instantiate a Call
10 Control instance (as specified in 2.6.10) with the received
11 BYPASS_ALERT_ANSWER_s. The mobile station shall identify this Call
12 Control instances by the corresponding CON_REF_i.
- 13 ○ For each of the remaining service option connections, Layer 3 shall
14 instantiate a Call Control instance (as specified in 2.6.10) for each of
15 the restored service option connections with a 'restore indication' and
16 Layer 3 shall identify each of these Call Control instances by the
17 value of the CON_REF field corresponding to the restored service
18 option connection.
- 19 + If SR_ID_r is not equal to '111', Layer 3 shall instantiate a Call Control
20 instance (as specified in 2.6.10) with the received
21 BYPASS_ALERT_ANSWER_s for the service option connection record
22 corresponding to the SR_ID_r received in this message.
- 23 9. *Candidate Frequency Search Control Message:* The mobile station shall process
24 the message as specified in 2.6.6.2.5.1.
- 25 10. *Candidate Frequency Search Request Message:* The mobile station shall process
26 the message as specified in 2.6.6.2.5.1.
- 27 11. *Continuous DTMF Tone Order:* Support of this order by the mobile station is
28 optional. If P_REV_IN_USE_s is less than seven, the Layer 3 shall deliver this
29 message to the Call Control instance; otherwise, the Layer 3 shall perform the
30 following: if CON_REF_INCL_r equals '0', the Layer 3 shall deliver this message
31 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
32 deliver this message to the Call Control instance identified by CON_REF_r.
- 33 12. *Data Burst Message*
- 34 13. *Extended Alert With Information Message:* The mobile station shall perform the
35 following: If CON_REF_INCL_r equals '0', the Layer 3 shall deliver this message
36 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
37 deliver this message to the Call Control instance identified by CON_REF_r.
- 38 14. *Extended Flash With Information Message:* The mobile station shall perform the
39 following: If CON_REF_INCL_r equals '0', the Layer 3 shall deliver this message
40 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
41 deliver this message to the Call Control instance identified by CON_REF_r.

- 1 28. *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_{s-p} equals the least-significant four bits of ORDQ_r). The mobile
4 station shall remain in the unlocked condition. The mobile station should
5 notify the user of the maintenance required condition.
- 6 29. *Message Encryption Mode Order*: The mobile station shall process the message
7 as specified in 2.3.12.2.
- 8 30. *Mobile Station Registered Message*: The mobile station shall process the
9 message as specified in 2.6.5.5.4.3.
- 10 31. *Mobile Assisted Burst Operation Parameters Message*: The mobile station shall
11 process the message as specified in 2.6.6.2.5.1.
- 12 32. *Neighbor List Update Message*: The mobile station shall process the message as
13 specified in 2.6.6.2.5.1.
- 14 33. *Outer Loop Report Request Order*: The mobile station shall send the *Outer Loop*
15 *Report Message* in assured mode to the base station.
- 16 34. *Parameter Update Order*: The Layer 3 shall send a "reset waiting for order
17 substate timer indication" to all Call Control instances. The mobile station
18 shall increment COUNT_{s-p} (see 2.3.12.1.3). The mobile station shall send a
19 *Parameter Update Confirmation Order* within T_{56m} seconds. The mobile station
20 shall set the ORDQ field of the *Parameter Update Confirmation Order* to the
21 same value as the ORDQ field of the *Parameter Update Order*.
- 22 35. *Periodic Pilot Measurement Request Order*: The mobile station shall process the
23 order as specified in 2.6.6.2.5.1.
- 24 36. *Pilot Measurement Request Order*: The mobile station shall process the order as
25 specified in 2.6.6.2.5.1.
- 26 37. *Power Control Message*: The mobile station shall process the message as
27 specified in 2.6.4.1.1.3.
- 28 38. *Power Control Parameters Message*: The mobile station shall process the
29 message as specified in 2.6.4.1.1.2.
- 30 39. *Power Up Function Message*: The mobile station shall process the message as
31 specified in 2.6.4.1.7.1.
- 32 40. *Power Up Function Completion Message*: The mobile station shall process the
33 message as specified in 2.6.4.1.7.3.
- 34 41. *Rate Change Message*: The mobile station shall process the message as
35 specified in 2.6.4.1.1.4.
- 36 42. *Release Order*: The Layer 3 shall send a "release indication" to all Call Control
37 instances, and shall enter the *Release Substate* with a base station release
38 indication (see 2.6.4.4).
- 39 43. *Resource Allocation Message*: The mobile station shall process the message as
40 specified in 2.6.4.1.10.

- 1 44. *Resource Allocation Mini Message*: The mobile station shall process the message
2 as specified in 2.6.4.1.10.
- 3 45. *Retrieve Parameters Message*: The mobile station shall send, within T_{56m}
4 seconds, a *Parameters Response Message*.
- 5 46. *Retry Order*: The mobile station shall process the order as follows:
- 6 - If $RETRY_TYPE_R$ is equal to '000', the mobile station shall set
7 $RETRY_DELAY_S[RETRY_TYPE]$ to 0, where $RETRY_TYPE$ is equal to '001',
8 '010', '011', '100', or '101'.
 - 9 - If $RETRY_TYPE_R$ is equal to '001', '100', or '101', then the mobile station
10 shall perform the following:
 - 11 + If $RETRY_DELAY_R$ is equal to '00000000', then the mobile station shall
12 set $RETRY_DELAY_S [RETRY_TYPE_R]$ to 0.
 - 13 + If $RETRY_DELAY_R$ is not equal to '00000000', the mobile station shall set
14 $RETRY_DELAY_S[RETRY_TYPE_R]$ as follows:
 - 15 o If the most significant bit of the $RETRY_DELAY_R$ is 0, set
16 $RETRY_DELAY_UNIT_S$ to 1000ms. If the most significant bit of the
17 $RETRY_DELAY_R$ is '1', set $RETRY_DELAY_UNIT_S$ to 60000ms.
 - 18 o The mobile station shall set $RETRY_DELAY_VALUE_S$ to the seven
19 least significant bits of $RETRY_DELAY_R$.
 - 20 o The mobile station shall store the next system time 80 ms boundary
21 + $RETRY_DELAY_VALUE_S \times RETRY_DELAY_UNIT_S$ ms as
22 $RETRY_DELAY_S[RETRY_TYPE_R]$.
 - 23 - If $RETRY_TYPE_R$ is equal to '010' or '011', the mobile station shall perform
24 the following:
 - 25 + If $RETRY_DELAY_R[RETRY_TYPE_R]$ is '00000000', then the mobile station
26 shall set $RETRY_DELAY_S [RETRY_TYPE_R]$ to 0.
 - 27 + If $RETRY_DELAY_R[RETRY_TYPE_R]$ is '11111111', then the mobile station
28 shall set $RETRY_DELAY_S[RETRY_TYPE_R]$ to *infinity*.
 - 29 + If $RETRY_DELAY_R[RETRY_TYPE_R]$ is not equal to '00000000' or
30 '11111111', the mobile station shall store the next system time 80 ms
31 boundary + $RETRY_DELAY_R[RETRY_TYPE_R] \times 320$ ms as
32 $RETRY_DELAY_S[RETRY_TYPE_R]$.
- 33 47. *Reverse Supplemental Channel Assignment Mini Message*: The mobile station
34 shall process the message as specified in 2.6.6.2.5.1.
- 35 48. *Security Mode Command Message*: The mobile station shall process the
36 message as specified in 2.6.4.1.14.
- 37 49. *Send Burst DTMF Message*: Support of this message by the mobile station is
38 optional. If $P_REV_IN_USE_S$ is less than seven, the Layer 3 shall deliver this
39 message to the Call Control instance; otherwise, the Layer 3 shall perform the

- 1 following: if CON_REF_INCL_r equals '0', the Layer 3 shall deliver this message
 2 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
 3 deliver this message to the Call Control instance identified by CON_REF_r.
- 4 50. *Service Connect Message*: The mobile station shall process the message in
 5 accordance with the requirements for the active service subfunction (see
 6 2.6.4.1.2.2) if the message is not rejected due to the following conditions:
- 7 - If the CC_INFO_INCL field is included in this message and is set to '1', the
 8 mobile station shall perform the following for each of the
 9 NUM_CALLS_ASSIGN call assignments included in this message:
 - 10 + If there already exists or currently pending instantiation a Call Control
 11 instance identified by CON_REF_r, the mobile station shall send a *Mobile*
 12 *Station Reject Order* with ORDQ field set to '00010010' (a call control
 13 instance is already present with the specified identifier), with the CON_REF
 14 field of the order set to CON_REF_r.
 - 15 + If RESPONSE_IND_r equals '1' and TAG_r does not match any of the TAG
 16 values contained in the list TAG_OUTSTANDING_LIST, the mobile station
 17 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010011'
 18 (TAG received does not match TAG stored), with the TAG field of the order
 19 set to TAG_r, and the CON_REF field of the order set to CON_REF_r.
 - 20 + If the mobile station does not accept this call assignment, the mobile station
 21 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010000'
 22 (call assignment not accepted), with the CON_REF field of the order set to
 23 CON_REF_r.
- 24 51. *Service Option Control Message*: The mobile station shall process the message
 25 in accordance with the requirements for the active service subfunction (see
 26 2.6.4.1.2.2).
- 27 52. *Service Option Control Order*: The mobile station shall process the message in
 28 accordance with the requirements for the active service subfunction (see
 29 2.6.4.1.2.2).
- 30 53. *Service Option Request Order*: The mobile station shall process the message in
 31 accordance with the requirements for the active service subfunction (see
 32 2.6.4.1.2.2).
- 33 54. *Service Option Response Order*: The mobile station shall process the message in
 34 accordance with the requirements for the active service subfunction (see
 35 2.6.4.1.2.2).
- 36 55. *Service Redirection Message*: The mobile station shall process the message as
 37 follows:
 38 If RECORD_TYPE_r is equal to '00000000', the mobile station shall perform the
 39 following:
 40 - The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.

- 1 - If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of
2 TMSI_CODE_{s-p} to '1'.
- 3 - The mobile station shall disable the full-TMSI timer.
- 4 - The Layer 3 shall send a "release indication" to all Call Control instances,
5 and shall enter the Release Substate with an NDSS off indication (see
6 2.6.4.4).
- 7 If RECORD_TYPE_r is not equal to '00000000', REDIRECT_TYPE_r is '1', and the
8 mobile station supports the band class and operating mode specified in the
9 message, the mobile station shall perform the following:
- 10 - The mobile station shall store the redirection record received in the message
11 as REDIRECT_REC_s.
- 12 - The mobile station shall enable NDSS_ORIG_s and shall record the dialed
13 digits (if any) corresponding to the last MS originated call.
- 14 - The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
- 15 - If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of
16 TMSI_CODE_{s-p} to '1'.
- 17 - The mobile station shall disable the full-TMSI timer.
- 18 - The Layer 3 shall send a "release indication" to all Call Control instances,
19 and shall enter the *Release Substate* with a redirection indication (see
20 2.6.4.4). Otherwise, the mobile station shall discard the message and send a
21 *Mobile Station Reject Order* (ORDQ set to the applicable reason code as
22 determined from Table 2.7.3-1) within T_{56m} seconds.
- 23 56. *Service Request Message*: The mobile station shall process the message in
24 accordance with the requirements for the active service subfunction (see
25 2.6.4.1.2.2).
- 26 57. *Service Response Message*: The mobile station shall process the message in
27 accordance with the requirements for the active service subfunction (see
28 2.6.4.1.2.2).
- 29 58. *Set Parameters Message*: If the mobile station can set all of the parameters
30 specified by the PARAMETER_ID fields in the message, the mobile station shall
31 set them; otherwise, the mobile station shall send, within T_{56m} seconds, a
32 *Mobile Station Reject Order*.
- 33 59. *SSD Update Message*: The Layer 3 shall send a "reset waiting for order substate
34 timer indication" to all Call Control instances. The mobile station shall process
35 the message and respond with a *Base Station Challenge Order* as specified in
36 2.3.12.1.5 within T_{32m} seconds.
- 37 60. *Status Request Message*: The mobile station shall send, within T_{56m} seconds, a
38 *Status Response Message*. If the message does not specify any qualification
39 information (QUAL_INFO_TYPE_r is equal to '00000000'), the mobile station

1 shall include the requested information records in the *Status Response*
 2 *Message*. If the message specifies a band class (QUAL_INFO_TYPE_r is equal to
 3 '0000001'), the mobile station shall only include the requested information
 4 records for the specified band class (BAND_CLASS_r) in the *Status Response*
 5 *Message*. If the message specifies a band class and an operating mode
 6 (QUAL_INFO_TYPE_r is equal to '0000010'), the mobile station shall only
 7 include the requested information records for the specified band class
 8 (BAND_CLASS_r) and operating mode (OP_MODE_r) in the *Status Response*
 9 *Message*.

10 If the message specifies a band class or a band class and an operating mode
 11 which is not supported by the mobile station, the mobile station shall send a
 12 *Mobile Station Reject Order* with ORDQ set to '0000110' (message requires a
 13 capability that is not supported by the mobile station).

14 If the response to this message exceeds the allowable length, the mobile station
 15 shall send a *Mobile Station Reject Order* with ORDQ set to '00001000' (response
 16 message would exceed the allowable length).

17 If the message specifies an information record which is not supported by the
 18 mobile station for the specified band class and operating mode, the mobile
 19 station shall send a *Mobile Station Reject Order* with ORDQ set to '00001001'
 20 (information record is not supported for the specified band class and operating
 21 mode).

22 61. *Status Request Order*: If CDMABAND_s is equal to '00000', the mobile station
 23 shall send a *Status Message* within T_{56m} seconds. The mobile station shall
 24 respond with information corresponding to the current band class and
 25 operating mode.

26 62. *Supplemental Channel Assignment Message*: The mobile station shall process
 27 the message as specified in 2.6.6.2.5.1.

28 63. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and
 29 code as follows:

- 30 - The mobile station shall store the length of the TMSI zone field by setting
 31 ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r,
- 32 - The mobile station shall store the assigning TMSI zone number by setting
 33 the ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
 34 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
- 35 - The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
 36 TMSI_CODE_r.

37 The mobile station shall set the TMSI expiration time by setting
 38 TMSI_EXP_TIME_{s-p} to TMSI_EXP_TIME_r. The mobile station shall disable the
 39 full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment*
 40 *Completion Message* within T_{56m} seconds.

41 64. *Universal Handoff Direction Message*: The Layer 3 shall send a "reset waiting for

- 1 order substate timer indication” to all Call Control instances. The mobile
2 station shall process the message as specified in 2.6.6.2.5.1.
- 3 65. *User Zone Reject Message*: The mobile station shall process this message as
4 specified in 2.6.9.2.2.
- 5 66. *User Zone Update Message*: The mobile station shall process this message as
6 specified in 2.6.9.2.2.
- 7 67. *BCMC Order*: The mobile station shall process this message as follows:
8 - If $ORDQ_r$ is set to ‘00000000’, the mobile station shall perform the following
9 for each of the BCMC flows that the base station is responding to:
10 + If $CLEAR_ALL_RETRY_DELAY_r$ equals ‘1’, the mobile station shall delete
11 the currently stored BCMC Retry Delay List.
12 + If $CLEAR_RETRY_DELAY_r$ equals ‘1’, the mobile station shall delete the
13 entry in the $BCMC_RETRY_DELAY_LIST_s[i]$ corresponding to
14 $BCMC_FLOW_ID$ (See section 2.6.13.11) in this message.
15 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0000’, Layer 3 shall
16 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
17 *FLOW_NOT_AVAILABLE, reason_ind=CURRENT_SYS)* for each of the
18 corresponding $BCMC_FLOW_ID$ to the BCMC Service Layer.
19 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0001’, Layer 3 shall
20 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
21 *FLOW_NOT_TRANSMITTED, reason_ind=CURRENT_SYS)* for each of the
22 corresponding $BCMC_FLOW_ID$ to the BCMC Service Layer.
23 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0010’, Layer 3 shall
24 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
25 *FLOW_TRANSMITTED_IN_IDLE, reason_ind=CURRENT_SYS)* for each of
26 the corresponding $BCMC_FLOW_ID$ to the BCMC Service Layer.
27 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0011’, Layer 3 shall
28 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = SUCCESS,*
29 *cause = REGISTRATION_ACCEPTED, reason_ind = CURRENT_SYS)* for
30 each of the corresponding $BCMC_FLOW_ID$ to the BCMC Service Layer.
31 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0100’, Layer 3 shall
32 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=*
33 *AUTHORIZATION_FAILURE, reason_ind=CURRENT_SYS)* for each of the
34 corresponding $BCMC_FLOW_ID$ to the BCMC Service Layer.
35 + If $ALL_BCMC_REASON_r$ or $BCMC_REASON_r$ equals ‘0101’, the mobile
36 station shall perform the following:
37 ○ Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID,*
38 *result=FAILURE, cause= RETRY_LATER, reason_ind=CURRENT_SYS)*
39 for each of the corresponding $BCMC_FLOW_ID$ to the BCMC Service
40 Layer.

- 1 ○ For each of the corresponding BCMC_FLOW_ID, if there is a
 2 BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID which is same as
 3 BCMC_FLOW_ID (See section 2.6.13.11), the mobile station shall set
 4 BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to current system
 5 time plus ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY;
 6 otherwise, the mobile station shall add new
 7 BCMC_RETRY_DELAY_LIST_s[i] to the BCMC Retry Delay List and
 8 shall set BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID to the
 9 BCMC_FLOW_ID, BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to
 10 current system time plus
 11 ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY_r.

12 68. *In-Traffic BCMC Service Parameters Message*: The mobile station shall process
 13 this message as follows:

14 The mobile station shall store the following parameters:

- 15 - Autonomous BCMC request on traffic channel allowed indicator
 16 (AUTO_REQ_TRAF_ALLOWED_IND_s = AUTO_REQ_TRAF_ALLOWED_IND_r).
- 17 - BCMC in idle state supported indicator
 18 (BCMC_ON_IDLE_SUP_IND_s = BCMC_ON_IDLE_SUP_IND_r).
- 19 - Only traffic state BCMC flows included indicator
 20 (BCMC_FLOWS_ON_TRAFFIC_ONLY_IND_s = BCMC_FLOWS_ON_TRAFFIC_
 21 ONLY_IND_r) if BCMC_FLOWS_ON_TRAFFIC_ONLY_IND_r is included;
 22 otherwise, BCMC_FLOWS_ON_TRAFFIC_ONLY_IND_s = '1'.
- 23 - Length of time stamp for use on r-csch
 24 (ACH_TIME_STAMP_SHORT_LENGTH_s = ACH_TIME_STAMP_SHORT_LEN
 25 GTH_r) if NON_DEFAULT_VALUE_INCLUDED_r equals '1'; otherwise,
 26 ACH_TIME_STAMP_SHORT_LENGTH_s shall be set to 10.
- 27 - Length of time stamp
 28 (TIME_STAMP_LONG_LENGTH_s = TIME_STAMP_LONG_LENGTH_r) if
 29 NON_DEFAULT_VALUE_INCLUDED_r equals '1'; otherwise,
 30 TIME_STAMP_LONG_LENGTH_s shall be set to 52.
- 31 - Unit for time stamp length (TIME_STAMP_UNIT_s = TIME_STAMP_UNIT_r) if
 32 NON_DEFAULT_VALUE_INCLUDED_r equals '1'; otherwise,
 33 TIME_STAMP_UNIT_s shall be set to 6.
- 34 - For i=1 to the number of flows included in this message, store the
 35 following:
- 36 + BCMC_FLOW_LIST_s[i].BCMC_FLOW_ID = ith occurrence of
 37 BCMC_FLOW_ID (BCMC flow identifier) . See section 2.6.13.11.

- 1 + If AUTH_SIGNATURE_REQUIRED_r equals '1',
2 BCMC_FLOW_LIST_s[i].AUTH_SIGNATURE_REQ_IND = ith occurrence
3 of AUTH_SIGNATURE_REQ_IND_r(Authorization signature required
4 indication).
- 5 + BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IDLE_IND = ith
6 occurrence of BCMC_FLOW_ON_TRAFFIC_IDLE_IND_r (BCMC flow on
7 traffic state or idle state supported identifier) if
8 BCMC_FLOW_ON_TRAFFIC_IDLE_IND_r is included; otherwise,
9 BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IDLE_IND = '01'.
- 10 69. *Shared Channel Configuration Order:* The mobile station shall process this
11 message as follows:
- 12 - If ORDQ_r is set to '00000000', the mobile station shall perform the following:
- 13 + The mobile station shall set REV_FCH_ASSIGNED_s to '1'.
- 14 + If CH_IND_s is equal to '11' , the mobile station shall begin transmitting
15 on the Reverse Fundamental Channel.
- 16 + If CH_IND_s is equal to '00' and EXT_CH_IND_s is equal to '01111',
17 '10001', '10011', or '10101', the mobile station shall begin transmitting
18 on the Reverse Fundamental Channel and do the following:
- 19 o If EXT_CH_IND_s is equal to '01111', store EXT_CH_IND_s = '00110'
20 o If EXT_CH_IND_s is equal to '10001', store EXT_CH_IND_s = '10010'
21 o If EXT_CH_IND_s is equal to '10011', store EXT_CH_IND_s = '01110'
22 o If EXT_CH_IND_s is equal to '10101', store EXT_CH_IND_s = '10110'
- 23 - If ORDQ_r is set to '00000001', the mobile station shall do the following:
- 24 + The mobile station shall set REV_FCH_ASSIGNED_s to '0'.
- 25 + If CH_IND_s is equal to '11' , the mobile station shall stop transmitting on
26 the Reverse Fundamental Channel.
- 27 + If CH_IND_s is equal to '00' and EXT_CH_IND_s is equal to '00110',
28 '10010', '01110', or '10110', the mobile station shall stop transmitting
29 on the Reverse Fundamental Channel and do the following:
- 30 o If EXT_CH_IND_s is equal to '00110', store EXT_CH_IND_s = '01111'
31 o If EXT_CH_IND_s is equal to '10010', store EXT_CH_IND_s = '10001'
32 o If EXT_CH_IND_s is equal to '01110', store EXT_CH_IND_s = '10011'
33 o If EXT_CH_IND_s is equal to '10110', store EXT_CH_IND_s = '10101'
- 34 70. *Service Status Order:* For each of the SERVICE_STATUS field included in this
35 message, the mobile station shall indicate the status to corresponding service
36 instance. For each of the SERVICE_STATUS field set to '001' (service request
37 rejected), the mobile station shall perform the following:

- 1 - The mobile station shall terminate the call control instance corresponding to
2 the SR_ID associated with this SERVICE_STATUS field.
- 3 - The mobile station shall send an indication to the affected service instance
4 indicating that the call control instance has been terminated.
- 5 - If a TAG is associated with the SR_ID corresponding to this
6 SERVICE_STATUS field, the mobile station shall remove the TAG value from
7 the TAG_OUTSTANDING_LIST and disable the corresponding enhanced
8 origination timer
- 9 71. *Radio Configuration Parameters Message:* If any of the field of the message is
10 set to an invalid value, then the mobile station shall send a *Mobile Station*
11 *Reject Order* with the ORDQ field set to '00000100' (message field not in valid
12 range). Otherwise, the mobile station shall perform the following:
- 13 - If FOR_FCH_ACK_MASK_RL_BLANKING_r is included, the mobile station
14 shall perform the following:
15 + Set FOR_FCH_ACK_MASK_RL_BLANKING_s to
16 FOR_FCH_ACK_MASK_RL_BLANKING_r.
- 17 - If FOR_FCH_ACK_MASK_NO_RL_BLANKING_r is included, the mobile station
18 shall perform the following:
19 + Set FOR_FCH_ACK_MASK_NO_RL_BLANKING_s to
20 FOR_FCH_ACK_MASK_NO_RL_BLANKING_r.
- 21 - If REV_FCH_ACK_MASK_r is included, the mobile station shall set
22 REV_FCH_ACK_MASK_s to REV_FCH_ACK_MASK_r.
- 23 - If FOR_SCH_ACK_MASK_RL_BLANKING_r is included, the mobile station
24 shall perform the following:
25 + Set FOR_SCH_ACK_MASK_RL_BLANKING_s to
26 FOR_SCH_ACK_MASK_RL_BLANKING_r.
- 27 - If FOR_SCH_ACK_MASK_NO_RL_BLANKING_r is included, the mobile station
28 shall perform the following:
29 + Set FOR_SCH_ACK_MASK_NO_RL_BLANKING_s to
30 FOR_SCH_ACK_MASK_NO_RL_BLANKING_r.
- 31 - If REV_SCH_ACK_MASK_r is included, the mobile station shall set
32 REV_SCH_ACK_MASK_s to REV_SCH_ACK_MASK_r.
- 33 - ~~If FOR_N2M_IND_r is included, t~~The mobile station shall set FOR_N2M_IND_s
34 to FOR_N2M_IND_r.
- 35 - The mobile station shall set FPC_MODE_NO_SCH_s to FPC_MODE_r.
- 36 - The mobile station shall set FPC_MODE_s = FPC_MODE_NO_SCH_s if there is
37 no forward Supplemental Channel burst in progress (see 2.6.6.2.5.1.1). ~~The~~
38 mobile station shall set FPC_MODE_s to FPC_MODE_r.

- 1 | - ~~If `RPC_MODEr` is included,~~ ~~t~~The mobile station shall set `RPC_MODEs` to
2 | `RPC_MODEr`.
- 3 | - ~~If `PWR_CNTL_STEPr` is included,~~ ~~t~~The mobile station shall set
4 | `PWR_CNTL_STEPs` to `PWR_CNTL_STEPr`.
- 5 | - ~~If `FOR_FCH_BLANKING_DUTYCYCLE` is included,~~ ~~t~~The mobile station shall
6 | set `FOR_FCH_BLANKING_DUTYCYCLEs` to
7 | `FOR_FCH_BLANKING_DUTYCYCLEr`.
- 8 | - ~~If `REV_FCH_BLANKING_DUTYCYCLE` is included,~~ ~~t~~The mobile station shall
9 | perform the following:
- 10 | - Set `REV_FCH_BLANKING_DUTYCYCLEs` to
11 | `REV_FCH_BLANKING_DUTYCYCLEr`.
- 12 | - If the mobile station does not have R-SCH burst assigned with RC08, then
13 | set `REV_FCH_BLANKING_DUTYCYCLE_IN_USE` to
14 | `REV_FCH_BLANKING_DUTYCYCLEr`.
- 15 | - If `REV_ACKCH_GAIN_ADJ_ACS1r` is included, the mobile station shall
16 | perform the following:
- 17 | + Set `REV_ACKCH_GAIN_ADJ_ACS1s` to `REV_ACKCH_GAIN_ADJ_ACS1r`.
- 18 | - If `REV_ACKCH_GAIN_ADJ_ACS2PLUSr` is included, the mobile station shall
19 | perform the following:
- 20 | + Set `REV_ACKCH_GAIN_ADJ_ACS2PLUSs` to
21 | `REV_ACKCH_GAIN_ADJ_ACS2PLUSr`.
- 22 | - If `NUM_RC_PARAMS_RECORDS` is set to non-zero value, the mobile station
23 | shall update `RC_PARAMS_RECORDs[i]` as follows:
- 24 | + If entry for `PILOT_PNr` exists then `RC_PARAMS_RECORDs[i]` is the
25 | existing entry, otherwise `RC_PARAMS_RECORDs[i]` is a new entry with
26 | `REV_SCH_ACK_CH_WALSH[00]`, `REV_SCH_ACK_BIT[00]`,
27 | `REV_SCH_ACK_CH_WALSH[01]`, and `REV_SCH_ACK_BIT[01]` fields set to
28 | NULL.
- 29 | + Set `RC_PARAMS_RECORDs[i].PILOT_PN` to `PILOT_PNr`.
- 30 | + Set `RC_PARAMS_RECORDs[i].QOF_SET_IN_USE` to `QOF_SET_IN_USEr`.
- 31 | + If `REV_SCH0_ACK_CH_WALSH` is included, the mobile station shall set
32 | `RC_PARAMS_RECORDs[i].REV_SCH_ACK_CH_WALSH[00]` to
33 | `REV_SCH0_ACK_CH_WALSHr`.
- 34 | + If `REV_SCH0_ACK_BIT` is included, the mobile station shall set
35 | `RC_PARAMS_RECORDs[i].REV_SCH_ACK_BIT[00]` to
36 | `REV_SCH0_ACK_BITr`.
- 37 | + If `REV_SCH1_ACK_CH_WALSH` is included, the mobile station shall set
38 | `RC_PARAMS_RECORDs[i].REV_SCH_ACK_CH_WALSH[01]` to
39 | `REV_SCH1_ACK_CH_WALSHr`.

- 1 + If REV_SCH1_ACK_BIT is included, the mobile station shall set
2 RC_PARAMS_RECORD_s[i].REV_SCH_ACK_BIT[01] to
3 REV_SCH1_ACK_BIT_r.
- 4 + Set RC_PARAMS_RECORD_s[i].FOR_FCH_CCSH_INTERLEAVER_TYPE to
5 FOR_FCH_CCSH_INTERLEAVER_TYPE_r.

6 *72. Alternative Technology Information Message:* The mobile shall store all the
7 Radio Interface records contained in the message.

8 *73. General Extension Message:* The mobile station shall process this message
9 as specified in section 2.6.18.

- 10 - If the mobile station receives a message that is not included in the above
11 list, cannot be processed, or requires a capability which is not supported,
12 the mobile station shall discard the message and send a *Mobile Station*
13 *Reject Order* (ORDQ set to the applicable reason code as determined from
14 Table 2.7.3-1) within T_{56m} seconds. If the mobile station receives a Call
15 Control message (see 2.6.10) which is directed to a Call Control instance
16 that does not exist, the mobile station shall send a *Mobile Station Reject*
17 *Order* with ORDQ field set to '00010001' (no call control instance present
18 with the specified identifier) to the base station within T_{56m} seconds.
- 19 - If the bits of TMSI_CODE_{s-p} are not all equal to '1', and if System Time (in
20 80 ms units) exceeds TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set
21 all the bits of TMSI_CODE_{s-p} to '1' within T_{66m} seconds.
- 22 - If the full-TMSI timer expires or has expired, the mobile station shall set all
23 the bits of TMSI_CODE_{s-p} to '1'. The mobile station shall update the
24 registration variables as described in 2.6.5.5.2.5.
- 25 - If the Forward Packet Data Channel is assigned, whenever the mobile
26 station transmitter is disabled, the MS shall set FPDCH_DTX_INDICATOR_s
27 to '1'.
- 28 - If the Forward Packet Data Channel is assigned, whenever the mobile
29 station transmitter is enabled, the mobile station shall perform the
30 following procedures:
 - 31 + The MS shall set FPDCH_DTX_INDICATOR_s to '0'.
 - 32 + If the mobile station transmitter has been disabled for at least
33 TX_DISABLED_TIMER_s, the mobile station shall send SIG-
34 HandoffPDCH.Indication (handoff_type = ASSIGN) primitive to the MAC
35 layer.

36 2.6.4.4 Release Substate

37 In this substate, the mobile station confirms the disconnect of all calls and physical
38 channels.

- 1 Upon entering the *Release Substate*, the mobile station shall perform the following:
- 2 • The mobile station shall set the substate timer for T_{55m} seconds.
 - 3 • If the mobile station enters the *Release Substate* with a power-down indication, the
4 mobile station shall send a *Release Order* (ORDQ = '00000001'), and shall perform
5 power-down registration procedures (see 2.6.5.5.4.4). The Layer 3 shall terminate
6 all Call Control instances.
 - 7 • If the mobile station enters the *Release Substate* with a mobile station release
8 indication, the mobile station shall send a *Release Order* as follows:
 - 9 - If the mobile station supports operation in the reduced slot cycle mode following
10 release from the traffic channel, the mobile station shall set ORDQ to
11 '00000011', RETURN_CAUSE_s to '0000', and perform the following:
 - 12 + If T_SLOTTED_s is equal to 0, the mobile station shall perform the following:
 - 13 ○ Set the RSC_MODE_IND field as specified in 2.7.3.5. If RSC_MODE_IND
14 is set to '1', then:
 - 15 ◇ Set RSC_MODE_ENABLED to YES.
 - 16 ◇ Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as
17 specified in 2.7.3.5, and store the system time specified by these
18 fields as RSC_END_TIME.
 - 19 ◇ Set the RSCI field as specified in 2.7.3.5 and store it as RSCI_s; if
20 RSCI_s is equal to '0111', set SLOTTED_s to NO.
 - 21 ◇ Set IGNORE_QPCH_s to '1'.
 - 22 + Otherwise, the mobile station shall set the RSC_MODE_IND field to '0'.
 - 23 - Otherwise, the mobile station shall set ORDQ to '00000000', and set
24 RETURN_CAUSE_s to '0000'.
 - 25 • If the mobile station enters the *Release Substate* with a service inactive indication,
26 the mobile station shall send a *Release Order* (ORDQ = '00000010'), and set
27 RETURN_CAUSE_s to '0000'.
 - 28 • If the mobile station enters the *Release Substate* with a base station release
29 indication, the mobile station shall send a *Release Order* (ORDQ = '00000000'). The
30 Layer 3 shall terminate all Call Control instances. The mobile station shall disable
31 its transmitter, set RETURN_CAUSE_s to '0000', and shall perform the procedures as
32 specified in 2.6.4.4.1.
 - 33 • If the mobile station entered the *Release Substate* with a base station extended
34 release indication, the mobile station shall perform the following:
 - 35 - The mobile station shall send an *Extended Release Response Message* to the
36 base station as follows:
 - 37 + If the RSC_MODE_SUPPORTED field in the received *Extended Release*
38 *Message* was set to '1' and the mobile station requests operation in the

- 1 reduced slot cycle mode, the mobile station shall set the RSC_MODE_IND
2 field to '1' and perform the following:
- 3 ○ Set RSC_MODE_ENABLED to YES.
 - 4 ○ Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as
5 specified in 2.7.2.3.2.25, and store the system time specified by these
6 fields as RSC_END_TIME. The value of RSC_END_TIME shall be no later
7 than the system time specified by MAX_RSC_END_TIME_UNIT_r and
8 MAX_RSC_END_TIME_VALUE_r received in the *Extended Release*
9 *Message*.
 - 10 ○ Set the RSCI field as specified in 2.7.2.3.2.25 and store it as RSCI_s; if
11 RSCI_s is equal to '0111', set SLOTTED_s to NO.
 - 12 ○ Set IGNORE_QPCH_s to IGNORE_QPCH_r received in the *Extended Release*
13 *Message*.
- 14 + Otherwise, the mobile station shall set the RSC_MODE_IND field to '0'.
- 15 - The Layer 3 shall terminate all Call Control instances.
 - 16 - The mobile station shall disable its transmitter, set RETURN_CAUSE_s to '0000',
17 and shall perform the procedures as specified in 2.6.4.4.1.
 - 18 • If the mobile station entered the *Release Substate* with a base station extended
19 release with mini message indication, then the mobile station shall perform the
20 following:
 - 21 - The mobile station shall send an *Extended Release Response Mini Message* to
22 the base station.
 - 23 - The Layer 3 shall terminate all Call Control instances.
 - 24 - The mobile station shall disable its transmitter, set RETURN_CAUSE_s to '0000',
25 and shall perform the procedures as specified in 2.6.4.4.1.
 - 26 • If the mobile station enters the *Release Substate* with a redirection indication, the
27 mobile station shall send a *Release Order* (ORDQ = '00000000') and shall enter the
28 *System Determination Substate* of the *Mobile Station Initialization State* with a
29 redirection indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control
30 instances.
 - 31 • If the mobile station enters the *Release Substate* with an NDSS off indication, the
32 mobile station shall send a *Release Order* (ORDQ = '00000000'), and shall enter the
33 *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS
34 off indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control instances.
 - 35 • While in the *Release Substate*, the mobile station shall perform the following:
 - 36 • If the substate timer expires, the Layer 3 shall terminate all Call Control instances,
37 and the mobile station shall disable its transmitter and shall enter the *System*
38 *Determination Substate* of the *Mobile Station Initialization State* with a release
39 indication (see 2.6.1.1).

- 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 release indication (see
5 2.6.1.1).
- 6 • The mobile station shall adjust its transmit power as specified in [2].
- 7 • The mobile station shall perform Forward Traffic Channel power control as specified
8 in 2.6.4.1.1.
- 9 • The mobile station shall perform handoff processing as specified in 2.6.6.
- 10 • If the Fundamental Channel is present, the mobile station shall transmit null
11 traffic, except when transmitting signaling traffic, on the Reverse Fundamental
12 Channel.
- 13 • The mobile station shall process Forward Traffic Channel signaling traffic and shall
14 discard other types of Forward Traffic Channel traffic.
- 15 • The mobile station shall perform registration timer maintenance as specified in
16 2.6.5.5.4.2.
- 17 • If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an
18 acknowledgment failure, the Layer 3 shall terminate all Call Control instances, and
19 the mobile station shall disable its transmitter and enter the *System Determination*
20 *Substate* of the *Mobile Station Initialization State* with a release indication (see
21 2.6.1.1).
- 22 • If the Layer 3 receives an “enter traffic channel substate indication” from a Call
23 Control instance, the Layer 3 shall enter the *Traffic Channel substate*.
- 24 • If Layer 3 receives a ‘message rejected indication’ from a Call Control instance,
25 mobile station shall send a *Mobile Station Reject Order* (ORDQ set to the applicable
26 reason code as determined from Table 2.7.3-1) within T_{56m} seconds as follows:
 - 27 - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall
28 include the CON_REF_INCL field with this message and shall perform the
29 following: if the corresponding Call Control instance is identified by NULL, the
30 mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or
31 set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection
32 reference of the service option connection corresponding to this Call Control
33 instance; otherwise, the mobile station shall set the CON_REF_INCL field of the
34 message to ‘1’ and the CON_REF field of the message to the connection
35 reference of the service option connection corresponding to this Call Control
36 instance.
- 37 • If the mobile station receives a message which is included in the following list, and
38 if every message field value is within its permissible range, the mobile station shall
39 process the message as described below and in accordance with the message’s
40 action time (see 2.6.4.1.5):

- 1 1. *Alert With Information Message*: If P_REV_IN_USE_s is less than seven, the Layer
2 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3
3 shall deliver this message to the Call Control instance identified by NULL.
- 4 2. *Authentication Request Message*: The mobile station shall process the message
5 and shall respond as specified in 2.3.12.5.2.
- 6 3. *Candidate Frequency Search Control Message*: The mobile station shall process
7 the message as specified in 2.6.6.2.5.1.
- 8 4. *Candidate Frequency Search Request Message*: The mobile station shall
9 process the message as specified in 2.6.6.2.5.1.
- 10 5. *Data Burst Message*
- 11 6. *Extended Alert With Information Message*: The mobile station shall perform the
12 following: If CON_REF_INCL_r equals '0', the Layer 3 shall deliver this message
13 to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
14 deliver this message to the Call Control instance identified by CON_REF_r.
- 15 7. *Extended Handoff Direction Message*: The mobile station shall process the
16 message as specified in 2.6.6.2.5.1.
- 17 8. *Extended Neighbor List Update Message*: The mobile station shall process the
18 message as specified in 2.6.6.2.5.1.
- 19 9. *Extended Supplemental Channel Assignment Message*: The mobile station shall
20 process the message as specified in 2.6.6.2.5.1.
- 21 10. *General Handoff Direction Message*: The mobile station shall process the
22 message as specified in 2.6.6.2.5.1.
- 23 11. *In-Traffic System Parameters Message*: The mobile station shall process the
24 message as specified in 2.6.4.1.4.
- 25 12. *Local Control Order*
- 26 13. *Mobile Assisted Burst Operation Parameters Message*: The mobile station shall
27 process the message as specified in 2.6.6.2.5.1.
- 28 14. *Lock Until Power-Cycled Order*: The mobile station shall disable its transmitter
29 and record the reason for the *Lock Until Power-Cycled Order* in the mobile
30 station's semi-permanent memory (LCKRSN_P_{s-p} equals the least-significant
31 four bits of ORDQ_r). The mobile station should notify the user of the locked
32 condition. The Layer 3 shall terminate all Call Control instances. The Layer 3
33 shall enter the *System Determination Substate* of the *Mobile Station Initialization*
34 *State* with a lock indication (see 2.6.1.1), and shall not enter the *System Access*
35 *State* again until after the next mobile station power-up or until it has received
36 an *Unlock Order*. This requirement shall take precedence over any other mobile
37 station requirement specifying entry to the *System Access State*.
- 38 15. *Maintenance Required Order*: The mobile station shall record the reason for the
39 *Maintenance Required Order* in the mobile station's semi-permanent memory
40 (MAINTRSN_{s-p} equals the least-significant four bits of ORDQ_r). The mobile

- 1 station shall remain in the unlocked condition. The mobile station should
2 notify the user of the maintenance required condition.
- 3 16. *Mobile Station Registered Message*: The mobile station shall process the
4 message as specified in 2.6.5.5.4.3.
- 5 17. *Neighbor List Update Message*: The mobile station shall process the message as
6 specified in 2.6.6.2.5.1.
- 7 18. *Outer Loop Report Request Order*: The mobile station shall send the *Outer Loop*
8 *Report Message* in assured mode to the base station.
- 9 19. *Power Control Message*: The mobile station shall process the message as
10 specified in 2.6.4.1.1.3.
- 11 20. *Power Control Parameters Message*: The mobile station shall process the
12 message as specified in 2.6.4.1.1.2.
- 13 21. *Power Up Function Message*: The mobile station shall process the message as
14 specified in 2.6.4.1.7.1.
- 15 22. *Power Up Function Completion Message*: The mobile station shall process the
16 message as specified in 2.6.4.1.7.3.
- 17 23. *Rate Change Message*: The mobile station shall process the message as
18 specified in 2.6.4.1.1.4.
- 19 24. *Release Order*: The mobile station shall disable its transmitter. The Layer 3
20 shall terminate all Call Control instances. The mobile station shall set
21 RSC_MODE_ENABLED to NO. If the mobile station enters the *Release Substate*
22 with a power-down indication, the mobile station may power down; otherwise,
23 the mobile station shall perform the procedures as specified in 2.6.4.4.1.
- 24 25. *Retrieve Parameters Message*: The mobile station shall send, within T_{56m}
25 seconds, a *Parameters Response Message*.
- 26 26. *Retry Order*: The mobile station shall process the order as follows:
- 27 - If $RETRY_TYPE_R$ is equal to '000', the mobile station shall set
28 $RETRY_DELAY_S[RETRY_TYPE]$ to 0, where $RETRY_TYPE$ is equal to '001',
29 '010', '011', '100', or '101'.
 - 30 - If $RETRY_TYPE_R$ is equal to '001', '100', or '101', then the mobile station
31 shall perform the following:
 - 32 + If $RETRY_DELAY_R$ is equal to '00000000', then the mobile station shall
33 set $RETRY_DELAY_S [RETRY_TYPE_R]$ to 0.
 - 34 + If $RETRY_DELAY_R$ is not equal to '00000000', the mobile station shall set
35 $RETRY_DELAY_S[RETRY_TYPE_R]$ as follows:
 - 36 ○ If the most significant bit of the $RETRY_DELAY_R$ is 0, set
37 $RETRY_DELAY_UNIT_S$ to 1000ms. If the most significant bit of the
38 $RETRY_DELAY_R$ is '1', set $RETRY_DELAY_UNIT_S$ to 60000ms.

- 1 ○ The mobile station shall set $RETRY_DELAY_VALUE_S$ to the seven
2 least significant bits of $RETRY_DELAY_R$.
- 3 ○ The mobile station shall store the next system time 80 ms boundary
4 + $RETRY_DELAY_VALUE_S \times RETRY_DELAY_UNIT_S$ ms as
5 $RETRY_DELAY_S[RETRY_TYPE_R]$.
- 6 27. *Service Option Control Message*: The mobile station shall process the message
7 in accordance with the requirements for the active service subfunction (see
8 2.6.4.1.2.2).
- 9 28. *Service Option Control Order*: The mobile station shall process the message in
10 accordance with the requirements for the active service subfunction (see
11 2.6.4.1.2.2).
- 12 29. *Service Redirection Message*: The mobile station shall disable its transmitter. If
13 the mobile station enters the *Release Substate* with a power-down indication,
14 the mobile station may power down (if powering down, the Layer 3 shall
15 terminate all Call Control instances); otherwise, the mobile station shall
16 process the message as follows:
17 - If $RECORD_TYPE_R$ is '00000000', the mobile station shall perform the
18 following:
19 + The mobile station shall set $RETURN_IF_FAIL_S = RETURN_IF_FAIL_R$.
20 + If $DELETE_TMSI_R$ is equal to '1', the mobile station shall set all the
21 bits of $TMSI_CODE_{S-p}$ to '1'.
22 + The mobile station shall disable the full-TMSI timer.
23 + The Layer 3 shall terminate all Call Control instances, and shall
24 enter the *System Determination Substate of the Mobile Station*
25 *Initialization State* with an NDSS off indication (see 2.6.1.1).
26 - If $RECORD_TYPE$ is not equal to '00000000', $REDIRECT_TYPE_R$ is '1',
27 and the mobile station supports the band class and operating mode
28 specified in the message, the mobile station shall perform the following:
29 + The mobile station shall store the redirection record received in the
30 message as $REDIRECT_REC_S$.
31 + The mobile station shall set $RETURN_IF_FAIL_S = RETURN_IF_FAIL_R$.
32 + If $DELETE_TMSI_R$ is equal to '1', the mobile station shall set all the
33 bits of $TMSI_CODE_{S-p}$ to '1'.
34 + The mobile station shall disable the full-TMSI timer.
35 + The Layer 3 shall terminate all Call Control instances, and shall
36 enter the *System Determination Substate of the Mobile Station*
37 *Initialization State* with a redirection indication (see 2.6.1.1).

- 1 - Otherwise, the mobile station shall discard the message and send a
2 *Mobile Station Reject Order* (ORDQ set to the applicable reason code as
3 determined from Table 2.7.3-1) within T_{56m} seconds.
- 4 30. *Status Request Message*: The mobile station shall send, within T_{56m} seconds, a
5 Status Response Message. If the message does not specify any qualification
6 information (QUAL_INFO_TYPE_r is equal to '00000000'), the mobile station
7 shall include the requested information records in the *Status Response*
8 *Message*. If the message specifies a band class (QUAL_INFO_TYPE_r is equal to
9 '00000001'), the mobile station shall only include the requested information
10 records for the specified band class (BAND_CLASS_r) in the *Status Response*
11 *Message*. If the message specifies a band class and an operating mode
12 (QUAL_INFO_TYPE_r is equal to '00000010'), the mobile station shall only
13 include the requested information records for the specified band class
14 (BAND_CLASS_r) and operating mode (OP_MODE_r) in the *Status Response*
15 *Message*. If the message specifies a band class or a band class and an
16 operating mode which are not supported by the mobile station, the mobile
17 station shall send a *Mobile Station Reject Order* with ORDQ set to '00000110'
18 (message requires a capability that is not supported by the mobile station). If
19 the response to this message exceeds the allowable length, the mobile station
20 shall send a *Mobile Station Reject Order* with ORDQ set to '00001000' (response
21 message would exceed the allowable length). If the message specifies an
22 information record which is not supported by the mobile station for the
23 specified band class and operating mode, the mobile station shall send a *Mobile*
24 *Station Reject Order* with ORDQ set to '00001001' (information record is not
25 supported for the specified band class and operating mode).
- 26 31. *Status Request Order*: If CDMABAND_s is equal to '00000', the mobile station
27 shall send, a *Status Message* within T_{56m} seconds. The mobile station shall
28 respond with information corresponding to the current band class and
29 operating mode.
- 30 32. *Supplemental Channel Assignment Message*: The mobile station shall process
31 the message as specified in 2.6.6.2.5.1.
- 32 33. *TMSI Assignment Message*: The mobile station shall store the TMSI zone and
33 code as follows:
- 34 - The mobile station shall store the length of the TMSI zone field by setting
35 ASSIGNING_TMSI_ZONE_LEN_{s-p} to TMSI_ZONE_LEN_r;
 - 36 - The mobile station shall store the assigning TMSI zone number by setting
37 the ASSIGNING_TMSI_ZONE_LEN_{s-p} least significant octets of
38 ASSIGNING_TMSI_ZONE_{s-p} to TMSI_ZONE_r, and
 - 39 - The mobile station shall store the TMSI code by setting TMSI_CODE_{s-p} to
40 TMSI_CODE_r.

41 The mobile station shall set the TMSI expiration time by setting
42 TMSI_EXP_TIME_{s-p} to TMSI_EXP_TIME_r. 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_{56m} seconds.
- 3 34. *Universal Handoff Direction Message*: The mobile station shall process the
4 message as specified in 2.6.6.2.5.1.
- 5 35. *User Zone Reject Message*: The mobile station shall process this message as
6 specified in 2.6.9.2.2.
- 7 36. *User Zone Update Message*: The mobile station shall process this message as
8 specified in 2.6.9.2.2.
- 9 37. *Extended Release Message*:
- 10 - If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to '111' or the
11 physical channels indicated by the two least significant bits of CH_IND
12 includes all the physical channels (FCH, DCCH, or both) currently being
13 processed by the mobile station, then the mobile station shall perform the
14 following:
- 15 + If the mobile station supports operation in the reduced slot cycle mode
16 following release of the traffic channel, the mobile station shall perform
17 the following:
- 18 o If RSC_MODE_ENABLED is equal to YES, the mobile station shall
19 perform the following:
- 20 ◇ If RSC_MODE_SUPPORTED_r is equal to '1', the mobile station
21 shall perform the following:
- 22 - Set RSC_END_TIME to the earlier of the current value of
23 RSC_END_TIME, and the system time specified by
24 MAX_RSC_END_TIME_UNIT_r and
25 MAX_RSC_END_TIME_VALUE_r.
- 26 - Set IGNORE_QPCH_s to IGNORE_QPCH_r.
- 27 ◇ If RSC_MODE_SUPPORTED_r is equal to '0', the mobile station
28 shall set RSC_MODE_ENABLED to NO.
- 29 o If RSC_MODE_ENABLED is equal to NO, the mobile station shall
30 perform the following:
- 31 ◇ If REQ_RSCI_INCL_r is included and set to '1', and the mobile
32 station sent a *Release Order* with ORDQ equal to '0000011', the
33 mobile station shall send an *Extended Release Response Message*
34 with the RSC_MODE_IND field set to '1', and perform the
35 following:
- 36 - Set RSC_MODE_ENABLED to YES.
- 37 - Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE
38 fields as specified in 2.7.2.3.2.25, and store the system time

- 1 specified by these fields as RSC_END_TIME. The value of
 2 RSC_END_TIME shall be no later than the system time
 3 specified by MAX_RSC_END_TIME_UNIT_r and
 4 MAX_RSC_END_TIME_VALUE_r received in the *Extended*
 5 *Release Message*.
- 6 – Set the RSCI field as specified in 2.7.2.3.2.25 and store it as
 7 RSCI_s; if RSCI_s is equal to '0111', set SLOTTED_s to NO.
 - 8 – Set IGNORE_QPCH_s to IGNORE_QPCH_r.
- 9 + The mobile station shall disable its transmitter.
 - 10 + The Layer 3 shall terminate all Call Control instances.
 - 11 + If the mobile station enters the *Release Substate* with a power-down
 12 indication, the mobile station may power down; otherwise, the mobile
 13 station shall perform the procedures as specified in 2.6.4.4.1.
- 14 - Otherwise, the mobile station shall discard the *Extended Release Message*
 15 and send a *Mobile Station Reject Order* with ORDQ field set to '0000010'
 16 (message not accepted in this state) within T_{56m} seconds.
 - 17 - If the mobile station receives a message that is not included in the above list
 18 or cannot be processed, the mobile station shall discard the message and
 19 send a *Mobile Station Reject Order* (ORDQ set to the applicable reason code
 20 as determined from Table 2.7.3-1) within T_{56m} seconds. If the mobile
 21 station receives a Call Control message (see 2.6.10) which is directed to a
 22 Call Control instance that does not exist, the mobile station shall send a
 23 *Mobile Station Reject Order* with ORDQ field set to '00010001' (no call control
 24 instance present with the specified identifier) to the base station within T_{56m}
 25 seconds.
 - 26 - If the bits of TMSI_CODE_{s-p} are not all equal to '1', and if System Time (in
 27 80 ms units) exceeds TMSI_EXP_TIME_{s-p} × 2¹², the mobile station shall set
 28 all the bits of TMSI_CODE_{s-p} to '1' within T_{66m} seconds.
 - 29 - If the full-TMSI timer expires or has expired, the mobile station shall set all
 30 the bits of TMSI_CODE_{s-p} to '1'. The mobile station shall update the
 31 registration variables as described in 2.6.5.5.2.5.

32 2.6.4.4.1 Procedures for Exiting the Release Substate

33 The mobile station shall perform the following procedures in the order listed below.

34 If the mobile station received an *Extended Release Message* with the
 35 RER_MODE_ENABLED field set to '1', then the mobile station shall set
 36 RER_MODE_ENABLED to YES, RER_COUNT to 0, and shall perform the following:

- 37 • The mobile station shall store the following:
 - 38 - Maximum number of *Radio Environment Messages* that the mobile station is
 39 permitted to transmit while in radio environment reporting mode

- 1 (RER_MAX_NUM_MSG_s = *infinity*, if RER_MAX_NUM_MSG_IDX_r is equal to
2 '111'; otherwise, RER_MAX_NUM_MSG_s = 2^{RER_MAX_NUM_MSG_IDX_r}).
- 3 - Maximum number of pilots to maintain in RER_PILOT_LIST
4 (MAX_RER_PILOT_LIST_SIZE_s = MAX_RER_PILOT_LIST_SIZE_r).
- 5 - System identification for radio environment reporting mode (RER_SID_s = SID_s).
- 6 - Network identification for radio environment reporting mode (RER_NID_s = NID_s).
- 7 • The mobile station shall initialize the radio environment report pilot list
8 (RER_PILOT_LIST) to contain the set of pilots that made up the Active Set on the
9 Traffic Channel.
- 10 • The mobile station shall enable the radio environment report timer with an initial
11 value of *infinity* if RER_TIME_r is equal to '111'; otherwise, the mobile station shall
12 enable the radio environment report timer with an initial value of 2^{RER_TIME_r}
13 seconds if RER_TIME_UNIT_r is equal to '00', or 2^{RER_TIME_r} minutes if
14 RER_TIME_UNIT_r is equal to '01', or 2^{RER_TIME_r} hours if RER_TIME_UNIT_r is equal
15 to '10'.

16 If the mobile station received an *Extended Release Message* with the TKZ_MODE_ENABLED
17 field set to '1', then the mobile station shall set TKZ_COUNT to 0, and shall perform the
18 following:

- 19 • The mobile station shall store the following:
- 20 - Tracking zone identifier (TKZ_ID_s = TKZ_ID_r).
- 21 - Tracking zone list length (TKZ_LIST_LEN_s = TKZ_LIST_LEN_r).
- 22 - TKZ timer (TKZ_TIMER_s = TKZ_TIMER_r).
- 23 - Maximum number of *Radio Environment Messages* that the mobile station is
24 permitted to transmit while in tracking zone mode (TKZ_MAX_NUM_MSG_s =
25 *infinity*, if TKZ_MAX_NUM_MSG_IDX_r is equal to '111'; otherwise,
26 TKZ_MAX_NUM_MSG_s = 2^{TKZ_MAX_NUM_MSG_IDX_r}).
- 27 - System identification for tracking zone mode (TKZ_SID_s = SID_s).
- 28 - Network identification for tracking zone mode (TKZ_NID_s = NID_s).
- 29 - Tracking zone update period (TKZ_UPDATE_PRD_s = TKZ_UPDATE_PRD_r).
- 30 • If RER_MODE_ENABLED is equal to NO, the mobile station shall set
31 TKZ_MODE_ENABLED to YES; otherwise, the mobile station shall set
32 TKZ_MODE_PENDING to YES.
- 33 • If TKZ_MODE_ENABLED is equal to YES, the mobile station shall perform the
34 following:
- 35 - Initialize the tracking zone list (TKZ_LIST) to contain TKZ_ID_s.

- 1 - Enable the tracking zone update timer with an initial value of infinity if
2 TKZ_UPDATE_PRD_s is equal to '1111'; otherwise, the mobile station shall enable
3 the tracking zone update timer with an initial value of $2^{TKZ_UPDATE_PRD_s} + 6$
4 seconds.

5 The mobile station shall perform the following procedures to determine whether to enter
6 the *Mobile Station Idle State* or *System Determination Substate* of the *Mobile Station*
7 *Initialization State*.

8 If the mobile station received an *Extended Release Message* with
9 DIRECT_TO_IDLE_INFO_INCL field equal to '1' and RELEASE_TYPE_r equal to '011', the
10 mobile station shall enter the *System Determination Substate* of the *Mobile Station*
11 *Initialization Substate* with a release indication (see 2.6.1.1).

12 If the mobile station received an *Extended Release Message* with
13 DIRECT_TO_IDLE_INFO_INCL field equal to '1', RELEASE_TYPE_r equal to a value other
14 than '011', and all the following conditions are met:

- 15 • The system indicated by this message is a preferred system according to system
16 selection process of the mobile station, and
- 17 • If the BAND_CLASS field is included in this message, the mobile station supports
18 the band class capability specified by this field, and
- 19 • If the SR1_TD_MODE field is included in this message, the mobile station supports
20 the transmit diversity capability specified by this field, and
- 21 • The mobile station is able to select one of the pilots in the DIRECT TO IDLE record
22 of the *Extended Release Message* with sufficient signal strength to enter *Mobile*
23 *Station Idle State*.

24 then, the mobile station shall perform the following:

- 25 • If RELEASE_TYPE_r equals '000', the mobile station shall perform the following:
 - 26 - If FREQ_INCL_r equals '1', the mobile station shall set CDMABAND_s to
27 BAND_CLASS_r and CDMACH_s to CDMA_FREQ_r.
 - 28 - The mobile station shall store the following:
 - 29 + PAGECH_s = PAGE_CH_r
 - 30 + PRAT_s = PRAT_r
 - 31 - The mobile station shall then perform the following:
 - 32 + Set its code channel to PAGECH_s,
 - 33 + Set the Paging Channel data rate as determined by PRAT_s,
 - 34 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA
35 Channel specified by CDMABAND_s and CDMACH_s and acquire the specified
36 Paging Channel. If BCMC_INFO_INCL_r is included and is equal to '1', the
37 mobile station may start monitoring the BCMC flows corresponding to the
38 BCMC_FLOW_IDS (See section 2.6.13.11) included in this message after
39 entering the *Mobile Station Idle State* as specified in section 2.6.13, using the

- 1 BCMC flow information included in this message.
- 2 • If $RELEASE_TYPE_T$ equals '001', the mobile station shall perform the following:
- 3 - If $FREQ_INCL_T$ equals '1', the mobile station shall set $CDMABAND_S$ to
- 4 $BAND_CLASS_T$ and $CDMACH_S$ to $CDMA_FREQ_T$.
- 5 - The mobile station shall store the following:
- 6 + $BCCH_S = SR1_BCCH_CODE_CHAN_NON_TD_T$
- 7 + $BCCH_CODE_RATE_S = SR1_CRAT_NON_TD_T$
- 8 + $BRAT_S = SR1_BRAT_NON_TD_T$
- 9 - The mobile station shall then perform the following:
- 10 + Set its Primary Broadcast Control Channel code channel to $BCCH_S$,
- 11 + Set the Primary Broadcast Control Channel data rate as determined by
- 12 $BRAT_S$,
- 13 + Set the Primary Broadcast Control Channel code rate as determined by
- 14 $BCCH_CODE_RATE_S$,
- 15 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA
- 16 Channel specified by $CDMABAND_S$ and $CDMACH_S$ and acquire the specified
- 17 Primary Broadcast Control Channel. If $BCMC_INFO_INCL_T$ is included and is
- 18 equal to '1', the mobile station may start monitoring the BCMC flows
- 19 corresponding to the $BCMC_FLOW_IDs$ (See section 2.6.13.11) included in
- 20 this message after entering the *Mobile Station Idle State* as specified in
- 21 section 2.6.13, using the BCMC flow information included in this message.
- 22 • If $RELEASE_TYPE_T$ equals '010', the mobile station shall perform the following:
- 23 - If $FREQ_INCL_T$ equals '1', the mobile station shall set $CDMABAND_S$ to
- 24 $BAND_CLASS_T$ and $CDMACH_S$ to $CDMA_FREQ_T$.
- 25 - The mobile station shall store the following:
- 26 + $BCCH_S = SR1_BCCH_CODE_CHAN_TD_T$
- 27 + $BCCH_CODE_RATE_S = SR1_CRAT_TD_T$
- 28 + $BRAT_S = SR1_BRAT_TD_T$
- 29 - The mobile station shall then perform the following:
- 30 + Set its Primary Broadcast Control Channel code channel to $BCCH_S$,
- 31 + Set the Primary Broadcast Control Channel data rate as determined by
- 32 $BRAT_S$,
- 33 + Set the Primary Broadcast Control Channel code rate as determined by
- 34 $BCCH_CODE_RATE_S$,
- 35 + The mobile station shall enter the *Mobile Station Idle State* on the CDMA
- 36 Channel specified by $CDMABAND_S$ and $CDMACH_S$ and acquire the specified
- 37 Primary Broadcast Control Channel that supports Transmit Diversity. If

1 BCMC_INFO_INCL_T is included and is equal to '1', the mobile station may
 2 start monitoring the BCMC flows corresponding to the BCMC_FLOW_IDs
 3 (See section 2.6.13.11) included in this message after entering the *Mobile*
 4 *Station Idle State* as specified in section 2.6.13, using the BCMC flow
 5 information included in this message.

6 Otherwise, the mobile station shall perform the following:

- 7 • If RELEASE_TO_IDLE_INDs is equal to '0', the mobile station shall enter the System
 8 Determination Substate of the Mobile Station Initialization State with a release
 9 indication (see 2.6.1.1).
- 10 • If RELEASE_TO_IDLE_IND_S is equal to '1', the mobile station shall perform the
 11 following:
 - 12 – If the mobile station has stored BCCH information (BCCH Walsh Code, BCCH
 13 data rate, and BCCH code rate) for a base station which has sufficient pilot
 14 strength, the mobile station shall restore the BCCH information to BCCH_S,
 15 BRAT_S and BCCH_CODE_RATE_S, and then perform the following:
 - 16 + Set its Primary Broadcast Control Channel code channel to BCCH_S,
 - 17 + Set the Primary Broadcast Control Channel data rate as determined by
 18 BRAT_S,
 - 19 + Set the Primary Broadcast Control Channel code rate as determined by
 20 BCCH_CODE_RATE_S,
 - 21 + The mobile station shall enter the *Mobile Station Idle State*.
 - 22 – Otherwise, the mobile station shall perform the following:
 - 23 + If the mobile station has stored PCH information (PCH number and PCH
 24 data rate) for a base station which has sufficient pilot strength, the mobile
 25 station shall restore the PCH information to PAGECH_S and PRAT_S, and then
 26 perform the following:
 - 27 o Set its code channel to PAGECH_S,
 - 28 o Set the Paging Channel data rate as determined by PRAT_S,
 - 29 o The mobile station shall enter the *Mobile Station Idle State*,
 - 30 + Otherwise, the mobile station shall perform the following:
 - 31 o If IDLE_SID is equal to SID_S, IDLE_CDMABAND is equal to
 32 CDMABAND_S, IDLE_NID is equal to NID_S, and IDLE_P_REV is equal to
 33 P_REV_S, and the mobile station decides to enter the *Mobile Station Idle*
 34 *State*, the mobile station shall perform the following:
 - 35 ◇ The mobile station shall set CDMACH_S to IDLE_CDMA_CHAN.
 - 36 ◇ If IDLE_BCCH_CHAN is equal to '1', the mobile station shall perform
 37 the following:
 - 38 – Set its Primary Broadcast Control Channel code channel to

- 1 BCCH_s,
- 2 – Set the Primary Broadcast Control Channel data rate as
- 3 determined by BRAT_s,
- 4 – Set the Primary Broadcast Control Channel code rate as
- 5 determined by BCCH_CODE_RATE_s,
- 6 – The mobile station shall enter the *Mobile Station Idle State*.
- 7 ◇ If IDLE_BCCH_CHAN is equal to '0', the mobile station shall perform
- 8 the following:
- 9 – Set its code channel to PAGECH_s,
- 10 – Set the Paging Channel data rate as determined by PRAT_s,
- 11 – The mobile station shall enter the *Mobile Station Idle State*.
- 12 o Otherwise, the mobile station shall enter the *System Determination*
- 13 *Substate* of the *Mobile Station Initialization State* with a release indication
- 14 (see 2.6.1.1).

15 2.6.5 Registration

16 2.6.5.1 Forms of Registration

17 Registration is the process by which the mobile station notifies the base station of its

18 location, status, identification, slot cycle, and other characteristics. The mobile station

19 informs the base station of its location and status so that the base station can efficiently

20 page the mobile station when establishing a mobile station terminated call. For operation

21 in the slotted mode, the mobile station supplies the SLOT_CYCLE_INDEX parameter so

22 that the base station can determine which slots the mobile station is monitoring. The

23 mobile station supplies the station class mark and the protocol revision number so that the

24 base station knows the capabilities of the mobile station.

25 The CDMA system supports 12 different forms of registration:

- 26 1. Power-up registration. The mobile station registers when it powers on, switches
- 27 from using a different frequency block designator, switches from using a different
- 28 band class, switches from using an alternative operating mode, or upon the
- 29 insertion of an R-UIM into a powered-on ME.
- 30 2. Power-down registration. The mobile station registers when it powers off if
- 31 previously registered in the current serving system.
- 32 3. Timer-based registration. The mobile station registers when a timer expires.
- 33 4. Distance-based registration. The mobile station registers when the distance
- 34 between the current base station and the base station in which it last registered
- 35 exceeds a threshold.
- 36 5. Zone-based registration. The mobile station registers when it enters a new zone.
- 37 6. Parameter-change registration. The mobile station registers when certain of its
- 38 stored parameters change or when it enters a new system.

- 1 7. Ordered registration. The mobile station registers when the base station requests it.
- 2 8. Implicit registration. When a mobile station successfully sends an *Origination*
3 *Message, Reconnect Message, Call Recovery Request Message, or Page Response*
4 *Message*, the base station can infer the mobile station's location. This is considered
5 an implicit registration.
- 6 9. Traffic Channel registration. Whenever the base station has registration information
7 for a mobile station that has been assigned to a Traffic Channel, the base station
8 can notify the mobile station that it is registered.
- 9 10. User Zone Registration. The mobile station registers when it selects an active User
10 Zone (see 2.6.9.1.2).
- 11 11. Encryption/Message Integrity re-sync required registration. The mobile station
12 registers when extended encryption is turned on and the mobile station determines
13 that it can not decrypt any messages from the base station (see 2.3.12.4.1.3) or the
14 mobile station registers when message integrity is supported and the mobile station
15 determines that it can not validate the MACI of any messages from the base station.
- 16 12. BCMC registration. BCMC registration is performed by a mobile station currently
17 monitoring or desiring to monitor a BCMC flow.

18 The first five forms of registration, User Zone Registration, and Encryption/Message
19 Integrity re-sync required registration, as a group, are called autonomous registration and
20 are enabled by roaming status (see 2.6.5.3). Parameter-change registration is independent
21 of roaming status. Ordered registration is initiated by the base station through an *Order*
22 *Message*. Implicit registration does not involve the exchange of any registration messages
23 between the base station and the mobile station. The base station can obtain registration
24 information by sending the *Status Request Message* to the mobile station on either the f-
25 csch or the f-dsch. The base station can obtain limited registration information by sending
26 the *Status Request Order* to the mobile station on the f-dsch. The mobile station can be
27 notified that it is registered through the *Mobile Station Registered Message*.

28 Any of the various forms of autonomous registration and parameter-change registration
29 can be enabled or disabled. The forms of registration that are enabled and the
30 corresponding registration parameters are communicated in the *System Parameters*
31 *Message* on the Paging Channel, or the *ANSI-41 System Parameters Message* on the Primary
32 Broadcast Control Channel.

33 In addition, the mobile station may enable or disable autonomous registration for each type
34 of roaming described in 2.6.5.3.

35 2.6.5.1.1 Power-Up Registration

36 Power-up registration is performed when the mobile station is turned on. To prevent
37 multiple registrations when power is quickly turned on and off, or when the R-UIM is
38 quickly inserted and removed, the mobile station delays T_{57m} seconds before registering,
39 after entering the *Mobile Station Idle State*.

1 The mobile station shall maintain a power-up/initialization timer. While the power-
 2 up/initialization timer is active, the mobile station shall not make registration access
 3 attempts.

4 Power-up registration is performed when the mobile station changes to a different operating
 5 mode (see 2.6.5.5.1.1), or as indicated by [40]. A power-up registration is also performed
 6 when the mobile station changes band classes, serving system, or frequency block
 7 designator if the conditions stated in 2.6.5.5.1.1 are met.

8 2.6.5.1.2 Power-Down Registration

9 Power-down registration is performed when the user directs the mobile station to power off.
 10 If power-down registration is performed, the mobile station does not power off until after
 11 completing the registration attempt.

12 The mobile station does not perform power-down registration if it has not previously
 13 registered in the system that corresponds to the current SID_s and NID_s (see 2.6.5.5.2.4).

14 2.6.5.1.3 Timer-Based Registration

15 Timer-based registration causes the mobile station to register at regular intervals. Its use
 16 also allows the system to automatically deregister mobile stations that did not perform a
 17 successful power-down registration. Timer-based registration uses a Paging Channel or a
 18 Forward Common Control Channel slot counter (equivalent to a timer with time increments
 19 of 80 ms). Timer-based registration is performed when the counter reaches a maximum
 20 value (REG_COUNT_MAX_s) that is controlled by the base station via the REG_PRD field of
 21 the *System Parameters Message* or *ANSI-41 System Parameters Message*. The base station
 22 disables timer-based registration by setting REG_PRD to zero.

23 The mobile station shall maintain a timer-based registration counter (REG_COUNT_s). The
 24 mobile station shall compute and store the timer expiration count (REG_COUNT_MAX_s) as

$$25 \text{REG_COUNT_MAX}_s = \lfloor 2^{\text{REG_PRD}/4} \rfloor.$$

26 The mobile station shall maintain an indicator of timer-based registration timer enable
 27 status (COUNTER_ENABLED_s).

28 The counter is reset after each successful registration.

29 Whenever the mobile station changes COUNTER_ENABLED_s from NO to YES, it shall set
 30 REG_COUNT_s as follows:

31 If the mobile station supports the procedure described in section 2.6.5.1.3.1 and the
 32 conditions for suppression of randomization of timer-based registration are met, the mobile
 33 station shall set REG_COUNT_s to 0; otherwise, the mobile station shall set REG_COUNT_s
 34 based upon the value of TBR_RAND_WINDOW_s as shown in Table 2.6.5.1.3-1. When
 35 setting REG_COUNT_s to a pseudorandom value, the mobile station shall use the
 36 pseudorandom number generator specified in 2.6.7.2.

1 **Table 2.6.5.1.3-1. Percentage of Randomization for Timer-based registration**

Value of TBR_RAND_WINDOW (binary)	Meaning	REG_COUNT _s
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 ($\text{REG_COUNT_MAX}_s - 1$)

2 If the mobile station is operating in the non-slotted mode, it shall increment the timer-
3 based registration counter once per 80 ms whenever COUNTER_ENABLED_s equals YES. If
4 the mobile station is operating in slotted mode, it may increment the timer-based
5 registration counter when it begins to monitor the Paging Channel (see 2.6.2.1.1.3) or the
6 Forward Common Control Channel. A mobile station operating in the slotted mode shall
7 increment the counter by the same amount that the counter would have been incremented
8 if the mobile station had been operating in the non-slotted mode.⁶¹

9 2.6.5.1.3.1 Timer-Based Registration based on Frequency of Implicit Registrations

10 A mobile station may support a procedure to prevent unnecessary timer-based
11 registrations when implicit registrations are sent frequently.

12 If the mobile station supports this procedure, the mobile station shall set REG_COUNT_s to
13 0 when it changes COUNTER_ENABLED_s from NO to YES if all of the following conditions
14 for suppression of randomization of timer-based registrations are met:

- 15 • the mobile station has been powered on for the past $\lfloor 2^{\text{REG_PRD}/4} \rfloor \times 0.32$ seconds,
- 16 • in every period of $\lfloor 2^{\text{REG_PRD}/4} \rfloor \times 0.08$ consecutive seconds in the past
17 $\lfloor 2^{\text{REG_PRD}/4} \rfloor \times 0.32$ seconds the mobile station sent at least one *Origination*
18 *Message*, *Page Response Message*, or *Reconnect Message*, or the
19 mobile station was in the *Mobile Station Control on the Traffic Channel State* for at
20 least part of the period,
- 21 • TBR_RAND_SUPPR_ENABLE_s is equal to '1'.
- 22 • If either of the following two conditions are true:

⁶¹ 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.

- 1 - 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
- 2
- 3 - 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.
- 4
- 5
- 6

7 2.6.5.1.4 Distance-Based Registration

8 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.

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14 The mobile station stores the base station latitude ($\text{BASE_LAT_REG}_{\text{s-p}}$), the base station longitude ($\text{BASE_LONG_REG}_{\text{s-p}}$) and the registration distance ($\text{REG_DIST_REG}_{\text{s-p}}$), 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 station shall compute the current base station's distance from the last registration point (DISTANCE) as:

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$$21 \quad \text{DISTANCE} = \lfloor \frac{\sqrt{(\Delta\text{lat})^2 + (\Delta\text{long})^2}}{16} \rfloor,$$

22 where

$$23 \quad \Delta\text{lat} = \text{BASE_LAT}_{\text{s}} - \text{BASE_LAT_REG}_{\text{s-p}}$$

24 and

$$25 \quad \Delta\text{long} = (\text{BASE_LONG}_{\text{s}} - \text{BASE_LONG_REG}_{\text{s-p}}) \times \cos(\pi/180 \times \text{BASE_LAT_REG}_{\text{s-p}}/14400).$$

26 The mobile station shall compute DISTANCE with an error of no more than $\pm 5\%$ of its true value when $|\text{BASE_LAT_REG}_{\text{s-p}}/14400|$ is less than 60 and with an error of no more than $\pm 7\%$ of its true value when $|\text{BASE_LAT_REG}_{\text{s-p}}/14400|$ is between 60 and 70.⁶²

27

28

29 2.6.5.1.5 Zone-Based Registration

30 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*.

31

32

⁶² 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 Zone-based registration causes a mobile station to register whenever it determines it is in a
2 new zone (see 2.6.5.5.2.1), not on its internally stored list of visited registration zones. A
3 zone is added to the list whenever a registration (including implicit registration) occurs, and
4 is deleted upon expiration of a timer. After a system access, timers are enabled for every
5 zone except one that was successfully registered by the access.

6 A mobile station can be registered in more than one zone. Zones are uniquely identified by
7 a zone number (REG_ZONE) plus the SID and NID of the zone.

8 The mobile station shall store a list of the zones in which the mobile station has registered
9 (ZONE_LIST_s). Each entry in ZONE_LIST_s shall include the zone number (REG_ZONE) and
10 the (SID, NID) pair for the zone. The mobile station shall be capable of storing at least N_{9M}
11 entries in ZONE_LIST_s. A base station shall be considered to be in ZONE_LIST_s only if the
12 base station's REG_ZONE, SID and NID are found in an entry in ZONE_LIST_s. The mobile
13 station provides storage for one entry of ZONE_LIST_s in semi-permanent memory,
14 ZONE_LIST_{s-p} (see 2.3.4).

15 The mobile station shall maintain a zone list entry timer for each entry in ZONE_LIST_s.
16 When an entry in ZONE_LIST_s is removed from the list, the corresponding zone list entry
17 timer shall be disabled. The timer duration shall be as determined from the stored value of
18 ZONE_TIMER_s using Table 3.7.2.3.2.1-1. The mobile station shall provide a means to
19 examine each timer's value while the timer is active, so that the age of list entries can be
20 compared.

21 If the mobile station supports one of more band classes that contain multiple frequency
22 block designators, the mobile station shall maintain an identifier of the frequency block
23 designator for each entry in ZONE_LIST_s (see [45]). When the mobile station adds a zone to
24 ZONE_LIST_s, the mobile station shall include the identifier for the frequency block
25 designator.⁶³

26 If the mobile station supports multiple band classes, the mobile station shall maintain an
27 identifier of the band class for each entry in ZONE_LIST_s (see [45]). When the mobile
28 station adds a zone to ZONE_LIST_s, the mobile station shall include the identifier for the
29 band class.

30 The base station controls the maximum number of zones in which a mobile station may be
31 considered registered, by means of the TOTAL_ZONES field of the *System Parameters*
32 *Message*, *ANSI-41 System Parameters Message* or *Mobile Station Registered Message*. When
33 an entry is added to the zone list, or if TOTAL_ZONES is decreased, the mobile station
34 removes entries from the zone list if there are more entries than allowed by the setting of
35 TOTAL_ZONES.

36 Whenever ZONE_LIST_s contains more than TOTAL_ZONES_s entries, the mobile station
37 shall delete the excess entries according to the following rules:

⁶³ 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.

- 1 • If TOTAL_ZONES_s is equal to zero, the mobile station shall delete all entries.
- 2 • If TOTAL_ZONES_s is not equal to zero, the mobile station shall delete those entries
- 3 having active zone list entry timers, starting with the oldest entry, as determined by
- 4 the timer values, and continuing in order of decreasing age until no more than
- 5 TOTAL_ZONES_s entries remain.

6 The mobile station shall store a list of the systems/networks in which the mobile station

7 has registered (SID_NID_LIST_s). Each entry in SID_NID_LIST_s shall include the (SID, NID)

8 pair for the system/network. The mobile station shall be capable of storing N_{10m} entries in

9 SID_NID_LIST_s. A base station shall be considered to be in the SID_NID_LIST_s only if the

10 base station's SID and NID are found in an entry in SID_NID_LIST_s. The mobile station

11 shall provide storage for one entry of SID_NID_LIST_s in semi-permanent memory

12 (SID_NID_LIST_{s-p}).

13 If the mobile station supports one or more band classes that contain multiple frequency

14 block designators, the mobile station shall maintain an identifier of the frequency block

15 designator for each entry in SID_NID_LIST_s (see [45]). When the mobile station adds an

16 entry to SID_NID_LIST_s, the mobile station shall include the identifier for the frequency

17 block designator.

18 If the mobile station supports multiple band classes, the mobile station shall maintain an

19 identifier of the band class for each entry in SID_NID_LIST_s (see [45]). When the mobile

20 station adds an entry to SID_NID_LIST_s, the mobile station shall include the identifier for

21 the band class.

22 The mobile station shall maintain a SID/NID list entry timer for each entry in

23 SID_NID_LIST_s. When an entry in SID_NID_LIST_s is removed from the list, the

24 corresponding SID/NID list entry timer shall be disabled. The timer duration shall be as

25 determined from the stored value of ZONE_TIMER_s using Table 3.7.2.3.2.1-1. The mobile

26 station shall provide a means to examine each timer's value while the timer is active, so

27 that the age of list entries can be compared.

28 Whenever SID_NID_LIST_s contains more than N_{10m} entries, the mobile station shall delete

29 the excess entries according to the following rule:

- 30 • The mobile station shall delete those entries having active SID/NID list entry timers,
- 31 starting with the oldest entry, as determined by the timer values, and continuing in
- 32 order of decreasing age.

33 Whenever MULT_SIDS_s is equal to '0' and SID_NID_LIST contains entries with different

34 SIDs, the mobile station shall delete the excess entries according to the following rules:

- 35 • If the SID/NID entry timer for any entry is disabled, the mobile station shall delete
- 36 all entries not having the same SID as the entry whose timer is disabled;
- 37 • Otherwise, the mobile station shall delete all entries not having the same SID as the
- 38 newest entry in SID_NID_LIST, as determined by the timer values.

39 Whenever MULT_NIDS_s is equal to '0', and SID_NID_LIST contains more than one entry for

40 any SID, the mobile station shall delete the excess entries for each SID according to the

41 following rules:

- 1 • If the SID/NID entry timer for any entry is disabled, the mobile station shall delete
2 all entries for that SID except the entry whose timer is disabled;
- 3 • For all other SIDs, the mobile station shall delete all entries for each SID except the
4 newest entry, as determined by the timer values.

5 2.6.5.1.6 Parameter-Change Registration

6 Parameter-change registration is performed when a mobile station modifies any of the
7 following stored parameters:

- 8 • The preferred slot cycle index (SLOT_CYCLE_INDEX_p)
- 9 • The station class mark (SCM_p)
- 10 • The call termination enabled indicators (MOB_TERM_HOME_p,
11 MOB_TERM_FOR_SID_p, and MOB_TERM_FOR_NID_p)

12 Parameter-change registration is also performed when any of the following capabilities
13 supported by the mobile station changes:

- 14 • The band classes
- 15 • The band subclasses
- 16 • The power classes
- 17 • The radio configurations
- 18 • The operating modes
- 19 • Transmit diversity (OTD or STS)
- 20 • Quick Paging Channel
- 21 • Spreading Rate 3 common channels support
- 22 • Encryption capability

23 Parameter-change registration is performed whenever there is no entry in the mobile
24 station's SID_NID_LIST_s that matches the base station's SID and NID.

25 Parameter-change registration is independent of the roaming status of the mobile station.⁶⁴

26 Whenever a parameter changes, the mobile station shall delete all entries from
27 SID_NID_LIST_s.

28 2.6.5.1.7 Ordered Registration

29 The base station can command the mobile station to register by sending a *Registration*
30 *Request Order*. Ordered registration is performed in the *Mobile Station Order and Message*
31 *Processing Operation* (2.6.2.4). Requirements are specified in 2.6.5.5.2.3.

⁶⁴ The indicator REG_ENABLED does not govern parameter-change registration.

2.6.5.1.8 Implicit Registration

Whenever an *Origination Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response Message* is sent, the base station can infer the location of the mobile station. This is considered an implicit registration. Requirements are specified in 2.6.5.5.3.

2.6.5.1.9 Traffic Channel Registration

While a mobile station is assigned a Traffic Channel, the mobile station is notified that it is registered through the *Mobile Station Registered Message*. Requirements are specified in 2.6.5.5.4.3.

2.6.5.1.10 User Zone Registration

User Zone registration is performed when the mobile station selects an active User Zone (see 2.6.9.2.1).

2.6.5.1.11 Encryption/Message Integrity Re-sync Required Registration

Encryption/Message Integrity re-sync required registration is performed when the mobile station determines that it can not decrypt any message or validate the MACI of any message from the base station (see 2.3.12.4.1.3). This type of registration is needed for the 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.

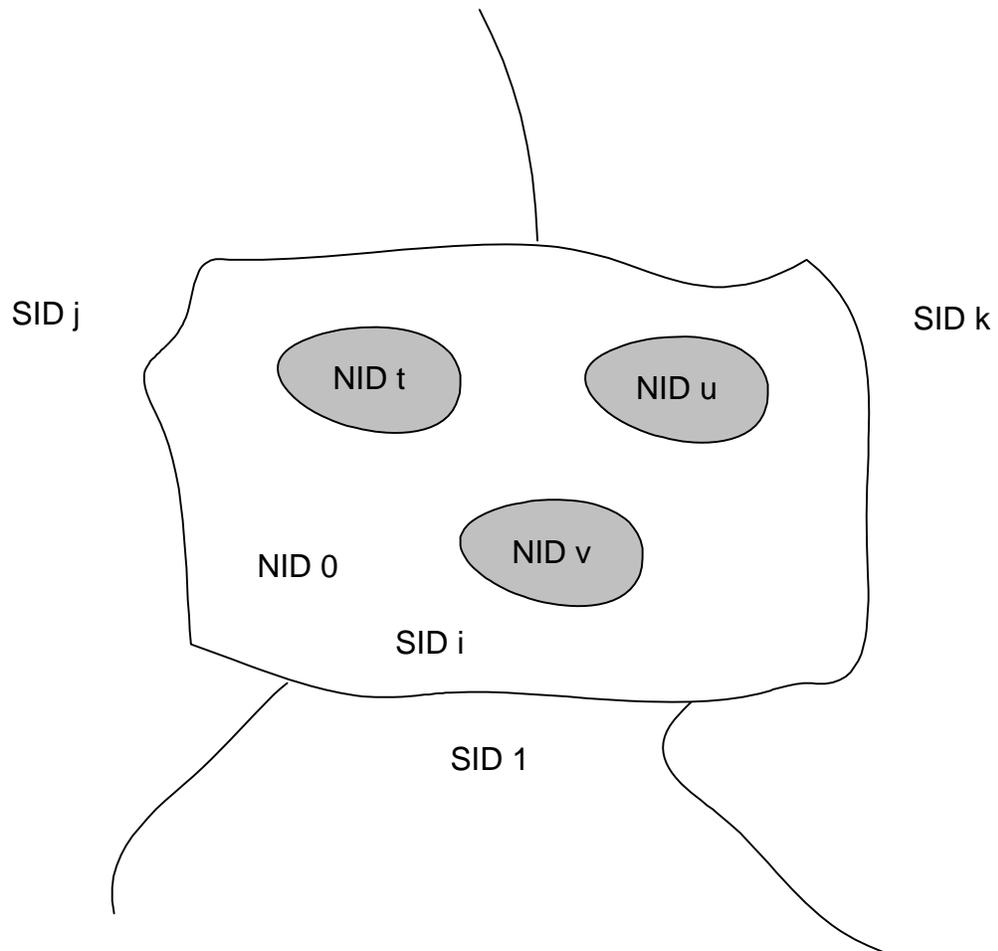
2.6.5.2 Systems and Networks

A base station is a member of a cellular or PCS system and a network. A network is a subset of a system.

1 Systems are labeled with an identification called the system identification or SID; networks
 2 within a system are given a network identification or NID. A network is uniquely identified
 3 by the pair (SID, NID). The SID number 0 is a reserved value. The NID number 0 is a
 4 reserved value indicating all base stations that are not included in a specific network. The
 5 NID number 65535 ($2^{16}-1$) is a reserved value the mobile station may use for roaming
 6 status determination (see 2.6.5.3) to indicate that the mobile station considers the entire
 7 SID (regardless of NID) as home (non-roaming).

8 Figure 2.6.5.2-1 shows an example of systems and networks. SID i contains three
 9 networks labeled t, u, and v. A base station in system i that is not in one of these three
 10 networks is in NID 0.

11



12

13 **Figure 2.6.5.2-1. Systems and Networks Example**

14 2.6.5.3 Roaming

15 The mobile station has a list of one or more home (non-roaming) (SID, NID) pairs. A mobile
 16 station is roaming if the stored (SID_s, NID_s) pair (received in the *System Parameters*

1 *Message* on the Paging Channel, or the *ANSI-41 System Parameters Message* on the Primary
 2 Broadcast Control Channel) does not match one of the mobile station's non-roaming (SID,
 3 NID) pairs. Two types of roaming are defined: A mobile station is a foreign NID roamer if
 4 the mobile station is roaming and there is some (SID, NID) pair in the mobile station's (SID,
 5 NID) list for which SID is equal to SID_s. A mobile station is a foreign SID roamer if there is
 6 no (SID, NID) pair in the mobile station's (SID, NID) list for which SID is equal to SID_s⁶⁵.
 7 The mobile station may use the special NID value 65535 to indicate that the mobile station
 8 considers all NIDs within a SID to be non-roaming (i.e., that the mobile station is not
 9 roaming when operating with any base station in that system).

10 The mobile station shall store three 1-bit parameters in its permanent memory (see 2.3.8).
 11 These parameters are MOB_TERM_HOME_p, MOB_TERM_FOR_SID_p, and MOB_TERM-
 12 _FOR_NID_p. The mobile station shall set MOB_TERM_HOME_p to '1' if the mobile station is
 13 configured to receive mobile station terminated calls when using a home (SID, NID) pair;
 14 otherwise, the mobile station shall set MOB_TERM_HOME_p to '0'. The mobile station shall
 15 set MOB_TERM_FOR_SID_p to '1' if the mobile station is configured to receive mobile station
 16 terminated calls when it is a foreign SID roamer; otherwise MOB_TERM_FOR_SID_p shall be
 17 set to '0'. The mobile station shall set MOB_TERM_FOR_NID_p to '1' if the mobile station is
 18 configured to receive mobile station terminated calls when it is a foreign NID roamer;
 19 otherwise the mobile station shall set MOB_TERM_FOR_NID_p to '0'.

20 The mobile station determines the registration status using these parameters and the
 21 HOME_REG, FOR_NID_REG, and FOR_SID_REG fields of the *System Parameters Message*
 22 or *ANSI-41 System Parameters Message*.

23 The mobile station shall store a mobile station call termination enabled indicator,
 24 MOB_TERM_s. The mobile station shall set MOB_TERM_s to YES if any of the following
 25 conditions is met:

- 26 • The mobile station is not roaming, and MOB_TERM_HOME_p is equal to '1'; or
- 27 • The mobile station is a foreign NID roamer and MOB_TERM_FOR_NID_p is equal to
 28 '1'; or
- 29 • The mobile station is a foreign SID roamer and MOB_TERM_FOR_SID_p is equal to
 30 '1'; otherwise the mobile station shall set MOB_TERM_s to NO.

31 The mobile station shall store a registration status indicator, REG_ENABLED_s. The mobile
 32 station shall set the indicator REG_ENABLED_s to YES if any of the following conditions is
 33 met for the mobile station:

⁶⁵ 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 not roaming, and both HOME_REG_S and MOB_TERM_HOME_P
- 2 are equal to '1'; or
- 3 • The mobile station is a foreign NID roamer and both FOR_NID_REG_S and
- 4 MOB_TERM_FOR_NID_P are equal to '1'; or
- 5 • The mobile station is a foreign SID roamer and both FOR_SID_REG_S and
- 6 MOB_TERM_FOR_SID_P are equal to '1'; otherwise the mobile station shall set
- 7 REG_ENABLED_S to NO.

8 The mobile station performs autonomous registrations if REG_ENABLED_S is YES.

9 2.6.5.4 Registration Timers and Indicators

10 The mobile station shall provide the following registration timers:

- 11 • Power-up/initialization timer (see 2.6.5.1.1).
- 12 • Timer-based registration timer (see 2.6.5.1.3).
- 13 • Zone list entry timers (see 2.6.5.1.5).
- 14 • SID/NID list entry timers (see 2.6.5.1.5).
- 15 • BCMC frequency registration timer (see 2.6.13).
- 16 • BCMC registration required timer (see 2.6.13).

17 The mobile station shall provide a means of enabling and disabling each timer. When a
18 timer is disabled, it shall not be considered expired. A timer that has been enabled is
19 referred to as active.

20 2.6.5.5 Registration Procedures

21 2.6.5.5.1 Actions in the Mobile Station Initialization State

22 2.6.5.5.1.1 Power-Up or Change to a Different Operating Mode, Band Class, Serving 23 System, Frequency Block Designator, or R-UIM Insertion.

24 Upon power-up, the mobile station shall perform the following actions:

- 25 • Delete all entries of ZONE_LIST_S.
- 26 • If ZONE_LIST_{S-P} contains an entry, copy the entry to ZONE_LIST_S and disable the
- 27 corresponding entry timer.
- 28 • Delete all entries of SID_NID_LIST_S.
- 29 • If SID_NID_LIST_{S-P} contains an entry, copy the entry to SID_NID_LIST_S and disable
- 30 the corresponding entry timer.
- 31 • Set the registered flag (REGISTERED_S) to NO.
- 32 • Set timer-based registration enable status (COUNTER_ENABLED_S) to NO.
- 33 • Set autonomous registration enable status (REG_ENABLED_S) to NO.
- 34 • Set RETURN_CAUSE_S to '0000'.
- 35 • Set KEY_ID, LAST_2G_KEY_ID_S, and LAST_3G_KEY_ID_S to '00'.

- 1 • Set ENC_KEY[i] and INT_KEY[i] to NULL, where i ranges from '00' to '11'.
- 2 • Set D_SIG_ENCRYPT_MODE_S and C_SIG_ENCRYPT_MODE_S to '000'.
- 3 • Set RESTORE_KEYS to '0'.
- 4 • If the UIM contains IK and CK, the mobile station shall set KEY_ID to '10',
- 5 RESTORE_KEYS to '1', INT_KEY[KEY_ID] to IK, ENC_KEY[KEY_ID] to CK,
- 6 TX_EXT_SSEQ[.][KEY_ID] and TX_EXT_SSEQ[.][KEY_ID] to any 24-bit value
- 7 multiplied by 256.

8 If any of the following conditions is true:

- 9 • BYPASS_REG_IND_S is equal to '00' and the mobile station has switched from using
- 10 CDMA
 - 11 – in a different band class, or
 - 12 – in a different serving system in a band class that supports multiple serving
 - 13 systems (e.g., Band Class 0), or
 - 14 – in a different frequency block designator in a band class that supports
 - 15 frequency block designator allocations (e.g. Band Class 1)
- 16 • BYPASS_REG_IND_S is equal to '01' and, for a reason other than processing the
- 17 *Extended CDMA Channel List Message*, the mobile station has switched from using
- 18 CDMA)
 - 19 – in a different band class, or
 - 20 – in a different serving system in a band class that supports multiple serving
 - 21 systems (e.g., Band Class 0), or
 - 22 – in a different frequency block designator in a band class that supports
 - 23 frequency block designator allocations (e.g. Band Class 1)
- 24 • BYPASS_REG_IND_S is equal to '10', SID_S is different than REG_SID_S and the mobile
- 25 station has switched from using CDMA
 - 26 – in a different band class, or
 - 27 – in a different serving system in a band class that supports multiple serving
 - 28 systems (e.g., Band Class 0), or
 - 29 – in a different frequency block designator in a band class that supports
 - 30 frequency block designator allocations (e.g. Band Class 1)

31 the mobile station shall perform the following actions:

- 32 • Set timer-based registration enable status (COUNTER_ENABLED_S) to NO.
- 33 • Set autonomous registration enable status (REG_ENABLED_S) to NO.
- 34 • Set RETURN_CAUSE_S to '0000'.
- 35 • Set the registered flag (REGISTERED_S) to NO.
- 36 • Set KEY_ID, LAST_2G_KEY_IDS, and LAST_3G_KEY_IDS to '00'.

- 1 • Set ENC_KEY[i] and INT_KEY[i] to NULL, where i ranges from '00' to '11'.
- 2 • Set RESTORE_KEYS to '0'.
- 3 • If the UIM contains IK and CK, the mobile station shall set KEY_ID to '10',
- 4 RESTORE_KEYS to '1', INT_KEY[KEY_ID] to IK, ENC_KEY[KEY_ID] to CK,
- 5 TX_EXT_SSEQ[.][KEY_ID] and TX_EXT_SSEQ[.][KEY_ID] to any 24-bit value
- 6 multiplied by 256.

7 2.6.5.5.1.2 Timer Maintenance

8 While in the *Mobile Station Initialization State*, the mobile station shall update all active
 9 registration timers (see 2.6.5.4). If any timer expires while in this state, the mobile station
 10 shall preserve the expiration status so that further action can be taken in the *Mobile Station*
 11 *Idle State*.

12 2.6.5.5.1.3 Entering the Mobile Station Idle State

13 Before entering the *Mobile Station Idle State* from the *Mobile Station Initialization State*, the
 14 mobile station shall perform the following action:

- 15 • If REGISTERED_s is equal to NO, enable the power-up/initialization timer with an
- 16 expiration time of T_{57m} seconds (see 2.6.5.1.1) only when the mobile station is
- 17 entering this state with a power-up indication.

18 2.6.5.5.2 Actions in the Mobile Station Idle State

19 Requirements in this section and its subsections apply only when the mobile station is in
 20 the *Mobile Station Idle State*.

21 2.6.5.5.2.1 Idle Registration Procedures

22 These procedures are performed whenever the mobile station is in the *Mobile Station Idle*
 23 *State* (see 2.6.2.1.3).

24 While in the *Mobile Station Idle State*, the mobile station shall update all active registration
 25 timers (see 2.6.5.4).

26 If the power-up/initialization timer has expired or is disabled, the mobile station shall
 27 perform the following actions in the order given. If any action necessitates a registration,
 28 the mobile station shall enter the *Update Overhead Information Substate* of the *System*
 29 *Access State* (see 2.6.3) with a registration indication.

- 30 1. The timer-based registration timer shall be enabled (COUNTER_ENABLED_s = YES)
- 31 and the timer count (REG_COUNT_s) shall be set to a pseudorandom number as
- 32 specified in 2.6.5.1.3, if the following conditions are met:
- 33 a. COUNTER_ENABLED_s is equal to NO; and
- 34 b. The stored configuration parameters are current (see 2.6.2.2); and
- 35 c. REG_ENABLED_s is equal to YES; and
- 36 d. REG_PRD_s is not equal to zero.

- 1 2. If any zone list entry timer (see 2.6.5.1.5) has expired, the mobile station shall
2 delete the corresponding entry from ZONE_LIST_s.
- 3 3. If any SID/NID list entry timer (see 2.6.5.1.5) has expired, the mobile station shall
4 delete the corresponding entry from SID_NID_LIST_s.
- 5 4. The mobile station shall perform power-up registration, as specified in 2.6.5.1.1, if
6 all the following conditions are met:
 - 7 a. POWER_UP_REG_s is equal to '1'; and
 - 8 b. The stored configuration parameters are current (see 2.6.2.2); and
 - 9 c. REGISTERED_s is equal to NO, and
 - 10 d. REG_ENABLED_s is equal to YES.
- 11 5. The mobile station shall perform parameter-change registration (see 2.6.5.1.6) if all
12 the following conditions are met:
 - 13 a. PARAMETER_REG_s is equal to '1'; and
 - 14 b. The stored configuration parameters are current (see 2.6.2.2); and
 - 15 c. There is no entry of SID_NID_LIST_s whose SID and NID fields match the stored
16 SID_s and NID_s.
- 17 6. The mobile station shall perform timer-based registration (see 2.6.5.1.3) if all the
18 following conditions are met:
 - 19 a. COUNTER_ENABLED_s is equal to YES; and
 - 20 b. The stored configuration parameters are current (see 2.6.2.2); and
 - 21 c. REG_ENABLED_s is equal to YES; and
 - 22 d. REG_COUNT_s is greater than or equal to REG_COUNT_MAX_s.
- 23 7. The mobile station shall perform distance-based registration (see 2.6.5.1.4) if all the
24 following conditions are met:
 - 25 a. REG_DIST_s is not equal to zero; and
 - 26 b. The stored configuration parameters are current (see 2.6.2.2); and
 - 27 c. REG_ENABLED_s is equal to YES; and
 - 28 d. The current base station's distance from the base station in which the mobile
29 station last registered (see 2.6.5.1.4) is greater than or equal to
30 REG_DIST_REG_{s-p}.
- 31 8. The mobile station shall perform zone-based registration (see 2.6.5.1.5) if all the
32 following conditions are met:
 - 33 a. TOTAL_ZONES_s is not equal to zero; and
 - 34 b. The stored configuration parameters are current (see 2.6.2.2); and
 - 35 c. REG_ENABLED_s is equal to YES; and

- 1 d. There is no entry of ZONE_LIST_s whose SID, NID and REG_ZONE fields match
2 the stored SID_s, NID_s and REG_ZONE_s.
- 3 9. The mobile station shall perform User Zone registration (see 2.6.2.5.1.10) if it
4 selects an active User Zone (see 2.6.9.1.2).
- 5 10. The mobile station shall perform encryption/message integrity re-sync required
6 registration (see 2.6.5.1.11) if all the following conditions are met:
- 7 a. REG_SECURITY_RESYNC is equal to YES or REGISTER_IN_IDLE_s is equal to '1';
8 and
- 9 b. None of the above registrations have been performed since the last entering of
10 the *Mobile Station Idle State*.

11 2.6.5.5.2.2 Processing the Registration Fields of the System Parameters Message and
12 ANSI-41 System Parameters Message

13 When the mobile station processes the *System Parameters Message* or *ANSI-41 System*
14 *Parameters Message*, it shall perform the following actions:

- 15 1. If REG_PRD_s is equal to zero, the mobile station shall set COUNTER_ENABLED_s to
16 NO.
- 17 2. If REG_PRD_s is not equal to zero, the mobile station shall set REG_COUNT_MAX_s as
18 specified in 2.6.5.1.3.
- 19 3. The mobile station shall update its roaming status and set REG_ENABLED_s as
20 specified in 2.6.5.3.
- 21 4. If ZONE_LIST_s contains more than TOTAL_ZONES_s entries, the mobile station shall
22 delete the excess entries according to the rules specified in 2.6.5.1.5.
- 23 5. If MULT_SIDS_s is equal to '0' and SID_NID_LIST contains entries with different
24 SIDs, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 25 6. If MULT_NIDS_s is equal to '0' and SID_NID_LIST contains more than one entry for
26 any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.

27 2.6.5.5.2.3 Ordered Registration

28 Ordered registration is performed after receiving a *Registration Request Order* while in the
29 *Mobile Station Order and Message Processing Operation* (see 2.6.2.4).

30 The mobile station shall enter the *Update Overhead Information Substate* of the *System*
31 *Access State* with a registration indication within T_{33m} seconds after the *Registration*
32 *Request Order* is received.

33 2.6.5.5.2.4 Power Off

34 These procedures are performed when the mobile station is directed by the user to power
35 off.

36 The mobile station shall perform the following actions:

- 1 • If an entry of ZONE_LIST_s does not have an active timer, copy that entry to
- 2 ZONE_LIST_{s-p}; otherwise, delete any entry in ZONE_LIST_{s-p}.
- 3 • If an entry of SID_NID_LIST_s does not have an active timer, copy that entry to
- 4 SID_NID_LIST_{s-p}; otherwise, delete any entry in SID_NID_LIST_{s-p}.

5 The mobile station shall perform power-down registration (see 2.6.5.1.2) by entering the
6 *System Access State* with a registration indication within T_{33m} seconds after the user
7 directs the mobile station to power off, if all the following conditions are true:

- 8 • REG_ENABLED_s equals YES; and
- 9 • POWER_DOWN_REG_s equals '1'; and
- 10 • There is an entry of SID_NID_LIST_s for which the SID and NID fields are equal to
11 SID_s and NID_s; and
- 12 • The power-up/initialization timer (see 2.6.5.1.1) is disabled or has expired.

13 2.6.5.5.2.5 Full-TMSI Timer Expiration

14 When the mobile station sets all the bits of TMSI_CODE_{s-p} to '1' upon expiration of the full-
15 TMSI timer (see 2.6.2), the mobile station shall delete all entries from SID_NID_LIST_s and
16 ZONE_LIST_s.

17 2.6.5.5.3 Actions in the System Access State

18 Requirements in this section and its subsections apply only when the mobile station is in
19 the *System Access State*.

20 2.6.5.5.3.1 Successful Access, Registration, or Implicit Registration

21 These procedures shall be performed after the mobile station receives confirmation of
22 delivery of a *Registration Message*, *Origination Message*, *Reconnect Message*, *Call Recovery*
23 *Request Message*, or *Page Response Message* sent on the r-csch (see 2.6.3.1.2).

- 24 • Disable the power-up/initialization timer (see 2.6.5.1.1).
- 25 • Set DIGITAL_REG_{s-p} to '00000001'.
- 26 • Set REG_COUNT_s to zero.
- 27 • Set REGISTERED_s to YES.
- 28 • If an explicit or implicit registration was sent, set SLOT_CYCLE_INDEX_REG to the
29 slot cycle index the mobile station included in the message.
- 30 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:
 - 31 - Delete all entries from ZONE_LIST_s belonging to a different band class (see [45])
32 than CDMABAND_s.
 - 33 - If CDMABAND_s contains multiple serving systems, delete all entries from
34 ZONE_LIST_s that have a SID from a different serving system than SERVSYS_s.

- 1 - If CDMABAND_s contains multiple frequency block designators, delete all entries
2 from ZONE_LIST_s belonging to a different frequency block designator (see [45])
3 than the frequency block designator associated with REG_SID_s.
- 4 • Add REG_REG_ZONE_s, REG_SID_s, and REG_NID_s to ZONE_LIST_s if not already in
5 the list. If required, include the band class identifier and block identifier for the
6 current band and frequency block designator as specified in 2.6.5.1.5.
- 7 • Disable the zone list entry timer for the entry of ZONE_LIST_s containing
8 REG_REG_ZONE_s, REG_SID_s, and REG_NID_s. For any other entry of ZONE_LIST_s
9 whose entry timer is not active, enable the entry timer with the duration specified
10 by REG_ZONE_TIMER_s (see 2.6.5.1.5).
- 11 • If ZONE_LIST_s contains more than TOTAL_ZONES_s entries, delete the excess
12 entries according to the rules specified in 2.6.5.1.5.
- 13 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:
- 14 - Delete all entries from SID_NID_LIST_s belonging to a different band class (see
15 [45]) than CDMABAND_s.
- 16 - If CDMABAND_s contains multiple serving systems, delete all entries from
17 SID_NID_LIST_s that have a SID from a different serving system than SERVSYS_s.
- 18 - If CDMABAND_s contains multiple frequency block designators, delete all entries
19 from SID_NID_LIST_s belonging to a different frequency block designator (see
20 [45]) than the frequency block designator associated with REG_SID_s.
- 21 • Add REG_SID_s and REG_NID_s to SID_NID_LIST_s if not already in the list. If
22 required, include the band class identifier and block identifier for the current band
23 and frequency block designator as specified in 2.6.5.1.5.
- 24 • Disable the SID/NID list entry timer for the entry of SID_NID_LIST_s containing
25 REG_SID_s, and REG_NID_s. For any other entry of SID_NID_LIST_s whose entry
26 timer is not active, enable the entry timer with the duration specified in 2.6.5.1.5.
- 27 • If SID_NID_LIST_s contains more than N_{10m} entries, delete the excess entries
28 according to the rules specified in 2.6.5.1.5.
- 29 • If MULT_SIDS_s is equal to '0' and SID_NID_LIST contains entries with different
30 REG_SID_s, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 31 • If MULT_NIDS_s is equal to '0' and SID_NID_LIST contains more than one entry for
32 any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.
- 33 • Set the stored location of last registration (BASE_LAT_REG_{s-p} and BASE_LONG-
34 _REG_{s-p}) to the current base station's location (BASE_LAT_s and BASE_LONG_s). Set
35 the stored registration distance (REG_DIST_REG_{s-p}) to the current base station's
36 registration distance (REG_DIST_s).
- 37 • Set REG_SECURITY_RESYNC to NO.
- 38 • Set REGISTER_IN_IDLE_s to '0'.

1 These procedures shall be performed after the mobile station receives confirmation of
 2 delivery of any other message:

- 3 • Set DIGITAL_REG_{s-p} to '00000001'.
- 4 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:
 - 5 - Delete all entries from ZONE_LIST_s belonging to a different band class (see [45])
 6 than CDMABAND_s.
 - 7 - If CDMABAND_s contains multiple serving systems, delete from ZONE_LIST_s all
 8 entries from ZONE_LIST_s that have a SID from a different serving system than
 9 SERVSYS_s.
 - 10 - If CDMABAND_s contains multiple frequency block designators, delete all entries
 11 from ZONE_LIST_s belonging to a different frequency block designator (see [45])
 12 than the frequency block designator associated with SID_s.
 - 13 • For any entry of ZONE_LIST_s not matching REG_ZONE_s, SID_s, and NID_s and not
 14 having an active entry timer, enable the entry timer with the duration specified by
 15 ZONE_TIMER_s (see 2.6.5.1.5).
 - 16 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:
 - 17 - Delete all entries from SID_NID_LIST_s belonging to a different band class (see
 18 [45]) than CDMABAND_s.
 - 19 - If CDMABAND_s contains multiple serving systems, delete from SID_NID_LIST_s
 20 all entries from SID_NID_LIST_s that have a SID from a different serving system
 21 than SERVSYS_s.
 - 22 - If CDMABAND_s contains multiple frequency block designators, delete all entries
 23 from SID_NID_LIST_s belonging to a different frequency block designator (see
 24 [45]) than the frequency block designator associated with SID_s.
 - 25 • For any entry of SID_NID_LIST_s not matching SID_s and NID_s and not having an
 26 active entry timer, enable the entry timer with the duration specified by
 27 ZONE_TIMER_s (see 2.6.5.1.5).

28 2.6.5.5.3.2 Unsuccessful Access

29 These procedures are performed when the mobile station declares an access attempt failure
 30 when in the *System Access State* (see 2.6.3).

31 The mobile station shall perform the following actions:

- 32 • Set DIGITAL_REG_{s-p} to '00000001'.
- 33 • If an explicit or implicit registration was sent, set SLOT_CYCLE_INDEX_REG to
 34 min(SLOT_CYCLE_INDEX_REG, slot cycle index the mobile station included in the
 35 message).
- 36 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:

- 1 - Delete all entries from ZONE_LIST_s belonging to a different band class (see [45])
2 than CDMABAND_s.
- 3 - If CDMABAND_s contains multiple serving systems, delete from ZONE_LIST_s all
4 entries from ZONE_LIST_s that have a SID from a different serving system than
5 SERVSYS_s.
- 6 - If CDMABAND_s contains multiple frequency block designators, delete all entries
7 from ZONE_LIST_s belonging to a different frequency block designator (see [45])
8 than the frequency block designator associated with SID_s.
- 9 • For any entry of ZONE_LIST_s not matching REG_ZONE_s, SID_s, and NID_s and not
10 having an active entry timer, enable the entry timer with the duration specified by
11 ZONE_TIMER_s (see 2.6.5.1.5).
- 12 • If BYPASS_REG_IND_s is equal to '00', the mobile station shall perform the following:
- 13 - Delete all entries from SID_NID_LIST_s belonging to a different band class (see
14 [45]) than CDMABAND_s.
- 15 - If CDMABAND_s contains multiple serving systems, delete from SID_NID_LIST_s
16 all entries from SID_NID_LIST_s that have a SID from a different serving system
17 than SERVSYS_s.
- 18 - If CDMABAND_s contains multiple frequency block designators, delete all entries
19 from SID_NID_LIST_s belonging to a different frequency block designator (see
20 [45]) than the frequency block designator associated with SID_s.
- 21 • For any entry of SID_NID_LIST_s not matching SID_s and NID_s and not having an
22 active entry timer, enable the entry timer with the duration specified by
23 ZONE_TIMER_s (see 2.6.5.1.5).

24 2.6.5.5.3.3 Power Off

25 These procedures are performed when the mobile station is directed by the user to power
26 off.

27 The mobile station shall perform the following actions:

- 28 • If an entry of ZONE_LIST_s does not have an active timer, copy that entry to
29 ZONE_LIST_{s-p}; otherwise, delete any entry in ZONE_LIST_{s-p}.
- 30 • If an entry of SID_NID_LIST_s does not have an active timer, copy that entry to
31 SID_NID_LIST_{s-p}; otherwise, delete any entry in SID_NID_LIST_{s-p}.

32 2.6.5.5.4 Actions in the Mobile Station Control on the Traffic Channel State

33 Requirements in this section and its subsections apply only when the mobile station is in
34 the *Mobile Station Control on the Traffic Channel State*.

35 2.6.5.5.4.1 Traffic Channel Initialization

36 Upon entering the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the*
37 *Traffic Channel State*, the mobile station shall set COUNTER_ENABLED_s to NO, shall set
38 TBR_RAND_SUPPR_ENABLE_s to '0', and shall set TBR_RAND_WINDOW_s to '11'.

1 2.6.5.5.4.2 Timer Maintenance

2 While in the *Mobile Station Control on the Traffic Channel State*, the mobile station shall
3 update all active registration timers.

4 If a zone list entry timer expires, the mobile station shall delete the corresponding entry
5 from $ZONE_LIST_s$. If a SID/NID list entry timer expires, the mobile station shall delete the
6 corresponding entry from $SID_NID_LIST_s$.

7 2.6.5.5.4.3 Processing the Mobile Station Registered Message

8 The mobile station receives the *Mobile Station Registered Message* on the Forward Traffic
9 Channel when the mobile station is considered registered for the base station whose
10 location and other parameters are included in the message.

11 The mobile station shall store the following parameters:

- 12 • System identification ($SID_s = SID_r$)
- 13 • Network identification ($NID_s = NID_r$)
- 14 • Registration zone ($REG_ZONE_s = REG_ZONE_r$)
- 15 • Number of registration zones to be retained ($TOTAL_ZONES_s = TOTAL_ZONES_r$)
- 16 • Zone timer length ($ZONE_TIMER_s = ZONE_TIMER_r$)
- 17 • Multiple SID storage indicator ($MULT_SIDS_s = MULT_SIDS_r$)
- 18 • Multiple NID storage indicator ($MULT_NIDS_s = MULT_NIDS_r$)
- 19 • Base station latitude ($BASE_LAT_s = BASE_LAT_r$)
- 20 • Base station longitude ($BASE_LONG_s = BASE_LONG_r$)
- 21 • Registration distance ($REG_DIST_s = REG_DIST_r$)

22 The mobile station shall perform the following actions:

- 23 • Set $DIGITAL_REG_{s-p}$ to '00000001'.
- 24 • Add REG_ZONE_s , SID_s , and NID_s to $ZONE_LIST_s$ if not already in the list. If
25 required, include the band class identifier and block identifier for the current band
26 and frequency block designator as specified in 2.6.5.1.5.
- 27 • If $BYPASS_REG_IND_s$ is equal to '00', delete all entries from $ZONE_LIST_s$ belonging
28 to a different band class (see [45]) than $CDMABAND_s$.
- 29 • Disable the zone list entry timer for the entry of $ZONE_LIST_s$ containing
30 REG_ZONE_s , SID_s , and NID_s . For any other entry of $ZONE_LIST_s$ whose entry
31 timer is not active, enable the entry timer with the duration specified by
32 $ZONE_TIMER_s$ (see 2.6.5.1.5).
- 33 • If $ZONE_LIST_s$ contains more than $TOTAL_ZONES_s$ entries, delete the excess
34 entries according to the rules specified in 2.6.5.1.5.
- 35 • If $BYPASS_REG_IND_s$ is equal to '00', delete all entries from $SID_NID_LIST_s$
36 belonging to a different band class (see [45]) than $CDMABAND_s$.

- 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-
- 14 _REG_{s-p}) to the base station's location (BASE_LAT_s and BASE_LONG_s). Set the
- 15 stored registration distance (REG_DIST_REG_{s-p}) to the base station's registration
- 16 distance (REG_DIST_s).
- 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 transitioned
8 between disjoint sets of base stations, different band classes, different Frequency
9 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 station⁶⁶. 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 If the mobile station is capable of obtaining Overhead Messages of neighboring sectors
27 while in traffic channel state, then the mobile station may include pilots from the
28 PSMM_SIGNATURE field of the *Access Point Identification Message* in the *Pilot Strength*
29 *Measurement Message*.

30 The pilot search parameters and the rules for *Pilot Strength Measurement Message* or
31 *Extended Pilot Strength Measurement Message* transmission are expressed in terms of the
32 following sets of pilots:

- 33 • *Active Set*: The pilots associated with the Forward Traffic Channels assigned to the
34 mobile station.

⁶⁶ 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 • *Candidate Set*: The pilots that are not currently in the Active Set but have been
2 received by the mobile station with sufficient strength to indicate that the
3 associated Forward Traffic Channels could be successfully demodulated.
- 4 • *Neighbor Set*: The pilots that are not currently in the Active Set or the Candidate
5 Set and are likely candidates for handoff.
- 6 • *Remaining Set*: The set of all possible pilots in the current system on the current
7 CDMA Frequency Assignment, excluding the pilots in the Neighbor Set, the
8 Candidate Set, and the Active Set. This set of possible pilots consists of pilots
9 whose pilot PN sequence offset indices are integer multiples of $PILOT_INC_S$.

10 The base station may direct the mobile station to search for pilots on a different CDMA
11 frequency to detect the presence of CDMA Channels and to measure their strengths. The
12 mobile station reports the results of the search to the base station using the *Candidate*
13 *Frequency Search Report Message*. Depending upon the pilot strength measurements
14 reported in the *Candidate Frequency Search Report Message*, the base station can direct the
15 mobile station to perform an inter-frequency hard handoff.

16 The pilot search parameters are expressed in terms of the following sets of pilots on the
17 CDMA Candidate Frequency:

- 18 • *Candidate Frequency Neighbor Set*: A list of pilots on the CDMA Candidate
19 Frequency.
- 20 • *Candidate Frequency Search Set*: A subset of the Candidate Frequency Neighbor Set
21 that the base station may direct the mobile station to search.

22 2.6.6.2 Requirements

23 2.6.6.2.1 Pilot Search

24 For the pilot sets defined in 2.6.6.1.2, the base station sets the search window (range of PN
25 offsets) in which the mobile station is to search for usable multipath components (i.e.,
26 multipath components that the mobile station can use for demodulation of the associated
27 Forward Traffic Channel) of the pilots in the set.

28 Search performance criteria are defined in [11].

29 This search shall be governed by the following:

- 30 • *Active Set and Candidate Set*: The search procedures for pilots in the Active Set and
31 Candidate Set shall be identical. The search window size⁶⁷ for each pilot in the
32 Active Set and Candidate Set shall be the number of PN chips specified in Table
33 2.6.6.2.1-1 corresponding to $SRCH_WIN_A_S$. The mobile station should center the
34 search window for each pilot of the Active Set and Candidate Set around the earliest
35 arriving usable multipath component of the pilot. If the mobile station receives a

⁶⁷ The table defines the entire search range. For example, $SRCH_WIN_A_S = 6$ corresponds to a 28 PN chip search window or ± 14 PN chips around the search window center.

1 value greater than or equal to 13 for SRCH_WIN_A_r, it may store and use the value
 2 13 in SRCH_WIN_A_s.

3 **Table 2.6.6.2.1-1. Searcher Window Sizes**

SRCH_WIN_A SRCH_WIN_N SRCH_WIN_NGHR SRCH_WIN_R CF_SRCH_WIN_N	window_size (PN chips)	SRCH_WIN_A SRCH_WIN_N SRCH_WIN_NGHR R SRCH_WIN_R CF_SRCH_WIN_N	window_size (PN chips)
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

4

5 **Table 2.6.6.2.1-2. Search Window Offset**

SRCH_OFFSET_NGHR CF_SRCH_OFFSET_NGHR	Offset (PN chips)
0	0
1	window_size/2
2	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

6

- 7
- 8 • *Neighbor Set*: If SRCH_WIN_NGHR_INCL_s is equal to '1', the search window size
 9 for each pilot in the Neighbor Set shall be the number of PN chips specified in Table
 10 2.6.6.2.1-1, corresponding to SRCH_WIN_NGHR_s associated with the pilot being
 11 searched. If SRCH_WIN_NGHR_INCL_s is equal to '0', the search window size for
 12 each pilot in the Neighbor Set shall be the number of PN chips specified in Table
 13 2.6.6.2.1-1 corresponding to SRCH_WIN_N_s. If SRCH_OFFSET_INCL_s is equal to
 14 '1', the search window offset for each pilot in the Neighbor Set shall be the number
 of PN chips specified in Table 2.6.6.2.1-2, corresponding to

1 SRCH_OFFSET_NGHBR_s associated with the pilot being searched. If
 2 SRCH_OFFSET_INCL_s is equal to '0', the search window offset for each pilot in the
 3 Neighbor Set shall be zero PN chip. The mobile station should center the search
 4 window for each pilot in the Neighbor Set around the pilot's PN sequence offset plus
 5 the corresponding search window offset, using timing defined by the mobile
 6 station's time reference (see [2]). If SEARCH_PRIORITY_INCL_s is equal to '1', the
 7 mobile station should use SEARCH_PRIORITY_s for the corresponding pilot to
 8 schedule its neighbor search. If the mobile station supports hopping pilot beacons
 9 and the TIMING_INCL field of the NGHBR_REC for the corresponding pilot is equal
 10 to '1', then the mobile station shall use the information included in the
 11 NGHBR_TX_OFFSET, NGHBR_TX_DURATION, and NGHBR_TX_PERIOD fields of
 12 the NGHBR_REC for the corresponding pilot to schedule the time for searching the
 13 neighbor. If ADD_PILOT_REC_INCL field of the NGHBR_REC for the corresponding
 14 pilot is equal to '1', the mobile station shall use the information included in the
 15 NGHBR_PILOT_REC field for searching the neighbor.

- 16 • *Remaining Set:* The search window size for each pilot in the Remaining Set shall be
 17 the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to
 18 SRCH_WIN_R_s. The mobile station should center the search window for each pilot
 19 in the Remaining Set around the pilot's PN sequence offset, using timing defined by
 20 the mobile station's time reference (see [2]). The mobile station should only search
 21 for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer
 22 multiples of PILOT_INC_s.
- 23 • *Candidate Frequency Search Set:* If CF_SRCH_WIN_NGHBR_INCL_s is equal to '1',
 24 the search window size for each pilot in the Candidate Frequency Search Set shall
 25 be the number of PN chips specified in Table 2.6.6.2.1-1, corresponding to
 26 SRCH_WIN_NGHBR_s associated with the pilot being searched. If
 27 CF_SRCH_WIN_NGHBR_INCL_s is equal to '0', the search window size for each pilot
 28 in the Candidate Frequency Search Set shall be the number of PN chips specified in
 29 Table 2.6.6.2.1-1 corresponding to CF_SRCH_WIN_N_s. If CF_SRCH_OFFSET_INCL_s
 30 is equal to '1', the search window offset for each pilot in the Candidate Frequency
 31 Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-2,
 32 corresponding to SRCH_OFFSET_NGHBR_s associated with the pilot being searched.
 33 If CF_SRCH_OFFSET_INCL_s is equal to '0', the search window offset for each pilot in
 34 the Candidate Frequency Search Set shall be zero PN chips. The mobile station
 35 should center the search window for each pilot in the Candidate Frequency Search
 36 Set around the pilot's PN sequence offset plus the corresponding search window
 37 offset using timing defined by the mobile station's time reference (see [2]). If
 38 CF_SEARCH_PRIORITY_INCL_s is equal to '1', the mobile station should use
 39 SEARCH_PRIORITY_s associated with each pilot to schedule a search of its
 40 Candidate Frequency Search Set.

41 2.6.6.2.2 Pilot Strength Measurements

42 The mobile station assists the base station in the handoff process and in the Reverse
 43 Supplemental Code Channel operation and in the Reverse Supplemental Channel operation
 44 by measuring and reporting the strengths of received pilots.

1 For an SR1 pilot, the mobile station should use the searcher element (see [2]) to compute
 2 the strength of a pilot (PS) by adding the ratios of received pilot energy per chip, E_c , to total
 3 received spectral density (noise and signals), I_o , of at most k usable multipath components,
 4 where k is the number of demodulating elements (see [2]) supported by the mobile station.

5 For an SR3 pilot, the pilot strength is given by

$$6 \quad \frac{1}{3} \times \left(\left(\frac{E_c}{I_o} \right)_{\text{Primary}} + \frac{\left(\frac{E_c}{I_o} \right)_1}{\Delta_1} + \frac{\left(\frac{E_c}{I_o} \right)_2}{\Delta_2} \right) \text{ where:}$$

7 - $\left(\frac{E_c}{I_o} \right)_{\text{Primary}}$ is the pilot E_c/I_o measured on the Primary carrier (computed as
 8 specified above for SR1 pilots),

9 - $\left(\frac{E_c}{I_o} \right)_1$ is the pilot E_c/I_o measured on the pilot on the lower frequency of the two
 10 remaining SR3 frequencies (computed as specified above for SR1 pilots), and Δ_1 is
 11 the pilot power level on the lower frequency of the two remaining SR3 frequencies
 12 relative to that of the primary SR3 pilot, i.e. $\Delta_1 = 10^{(-\text{SR3_PILOT_POWER1}/10)}$.

13 - $\left(\frac{E_c}{I_o} \right)_2$ is the pilot E_c/I_o measured on the pilot on the higher frequency of the two
 14 remaining SR3 frequencies (computed as specified above for SR1 pilots), and Δ_2 is
 15 the pilot power level on the higher frequency of the two remaining SR3 frequencies
 16 relative to that of the primary SR3 pilot, i.e. $\Delta_2 = 10^{(-\text{SR3_PILOT_POWER2}/10)}$.

17 2.6.6.2.3 Handoff Drop Timer

18 The mobile station shall maintain a handoff drop timer for each pilot in the Active Set and
 19 Candidate Set.

20 If $P_REV_IN_USE_s$ is less than or equal to three or SOFT_SLOPE_s is equal to '000000', the
 21 mobile station shall perform the following:

- 22 • For the Candidate Set, the mobile station shall start the timer whenever the
 23 strength of the corresponding pilot becomes less than T_DROP_s . The mobile station
 24 shall reset and disable the timer if the strength of the corresponding pilot exceeds
 25 T_DROP_s .
- 26 • For the Active Set, the mobile station shall start the timer whenever the strength of
 27 the corresponding pilot becomes less than T_DROP_s . The mobile station shall reset
 28 and disable the timer if the strength of the corresponding pilot exceeds T_DROP_s .

1 If P_REV_IN_USE_s is greater than three and SOFT_SLOPE_s is not equal to '000000', the
 2 mobile station shall perform the following:

- 3 • For the Candidate Set, the mobile station shall start the timer whenever the
 4 strength of the corresponding pilot becomes less than T_DROP_s. The mobile station
 5 shall reset and disable the timer if the strength of the corresponding pilot exceeds
 6 T_DROP_s.
- 7 • For the Active Set, the mobile station shall sort the N_A pilots in the Active Set in
 8 order of increasing strengths, i.e., PS₁ < PS₂ < PS₃ < ... < PS_{N_A} where the strength
 9 PS is as defined in 2.6.6.2.2. The mobile station shall start the timer whenever the
 10 strength PS_i satisfies the following inequality:

$$11 \quad 10 \times \log_{10} PS_i < \max\left(\frac{\text{SOFT_SLOPE}_s \times 10 \times \log_{10} \sum_{j>1} PS_j + \frac{\text{DROP_INTERCEPT}_s}{2}}{8}, -\frac{T_DROP_s}{2}\right)$$

12 $i = 1, 2, \dots, PS_{N_A-1}$

12

13 For the Active Set, the mobile station shall start the timer even if the timer has previously
 14 expired. The mobile station shall reset and disable the timer whenever the above inequality
 15 is not satisfied for the corresponding pilot.

16 If T_TDROP_RANGE_s is equal to '0000' or if P_REV_IN_USE_s is less than 9, then the mobile
 17 station shall perform the following:

- 18 • If T_TDROP_s equals zero, the mobile station shall consider the timer expired within
 19 100 ms of enabling it.
- 20 • Otherwise, the mobile station shall consider the timer expired within 10% of the
 21 timer expiration value shown in Table 2.6.6.2.3-1 corresponding to T_TDROP_s. If
 22 T_TDROP_s changes, the mobile station shall begin using the new value for all
 23 handoff drop timers within 100 ms.

24

Table 2.6.6.2.3-1. Handoff Drop Timer Expiration Values

T_TDROP	Timer Expiration (seconds)	T_TDROP	Timer Expiration (seconds)
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_S and,
 - + the timer expiration range value is the timer expiration range value in Table 2.6.6.2.3-2 corresponding to $T_TDROP_RANGE_S$.
 - The mobile station shall select the timer expiration value less than or equal to the maximum drop timer value which 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_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

T_TDROP_R ANGE [binary]	Timer Expiration Range (seconds)	T_TDROP _RANGE [binary]	Timer Expiration Range (seconds)
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

$$\text{PILOT_PN_PHASE} = (\text{PILOT_ARRIVAL} + (64 \times \text{PILOT_PN})) \bmod 2^{15},$$

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

1 to '0000010' (message not accepted in this state); otherwise, the mobile station
 2 shall process the message as specified in 2.6.6.2.6.3 and set
 3 SEARCH_PRIORITY_INCL_s, SRCH_WIN_NGHR_INCL_s, and SRCH_OFFSET_INCL_s
 4 to '0', and set TIMING_INCL for each of the neighboring base stations in the
 5 *Neighbor List Update Message* to '0'.

6 4. *Extended Handoff Direction Message*: The mobile station shall process the message as
 7 follows:

8 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
 9 to '00000110' (capability not supported), if the mobile station does not support the
 10 band class specified in the *Extended Handoff Direction Message*.

11 If the mobile station does not send a *Mobile Station Reject Order* in response to the
 12 *Extended Handoff Direction Message*, the mobile station shall perform the following at
 13 the action time of the message:

- 14 • The mobile station shall send a *Handoff Completion Message* or an *Extended*
 15 *Handoff Completion Message* as specified in 2.6.6.2.5.2. If the RC assigned on the
 16 reverse fundamental channel or supplemental channel is less than RC08 the mobile
 17 station shall set RC_BITMAP_CAPABILITY_EXT_ALLOWED_s to '0'.
- 18 • Update the Active Set, Candidate Set, and Neighbor Set in accordance with the
 19 *Extended Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and
 20 2.6.6.2.6.3).
- 21 • The mobile station shall delete all pilots that are not listed in the Active Set from the
 22 Active Set of the Supplemental Channel for the Forward Supplemental Channel
 23 Assignment (if any). If these deleted pilots include all pilots in the Active Set of the
 24 Supplemental Channel, the mobile station shall cancel the Forward Supplemental
 25 Channel Assignment.
- 26 • Discontinue use of all Forward Traffic Channels associated with pilots not listed in
 27 the *Extended Handoff Direction Message*.
- 28 • The mobile station shall update the Code Channel List, CODE_CHAN_LIST_s, as
 29 specified in 2.6.8.
- 30 • If the mobile station is currently processing Forward Supplemental Code Channels,
 31 then it shall continue processing the Forward Supplemental Code Channels using
 32 the updated Code Channel List, CODE_CHAN_LIST_s.
- 33 • The mobile station shall set IGNORE_SCAM_s and IGNORE_ESCAM_s to '0'.
- 34 • If HARD_INCLUDED is equal to '1', perform the following actions:
 - 35 – If FRAME_OFFSET_r is not equal to FRAME_OFFSET_s, change the frame
 36 offset on all of the code channels of the Forward Traffic Channel and of the
 37 Reverse Traffic Channel.

- 1 – If RESET_L2_r is equal to ‘1’, Layer 3 shall send a L2-Supervision.Request
2 primitive to Layer 2 to reset the acknowledgment procedures as specified in
3 [4]. The acknowledgment procedures shall be reset immediately after the
4 action time of the *Extended Handoff Direction Message*.
- 5 – If RESET_FPC_r is equal to ‘1’, initialize the Forward Traffic Channel power
6 control counters as specified in 2.6.4.1.1.1.
- 7 – If SERV_NEG_TYPE_r is equal to ‘1’, set SERV_NEG_s to enabled; otherwise set
8 SERV_NEG_s to disabled.
- 9 – Use the long code mask as follows:
- 10 + If PRIVATE_LCM_r equals ‘1’, the mobile station shall use the Private Long
11 Code Mask as specified in 2.3.6.
- 12 + If PRIVATE_LCM_r equals ‘0’, the mobile station shall use the Public Long
13 Code Mask derived from PLCM_TYPE_s as specified in 2.3.6.
- 14 + The mobile station shall indicate to the user the voice privacy mode
15 status.
- 16 – Process the ENCRYPT_MODE field as specified in 2.3.12.2.
- 17 • Store the following parameters from the current configuration:
- 18 – Serving Frequency Assignment (SF_CDMACH_s = CDMACH_s)
- 19 – Serving Frequency band class (SF_BAND_CLASS_s = BAND_CLASS_s)
- 20 – Serving Frequency frame offset (SF_FRAME_OFFSET_s = FRAME_OFFSET_s)
- 21 • If HARD_INCLUDED is not equal to ‘1’, set NUM_PREAMBLE_s = ‘000’.
- 22 • Store the following parameters from the *Extended Handoff Direction Message*:
- 23 – *Extended Handoff Direction Message* sequence number (HDM_SEQ_s =
24 HDM_SEQ_r)
- 25 – If SEARCH_INCLUDED is equal to ‘1’, then store the following:
- 26 + Search window size for the Active Set and Candidate Set
27 (SRCH_WIN_A_s = SRCH_WIN_A_r)
- 28 + Pilot detection threshold (T_ADD_s = T_ADD_r)
- 29 + Pilot drop threshold (T_DROP_s = T_DROP_r)
- 30 + Active Set versus Candidate Set comparison threshold
31 (T_COMP_s = T_COMP_r)
- 32 + Drop timer value (T_TDROPS = T_TDROPr)
- 33 – If HARD_INCLUDED is equal to ‘1’, then store the following:
- 34 + Frame offset (FRAME_OFFSET_s = FRAME_OFFSET_r)
- 35 + Nominal power setting of the target cell (NOM_PWR_s = NOM_PWR_r)

- 1 + Hard handoff traffic channel preamble count required before transmitting
2 *Handoff Completion Message* or *Extended Handoff Completion Message*
3 (NUM_PREAMBLE_S = NUM_PREAMBLE_T)
- 4 + CDMA band class (CDMABAND_S = BAND_CLASS_T)
- 5 + Frequency assignment (CDMACH_S = CDMA_FREQ_T)
- 6 + Nominal power setting of the target cell (If CDMABAND_S = '00000' or
7 CDMABAND_S = '00011', then NOM_PWR_EXT_S = '0'; otherwise,
8 NOM_PWR_EXT_S = NOM_PWR_EXT_T)
- 9 – One occurrence of PILOT_PN and PWR_COMB_IND for each included
10 member of the Active Set.
- 11 – If ADD_LENGTH is not equal to '000', then store the following:
12 + Protocol revision level (P_REV_S = P_REV_T)
13 + Protocol revision level currently in use (P_REV_IN_USE_S = the minimum
14 value of P_REV_S and MOB_P_REV_P of the current band class)
- 15 – Disable return on failure (RETURN_IF_HANDOFF_FAIL_S = '0')
- 16 • Perform a soft or hard handoff depending on the following conditions:
17 – If any of the following conditions is true, the mobile station shall perform a
18 hard handoff:
19 + HARD_INCLUDED is set to '1' and either BAND_CLASS_T is not equal to
20 SF_CDMABAND_S, CDMA_FREQ_T is not equal to SF_CDMACH_S, or
21 FRAME_OFFSET_T is not equal to SF_FRAME_OFFSET_S, or
22 + The set of pilots specified by the message is disjoint from the Active Set
23 prior to the action time of the message.
- 24 – If the mobile station performs a hard handoff, it shall perform the following:
25 + If a Periodic Serving Frequency Pilot Report Procedure is in progress, abort
26 the procedure (see 2.6.6.2.12).
27 + If a Candidate Frequency periodic search is in progress, abort the periodic
28 search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4) and set PERIODIC_SEARCH_S to
29 '0'.
30 + The mobile station shall cancel the Forward Supplemental Channel
31 assignment or the Reverse Supplemental Channel assignment (if any).
32 + Perform the actions specified in 2.6.6.2.8.1. If the message specifies more
33 than one pilot, the mobile station shall also perform the actions specified in
34 2.6.6.2.7.1 and 2.6.6.2.7.2.
- 35 – Otherwise, the mobile station shall perform a soft handoff as specified in
36 2.6.6.2.7.

37 5. *Candidate Frequency Search Request Message*: The mobile station shall process the
38 message as follows:

1 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
2 to '00000110' (capability not supported), if the following condition is true:

- 3 • SEARCH_MODE_r is not equal to '0000', and the mobile station does not support
4 the capability specified by SEARCH_MODE_r.

5 If none of the above conditions is true, the mobile station shall perform the actions
6 described in the remainder of this section to process the *Candidate Frequency*
7 *Search Request Message*.

8 If SEARCH_MODE_r is equal to '0000', the mobile station shall process the
9 *Candidate Frequency Search Request Message* as follows:

- 10 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
11 set to '00001100' (invalid Frequency Assignment), if the Frequency Assignment
12 specified in the message is the same as the Serving Frequency (BAND_CLASS_r is
13 equal to CDMABAND_s and CDMA_FREQ_r is equal to CDMACH_s).
- 14 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
15 set to '00001010' (search set not specified), if SEARCH_TYPE_r is equal to '01' or
16 '11', and one of the following conditions is true:
 - 17 – PILOT_UPDATE_r is equal to '0' and the Candidate Frequency Search Set
18 before the action time of the *Candidate Frequency Search Request Message* is
19 empty, or
 - 20 – PILOT_UPDATE_r is equal to '1' and the message specifies an empty search
21 set.
- 22 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
23 set to '00001101' (search period too short), if SEARCH_TYPE_r is equal to '11'
24 and *search_period* is less than $(\max(fwd_time, rev_time) + T_{71m})$ seconds, where
25 *search_period*, *fwd_time* and *rev_time* are defined below.

26 (In the following, if PILOT_UPDATE_r is equal to '1', *rec_search_set* is the set of
27 pilots specified in the *Candidate Frequency Search Request Message* with the
28 corresponding SEARCH_SET field set to '1'; otherwise, *rec_search_set* is the
29 Candidate Frequency Search Set before the action time of the *Candidate*
30 *Frequency Search Request Message*.)

31 *search_period* = time period corresponding to SEARCH_PERIOD_r shown in
32 Table 2.6.6.2.8.3.2-1

33 *fwd_time* = the mobile station's estimate of the total length of time, in
34 seconds, for which the mobile station will need to suspend its
35 current Forward Traffic Channel processing in order to tune
36 to the Candidate Frequency, to search *rec_search_set*, and to
37 re-tune to the Serving Frequency; if the mobile station
38 searches *rec_search_set* in multiple visits, *fwd_time* is the
39 total time for all visits to the Candidate Frequency in a search
40 period (see 2.6.6.2.8.3.2)

- 1 *rev_time* = the mobile station's estimate of the total length of time, in
 2 seconds, for which the mobile station will need to suspend its
 3 current Reverse Traffic Channel processing in order to tune to
 4 the Candidate Frequency, to search *rec_search_set*, and to re-
 5 tune to the Serving Frequency; if the mobile station searches
 6 *rec_search_set* in multiple visits, *rev_time* is the total time for
 7 all visits to the Candidate Frequency in a search period
- 8 • If the mobile station does not send a *Mobile Station Reject Order* in response to
 9 the *Candidate Frequency Search Request Message*, it shall perform the following:
 - 10 – The mobile station shall send a *Candidate Frequency Search Response*
 11 *Message* in assured mode, within T_{56m} seconds of receiving the *Candidate*
 12 *Frequency Search Request Message*. The mobile station shall set the fields of
 13 the *Candidate Frequency Search Response Message* as follows:
 - 14 + The mobile station shall set TOTAL_OFF_TIME_FWD and
 15 TOTAL_OFF_TIME_REV to its estimate of the total number of frames or
 16 power control groups for which it will need to suspend its current
 17 Forward Traffic Channel processing and Reverse Traffic Channel
 18 processing, respectively, in order to tune to the Candidate Frequency, to
 19 search *rec_search_set*, and to re-tune to the Serving Frequency (see
 20 2.6.6.2.8.3.2). If the mobile station searches *rec_search_set* in multiple
 21 visits to the Candidate Frequency, the mobile station shall report the
 22 total number of frames or power control groups in all visits in a search
 23 period for which it will need to suspend its current Forward Traffic
 24 Channel and the Reverse Traffic Channel processing.
 - 25 + The mobile station shall set MAX_OFF_TIME_FWD and
 26 MAX_OFF_TIME_REV to its estimate of the maximum number of frames
 27 or power control groups for which it will need to suspend its current
 28 Forward Traffic Channel processing and Reverse Traffic Channel
 29 processing, respectively, during any single visit to tune to the Candidate
 30 Frequency, to search a subset of *rec_search_set*, and to re-tune to the
 31 Serving Frequency.⁶⁸
 - 32 + The mobile station shall set PCG_OFF_TIMES to '1' if
 33 TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV
 34 and MAX_OFF_TIME_REV are expressed in units of power control
 35 groups. If these time estimates are expressed in units of frames, the
 36 mobile station shall set PCG_OFF_TIMES to '0'. The mobile station shall
 37 not use power control groups as the unit of duration if P_REV_IN_USE_S
 38 is less than six.

⁶⁸ If the mobile station searches the entire Candidate Frequency Search Set in a single visit to the 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 + If ALIGN_TIMING_T is equal to '1', the mobile station shall set
2 ALIGN_TIMING_USED to '1' to indicate if it will align its search as
3 requested by the base station; otherwise, the mobile station shall set
4 ALIGN_TIMING_USED to '0'. If ALIGN_TIMING_USED is set to '1', the
5 mobile station shall set MAX_NUM_VISITS to the maximum number of
6 visits per search period minus one. If MAX_NUM_VISITS is not equal to
7 0, the mobile station shall set INTER_VISIT_TIME, in units of frames or
8 power control groups, to its estimate of the time between the beginning
9 of consecutive visits to the Candidate Frequency within the same search
10 period.
- 11 – When the message takes effect, the mobile station shall perform the
12 following actions:
- 13 + If any periodic search is in progress, the mobile station shall abort it (see
14 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
- 15 + Store the following parameters from the *Candidate Frequency Search*
16 *Request Message*:
- 17 o *Candidate Frequency Search Request Message* sequence number
18 (CFSRM_SEQ_S = CFSRM_SEQ_T)
- 19 o Periodic search flag: If SEARCH_TYPE_T is equal to '11', the mobile
20 station shall set PERIODIC_SEARCH_S to '1'; otherwise, the mobile
21 station shall set PERIODIC_SEARCH_S to '0'.
- 22 o Search period on the Candidate Frequency
23 (SEARCH_PERIOD_S = SEARCH_PERIOD_T)
- 24 o Candidate Frequency search mode
25 (SEARCH_MODE_S = SEARCH_MODE_T)
- 26 o Band class for the Candidate Frequency
27 (CF_CDMABAND_S = BAND_CLASS_T)
- 28 o CDMA Channel number for the CDMA Candidate Frequency
29 (CF_CDMACH_S = CDMA_FREQ_T)
- 30 o Serving Frequency total pilot E_C threshold
31 (SF_TOTAL_EC_THRESH_S = SF_TOTAL_EC_THRESH_T)
- 32 o Serving Frequency total pilot E_C/I₀ threshold
33 (SF_TOTAL_EC_I0_THRESH_S = SF_TOTAL_EC_I0_THRESH_T)
- 34 o Received power difference threshold
35 (DIFF_RX_PWR_THRESH_S = DIFF_RX_PWR_THRESH_T)
- 36 o Candidate Frequency Total pilot E_C/I₀ threshold
37 (MIN_TOTAL_PILOT_EC_I0_S = MIN_TOTAL_PILOT_EC_I0_T)
- 38 o Pilot detection threshold on the CDMA Candidate Frequency
39 (CF_T_ADD_S = CF_T_ADD_T)

- 1 o Maximum time on the CDMA Target Frequency that the mobile
2 station may wait to receive a period of $(N_{11m} \times 20)$ ms with sufficient
3 signal quality on the physical channel corresponding to
4 FPC_PRI_CHAN_S
5 (TF_WAIT_TIME_S = TF_WAIT_TIME_T)
- 6 o Pilot PN sequence offset increment on the CDMA Candidate
7 Frequency (CF_PILOT_INC_S = CF_PILOT_INC_T)
- 8 o Search window for pilots in the Neighbor Set on the CDMA Candidate
9 Frequency (CF_SRCH_WIN_N_S = CF_SRCH_WIN_N_T)
- 10 o Search window for pilots in the Remaining Set on the CDMA
11 Candidate Frequency (CF_SRCH_WIN_R_S = CF_SRCH_WIN_R_T)
- 12 o If PILOT_UPDATE is equal to '1', the mobile station shall perform the
13 following:
- 14 ◇ Set CF_SEARCH_PRIORITY_INCL_S and
15 CF_SRCH_WIN_NGHBR_INCL_S to the values corresponding to
16 CF_NGHBR_SRCH_MODE shown in Table 2.6.6.2.5.1-1,
17 ◇ Set CF_SRCH_OFFSET_INCL_S to CF_SRCH_OFFSET_INCL_T.
- 18 o If PILOT_UPDATE is equal to '1', the mobile station shall replace the
19 Candidate Frequency Neighbor Set with all neighbor pilots specified
20 in the *Candidate Frequency Search Request Message*. Specifically,
21 the mobile station shall store the following:
- 22 ◇ Set the NGHBR_PN field of the Candidate Frequency Neighbor Set
23 Pilot Record to NGHBR_PN_T.
- 24 ◇ Set the ADD_PILOT_REC_INCL field of the Candidate Frequency
25 Neighbor Set Pilot Record to ADD_PILOT_REC_INCL_T. If
26 ADD_PILOT_REC_INCL_T is equal to '1', the mobile station shall
27 store the following:
- 28 – Set the NGHBR_PILOT_REC_TYPE field of the Candidate
29 Frequency Neighbor Set Pilot Record to
30 NGHBR_PILOT_REC_TYPE_T.
- 31 – If NGHBR_PILOT_REC_TYPE_T equals '000', the mobile station
32 shall set the TD_POWER_LEVEL and TD_MODE fields of the
33 Candidate Frequency Neighbor Set Pilot Record to
34 TD_POWER_LEVEL_T and TD_MODE_T, respectively.
- 35 – If NGHBR_PILOT_REC_TYPE_T is equal to '001', the mobile
36 station shall
- 37 + Set the AUX_PILOT_QOF field of the Candidate Frequency
38 Neighbor Set Pilot Record to QOF_T.

- 1 + Set the AUX_PILOT_WALSH_CODE field of the Candidate
2 Frequency Neighbor Set Pilot Record to
3 AUX_PILOT_WALSH_r with the Walsh Code length specified
4 by WALSH_LENGTH_r.
- 5 – If NGHBR_PILOT_REC_TYPE_r is equal to ‘010’, the mobile
6 station shall:
7 + Set the AUX_PILOT_TD_QOF field of the Candidate
8 Frequency Neighbor Set Pilot Record to QOF_r.
9 + Set the AUX_PILOT_WALSH_CODE field of the Candidate
10 Frequency Neighbor Set Pilot Record to AUX_WALSH_r with
11 the Walsh Code length specified by WALSH_LENGTH_r.
12 + Set the AUX_TD_POWER_LEVEL field of the Candidate
13 Frequency Neighbor Set Pilot Record to
14 AUX_TD_POWER_LEVEL_r.
15 + Set the TD_MODE field of the Candidate Frequency
16 Neighbor Set Pilot Record to TD_MODE_r.
- 17 – If NGHBR_PILOT_REC_TYPE_r is equal to ‘011’, the mobile
18 station shall:
19 + Set the SR3_PRIMARY_PILOT field of Candidate Frequency
20 Neighbor Set Pilot Record to SR3_PRIMARY_PILOT_r.
21 + Set the SR3_PILOT_POWER1 field of Candidate Frequency
22 Neighbor Set Pilot Record to SR3_PILOT_POWER1_r.
23 + Set the SR3_PILOT_POWER2 field of Candidate Frequency
24 Neighbor Set Pilot Record to SR3_PILOT_POWER2_r.
- 25 – If NGHBR_PILOT_REC_TYPE_r is equal to ‘100’, the mobile
26 station shall:
27 + Set the SR3_PRIMARY_PILOT field of Candidate Frequency
28 Neighbor Set Pilot Record to SR3_PRIMARY_PILOT_r.
29 + Set the SR3_PILOT_POWER1 field of Candidate Frequency
30 Neighbor Set Pilot Record to SR3_PILOT_POWER1_r.
31 + Set the SR3_PILOT_POWER2 field of Candidate Frequency
32 Neighbor Set Pilot Record to SR3_PILOT_POWER2_r.
33 + Set the AUX_PILOT_QOF field of Candidate Frequency
34 Neighbor Set Pilot Record to QOF_r.
35 + Set the AUX_PILOT_WALSH_CODE field of Candidate
36 Frequency Neighbor Set Pilot Record to
37 AUX_PILOT_WALSH_r with the Walsh Code length specified
38 by WALSH_LENGTH_r.

- 1 + If ADD_INFO_INCL1_r is equal to '1', set the
2 AUX_PILOT_QOF1 field of Candidate Frequency Neighbor
3 Set Pilot Record to QOF1_r and set the
4 AUX_PILOT_WALSH_CODE1 field of Candidate Frequency
5 Neighbor Set Pilot Record to AUX_PILOT_WALSH1_r with
6 the Walsh Code length specified by WALSH_LENGTH1_r;
7 otherwise, set the AUX_PILOT_QOF1 field of Candidate
8 Frequency Neighbor Set Pilot Record to QOF_r and set the
9 AUX_PILOT_WALSH_CODE1 field of Candidate Frequency
10 Neighbor Set Pilot Record to AUX_PILOT_WALSH_r with the
11 Walsh Code length specified by WALSH_LENGTH_r.
- 12 + If ADD_INFO_INCL2_r is equal to '1', set the
13 AUX_PILOT_QOF2 field of Candidate Frequency Neighbor
14 Set Pilot Record to QOF2_r and set the
15 AUX_PILOT_WALSH_CODE2 field of Candidate Frequency
16 Neighbor Set Pilot Record to AUX_PILOT_WALSH2_r with
17 the Walsh Code length specified by WALSH_LENGTH2_r;
18 otherwise, set the AUX_PILOT_QOF2 field of Candidate
19 Frequency Neighbor Set Pilot Record to QOF_r and set the
20 AUX_PILOT_WALSH_CODE2 field of Candidate Frequency
21 Neighbor Set Pilot Record to AUX_PILOT_WALSH_r with the
22 Walsh Code length specified by WALSH_LENGTH_r.
- 23 o If PILOT_UPDATE is equal to '1' and CF_SEARCH_PRIORITY_INCL_s is
24 equal to '1', the mobile station shall store the search priority
25 (SEARCH_PRIORITY_s = SEARCH_PRIORITY_r) associated with each of
26 the neighboring base stations contained in the Candidate Frequency
27 Neighbor Set.
- 28 o If PILOT_UPDATE is equal to '1' and CF_SRCH_WIN_NGHBR_INCL_s
29 is equal to '1', the mobile station shall perform the following:
- 30 ◇ Store the neighbor pilot channel search window size
31 (SRCH_WIN_NGHBR_s = SRCH_WIN_NGHBR_r) associated with
32 each of the neighboring base stations contained in the Candidate
33 Frequency Neighbor Set,
- 34 ◇ If CF_SRCH_OFFSET_INCL_r equals '1', store the neighbor pilot
35 channel search window offset (SRCH_OFFSET_NGHBR_s =
36 SRCH_OFFSET_NGHBR_r) associated with each of the neighboring
37 base stations contained in the Candidate Frequency Neighbor
38 Set.
- 39 o If PILOT_UPDATE is equal to '1', the mobile station shall replace the
40 Candidate Frequency Search Set with all flagged pilots (those with
41 the corresponding SEARCH_SET field set to '1') specified in the
42 *Candidate Frequency Search Request Message*.

- 1 + If ALIGN_TIMING_T is equal to '1' and the mobile station will align its
- 2 search as requested by the base station, the mobile station shall set
- 3 ALIGN_TIMING_USED_S to '1' and SEARCH_OFFSET_S to
- 4 SEARCH_OFFSET_T; otherwise, the mobile station shall set
- 5 ALIGN_TIMING_USED_S to '0' and SEARCH_OFFSET_S to '000000'.

- 6 + If the mobile station sets the PCG_OFF_TIMES field of the *Candidate*
- 7 *Frequency Search Response Message* to '1', it shall set
- 8 SEARCH_TIME_RESOLUTION_S to 0.00125; otherwise, it shall set
- 9 SEARCH_TIME_RESOLUTION_S to 0.02.

- 10 + If SEARCH_TYPE_T is equal to '01', the mobile station shall perform a
- 11 single search of the Candidate Frequency Search Set, as described in
- 12 2.6.6.2.8.3.1. If SEARCH_TYPE_T is equal to '11', the mobile station shall
- 13 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

NGHBR_SRCH_ -MODE	SEARCH_ -PRIORITY_INCL	SRCH_WIN_ -NGHBR_INCL
CF_NGHBR_ -SRCH_MODE	CF_SEARCH_ -PRIORITY_INCL	CF_SRCH_ -WIN_NGHBR_INCL
00	0	0
01	1	0
10	0	1
11	1	1

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6. *Candidate Frequency Search Control Message*: The mobile station shall process the message as follows:

If SEARCH_MODE_S is equal to '0000':

- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001010' (search set not specified), if SEARCH_TYPE_T is not equal to '00' and the Candidate Frequency Search Set is empty.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001011' (invalid search request), if SEARCH_TYPE_T is not equal to '00' and the Candidate Frequency is the same as the Serving Frequency (CF_CDMABAND_S is equal to CDMABAND_S and CF_CDMACH_S is equal to CDMACH_S).
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001101' (search period too short), if SEARCH_TYPE_T is equal to '11' and *search_period* is less than (max (*fwd_time*, *rev_time*) + T_{71m}) seconds, where

1 *search_period* = time period corresponding to SEARCH_PERIOD_T shown in
2 Table 2.6.6.2.8.3.2-1,

3 *fwd_time* = the mobile station's estimate of the total length of time, in
4 seconds, for which the mobile station will need to suspend its
5 current Forward Traffic Channel processing in order to tune to
6 the Candidate Frequency, to search the Candidate Frequency
7 Search Set and to re-tune to the Serving Frequency; if the
8 mobile station searches the Candidate Frequency Search Set in
9 multiple visits, *fwd_time* is the total time for all visits to the
10 Candidate Frequency in a search period (see 2.6.6.2.8.3.2),

11 and

12 *rev_time* = the mobile station's estimate of the total length of time, in
13 seconds, 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 search the Candidate Frequency
16 Search Set and to re-tune to the Serving Frequency; if the
17 mobile station searches the Candidate Frequency Search Set in
18 multiple visits, *rev_time* is the total time for all visits to the
19 Candidate Frequency in a search period.

- 20 • If the mobile station does not reject the *Candidate Frequency Search Control*
21 *Message*, it shall perform the following actions when the message takes effect:
 - 22 – If any periodic search is in progress, the mobile station shall abort it (see
23 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
 - 24 – If ALIGN_TIMING_T is equal to '1' and the mobile station will align its search
25 as requested by the base station, the mobile station shall set
26 ALIGN_TIMING_USED_S to '1'; otherwise, the mobile station shall set
27 ALIGN_TIMING_USED_S to '0' and SEARCH_OFFSET_S to '000000'.
 - 28 – If SEARCH_TYPE_T is equal to '00', the mobile station shall set
29 PERIODIC_SEARCH_S to '0'.
 - 30 – If SEARCH_TYPE_T is equal to '01':
 - 31 + The mobile station shall set PERIODIC_SEARCH_S to '0'.
 - 32 + The mobile station shall perform a single search of the Candidate
33 Frequency Search Set, as described in 2.6.6.2.8.3.1.
 - 34 – If SEARCH_TYPE_T is equal to '11':
 - 35 + The mobile station shall set PERIODIC_SEARCH_S to '1'.
 - 36 + The mobile station shall perform the periodic search procedures for the
37 Candidate Frequency Search Set, as described in 2.6.6.2.8.3.2.

38 7. *Extended Neighbor List Update Message*: The mobile station shall update its
39 neighbor set as specified in 2.6.6.2.6.3 and perform the following:

- 1 • If NGHBR_SRCH_MODE_T is equal to '01' or '11', the mobile station shall store
2 the search priority (SEARCH_PRIORITY_S = SEARCH_PRIORITY_T) associated with
3 each of the neighboring base stations contained in the *Extended Neighbor List*
4 *Update Message* which are in the mobile's neighbor set.
- 5 • If NGHBR_SRCH_MODE_T is equal to '01' or '00', the mobile station shall set the
6 SRCH_OFFSET_INCL_S field '0'.
- 7 • If NGHBR_SRCH_MODE_T is equal to '10' or '11', the mobile station shall perform
8 the following:
- 9 – Store the neighbor pilot channel search window size
10 (SRCH_WIN_NGHBR_S = SRCH_WIN_NGHBR_T) associated with each of the
11 neighboring base stations contained in the *Extended Neighbor List Updated*
12 *Message* which are in the mobile's neighbor set,
- 13 – If SRCH_OFFSET_INCL_T equals '1', set the SRCH_OFFSET_NGHBR field of
14 NGHBR_REC[i] to the ith occurrence of SRCH_OFFSET_NGHBR_T,
- 15 – Set SRCH_OFFSET_INCL_S to SRCH_OFFSET_INCL_T.
- 16 • The mobile station shall update the default search window size for its Neighbor
17 Set (SRCH_WIN_N_S = SRCH_WIN_N_T).
- 18 • The mobile station shall set SEARCH_PRIORITY_INCL_S and
19 SRCH_WIN_NGHBR_INCL_S to the value specified in Table 2.6.6.2.5.1-1
20 corresponding to NGHBR_SRCH_MODE_T.
- 21 • If USE_TIMING is equal to '1', the mobile station shall store the timing included
22 flag (TIMING_INCL) associated with each of the neighboring base stations
23 contained in the *Extended Neighbor List Update Message* which are in the mobile
24 station neighbor set; otherwise the mobile station shall set the timing included
25 flag (TIMING_INCL) associated with each of the neighboring base stations to '0'.
- 26 • If USE_TIMING is equal to '1' and TIMING_INCL_T is equal to '1', the mobile
27 station shall store the neighbor transmit time offset (NGHBR_TX_OFFSET =
28 NGHBR_TX_OFFSET_T) associated with each of the neighboring base stations
29 contained in the *Extended Neighbor List Update Message* which are in the mobile
30 station neighbor set.
- 31 • If USE_TIMING is equal to '1' and the TIMING_INCL is equal to '1', then the
32 mobile station shall perform the following:
- 33 – If the GLOBAL_TIMING_INCL field is equal to '1', then the mobile station
34 shall store the neighbor transmit time duration (NGHBR_TX_DURATION =
35 GLOBAL_TX_DURATION_T) and the neighbor transmit time duration
36 (NGHBR_TX_PERIOD = GLOBAL_TX_PERIOD_T) contained in the *Extended*
37 *Neighbor List Update Message*.

- 1 – If the GLOBAL_TIMING_INCL field is equal to ‘0’, then the mobile station
2 shall store the neighbor transmit time duration (NGHBR_TX_DURATION =
3 NGHBR_TX_DURATION_T) and the neighbor transmit time duration
4 (NGHBR_TX_PERIOD = NGHBR_TX_PERIOD_T) associated with each of the
5 neighboring base stations contained in the *Extended Neighbor List Update*
6 *Message* which are in the mobile station neighbor set.
- 7 • The mobile station shall set RESQ_ENABLED_S = RESQ_ENABLED_T. If
8 RESQ_ENABLED_S is equal to ‘1’, then the mobile station shall store:
- 9 – Call rescue delay timer value (RESQ_DELAY_TIME_S = RESQ_DELAY_TIME_T)
10 – Call rescue allowed timer value (RESQ_ALLOWED_TIME_S =
11 RESQ_ALLOWED_TIME_T)
12 – Call rescue attempt timer value (RESQ_ATTEMPT_TIME_S =
13 RESQ_ATTEMPT_TIME_T)
14 – Code channel index for call rescue (RESQ_CODE_CHAN_S =
15 RESQ_CODE_CHAN_T)
16 – Quasi-Orthogonal Function mask identifier for call rescue (RESQ_QOF_S =
17 RESQ_QOF_T)
18 – Minimum time between consecutive rescues (RESQ_MIN_PERIOD_S =
19 RESQ_MIN_PERIOD_T + 1) if RESQ_MIN_PERIOD_INCL_T is equal to ‘1’;
20 otherwise, RESQ_MIN_PERIOD_S = ‘00000’.
- 21 – The required number of transmissions of a regular PDU before declaring L2
22 Acknowledgment Failure when Call Rescue is enabled
23 (RESQ_NUM_TOT_TRANS_20MS_S = RESQ_NUM_TOT_TRANS_20MS_T) if
24 included.
- 25 – The required number of transmissions of a mini PDU before declaring L2
26 Acknowledgment Failure when Call Rescue is enabled
27 (RESQ_NUM_TOT_TRANS_5MS_S = RESQ_NUM_TOT_TRANS_5MS_T) if
28 included.
- 29 – The mobile station shall set the Traffic Channel preamble length for Call
30 Rescue Soft Handoff as follows:
- 31 + If the mobile station is operating in Radio Configuration 1 or 2, set
32 RESQ_NUM_PREAMBLE_RC1_RC2_S = RESQ_NUM_PREAMBLE_T;
33 + If the mobile station is operating in Radio Configuration greater 2, set
34 RESQ_NUM_PREAMBLE_S = RESQ_NUM_PREAMBLE_T.
- 35 – The power level adjustment to be applied to the last closed-loop power level
36 when re-enabling the transmitter for call rescue soft handoff
37 (RESQ_POWER_DELTA_S = RESQ_POWER_DELTA_T).
- 38 – Set the NGHBR_RESQ_CONFIGURED field of NGHBR_REC[i] to the ith
39 occurrence of NGHBR_RESQ_CONFIGURED_T.

- 1 • For each of the neighboring base stations contained in the *General Neighbor List*
2 *Message*, the mobile station shall set ADD_PILOT_REC_INCL field of
3 NGHBR_REC[i] to the ith occurrence of ADD_PILOT_REC_INCL_r. If
4 ADD_PILOT_REC_INCL_r equals '1', for each pilot, the mobile station shall also
5 perform the following:
- 6 – Set the NGHBR_PILOT_REC_TYPE field of NGHBR_PILOT_REC to
7 NGHBR_PILOT_REC_TYPE_r.
 - 8 – If NGHBR_PILOT_REC_TYPE_r is equal to '000'. The mobile station shall set
9 the TD_POWER_LEVEL field of NGHBR_PILOT_REC to TD_POWER_LEVEL_r
10 and set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
 - 11 – If NGHBR_PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
12 + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r
13 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
14 AUX_PILOT_WALSH_r with the Walsh Code length specified by
15 WALSH_LENGTH_r
 - 16 – If NGHBR_PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
17 + Set the AUX_PILOT_TD_QOF field of NGHBR_PILOT_REC to QOF_r.
18 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
19 AUX_WALSH_r with the Walsh Code length specified by
20 WALSH_LENGTH_r.
21 + Set the AUX_TD_POWER_LEVEL field of NGHBR_PILOT_REC to
22 AUX_TD_POWER_LEVEL_r.
23 + Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
 - 24 – If NGHBR_PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
25 + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
26 SR3_PRIMARY_PILOT_r.
27 + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
28 SR3_PILOT_POWER1_r.
29 + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
30 SR3_PILOT_POWER2_r.
 - 31 – If NGHBR_PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
32 + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
33 SR3_PRIMARY_PILOT_r.
34 + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
35 SR3_PILOT_POWER1_r.
36 + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
37 SR3_PILOT_POWER2_r.
38 + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF_r.

- 1 + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
2 AUX_PILOT_WALSH_r with the Walsh Code length specified by
3 WALSH_LENGTH_r.
- 4 + If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1 field of
5 NGHBR_PILOT_REC to QOF1_r and set the AUX_PILOT_WALSH_CODE1
6 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh
7 Code length specified by WALSH_LENGTH1_r; otherwise, set the
8 AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF_r and set the
9 AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to
10 AUX_PILOT_WALSH_r with the Walsh Code length specified by
11 WALSH_LENGTH_r.
- 12 + If ADD_INFO_INCL2_r is equal to '1', set the AUX_PILOT_QOF2 field of
13 NGHBR_PILOT_REC to QOF2_r and set the AUX_PILOT_WALSH_CODE2
14 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH2_r with the Walsh
15 Code length specified by WALSH_LENGTH2_r; otherwise, set the
16 AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF_r and set the
17 AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to
18 AUX_PILOT_WALSH_r with the Walsh Code length specified by
19 WALSH_LENGTH_r.

20 8. *Supplemental Channel Assignment Message*: The mobile station shall process this
21 message as follows:

22 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
23 to the specified value if any of the following conditions is true, and shall not perform
24 any other action described in this section for processing the *Supplemental Channel*
25 *Assignment Message*:

- 26 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
27 set to '00000110' (capability not supported), if the number of forward or reverse
28 Supplemental Code Channels specified in the *Supplemental Channel Assignment*
29 *Message* is greater than the maximum number of Supplemental Code Channels
30 supported by the mobile station.
- 31 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
32 set to '00000011' (message structure not acceptable), if both
33 USE_REV_HDM_SEQ and EXPL_REV_START_TIME or both
34 USE_FOR_HDM_SEQ and EXPL_FOR_START_TIME specified in the
35 *Supplemental Channel Assignment Message* are set to '1'.
- 36 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
37 set to '00000100' (message field not in valid range), if PILOT_PN specified in the
38 *Supplemental Channel Assignment Message* is not in the Active Set and this
39 message is not linked with a *General Handoff Direction Message*.

40 If none of the above conditions is true, the mobile station shall perform the
41 following.

- 1 • The mobile station shall store the following parameters from the *Supplemental*
2 *Channel Assignment Message*:
- 3 – Use *General Handoff Direction Message* forward sequence number indicator
4 (USE_FOR_HDM_SEQ_s = USE_FOR_HDM_SEQ_r)
- 5 – If USE_FOR_HDM_SEQ_r is equal to ‘1’, then the mobile station shall store
6 the following:
- 7 + The sequence number of the *General Handoff Direction Message* to which
8 this message is linked for the Forward Supplemental Code Channel
9 assignment (FOR_LINKED_HDM_SEQ_s = FOR_LINKED_HDM_SEQ_r)
- 10 + The forward Supplemental Code Channel assignment order
11 (SCAM_FOR_ORDER_s = least significant bit of FOR_SUP_CONFIG_r)
- 12 + The forward duration assignment indicator
13 (SCAM_FOR_DURATION_MODE_s = USE_FOR_DURATION_r).
- 14 – Use *General Handoff Direction Message* reverse sequence number indicator
15 (USE_REV_HDM_SEQ_s = USE_REV_HDM_SEQ_r)
- 16 – If USE_REV_HDM_SEQ_r is equal to ‘1’, then the mobile station shall store
17 the following:
- 18 + The sequence number of the *General Handoff Direction Message* to which
19 this message is linked for the Reverse Supplemental Code Channel
20 assignment (REV_LINKED_HDM_SEQ_s = REV_LINKED_HDM_SEQ_r)
- 21 + The reverse duration assignment indicator
22 (SCAM_REV_DURATION_MODE_s = USE_REV_DURATION_r).
- 23 • If USE_RETRY_DELAY_r is ‘0’, then the mobile station shall store 0 as
24 RETRY_DELAY_s. The mobile station may send subsequent *Supplemental*
25 *Channel Request Messages* whenever RETRY_DELAY_s is set to 0.
- 26 • If USE_RETRY_DELAY_r is set to ‘1’, the mobile station shall interpret the
27 *Supplemental Channel Assignment Message* as an indication that the base
28 station has specified a *Supplemental Channel Request Message* retry delay in
29 RETRY_DELAY_r as follows:
- 30 – The mobile station shall store the next system time 80 ms boundary +
31 RETRY_DELAY_r × 320 ms as RETRY_DELAY_s. The mobile station shall not
32 send any subsequent *Supplemental Channel Request Message* until after the
33 system time stored in RETRY_DELAY_s. At the system time stored in
34 RETRY_DELAY_s, the mobile station shall reset RETRY_DELAY_s to 0.
- 35 – If RETRY_DELAY_r is ‘00000000’, then the mobile station shall store 0 as
36 RETRY_DELAY_s. The mobile station may send subsequent *Supplemental*
37 *Channel Request Messages* whenever RETRY_DELAY_s is set to 0.

- 1 – If $RETRY_DELAY_r$ is '11111111', then the mobile station shall store *infinity*
2 as $RETRY_DELAY_s$, and the mobile station shall not send any further
3 *Supplemental Channel Request Messages* until the mobile station receives a
4 new *Supplemental Channel Assignment Message* with no retry delay or a non-
5 infinite retry delay specified, or until the mobile station receives a *General*
6 *Handoff Direction Message* with a $CLEAR_RETRY_DELAY$ indication set.
- 7 • If $REV_INCLUDED_r$ is equal to '1', then the mobile station shall process Reverse
8 Supplemental Code Channel assignment information for the *Supplemental*
9 *Channel Assignment Message*. This information shall be processed as follows:
- 10 – The mobile station shall store $USE_T_ADD_ABORT_r$, the Reverse
11 Supplemental Code Channel assignment T_ADD abort indicator, as
12 $USE_T_ADD_ABORT_s$.
- 13 – The mobile station shall store $REV_DTX_DURATION_r$, Reverse Supplemental
14 Channel Discontinuous Transmission Duration, as $REV_DTX_DURATION_s$.
- 15 – If $REV_PARMS_INCLUDED_r$ is equal to '1', the mobile station shall store the
16 following:
17 + $T_MULCHAN_s = T_MULCHAN_r$
18 + $BEGIN_PREAMBLE_s = BEGIN_PREAMBLE_r$
19 + $RESUME_PREAMBLE_s = RESUME_PREAMBLE_r$
- 20 – If $IGNORE_SCAM_s$ is equal to '1' and $SCRM_SEQ_NUM_r$ is not present or is
21 present and is not equal to $SCRM_SEQ_NUM_s$, then the mobile station shall
22 not process the remaining Reverse Supplemental Code Channel assignment
23 information in this message.
- 24 – If $IGNORE_SCAM_s$ is equal to '1' and $SCRM_SEQ_NUM_r$ is present and is
25 equal to $SCRM_SEQ_NUM_s$, then the mobile station shall set
26 $IGNORE_SCAM_s$ to '0'.
- 27 – The mobile station shall set $REV_START_TIME_s$ as follows:
28 + If $EXPL_REV_START_TIME_r$ is equal to '1', the mobile station shall set
29 the $REV_START_TIME_s$ to $REV_START_TIME_r$.
- 30 + If $USE_REV_HDM_SEQ_r$ is equal to '1' and $REV_LINKED_HDM_SEQ_r$ is
31 not equal to HDM_SEQ_s , the mobile station shall set the
32 $REV_START_TIME_s$ to NULL.
- 33 + If $USE_REV_HDM_SEQ_r$ is equal to '1' and $REV_LINKED_HDM_SEQ_r$ is
34 equal to HDM_SEQ_s , then the mobile station shall set the
35 $REV_START_TIME_s$ to the action time of the *General Handoff Direction*
36 *Message* that is linked to the *Supplemental Channel Assignment Message*.
- 37 + If $EXPL_REV_START_TIME_r$ is equal to '0' and $USE_REV_HDM_SEQ_r$ is
38 equal to '0', the mobile station shall set the $REV_START_TIME_s$ to the
39 next 80 ms boundary following the action time of the *Supplemental*
40 *Channel Assignment Message*.

- 1 – The mobile station shall set NUM_REV_CODES_S to NUM_REV_CODES_R. If
2 REV_START_TIME_S is not equal to NULL, the mobile station shall perform the
3 following actions:
- 4 + If NUM_REV_CODES_R is equal to '000', the mobile station shall stop
5 transmitting the Reverse Supplemental Code Channels at the start time
6 specified by REV_START_TIME_S.
- 7 + If NUM_REV_CODES_R is not equal to '000', the mobile station shall set
8 PILOT_GATING_USE_RATE to '0' at the action time of the message and
9 the mobile station may start transmitting on NUM_REV_CODES_S Reverse
10 Supplemental Code Channels at the start time specified by
11 REV_START_TIME_S for a duration of time specified by the following rules:
- 12 o If USE_REV_DURATION_R is equal to '1', the mobile station shall set
13 REV_DURATION_S to REV_DURATION_R. The mobile station may
14 continue transmitting on the Reverse Supplemental Code Channels
15 for a period of (REV_DURATION_S × 80) ms, or until it receives the
16 action time of a subsequent *General Handoff Direction Message* or a
17 *Supplemental Channel Assignment Message* that specifies a different
18 Reverse Supplemental assignment duration or start time.
- 19 o If USE_REV_DURATION_R is equal to '0', the mobile station may
20 continue to transmit indefinitely on the Reverse Supplemental Code
21 Channels, or until it receives the action time of a subsequent *General*
22 *Handoff Direction Message* or a *Supplemental Channel Assignment*
23 *Message* that specifies a different Reverse Supplemental assignment
24 duration or start time.
- 25 • If FOR_INCLUDED is equal to '1', then the mobile station shall process Forward
26 Supplemental Code Channel assignment information as follows:
- 27 – The mobile station shall assign a value to FOR_START_TIME_S according to
28 the following rules:
- 29 + If EXPL_FOR_START_TIME is equal to '1', the mobile station shall set the
30 FOR_START_TIME_S to FOR_START_TIME_R.
- 31 + If USE_FOR_HDM_SEQ_R is equal to '1' and FOR_LINKED_HDM_SEQ_R is
32 not equal to HDM_SEQ_S, the mobile station shall set the
33 FOR_START_TIME_S to NULL.
- 34 + If USE_FOR_HDM_SEQ_R is equal to '1' and FOR_LINKED_HDM_SEQ_R is
35 equal to HDM_SEQ_S, then the mobile station shall set the
36 FOR_START_TIME_S to the action time of the *General Handoff Direction*
37 *Message* that is linked to the *Supplemental Channel Assignment Message*.
- 38 + If EXPL_FOR_START_TIME_R is equal to '0' and USE_FOR_HDM_SEQ_R
39 equals '0', the mobile station shall set the FOR_START_TIME_S to the
40 action time of the *Supplemental Channel Assignment Message*.

- 1 – If FOR_SUP_CONFIG_r is equal to ‘00’ and FOR_START_TIME_s is not equal to
2 NULL, the mobile station should stop processing the Forward Supplemental
3 Code Channels at the time specified by FOR_START_TIME_s.
- 4 – If FOR_SUP_CONFIG_r is equal to ‘01’ and FOR_START_TIME_s is not equal to
5 NULL, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ at the
6 action time of the message and start processing the Forward Supplemental
7 Code Channels in the CODE_CHAN_LIST_s at FOR_START_TIME_s for a period
8 of time specified by the following rules:
- 9 + If USE_FOR_DURATION is equal to ‘1’, the mobile station shall set
10 FOR_DURATION_s to FOR_DURATION_r. The mobile station shall
11 continue processing the Forward Supplemental Code Channels for a
12 period of (FOR_DURATION_s × 80) ms, or until it receives the action time
13 of a subsequent *Supplemental Channel Assignment Message* or a *General*
14 *Handoff Direction Message* that specifies a different Forward
15 Supplemental assignment duration or start time.
- 16 + If USE_FOR_DURATION_r is equal to ‘0’, the mobile station shall continue
17 processing the Forward Supplemental Code Channels until it receives
18 the action time of a subsequent *Supplemental Channel Assignment*
19 *Message* or a *General Handoff Direction Message* that specifies a different
20 Forward Supplemental assignment duration or start time.
- 21 – If FOR_SUP_CONFIG_r is equal to ‘10’, the mobile station shall perform the
22 following:
23 + The mobile station shall update the CODE_CHAN_LIST_s as specified in
24 2.6.8.
25 + If FOR_START_TIME_s is not equal to NULL the mobile station should
26 stop processing Forward Supplemental Code Channels at the time
27 specified by FOR_START_TIME_s.
- 28 – If FOR_SUP_CONFIG_r is equal to ‘11’, the mobile station shall perform the
29 following:
30 + The mobile station shall update the CODE_CHAN_LIST_s as specified in
31 2.6.8.
32 + If FOR_START_TIME_s is not equal to NULL, then the mobile station shall
33 set PILOT_GATING_USE_RATE to ‘0’ at the action time of the message
34 and start processing the Forward Supplemental Code Channels in the
35 CODE_CHAN_LIST_s at the time specified by FOR_START_TIME_s for a
36 period of time specified by the following rules:

- 1 o If USE_FOR_DURATION_r is equal to '1', the mobile station shall set
2 FOR_DURATION_s to FOR_DURATION_r. The mobile station shall
3 continue processing the Forward Supplemental Code Channels for
4 (FOR_DURATION_s × 80) ms, until it receives a subsequent
5 *Supplemental Channel Assignment Message* or a *General Handoff*
6 *Direction Message* that specifies a different Forward Supplemental
7 assignment duration or start time.
- 8 o If USE_FOR_DURATION_r is equal to '0', the mobile station shall
9 continue processing the Forward Supplemental Code Channels until
10 it receives a subsequent *Supplemental Channel Assignment Message*
11 or a *General Handoff Direction Message* that specifies a different
12 Forward Supplemental assignment duration or start time.

13 9. *General Handoff Direction Message*: The mobile station shall process the message
14 as follows:

15 In addition to the requirements in this section, if the SCR_INCLUDED field is
16 included in this message and is set to '1' the mobile station shall also process this
17 message in accordance with the requirements for the active service subfunction (see
18 2.6.4.1.2.2).

19 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
20 to the specified value if any of the following conditions is true, and shall not perform
21 any other action described in this section for processing the *General Handoff*
22 *Direction Message*:

- 23 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
24 set to '00000110' (capability not supported), if the mobile station does not
25 support the band class specified in the *General Handoff Direction Message*.
- 26 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
27 set to '00000110' (capability not supported), if the number of forward or reverse
28 Supplemental Code Channels specified in the *General Handoff Direction Message*
29 is greater than the maximum number of Supplemental Code Channels
30 supported by the mobile station.
- 31 • If the SCR_INCLUDED field is included in this message and is set to '1', the
32 mobile station shall perform the following:
 - 33 - The mobile station shall send a *Mobile Station Reject Order* with the ORDQ
34 field set to '00000111' (message cannot be handled by the current mobile
35 station configuration), if the mobile station does not support the service
36 configuration specified in the *General Handoff Direction Message*.
 - 37 - The mobile station shall send a *Mobile Station Reject Order* (ORDQ =
38 '00000111') within T_{56m} seconds, if the mobile station supports the service
39 configuration specified but does not accept the service configuration
40 specified in the *General Handoff Direction Message*.

- 1 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
2 set to '00000111' (message cannot be handled by the current mobile station
3 configuration), if the NNSCR_INCLUDED field is included and set to '1' and the
4 SCR_INCLUDED field is either not included or included but set to '0', and the
5 mobile station does not support the configuration specified in the non-
6 negotiable service configuration information record in the *General Handoff*
7 *Direction Message*.
- 8 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
9 set to '00001010' (search set not specified), if the PERIODIC_SEARCH field is
10 included in the *General Handoff Direction Message* and is set to '1', and the
11 Candidate Frequency Search Set is empty.
- 12 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
13 set to '00001101' (search period too short), if the PERIODIC_SEARCH field is
14 included in the *General Handoff Direction Message* and is set to '1', and
15 *search_period* is less than $(\max(fwd_time, rev_time) + T_{71m} \text{ seconds})$, where
16 *search_period* = time period corresponding to SEARCH_PERIOD_s shown in
17 Table 2.6.6.2.8.3.2-1,

18 *fwd_time* = the mobile station's estimate of the total length of time, in seconds,
19 for which the mobile station will need to suspend its current
20 Forward Traffic Channel processing in order to tune to the CDMA
21 Candidate Frequency, to search the Candidate Frequency Search
22 Set, and to re-tune to the Serving Frequency; if the mobile station
23 searches the Candidate Frequency Search Set in multiple visits,
24 *fwd_time* is the total time for all visits to the CDMA Candidate
25 Frequency in a search period (see 2.6.6.2.8.3.2),

26 and

27 *rev_time* = the mobile station's estimate of the total length of time, in seconds,
28 for which the mobile station will need to suspend its current Reverse
29 Traffic Channel processing in order to tune to the CDMA Candidate
30 Frequency, to search the Candidate Frequency Search Set, and to
31 re-tune to the Serving Frequency; if the mobile station searches the
32 Candidate Frequency Search Set in multiple visits, *rev_time* is the
33 total time for all visits to the CDMA Candidate Frequency in a
34 search period.

35 If none of the above conditions is true, the mobile station shall perform the actions
36 described in the remainder of this section to process the *General Handoff Direction*
37 *Message* at the action time of the message.

38 If EXTRA_PARMS is equal to '1', the mobile station shall store the return on failure
39 indicator from the *General Handoff Direction Message* (RETURN_IF_HANDOFF_FAIL_s
40 = RETURN_IF_HANDOFF_FAIL_r); otherwise the mobile station shall set
41 RETURN_IF_HANDOFF_FAIL_s to '0'.

1 The mobile station shall set RETURN_IF_HANDOFF_FAIL_S to '0' (disable return on
2 failure) if any of the following conditions is true:

- 3 • If P_REV_IN_USE_S is less than or equal to four and the mobile station does not
4 support hard handoff with return on failure, or
- 5 • At least one of the pilots specified by the message is also included in the Active
6 Set prior to the action time of the message, and one of the following conditions is
7 true:
 - 8 – EXTRA_PARMS is equal to '0', or
 - 9 – EXTRA_PARMS is equal to '1', the message specifies the same Frequency
10 Assignment as the Serving Frequency (BAND_CLASS_r is equal to
11 CDMABAND_S and CDMA_FREQ_r is equal to CDMACH_S), and
12 FRAME_OFFSET_r is equal to FRAME_OFFSET_S.

13 The mobile station shall store the following parameters from its current
14 configuration:

- 15 • CDMA band class (SF_CDMABAND_S = CDMABAND_S)
- 16 • Frequency assignment (SF_CDMACH_S = CDMACH_S)
- 17 • Frame Offset (SF_FRAME_OFFSET_S = FRAME_OFFSET_S)

18 If RETURN_IF_HANDOFF_FAIL_S is equal to '1', the mobile station shall also store
19 the following parameters from its current configuration:

- 20 • Protocol revision level
21 (SF_P_REV_S = P_REV_S)
- 22 • Protocol revision level in use on the Serving Frequency
23 (SF_P_REV_IN_USE_S = P_REV_IN_USE_S)
- 24 • Search window size for the Active Set and Candidate Set
25 (SF_SRCH_WIN_A_S = SRCH_WIN_A_S)
- 26 • Search window size for the Neighbor Set
27 (SF_SRCH_WIN_N_S = SRCH_WIN_N_S)
- 28 • Search window size for the Remainder Set
29 (SF_SRCH_WIN_R_S = SRCH_WIN_R_S)
- 30 • Pilot detection threshold
31 (SF_T_ADD_S = T_ADD_S)
- 32 • Pilot drop threshold
33 (SF_T_DROP_S = T_DROP_S)
- 34 • Active Set versus Candidate Set comparison threshold
35 (SF_T_COMP_S = T_COMP_S)
- 36 • Drop timer value
37 (SF_T_TDROPS = T_TDROPS)
- 38 • Drop timer range value (SF_T_TDROPS_RANGE_S = T_TDROPS_RANGE_S)

- 1 • Soft slope for the dynamic add and drop thresholds
2 (SF_SOFT_SLOPE_s = SOFT_SLOPE_s)
- 3 • Intercept for the dynamic add threshold
4 (SF_ADD_INTERCEPT_s = ADD_INTERCEPT_s)
- 5 • Intercept for the dynamic drop threshold
6 (SF_DROP_INTERCEPT_s = DROP_INTERCEPT_s)
- 7 • Private long code mask indicator: If the mobile station is using the private long
8 code mask on the Serving Frequency, it shall set SF_PRIVATE_LCM_s to '1';
9 otherwise, it shall set SF_PRIVATE_LCM_s to '0'.
- 10 • Private long code mask: If the mobile station is using the private long code mask
11 on the Serving Frequency, it shall set SF_PVTLCM_42_s to the PVTLCM_42.
- 12 • Public long code mask type: The mobile station shall set SF_PLCM_TYPE_s to
13 PLCM_TYPE_s. If PLCM_TYPE_s equals '0001', the mobile station shall set
14 SF_PLCM_39_s to PLCM_39_s.
- 15 • Service negotiation type
16 (SF_SERV_NEG_s = SERV_NEG_s)
- 17 • Service configuration:
18 Store the current service configuration (service configuration record and non-
19 negotiable service configuration record) in SF_SERVICE_CONFIG_s
- 20 • Call Information:
21 Store the list of current calls (Call Control instances, etc.) in SF_CALLS_s
- 22 • Message encryption mode: If message encryption is on, the mobile station shall
23 set SF_ENCRYPT_MODE_s to '1'; otherwise, the mobile station shall set
24 SF_ENCRYPT_MODE_s to '0'.
- 25 • Extended nominal power setting of the current cell
26 (SF_NOM_PWR_EXT_s = NOM_PWR_EXT_s)
- 27 • Nominal power setting of the current cell
28 (SF_NOM_PWR_s = NOM_PWR_s)
- 29 • Power control step
30 (SF_PWR_CNTL_STEP_s = PWR_CNTL_STEP_s)
- 31 • Serving Frequency Active Set (SF Active Set = (For each pilot in the current
32 Active Set: (PILOT_PN, PWR_COMB_IND)))
- 33 • Serving Frequency Code Channel List
34 (SF_CODE_CHAN_LIST_s = CODE_CHAN_LIST_s)

35 When the message takes effect, the mobile station shall perform the following actions:

- 36 • The mobile station shall send a *Handoff Completion Message* or an *Extended*
37 *Handoff Completion Message* as specified in 2.6.6.2.5.2. If the RC assigned on the
38 reverse fundamental channel or supplemental channel is less than RC08 the mobile
39 station shall set RC_BITMAP_CAPABILITY_EXT_ALLOWED_s to '0'.

- 1 • Update the Active Set, Candidate Set, and Neighbor Set in accordance with the
2 *General Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and
3 2.6.6.2.6.3).
- 4 • The mobile station shall delete all pilots that are not listed in the Active Set from
5 the Active Set of the Supplemental Channel for the Forward Supplemental
6 Channel Assignment (if any). If these deleted pilots include all pilots in the
7 Active Set of the Supplemental Channel, the mobile station shall cancel the
8 Forward Supplemental Channel Assignment.
- 9 • Discontinue use of all Forward Traffic Channels associated with pilots not listed
10 in the *General Handoff Direction Message*.
- 11 • If EXTRA_PARMS is equal to '1', perform the following actions:
- 12 – If FRAME_OFFSET_r is not equal to FRAME_OFFSET_s, change the frame
13 offset on all of the code channels of the Forward Traffic Channel and of the
14 Reverse Traffic Channel.
- 15 – If RESET_L2_r is equal to '1', and RETURN_IF_HANDOFF_FAIL_s is equal to
16 '0', Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset
17 the acknowledgment procedures, as specified in [4]. The mobile station shall
18 reset the acknowledgment procedures immediately after the action time of
19 the *General Handoff Direction Message*.
- 20 – If RESET_FPC_r is equal to '1' and RETURN_IF_HANDOFF_FAIL_s is equal to
21 '0', initialize the Forward Traffic Channel power control counters, as
22 specified in 2.6.4.1.1.1.
- 23 – If SERV_NEG_TYPE_r is equal to '1', set SERV_NEG_s to enabled; otherwise set
24 SERV_NEG_s to disabled.
- 25 – Use the long code mask as follows:
- 26 + If PRIVATE_LCM_r equals '1', the mobile station shall use the Private Long
27 Code Mask as specified in 2.3.6.
- 28 + If PRIVATE_LCM_r equals '0', the mobile station shall use the Public Long
29 Code Mask derived from PLCM_TYPE_s as specified in 2.3.6
- 30 + The mobile station shall indicate to the user the voice privacy mode
31 status.
- 32 – Process the ENCRYPT_MODE field, as specified in 2.3.12.2.
- 33 – Perform the procedures as specified in 2.6.11.3.
- 34 • If EXTRA_PARMS is equal to '0', set the following variables to the values
35 indicated:
- 36 – Hard handoff traffic channel preamble count required before transmitting a
37 *Handoff Completion Message* or an *Extended Handoff Completion Message*
38 (NUM_PREAMBLE_s = '000')
- 39 – Complete search flag (COMPLETE_SEARCH_s = '1')

- 1 – CDMA band class for the Target Frequency
2 (TF_CDMABAND_S = SF_CDMABAND_S)
- 3 – Frequency assignment for the Target Frequency
4 (TF_CDMACH_S = SF_CDMACH_S)
- 5 • Store the following parameters from the *General Handoff Direction Message*:
- 6 – *General Handoff Direction Message* sequence number
7 (HDM_SEQ_S = HDM_SEQ_T)
- 8 – Forward power control subchannel relative gain (FPC_SUBCHAN_GAIN_S =
9 FPC_SUBCHAN_GAIN_T).
- 10 – If the mobile station uses FPC_SUBCHAN_GAIN_S, the mobile station shall
11 perform the following:
- 12 + If PC_ACTION_TIME_T is received, the mobile station shall apply its usage
13 of the FPC_SUBCHAN_GAIN_S at the time specified by PC_ACTION_TIME_T.
- 14 + If PC_ACTION_TIME is not received and the explicit action time is
15 received, the mobile station shall apply its usage of the
16 FPC_SUBCHAN_GAIN_S at the action time.
- 17 + If neither PC_ACTION_TIME_T nor explicit action time is received, the
18 mobile station shall apply its usage of the FPC_SUBCHAN_GAIN_S at the
19 first 80ms boundary occurring at least 80ms after the end of the frame
20 containing the last bit of the *General Handoff Direction Message* sent to
21 the mobile station.
- 22 – Reverse Eighth Gating Mode (REV_FCH_GATING_MODE_S =
23 REV_FCH_GATING_MODE_T).
- 24 – Reverse Power Control Delay if REV_PWR_CNTL_DELAY_INCL_T is equal to '1'
25 (REV_PWR_CNTL_DELAY_S = REV_PWR_CNTL_DELAY_T).
- 26 – Concurrent services supported indicator (CS_SUPPORTED_S =
27 CS_SUPPORTED_T).
- 28 – Forward Packet Data Channel supported indicator
29 (FOR_PDCH_SUPPORTED_S = FOR_PDCH_SUPPORTED_T).
- 30 – Pilot information request supported indicator
31 (PILOT_INFO_REQ_SUPPORTED_S = PILOT_INFO_REQ_SUPPORTED_T).
- 32 – If SEARCH_INCLUDED is equal to '1', store the following:
- 33 + Search window size for the Active Set and Candidate Set
34 (SRCH_WIN_A_S = SRCH_WIN_A_T)
- 35 + Pilot detection threshold
36 (T_ADD_S = T_ADD_T)
- 37 + Pilot drop threshold
38 (T_DROP_S = T_DROP_T)

- 1 + Active Set versus Candidate Set comparison threshold
2 (T_COMP_S = T_COMP_T)
- 3 + Drop timer value
4 (T_TDROP_S = T_TDROP_T)
- 5 + Drop timer range value (T_TDROP_RANGE_S = T_TDROP_RANGE_T) if
6 T_TDROP_RANGE_INCL_T is equal to '1'; otherwise, (T_TDROP_RANGE_S =
7 '0000')
- 8 + Soft slope for the dynamic add and drop thresholds
9 (SOFT_SLOPE_S = SOFT_SLOPE_T)
- 10 + Intercept for the dynamic add threshold
11 (ADD_INTERCEPT_S = ADD_INTERCEPT_T)
- 12 + Intercept for the dynamic drop threshold
13 (DROP_INTERCEPT_S = DROP_INTERCEPT_T)
- 14 – If EXTRA_PARMS is equal to '1', store the following:
- 15 + Protocol revision level (P_REV_S = P_REV_T), and protocol revision level
16 currently in use (P_REV_IN_USE_S = min (P_REV_S, MOB_P_REV_P of the
17 current band class))
- 18 + If the mobile station supports packet data service options, the packet
19 data services zone identifier (PACKET_ZONE_ID_S = PACKET_ZONE_ID_T)
- 20 + Frame offset (FRAME_OFFSET_S = FRAME_OFFSET_T)
- 21 + Acknowledgment procedures reset indicator
22 (If RETURN_IF_HANDOFF_FAIL_S is equal to '1', set TF_RESET_L2_S to
23 RESET_L2_T)
- 24 + Indicator to initialize the Forward Traffic Channel power control counters
25 (If RETURN_IF_HANDOFF_FAIL_S is equal to '1', set TF_RESET_FPC_S to
26 RESET_FPC_T)
- 27 + Nominal power setting of the target cell (NOM_PWR_S = NOM_PWR_T)
- 28 + Extended nominal power setting of the target cell (If CDMABAND_S =
29 '00000' or CDMABAND_S = '00011', then NOM_PWR_EXT_S = '0';
30 otherwise, NOM_PWR_EXT_S = NOM_PWR_EXT_T)
- 31 + Hard handoff traffic channel preamble count required before
32 transmitting a *Handoff Completion Message* or an *Extended Handoff*
33 *Completion Message* (NUM_PREAMBLE_S = NUM_PREAMBLE_T)
- 34 + CDMA band class for the Target Frequency
35 (TF_CDMABAND_S = BAND_CLASS_T and CDMABAND_S = BAND_CLASS_T)
- 36 + Frequency assignment for the Target Frequency
37 (TF_CDMACH_S = CDMA_FREQ_T and CDMACH_S = CDMA_FREQ_T)
- 38 + Complete search flag (COMPLETE_SEARCH_S = COMPLETE_SEARCH_T)

- 1 + Periodic search flag ($PERIODIC_SEARCH_S = PERIODIC_SEARCH_T$)
- 2 + Nominal code channel output power offset relative to the Reverse Pilot
- 3 Channel power ($RLGAIN_TRAFFIC_PILOT_S = RLGAIN_TRAFFIC_PILOT_T$)
- 4 – If $EXTRA_PARMS$ is equal to '1' and $DEFAULT_RLAG$ is equal to '1', the
- 5 mobile station shall set each entry of the Reverse Link Attribute Adjustment
- 6 Gain Table and Reverse Channel Adjustment Gain Table (see [2]) to 0.
- 7 – If $REV_PARMS_INCLUDED$ is included and is equal to '1', the mobile station
- 8 shall store the following:
- 9 + Neighbor pilot strength measurement threshold offset ($T_MULCHAN_S =$
- 10 $T_MULCHAN_T$)
- 11 + Reverse Supplemental Code Channel beginning of transmission
- 12 preamble length ($BEGIN_PREAMBLE_S = BEGIN_PREAMBLE_T$)
- 13 + Reverse Supplemental Code Channel resumption of transmission
- 14 preamble length ($RESUME_PREAMBLE_S = RESUME_PREAMBLE_T$)
- 15 – For each pilot included in the message, the mobile station shall store the
- 16 following:
- 17 + $PILOT_PN$, the pilot PN sequence offset index
- 18 + PWR_COMB_IND , the power control symbol combining indicator
- 19 – If $USE_PWR_CNTL_STEP$ is equal to '1' and $PWR_CNTL_STEP_T$ corresponds
- 20 to a power control step size supported by the mobile station (see [2]), then
- 21 the mobile station shall set $PWR_CNTL_STEP_S$ to $PWR_CNTL_STEP_T$.
- 22 • Set the pilot detection threshold for the Target Frequency and the Candidate
- 23 Frequency:
- 24 – Set $TF_T_ADD_S$ to T_ADD_S .
- 25 – If the Target Frequency is the same as the Candidate Frequency
- 26 ($TF_CDMABAND_S$ is equal to $CF_CDMABAND_S$ and TF_CDMACH_S is equal to
- 27 CF_CDMACH_S), set $CF_T_ADD_S$ to T_ADD_S .
- 28 • If $FOR_INCLUDED$ is included and is equal to '0', the mobile station shall
- 29 perform the following:
- 30 – The mobile station shall update the Code Channel List, $CODE_CHAN_LIST_S$,
- 31 as specified in 2.6.8.
- 32 – If $USE_FOR_HDM_SEQ_S$ is equal to '1' and $FOR_LINKED_HDM_SEQ_S$ is
- 33 equal to HDM_SEQ_T (this indicates that there is pending Forward
- 34 Supplemental Code Channel assignment information, received in a
- 35 *Supplemental Channel Assignment Message*, linked to this *General Handoff*
- 36 *Direction Message*), then the mobile station shall perform the following
- 37 actions:
- 38 + The mobile station shall set $USE_FOR_HDM_SEQ_S$ to '0'.

- 1 + If SCAM_FOR_ORDER_S is equal to '0', the mobile station shall stop
2 processing all Forward Supplemental Code Channels at the action time
3 of the *General Handoff Direction Message*.
- 4 + If SCAM_FOR_ORDER_S is equal to '1', the mobile station shall start
5 processing the Forward Supplemental Code Channels specified in
6 CODE_CHAN_LIST_S at the action time of the *General Handoff Direction*
7 *Message*, for a period of time determined by the following rules:
- 8 o If SCAM_FOR_DURATION_MODE_S is equal to '1', the mobile station
9 shall continue processing the Forward Supplemental Code Channels
10 for a period of (FOR_DURATION_S × 80) ms, until it receives a
11 subsequent *General Handoff Direction Message* or a *Supplemental*
12 *Channel Assignment Message* that specifies a different Forward
13 Supplemental Code Channel assignment.
- 14 o If SCAM_FOR_DURATION_MODE_S is equal to '0', the mobile station
15 shall continue processing the Forward Supplemental Code Channels
16 until it receives a subsequent *Supplemental Channel Assignment*
17 *Message* or a *General Handoff Direction Message* that specifies a
18 different Forward Supplemental Code Channel assignment.
- 19 – If USE_FOR_HDM_SEQ_S is equal to '0' or FOR_LINKED_HDM_SEQ_S is not
20 equal to HDM_SEQ_R, and if the mobile station is currently processing
21 Forward Supplemental Code Channels, it shall continue processing the
22 Forward Supplemental Code Channels using the updated Code Channel
23 List, CODE_CHAN_LIST_S.
- 24 • If NNSCR_INCLUDED field is included and set to '1' and SCR_INCLUDED field is
25 either not included or included but set to '0', the mobile station shall process
26 the received Non-negotiable Service Configuration Record as specified in
27 2.6.4.1.13 at the action time of this message. If SYNC_ID_INCL_R is set to '1', the
28 mobile station shall perform the following:
- 29 – The mobile station shall store the synchronization identifier received from
30 the base station (SYNC_ID_S = SYNC_ID_R).
- 31 – The mobile station shall store the current service configuration as specified
32 in 2.6.4.1.2.2.5.1 at the action time of this message.
- 33 Otherwise, the mobile station shall set SYNC_ID_S to NULL.
- 34 • If FOR_INCLUDED is included and is equal to '1', then the mobile station shall
35 process the Forward Supplemental Code Channel assignment information as
36 follows:
- 37 – The mobile station shall set USE_FOR_HDM_SEQ_S to '0'.
- 38 – If FOR_START_TIME_S specifies a time which is after the action time of the
39 *General Handoff Direction Message*, the mobile station shall cancel any
40 pending Forward Supplemental Code Channel assignment and shall set
41 FOR_START_TIME_S to NULL.

- 1 – The mobile station shall update the Code Channel List,
2 CODE_CHAN_LIST_s, in accordance with the value of FOR_SUP_CONFIG, as
3 specified in 2.6.8.
- 4 – If FOR_SUP_CONFIG is equal to ‘00’ or ‘10’, the mobile station should stop
5 processing Forward Supplemental Code Channels, if any, when the message
6 takes effect.
- 7 – If FOR_SUP_CONFIG is equal to ‘01’ or ‘11’, the mobile station shall set
8 PILOT_GATING_USE_RATE to ‘0’ at the action time of the message and start
9 processing the Forward Supplemental Code Channels in the updated Code
10 Channel List, CODE_CHAN_LIST_s, at the action time of the message, for a
11 period of time determined by the following rules:
- 12 + If USE_FOR_DURATION is equal to ‘1’, the mobile station shall set
13 FOR_DURATION_s to FOR_DURATION_r. The mobile station shall
14 continue processing the Forward Supplemental Code Channels for a
15 period of (FOR_DURATION_s × 80) ms, until it receives a subsequent
16 *Supplemental Channel Assignment Message* or a *General Handoff*
17 *Direction Message* that specifies a different Forward Supplemental Code
18 Channel assignment.
- 19 + If USE_FOR_DURATION is equal to ‘0’, the mobile station shall continue
20 processing the Forward Supplemental Code Channels until it receives a
21 subsequent *Supplemental Channel Assignment Message* or a *General*
22 *Handoff Direction Message* that specifies a different Forward
23 Supplemental Code Channel assignment.
- 24 • If REV_INCLUDED is included and is equal to ‘0’, the mobile station shall
25 perform the following:
- 26 – If USE_REV_HDM_SEQ_s is equal to ‘1’ and REV_LINKED_HDM_SEQ_s is
27 equal to HDM_SEQ_r (this indicates that there is pending Reverse
28 Supplemental Code Channel assignment information, received in a
29 *Supplemental Channel Assignment Message*, linked to this *General Handoff*
30 *Direction Message*), the mobile station shall perform the following actions:
- 31 + If NUM_REV_CODES_s is equal to ‘000’, the mobile station shall stop
32 transmitting on all Reverse Supplemental Code Channels at the action
33 time of the message.
- 34 + If NUM_REV_CODES_s is not equal to ‘000’, the mobile station may start
35 transmitting on NUM_REV_CODES_s Reverse Supplemental Code
36 Channels at the action time of the message, for a duration of time
37 determined by the following rules:

- 1 o If SCAM_REV_DURATION_MODE_S is equal to '1', the mobile station
2 may continue transmitting on the Reverse Supplemental Code
3 Channels for a period of (REV_DURATION_S × 80) ms, until it receives
4 a subsequent *General Handoff Direction Message* or a *Supplemental*
5 *Channel Assignment Message* that specifies a different Reverse
6 Supplemental Code Channel assignment.
- 7 o If SCAM_REV_DURATION_MODE_S is equal to '0', the mobile station
8 may continue transmitting on the Reverse Supplemental Code
9 Channels until it receives a subsequent *General Handoff Direction*
10 *Message* or a *Supplemental Channel Assignment Message* that
11 specifies a different Reverse Supplemental Code Channel
12 assignment.
- 13 + The mobile station shall set USE_REV_HDM_SEQ_S to '0'.
- 14 – If USE_REV_HDM_SEQ_S is equal to '0' or REV_LINKED_HDM_SEQ_S is not
15 equal to HDM_SEQ_R, and if the previous Reverse Supplemental Code
16 Channel assignment is still valid, the mobile station may continue to
17 transmit on the Reverse Supplemental Code Channels according to the
18 previously specified Reverse Supplemental Code Channel assignment.
- 19 • If REV_INCLUDED is included and is equal to '1', then the mobile station shall
20 process the Reverse Supplemental Code Channel assignment information as
21 follows:
- 22 – The mobile station shall set REV_DTX_DURATION_S to
23 REV_DTX_DURATION_R.
- 24 – The mobile station shall set USE_REV_HDM_SEQ_S to '0'.
- 25 – If REV_START_TIME_S specifies a time which is after the action time of the
26 *General Handoff Direction Message*, the mobile station shall cancel any
27 pending Reverse Supplemental Code Channel assignment and shall set
28 REV_START_TIME_S to NULL.
- 29 – If CLEAR_RETRY_DELAY is equal to '1', the mobile station shall cancel any
30 previously indicated retry delay and shall set RETRY_DELAY_S⁶⁹ to 0;
31 otherwise, the mobile station shall continue to honor any previously active
32 retry delay stored in RETRY_DELAY_S.
- 33 – The mobile station shall set NUM_REV_CODES_S to NUM_REV_CODES_R, and
34 shall perform the following actions:

⁶⁹ The CLEAR_RETRY_DELAY field received in *General Handoff Direction Message* does not affect the RETRY_DELAY_S[RETRY_TYPE] values.

- 1 + If NUM_REV_CODES_S is equal to '000', the mobile station shall stop
2 transmitting on all Reverse Supplemental Code Channels at the action
3 time of the message.
- 4 + If NUM_REV_CODES_S is not equal to '000', the mobile station shall set
5 PILOT_GATING_USE_RATE to '0' at the action time of the message and
6 may start transmitting on NUM_REV_CODES_S Reverse Supplemental
7 Code Channels at the action time of the message, for a duration of time
8 determined by the following rules:
- 9 o If USE_REV_DURATION_T is equal to '1', the mobile station shall set
10 REV_DURATION_S to REV_DURATION_T. The mobile station may
11 continue transmitting on the Reverse Supplemental Code Channels
12 for a period of (REV_DURATION_S × 80) ms, until it receives a
13 subsequent *General Handoff Direction Message* or a *Supplemental*
14 *Channel Assignment Message* that specifies a different Reverse
15 Supplemental Code Channel assignment.
- 16 o If USE_REV_DURATION is equal to '0', the mobile station may
17 continue to transmit on the Reverse Supplemental Code Channels
18 until it receives a subsequent *General Handoff Direction Message* or a
19 *Supplemental Channel Assignment Message* that specifies a different
20 Reverse Supplemental Code Channel assignment.
- 21 – The mobile station shall store USE_T_ADD_ABORT_T, the Reverse
22 Supplemental Code Channel assignment T_ADD abort indicator, as
23 USE_T_ADD_ABORT_S.
- 24 • The mobile station shall set IGNORE_SCAM_S and IGNORE_ESCAM_S to '0'.
- 25 • If PERIODIC_SEARCH_S is equal to '0' and a periodic search is in progress, the
26 mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and
27 2.6.6.2.10.4).
- 28 • Perform a soft or hard handoff depending on the following conditions:
- 29 – If any of the following conditions is true, the mobile station shall perform a
30 hard handoff:
- 31 + EXTRA_PARAMS is set to '1' and either BAND_CLASS_T is not equal to
32 SF_CDMABAND_S, CDMA_FREQ_T is not equal to SF_CDMACH_S, or
33 FRAME_OFFSET_T is not equal to SF_FRAME_OFFSET_S, or
- 34 + The set of pilots specified by the message is disjoint from the Active
35 Set prior to the action time of the message.
- 36 – If the mobile station performs a hard handoff, it shall perform the following:
- 37 + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the
38 mobile station shall abort the procedure (see 2.6.6.2.12).
- 39 + If a Candidate Frequency periodic search is in progress, the mobile station
40 shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).

- 1 + The mobile station shall cancel the Forward Supplemental Channel
- 2 assignment or the Reverse Supplemental Channel assignment (if any).
- 3 + If RETURN_IF_HANDOFF_FAIL_S is equal to '0', the mobile station shall
- 4 perform actions specified in 2.6.6.2.8.1. If the message specifies more than
- 5 one pilot, the mobile station shall also perform actions specified in
- 6 2.6.6.2.7.1 and 2.6.6.2.7.2.
- 7 + If RETURN_IF_HANDOFF_FAIL_S is equal to '1', the mobile station shall
- 8 perform actions specified in 2.6.6.2.8.2. If the message specifies more than
- 9 one pilot, the mobile station shall also perform actions specified in
- 10 2.6.6.2.7.1 and 2.6.6.2.7.2.
- 11 – Otherwise, the mobile station shall perform a soft handoff as specified in
- 12 2.6.6.2.7.

13 10. *Periodic Pilot Measurement Request Order*: The mobile station shall perform the
14 following:

- 15 • If the PPSMM timer is enabled, disable it.
- 16 • If ORDQ is equal to '1111111', the mobile station shall send a *Periodic Pilot*
- 17 *Strength Measurement Message* to the base station within T_{56m} seconds.
- 18 • If ORDQ is not equal to '1111111', the mobile station shall perform the
- 19 following:
 - 20 – Set the MIN_PILOT_PWR_THRESH_S to MIN_PILOT_PWR_THRESH_T received
 - 21 from the *Periodic Pilot Strength Measurement Request Order*.
 - 22 – Set the MIN_PILOT_EC_IO_THRESH_S to MIN_PILOT_EC_IO_THRESH_T
 - 23 received from the *Periodic Pilot Strength Measurement Request Order*.
 - 24 – Set PPSMM_PERIOD_S equal to the larger value of ORDQ and the total length
 - 25 of time, in units of 80 ms, required by the mobile station to update the pilot
 - 26 strength measurement of each pilot in the Active Set and the Candidate Set.
 - 27 – Perform the Periodic Serving Frequency Pilot Report Procedure as specified
 - 28 in 2.6.6.2.12.
- 29 • If the mobile station sends the *Periodic Pilot Strength Measurement Message* and
- 30 if INCL_SETPT_T is equal to '1', the mobile station shall include outer loop E_b/N_t
- 31 setpoint information corresponding to the physical channel specified by
- 32 FPC_PRI_CHAN_S, and Supplemental Channel outer loop E_b/N_t setpoint
- 33 information if one or more Supplemental Channels are assigned, in the *Periodic*
- 34 *Pilot Strength Measurement Message*.

35 11. *Universal 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 (see
40 2.6.4.1.2.2).

1 The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
 2 to the specified value if any of the following conditions is true, and shall not perform
 3 any other action described in this section for processing the *Universal Handoff*
 4 *Direction Message*:

- 5 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
 6 set to '00000110' (capability not supported), if the mobile station does not
 7 support the band class specified in the *Universal Handoff Direction Message*.
- 8 • If the SCR_INCLUDED field is included in this message and is set to '1', the
 9 mobile station shall perform the following:
 - 10 - The mobile station shall send a *Mobile Station Reject Order* with the ORDQ
 11 field set to '00000111' (message cannot be handled by the current mobile
 12 station configuration), if the mobile station does not support the service
 13 configuration specified in the *Universal Handoff Direction Message*.
 - 14 - The mobile station shall send a *Mobile Station Reject Order* (ORDQ =
 15 '00000111') within T_{56m} seconds, if the mobile station supports the service
 16 configuration specified but does not accept the service configuration
 17 specified in the *Universal Handoff Direction Message*.
- 18 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
 19 set to '00000111' (message cannot be handled by the current mobile station
 20 configuration), if the NNSCR_INCLUDED field is included and set to '1' and the
 21 SCR_INCLUDED field is either not included or included but set to '0', and the
 22 mobile station does not support the configuration specified in the non-
 23 negotiable service configuration information record in the *Universal Handoff*
 24 *Direction Message*.
- 25 • If the CC_INFO_INCL field is included in this message and is set to '1', the
 26 mobile station shall perform the following for each of the NUM_CALLS_ASSIGN
 27 call assignments included in this message:
 - 28 - If there already exists or currently pending instantiation a Call Control
 29 instance identified by CON_REF_r, the mobile station shall send a *Mobile*
 30 *Station Reject Order* with ORDQ field set to '00010010' (a call control
 31 instance is already present with the specified identifier), with the CON_REF
 32 field of the order set to CON_REF_r.
 - 33 - If RESPONSE_IND_r equals '1' and TAG_r does not match any of the TAG
 34 values contained in the list TAG_OUTSTANDING_LIST, the mobile station
 35 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010011'
 36 (TAG received does not match TAG stored), with the TAG field of the order
 37 set to TAG_r, and the CON_REF field of the order set to CON_REF_r.
 - 38 - If the mobile station does not accept this call assignment, the mobile station
 39 shall send a *Mobile Station Reject Order* with ORDQ field set to '00010000'
 40 (call assignment not accepted), with the CON_REF field of the order set to
 41 CON_REF_r.

- 1 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
2 set to '00001010' (search set not specified), if the PERIODIC_SEARCH field is
3 included in the *Universal Handoff Direction Message* and is set to '1' and the
4 Candidate Frequency Search Set is empty.
- 5 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
6 set to '00000011' (message structure not acceptable), if the message specifies
7 the Forward/Reverse Supplemental Channel assignment, the most significant
8 bit of CH_IND_r is equal to '0', and CH_IND_r is not equal to '000'.
- 9 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
10 set to '00000111' (message can not be handled by the current mobile station
11 configuration), if the message includes a reverse Supplemental Channel
12 assignment, and any of the following conditions are true:
- 13 – any of the mobile station's reverse supplemental channel configuration
14 parameter for the corresponding Supplemental Channel is NULL, or
- 15 – the message includes a Reverse Packet Data Channel assignment.
- 16 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field
17 set to '00000111' (message can not be handled by the current mobile station
18 configuration), if the message includes a forward Supplemental Channel
19 assignment and any of the mobile station's forward supplemental channel
20 configuration parameters for the corresponding Supplemental Channel is NULL.
- 21 • The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set
22 to '00001101' (search period too short), if the PERIODIC_SEARCH field is included
23 in the *Universal Handoff Direction Message* and is set to '1', and *search_period* is
24 less than $(\max(fwd_time, rev_time) + T_{71m} \text{ seconds})$, where
- 25 $search_period =$ time period corresponding to SEARCH_PERIOD_s shown in
26 Table 2.6.6.2.8.3.2-1,
- 27 $fwd_time =$ the mobile station's estimate of the total length of time, in seconds,
28 for which the mobile station will need to suspend its current
29 Forward Traffic Channel processing in order to tune to the CDMA
30 Candidate Frequency, to search the Candidate Frequency Search
31 Set, and to re-tune to the Serving Frequency; if the mobile station
32 searches the Candidate Frequency Search Set in multiple visits,
33 fwd_time is the total time for all visits to the CDMA Candidate
34 Frequency in a search period (see 2.6.6.2.8.3.2),
- 35 and
- 36 $rev_time =$ the mobile station's estimate of the total length of time, in seconds,
37 for which the mobile station will need to suspend its current Reverse
38 Traffic Channel processing in order to tune to the CDMA Candidate
39 Frequency, to search the Candidate Frequency Search Set, and to re-
40 tune to the Serving Frequency; if the mobile station searches the
41 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.

- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '0000111' (message can not be handled by the current mobile station configuration), if CH_IND_r is equal to '000', and EXT_CH_IND_r is not defined in Table 3.7.2.3.2.4-11.
- The mobile shall send a *Mobile Station Reject Order* with the ORDQ field set to '00011100' (PLCM_TYPE mismatch) if PLCM_TYPE_r equals '0010' and IMSI_O is derived from IMSI_T or if PLCM_TYPE_r equals '0011' and IMSI_O is derived from IMSI_M.

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 *Universal 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 *Universal Handoff Direction Message* (RETURN_IF_HANDOFF_FAIL_s = RETURN_IF_HANDOFF_FAIL_r); otherwise the mobile station shall set RETURN_IF_HANDOFF_FAIL_s to '0'.

The mobile station shall set RETURN_IF_HANDOFF_FAIL_s to '0' (disable return on failure) if any of the following conditions is true:

- If P_REV_IN_USE_s 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_r is equal to CDMABAND_s and CDMA_FREQ_r is equal to CDMACH_s), and FRAME_OFFSET_r is equal to FRAME_OFFSET_s.

The mobile station shall store the following parameters from its current configuration:

- CDMA band class (SF_CDMABAND_s = CDMABAND_s)
- Frequency assignment (SF_CDMACH_s = CDMACH_s)
- Frame Offset (SF_FRAME_OFFSET_s = FRAME_OFFSET_s)

If RETURN_IF_HANDOFF_FAIL_s is equal to '1', the mobile station shall also store the following parameters from its current configuration:

- Protocol revision level (SF_P_REV_s = P_REV_s)
- Protocol revision level in use on the Serving Frequency (SF_P_REV_IN_USE_s = P_REV_IN_USE_s)

- 1 • Search window size for the Active Set and Candidate Set (SF_SRCH_WIN_A_s =
2 SRCH_WIN_A_s)
- 3 • Search window size for the Neighbor Set
4 (SF_SRCH_WIN_N_s = SRCH_WIN_N_s),
- 5 • Search window size for the Remainder Set
6 (SF_SRCH_WIN_R_s = SRCH_WIN_R_s)
- 7 • Pilot detection threshold (SF_T_ADD_s = T_ADD_s)
- 8 • Pilot drop threshold (SF_T_DROP_s = T_DROP_s)
- 9 • Active Set versus Candidate Set comparison threshold
10 (SF_T_COMP_s = T_COMP_s)
- 11 • Drop timer value (SF_T_TDROP_s = T_TDROP_s)
- 12 • Drop timer range value (SF_T_TDROP_RANGE_s = T_TDROP_RANGE_s)
- 13 • Soft slope for the dynamic add and drop thresholds
14 (SF_SOFT_SLOPE_s = SOFT_SLOPE_s)
- 15 • Intercept for the dynamic add threshold
16 (SF_ADD_INTERCEPT_s = ADD_INTERCEPT_s)
- 17 • Intercept for the dynamic drop threshold
18 (SF_DROP_INTERCEPT_s = DROP_INTERCEPT_s)
- 19 • Private long code mask indicator: If the mobile station is using the private long
20 code mask on the Serving Frequency, it shall set SF_PRIVATE_LCM_s to '1';
21 otherwise, it shall set SF_PRIVATE_LCM_s to '0'.
- 22 • Private long code mask: If the mobile station is using the private long code mask
23 on the Serving Frequency, it shall set SF_PVTLCM_42_s to the PVTLCM_42.
- 24 • Public long code mask type: The mobile station shall set SF_PLCM_TYPE_s to
25 PLCM_TYPE_s. If PLCM_TYPE_s equals '0001', the mobile station shall set
26 SF_PLCM_39_s to PLCM_39_s.
- 27 • Service negotiation type (SF_SERV_NEG_s = SERV_NEG_s)
- 28 • Service configuration: Store the current service configuration (service
29 configuration record and non-negotiable service configuration record) in
30 SF_SERVICE_CONFIG_s
- 31 • Call Information:
32 Store the list of current calls (Call Control instances, etc.) in SF_CALLS_s
- 33 • Message encryption mode: If message encryption is on, the mobile station shall
34 set SF_ENCRYPT_MODE_s to '1'; otherwise, the mobile station shall set
35 SF_ENCRYPT_MODE_s to '0'.
- 36 • Extended nominal power setting of the current cell
37 (SF_NOM_PWR_EXT_s = NOM_PWR_EXT_s)
- 38 • Nominal power setting of the current cell (SF_NOM_PWR_s = NOM_PWR_s)

- 1 • Power control step ($SF_PWR_CNTL_STEP_s = PWR_CNTL_STEP_s$)
- 2 • Serving Frequency Active Set (SF Active Set = (For each pilot in the current
- 3 Active Set: (PILOT_PN, PWR_COMB_IND)))
- 4 • Serving Frequency Code Channel List
- 5 (SF_CODE_CHAN_LIST_s = CODE_CHAN_LIST_s)

6 If NNSCR_INCLUDED field is included and set to '1' and SCR_INCLUDED field is
 7 either not included or included but set to '0', the mobile station shall process the
 8 received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 at
 9 the action time of this message. If SYNC_ID_INCL_r is set to '1', the mobile station
 10 shall perform the following:

- 11 • The mobile station shall store (if included) the synchronization identifier
 12 received from the base station corresponding to this service configuration
 13 (SYNC_ID_s = SYNC_ID_r).
- 14 • The mobile station shall store the current service configuration as specified in
 15 2.6.4.1.2.2.5.1 at the action time of this message.

16 Otherwise, the mobile station shall set SYNC_ID_s to NULL.

17 If SYNC_ID_INCL_r is set to '1', NNSCR_INCLUDED field is not included or is
 18 included and set to '0', and SCR_INCLUDED is not included or is included and set
 19 to '0', the mobile station shall perform the following:

- 20 • The mobile station shall store the synchronization identifier received from the
 21 base station (SYNC_ID_s = SYNC_ID_r).
- 22 • If the currently used service configuration has a corresponding SYNC_ID, the
 23 mobile station shall perform one of the following:
 - 24 - If the current SID (if SID_r is included in the message then the current SID is
 25 SID_r; otherwise, the current SID is SID_s) or current NID (if NID_r is included
 26 in the message then the current NID is NID_r; otherwise, the current NID is
 27 NID_s) is not equal to the stored SID or NID corresponding to the currently
 28 used service configuration, the mobile station shall store the current service
 29 configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this
 30 message.
 - 31 - Otherwise, the mobile station shall update the stored SYNC_ID value
 32 corresponding to the currently used service configuration with SYNC_ID_r.
- 33 • If the currently used service configuration does not have a corresponding
 34 SYNC_ID, the mobile station shall store the current service configuration as
 35 specified in 2.6.4.1.2.2.5.1 at the action time of this message.

36 When the message takes effect, the mobile station shall perform the following
 37 actions:

- 38 • The mobile station shall send a *Handoff Completion Message* or an *Extended*
 39 *Handoff Completion Message* as specified in 2.6.6.2.5.2. [. If the RC assigned on the](#)

reverse fundamental channel or supplemental channel is less than RC08 the mobile station shall set RC_BITMAP_CAPABILITY_EXT_ALLOWED_s to '0'.

- Update the Active Set, Candidate Set, and Neighbor Set in accordance with the *Universal Handoff Direction Message* processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and 2.6.6.2.6.3).
- Discontinue use of all Forward Traffic Channels associated with pilots not in the updated Active Set.
- The mobile station shall perform the following to determine the long code mask to use after the handoff:
 - If the PRIVATE_LCM field is not included and PLCM_TYPE_INCL_r equals '0', the mobile station shall continue to use the long code mask currently in use.
 - If the PRIVATE_LCM field is not included and PLCM_TYPE_INCL_r equals '1', the mobile station shall perform the following:
 - + The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r; if PLCM_TYPE_r equals '0001', the mobile station shall set PLCM_39_s to PLCM_39_r.
 - + The mobile station shall use the public long code mask derived from PLCM_TYPE_s as specified in 2.3.6.
 - If PRIVATE_LCM_r equals '1' and PLCM_TYPE_INCL_r equals '0', the mobile station shall perform the following:
 - + The mobile station shall use the private long code mask.
 - If PRIVATE_LCM_r equals '1' and PLCM_TYPE_INCL_r equals '1', the mobile station shall perform the following:
 - + The mobile station shall use the private long code mask.
 - + The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r; if PLCM_TYPE_r equals '0001', the mobile station shall set PLCM_39_s to PLCM_39_r.
 - If PRIVATE_LCM_r equals '0' and PLCM_TYPE_INCL_r equals '0', the mobile station shall perform the following:
 - + The mobile station shall use the public long code mask derived from PLCM_TYPE_s as specified in 2.3.6.
 - If PRIVATE_LCM_r equals '0' and PLCM_TYPE_INCL_r equals '1', the mobile station shall perform the following:
 - + The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r; if PLCM_TYPE_r equals '0001', the mobile station shall set PLCM_39_s to PLCM_39_r.
 - + The mobile station shall use the public long code mask derived from PLCM_TYPE_s as specified in 2.3.6.

- 1 – The mobile station shall indicate to the user the voice privacy mode status.
- 2 • If PARS_INCL is equal to '1', perform the following actions:
- 3 – Set protocol revision level ($P_REV_S = P_REV_T$), and protocol revision level
- 4 currently in use ($P_REV_IN_USE_S = \min(P_REV_S, MOB_P_REV_P$ of the
- 5 current band class)).
- 6 – If SERV_NEG_TYPE_T is equal to '1', set SERV_NEG_S to enabled; otherwise set
- 7 SERV_NEG_S to disabled.
- 8 • If EXTRA_PARS is equal to '1', perform the following actions:
- 9 – If FRAME_OFFSET_T is not equal to FRAME_OFFSET_S, change the frame
- 10 offset on all of the code channels of the Forward Traffic Channel and of the
- 11 Reverse Traffic Channel.
- 12 – If RESET_L2_T is equal to '1', and RETURN_IF_HANDOFF_FAIL_S is equal to
- 13 '0', Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset
- 14 the acknowledgment procedures, as specified in [4]. The mobile station shall
- 15 reset the acknowledgment procedures immediately after the action time of
- 16 the *Universal Handoff Direction Message*.
- 17 – If RESET_FPC_T is equal to '1' and RETURN_IF_HANDOFF_FAIL_S is equal to
- 18 '0', initialize the Forward Traffic Channel power control counters, as
- 19 specified in 2.6.4.1.1.1.
- 20 – Process the ENCRYPT_MODE field, as specified in 2.3.12.2.
- 21 – Perform the procedures as specified in 2.6.11.3.
- 22 • If EXTRA_PARS is equal to '0', set the following variables to the values
- 23 indicated:
- 24 – Hard handoff traffic channel preamble count required before transmitting a
- 25 *Handoff Completion Message* or an *Extended Handoff Completion Message*
- 26 (NUM_PREAMBLE_S = '000')
- 27 – Complete search flag (COMPLETE_SEARCH_S = '1')
- 28 – CDMA band class for the Target Frequency
- 29 (TF_CDMABAND_S = SF_CDMABAND_S)
- 30 – Frequency assignment for the Target Frequency
- 31 (TF_CDMACH_S = SF_CDMACH_S)
- 32 • Store the following parameters from the *Universal Handoff Direction Message*:
- 33 – *Universal Handoff Direction Message* sequence number
- 34 (HDM_SEQ_S = HDM_SEQ_T)
- 35 – Forward power control subchannel relative gain (FPC_SUBCHAN_GAIN_S =
- 36 FPC_SUBCHAN_GAIN_T).
- 37 – If the mobile station uses FPC_SUBCHAN_GAIN_S, the mobile station shall
- 38 perform the following:

- 1 + If PC_ACTION_TIME_T is received, the mobile station shall apply its usage
2 of the FPC_SUBCHAN_GAIN_S at the time specified by PC_ACTION_TIME_T.
- 3 + If PC_ACTION_TIME is not received and the explicit action time is
4 received, the mobile station shall apply its usage of the
5 FPC_SUBCHAN_GAIN_S at the action time.
- 6 + If neither PC_ACTION_TIME_T nor explicit action time is received, the
7 mobile station shall apply its usage of the FPC_SUBCHAN_GAIN_S at the
8 first 80ms boundary occurring at least 80ms after the end of the frame
9 containing the last bit of the *Universal Handoff Direction Message* sent to
10 the mobile station.
- 11 – Reverse Eighth Gating Mode (REV_FCH_GATING_MODE_S =
12 REV_FCH_GATING_MODE_T).
- 13 – Reverse Power Control Delay if REV_PWR_CNTL_DELAY_INCL_T is equal to ‘1’
14 (REV_PWR_CNTL_DELAY_S = REV_PWR_CNTL_DELAY_T).
- 15 – Concurrent services supported indicator (CS_SUPPORTED_S =
16 CS_SUPPORTED_T).
- 17 – Maximum number of additional service reference identifiers allowed in
18 origination (MAX_ADD_SERV_INSTANCE_S = MAX_ADD_SERV_INSTANCE_T),
19 if included; otherwise, the mobile station shall set
20 MAX_ADD_SERV_INSTANCE_S to 0.
- 21 – Control Hold Mode supported indicator (CHM_SUPPORTED_S =
22 CHM_SUPPORTED_T) if included; otherwise, the mobile station shall perform
23 the following:
- 24 + If P_REV_IN_USE_S is less than 6, set CHM_SUPPORTED_S to ‘0’.
- 25 + Otherwise, set CHM_SUPPORTED_S to ‘1’
- 26 – CDMA off time report supported indicator
27 (CDMA_OFF_TIME_REP_SUP_IND_S = CDMA_OFF_TIME_REP_SUP_IND_T).
- 28 – If CDMA_OFF_TIME_REP_SUP_IND_T is equal to ‘1’, the mobile station shall
29 store CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLD_S
30 = CDMA_OFF_TIME_REP_THRESHOLD_T in units specified by
31 CDMA_OFF_TIME_REP_UNIT_T).
- 32 – Forward Packet Data Channel supported indicator
33 (FOR_PDCH_SUPPORTED_S = FOR_PDCH_SUPPORTED_T).
- 34 – PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED_S =
35 PDCH_CHM_SUPPORTED_T) if included; otherwise, set
36 PDCH_CHM_SUPPORTED_S to ‘0’.
- 37 – Reverse Packet Data Channel supported indicator
38 (REV_PDCH_SUPPORTED_S = REV_PDCH_SUPPORTED_T) if included;
39 otherwise, set REV_PDCH_SUPPORTED_S to ‘0’.

- 1 – Short Data Burst supported indicator ($SDB_SUPPORTED_S =$
2 $SDB_SUPPORTED_T$).
- 3 – Pilot information request supported indicator
4 ($PILOT_INFO_REQ_SUPPORTED_S = PILOT_INFO_REQ_SUPPORTED_T$).
- 5 – Release to Idle State allowed indicator ($RELEASE_TO_IDLE_IND_S =$
6 $RELEASE_TO_IDLE_IND_T$).
- 7 – If $SEARCH_INCLUDED$ is equal to '1', store the following:
- 8 + Search window size for the Active Set and Candidate Set
9 ($SRCH_WIN_A_S = SRCH_WIN_A_T$)
- 10 + Pilot detection threshold ($T_ADD_S = T_ADD_T$)
- 11 + Pilot drop threshold ($T_DROP_S = T_DROP_T$)
- 12 + Active Set versus Candidate Set comparison threshold
13 ($T_COMP_S = T_COMP_T$)
- 14 + Drop timer value ($T_TDROP_S = T_TDROP_T$)
- 15 + Drop timer range value ($T_TDROP_RANGE_S = T_TDROP_RANGE_T$) if
16 $T_TDROP_RANGE_INCL_T$ is equal to '1'; otherwise, ($T_TDROP_RANGE_S =$
17 '0000')
- 18 + Soft slope for the dynamic add and drop thresholds
19 ($SOFT_SLOPE_S = SOFT_SLOPE_T$)
- 20 + Intercept for the dynamic add threshold
21 ($ADD_INTERCEPT_S = ADD_INTERCEPT_T$)
- 22 + Intercept for the dynamic drop threshold
23 ($DROP_INTERCEPT_S = DROP_INTERCEPT_T$)
- 24 – If $EXTRA_PARMS$ is equal to '1', store the following:
- 25 + If the mobile station supports packet data service options, the packet
26 data services zone identifier ($PACKET_ZONE_ID_S = PACKET_ZONE_ID_T$).
- 27 + If the mobile station supports packet data service options and the
28 $PZ_HYST_ENABLED$ field is included, the mobile station shall store the
29 packet zone hysteresis enabled indicator ($PZ_HYST_ENABLED_S =$
30 $PZ_HYST_ENABLED_T$); otherwise, the mobile station shall set
31 $PZ_HYST_ENABLED_S$ to '1'.
- 32 + If the $PZ_HYST_LIST_LEN$ field is included, the mobile station shall store
33 the packet zone hysteresis list length ($PZ_HYST_LIST_LEN_S =$
34 $PZ_HYST_LIST_LEN_T$); otherwise, the mobile station shall set
35 $PZ_HYST_LIST_LEN_S$ to 4.
- 36 + If the $PZ_HYST_ACT_TIMER$ field is included, the mobile station shall
37 store the packet zone hysteresis activation timer ($PZ_HYST_ACT_TIMER_S =$
38 $PZ_HYST_ACT_TIMER_T$); otherwise, the mobile station shall set

- 1 PZ_HYST_ACT_TIMERS to 30 seconds.
- 2 + If the PZ_HYST_TIMER_MUL field and the PZ_HYST_TIMER_EXP field are
3 included, the mobile station shall store the packet zone hysteresis timer
4 ($PZ_HYST_TIMERS = PZ_HYST_TIMER_MUL_r \times 8 \wedge$
5 $PZ_HYST_TIMER_EXP_r$); otherwise, the mobile station shall set
6 PZ_HYST_TIMERS to 60 seconds.
- 7 + Frame offset ($FRAME_OFFSET_s = FRAME_OFFSET_r$)
- 8 + Acknowledgment procedures reset indicator
9 (If RETURN_IF_HANDOFF_FAIL_s is equal to '1', set TF_RESET_L2_s to
10 RESET_L2_r)
- 11 + Indicator to initialize the Forward Traffic Channel power control counters
12 (If RETURN_IF_HANDOFF_FAIL_s is equal to '1', set TF_RESET_FPC_s to
13 RESET_FPC_r)
- 14 + Nominal power setting of the target cell ($NOM_PWR_s = NOM_PWR_r$)
- 15 + Extended nominal power setting of the target cell (If CDMABAND_s =
16 '00000' or CDMABAND_s = '00011', then $NOM_PWR_EXT_s = '0'$;
17 otherwise, $NOM_PWR_EXT_s = NOM_PWR_EXT_r$)
- 18 + Hard handoff traffic channel preamble count required before
19 transmitting a *Handoff Completion Message* or an *Extended Handoff*
20 *Completion Message* ($NUM_PREAMBLE_s = NUM_PREAMBLE_r$)
- 21 + CDMA band class for the Target Frequency
22 ($TF_CDMABAND_s = BAND_CLASS_r$ and $CDMABAND_s = BAND_CLASS_r$)
- 23 + Frequency assignment for the Target Frequency
24 ($TF_CDMACH_s = CDMA_FREQ_r$ and $CDMACH_s = CDMA_FREQ_r$)
- 25 + Complete search flag ($COMPLETE_SEARCH_s = COMPLETE_SEARCH_r$)
- 26 + Periodic search flag ($PERIODIC_SEARCH_s = PERIODIC_SEARCH_r$)
- 27 + Nominal code channel output power offset relative to the Reverse Pilot
28 Channel power ($RLGAIN_TRAFFIC_PILOT_s = RLGAIN_TRAFFIC_PILOT_r$)
- 29 - If EXTRA_PARMS is equal to '1' and DEFAULT_RLAG is equal to '1', the
30 mobile station shall set each entry of the Reverse Link Attribute Adjustment
31 Gain Table and Reverse Channel Adjustment Gain Table (see [2]) to 0.
- 32 - If USE_PWR_CNTL_STEP is equal to '1' and PWR_CNTL_STEP_r corresponds
33 to a power control step size supported by the mobile station (see [2]), then
34 the mobile station shall set PWR_CNTL_STEP_s to PWR_CNTL_STEP_r.
- 35 - If CLEAR_RETRY_DELAY_r is equal to '1', the mobile station shall cancel any
36 previously indicated retry delay and shall set $RETRY_DELAY_s[RETRY_TYPE]$
37 to 0, where RETRY_TYPE is equal to '001', '010', '011', '100', or '101';
38 otherwise, the mobile station shall continue to honor any previously active
39 retry delay stored in RETRY_DELAY_s.

- 1 – If 3XFL_1XRL_INCL_T is equal to ‘1’, the mobile station shall set
2 1XRL_FREQ_OFFSET_S to 1XRL_FREQ_OFFSET_T.
- 3 – If SCH_INCL_T is equal to ‘1’ and NUM_FOR_ASSIGN_T is not equal to ‘00’, the
4 mobile station shall store the following information for each occurrence of
5 the record and process the Forward Supplemental Burst as specified in
6 2.6.6.2.5.1.1:
- 7 + FOR_SCH_START_TIME_INCL_S[FOR_SCH_ID_T] =
8 FOR_SCH_START_TIME_INCL_T
- 9 + If FOR_SCH_START_TIME_INCL_S[FOR_SCH_ID_T] is equal to ‘1’, set
10 FOR_SCH_START_TIME_S[FOR_SCH_ID_T] = FOR_SCH_START_TIME_T
- 11 + FOR_SCH_DURATION_S[FOR_SCH_ID_T] = FOR_SCH_DURATION_T
- 12 + SCCL_INDEX_S[FOR_SCH_ID_T] = SCCL_INDEX_T
- 13 + If SCH_BCMC_IND field is included the mobile station shall perform the
14 following:
- 15 o If SCH_BCMC_IND_T equals ‘1’ and USE_ADD_PLCM_FOR_SCH_T
16 equals ‘1’, set corresponding SCH_BCMC_IND[FOR_SCH_ID_T] to ‘1’;
17 otherwise, set SCH_BCMC_IND[FOR_SCH_ID_T] = ‘0’
- 18 + If SCH_BCMC_IND_T is included and equals ‘1’ and
19 ADD_PLCM_FOR_SCH_INCL_T is included and is set to ‘1’, the mobile
20 station shall store following fields:
- 21 o Set ADD_PLCM_FOR_SCH_TYPE_S to ADD_PLCM_FOR_SCH_TYPE_T.
- 22 o Set ADD_PLCM_FOR_SCH_35_S to ADD_PLCM_FOR_SCH_35_T if
23 ADD_PLCM_FOR_SCH_TYPE_T is equal to ‘1’.
- 24 + If SCH_BCMC_IND_T is included and equals ‘1’, the mobile station shall
25 store following fields:
- 26 o USE_ADD_PLCM_FOR_SCH_S[FOR_SCH_ID_T] =
27 USE_ADD_PLCM_FOR_SCH_T
- 28 o FSCH_OUTERCODE_INCL_S[FOR_SCH_ID_T] =
29 FSCH_OUTERCODE_INCL_T
- 30 o If FSCH_OUTERCODE_INCL_T equals ‘1’, the mobile station shall store
31 following fields:
- 32 o FSCH_OUTERCODE_RATE_S[FOR_SCH_ID_T] =
33 FSCH_OUTERCODE_RATE_T
- 34 o FSCH_OUTERCODE_OFFSET_S[FOR_SCH_ID_T] =
35 FSCH_OUTERCODE_OFFSET_T
- 36 – If SCH_INCL_T is equal to ‘1’ and NUM_REV_ASSIGN_T is not equal to ‘00’, the
37 mobile station shall store the following information for each occurrence of
38 the record and process the Reverse Supplemental Burst as specified in
39 2.6.6.2.5.1.2:

- 1 + REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] =
2 REV_SCH_START_TIME_INCL_r
- 3 + If REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] is equal to '1', set
4 REV_SCH_START_TIME_s[REV_SCH_ID_r] = REV_SCH_START_TIME_r
- 5 + REV_SCH_DURATION_s[REV_SCH_ID_r] = REV_SCH_DURATION_r
- 6 + REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r] = REV_SCH_NUM_BITS_IDX_r
- 7 – The mobile station shall set BCMC_ON_TRAFFIC_SUP_s to
8 BCMC_ON_TRAFFIC_SUP_r. If BCMC_ON_TRAFFIC_SUP_r is set to '1', the
9 mobile station shall store AUTO_REQ_TRAF_ALLOWED_IND_s =
10 AUTO_REQ_TRAF_ALLOWED_IND_r
- 11 – If SID_INCL_r is equal to '1', the mobile station shall store the following:
12 + System identification (SID_s = SID_r)
- 13 – If NID_INCL_r is equal to '1', the mobile station shall store the following:
14 + Network identification (NID_s = NID_r)
- 15 – If ENC_SUPPORTED_r is equal to '1', the mobile station shall store:
16 + Signaling encryption supported indicator (SIG_ENCRYPT_SUP_s =
17 SIG_ENCRYPT_SUP_r)
- 18 + User information encryption supported indicator (UI_ENCRYPT_SUP_s =
19 UI_ENCRYPT_SUP_r)
- 20 – Sync ID supported indicator (USE_SYNC_ID_s = USE_SYNC_ID_r) if included.
- 21 – Channel configuration request allowed indicator (USE_CH_CFG_RRM_s =
22 USE_CH_CFG_RRM_r) if included; otherwise, set USE_CH_CFG_RRM_s to '0'.
- 23 – If TX_PWR_LIMIT_DEFAULT_r is included and set to '0', the mobile station
24 shall perform the 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 – If TX_PWR_LIMIT_DEFAULT_r is included and set to '1', the mobile station
31 shall store TX_PWR_LIMIT_s to the limit defined in [11] for the target base
32 station.
- 33 – Permission for the mobile station to request QoS settings in the *Origination*
34 *Message*, *Origination Continuation Message*, or *Enhanced Origination Message*
35 (MOB_QOS_s = MOB_QOS_r) if included.
- 36 – The mobile station initiated position location determination supported
37 indicator (MS_INIT_POS_LOC_SUP_IND_s = MS_INIT_POS_LOC_SUP_IND_r).

- 1 – If CH_IND_r is equal to ‘101’, the mobile station shall perform the following:
- 2 + The mobile station shall set CH_IND_s = ‘01’.
- 3 + If SCH_INCL_r is equal to ‘1’ and NUM_FOR_SCH is not equal to ‘00000’,
- 4 for all the NUM_FOR_SCH occurrences, the mobile station shall perform
- 5 the following:
- 6 o The mobile station shall determine,
- 7 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the number of
- 8 information bits per Forward Supplemental Channel frame identified
- 9 by FOR_SCH_ID and corresponding to the index SCCL_INDEX
- 10 according to the following rules:
- 11 If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘000’, then:
- 12 – If USE_FLEX_NUM_BITS_s is equal to ‘0’ or if
- 13 USE_FLEX_NUM_BITS_s is equal to ‘1’ and
- 14 FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘0000’,
- 15 then the mobile station shall set the number of information
- 16 bits per frame,
- 17 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and
- 18 number of CRC bits per frame,
- 19 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
- 20 according to Table 3.7.3.3.2.37-2 using
- 21 FOR_SCH_NUM_BITS_IDX_r as the index to the table.
- 22 – If USE_FLEX_NUM_BITS_s is equal to ‘1’ and
- 23 FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is not equal to ‘0000’,
- 24 then the mobile station shall set the number of CRC bits per
- 25 frame, FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
- 26 using Table 3.7.5.20-1 and
- 27 CRC_LEN_IDX_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]][FOR_
- 28 SCH_NUM_BITS_IDX_r] as the index to the table.
- 29 The mobile station shall also set the number of information
- 30 bits per frame corresponding to SCCL_INDEX_r,
- 31 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], to
- 32 NUM_BITS_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]][FOR_SC
- 33 H_NUM_BITS_IDX_r].
- 34 If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is not equal to ‘000’, then:
- 35 – The mobile station shall set
- 36 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r], the set of indices to
- 37 the number of information bits per frame as follows:
- 38 + If FOR_SCH_NUM_BITS_IDX_r is equal to ‘0000’, then
- 39 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] = {
- 40 FOR_SCH_NUM_BITS_IDX_r },

- 1 + otherwise the mobile station shall set (initialize)
2 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] =
3 {FOR_SCH_NUM_BITS_IDX_r} and for i=1, ...,
4 FOR_SCH_NUM_BITS_IDX_r the mobile station shall add
5 FOR_SCH_NUM_BITS_IDX_r -
6 VAR_FSCH_RATE_OFFSET_s[FOR_SCH_ID_r][FOR_SCH_NUM_BITS_IDX_r][i] to the set specified by
7 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]
8
- 9
- 10 - If USE_FLEX_NUM_BITS_s is equal to '0' or if
11 USE_FLEX_NUM_BITS_s is equal to '1' and
12 FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r] is equal to '0000',
13 then the mobile station shall set
14 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the set of
15 number of information bits per frame as follows.
16 The *i*th member of the set
17 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] is
18 obtained using Table 3.7.3.3.2.37-2 and the *i*th member of the
19 set N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] as the index to
20 the table.
- 21 - If USE_FLEX_NUM_BITS_s is equal to '1' and
22 FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r] is not equal to '0000',
23 then
- 24 + the mobile station shall set
25 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the
26 set of number of information bits per frame as follows.
27 The *i*th member of the set
28 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] is
29 equal to
30 NUM_BITS_s[FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r]]
31 [N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][i]], where
32 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][i] denotes the *i*th
33 member of the set
34 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] and,

- 1 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 2 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 3 AUX_WALSH_r with the Walsh Code length specified by
- 4 WALSH_LENGTH_r.
- 5 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 6 AUX_TD_POWER_LEVEL_r.
- 7 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.

8 If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:

- 9 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 10 SR3_PRIMARY_PILOT_r.
- 11 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 12 SR3_PILOT_POWER1_r.
- 13 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 14 SR3_PILOT_POWER2_r.

15 If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:

- 16 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 17 SR3_PRIMARY_PILOT_r.
- 18 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 19 SR3_PILOT_POWER1_r.
- 20 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 21 SR3_PILOT_POWER2_r.
- 22 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.

- 23 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 24 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 25 WALSH_LENGTH_r.

- 26 – If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1
- 27 field of PILOT_REC to QOF1_r and set the
- 28 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 29 AUX_PILOT_WALSH1_r with the Walsh Code length specified
- 30 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
- 31 field of PILOT_REC to QOF_r and set the
- 32 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 33 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 34 WALSH_LENGTH_r.

- 1 o If $CCSH_ENCODER_ACTION_TIME_r$ is received, then the mobile
2 station shall set $CCSH_ENCODER_ACTION_TIME_s$ to
3 $CCSH_ENCODER_ACTION_TIME_r$, and the mobile station shall apply
4 each $CCSH_ENCODER_TYPE_s$ at the time specified by
5 $CCSH_ENCODER_ACTION_TIME_r$.
- 6 o If $CCSH_ENCODER_ACTION_TIME_r$ is not received, the mobile
7 station shall apply each $CCSH_ENCODER_TYPE_s$ at the action time
8 of the message.
- 9 + If $3X_FCH_INFO_INCL_r$ equals '1', for each included member of the
10 Active Set, the mobile station store the following:
- 11 o If $3X_FCH_LOW_INCL_r$ equals '1', set the $QOF_MASK_ID_FCH_LOW$
12 field to $QOF_MASK_ID_FCH_LOW_r$ and the $CODE_CHAN_FCH_LOW$
13 field to $CODE_CHAN_FCH_LOW_r$. Otherwise, set the
14 $QOF_MASK_ID_FCH_LOW$ field to $QOF_MASK_ID_FCH_r$ and the
15 $CODE_CHAN_FCH_LOW$ to $CODE_CHAN_FCH_r$.
- 16 o If $3X_FCH_HIGH_INCL_r$ equals '1', set the $QOF_MASK_ID_FCH_HIGH$
17 field to $QOF_MASK_ID_FCH_HIGH_r$ and the
18 $CODE_CHAN_FCH_HIGH$ field to $CODE_CHAN_FCH_HIGH_r$.
19 Otherwise, set the $QOF_MASK_ID_FCH_HIGH$ field to
20 $QOF_MASK_ID_FCH_r$ and the $CODE_CHAN_FCH_HIGH$ to
21 $CODE_CHAN_FCH_r$.
- 22 o If $3X_SCH_INFO_INCL_r$ equals '1', for each Supplemental Channel
23 included, the mobile station store the following:
- 24 If $3X_SCH_LOW_INCL_r$ equals '1', set the $QOF_ID_SCH_LOW_s$
25 $[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to $QOF_MASK_ID_SCH_LOW_r$
26 and the
27 $FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ field
28 to $CODE_CHAN_SCH_LOW_r$. Otherwise, set
29 $QOF_ID_SCH_LOW_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
30 $QOF_MASK_ID_SCH_r$, and
31 $FOR_SCH_CC_INDEX_LOW_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
32 $CODE_CHAN_SCH_r$.
- 33 If $3X_SCH_HIGH_INCL_r$ equals '1', set the $QOF_ID_SCH_HIGH_s$
34 $[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to $QOF_MASK_ID_SCH_HIGH_r$
35 and the
36 $FOR_SCH_CC_INDEX_HIGH[FOR_SCH_ID_r][SCCL_INDEX_r][i]$
37 field to $CODE_CHAN_SCH_HIGH_r$. Otherwise, set
38 $QOF_ID_SCH_HIGH_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
39 $QOF_MASK_ID_SCH_r$, and
40 $FOR_SCH_CC_INDEX_HIGH_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
41 $CODE_CHAN_SCH_r$.

- 1 + The mobile station shall delete all pilots that are not listed in the
2 NUM_PILOTS field from the Active Set.
- 3 + The mobile station shall delete all pilots that are not listed in the Active
4 Set from the Active Set of the Supplemental Channel for the Forward
5 Supplemental Channel Assignment (if any). If these deleted pilots
6 include all pilots in the Active Set of the Supplemental Channel, the
7 mobile station shall cancel the Forward Supplemental Channel
8 Assignment.
- 9 – If CH_IND_T is equal to '010' or '110', the mobile station shall perform the
10 following:
- 11 + The mobile station shall set CH_IND_S = '10'.
- 12 + If SCH_INCL_T is equal to '1' and NUM_FOR_SCH is not equal to '00000',
13 for all the NUM_FOR_SCH occurrences, the mobile station shall perform
14 the following:
- 15 o The mobile station shall determine,
16 N_FSCH_BITS_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T], the number of
17 information bits per Forward Supplemental Channel frame identified
18 by FOR_SCH_ID and corresponding to the index SCCL_INDEX
19 according to the following rules:
- 20 If FSCH_VAR_TABLE_ID_S[FOR_SCH_ID_T] is equal to '000', then:
- 21 – If USE_FLEX_NUM_BITS_S is equal to '0' or if
22 USE_FLEX_NUM_BITS_S is equal to '1' and
23 FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_T] is equal to '0000',
24 then the mobile station shall set the number of information
25 bits per frame,
26 N_FSCH_BITS_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T] and
27 number of CRC bits per frame,
28 FSCH_CRC_LEN_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T],
29 according to Table 3.7.3.3.2.37-2 using
30 FOR_SCH_NUM_BITS_IDX_T as the index to the table.
- 31 – If USE_FLEX_NUM_BITS_S is equal to '1' and
32 FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_T] is not equal to '0000',
33 then the mobile station shall set the number of CRC bits per
34 frame, FSCH_CRC_LEN_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T],
35 using Table 3.7.5.20-1 and
36 CRC_LEN_IDX_S[FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_T]][FOR_
37 SCH_NUM_BITS_IDX_T] as the index to the table.
- 38 The mobile station shall also set the number of information
39 bits per frame corresponding to SCCL_INDEX_T,
40 N_FSCH_BITS_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T], to
41 NUM_BITS_S[FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_T]][FOR_SC
42 H_NUM_BITS_IDX_T].

- 1 If FSCH_VAR_TABLE_IDS_s[FOR_SCH_ID_r] is not equal to '000', then:
- 2 - The mobile station shall set
- 3 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r], the set of indices to
- 4 the number of information bits per frame as 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, ...,
- 11 FOR_SCH_NUM_BITS_IDX_r the mobile station shall add
- 12 FOR_SCH_NUM_BITS_IDX_r -
- 13 VAR_FSCH_RATE_OFFSET_s[FOR_SCH_ID_r][FOR_SCH_NUM_BITS_IDX_r][i] to the set specified by
- 14 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]
- 15
- 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_IDS_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 set of
- 21 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 the
- 25 set N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] as the index to
- 26 the table.
- 27 - If USE_FLEX_NUM_BITS_s is equal to '1' and
- 28 FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r] is not equal to '0000',
- 29 then
- 30 + the mobile station shall set
- 31 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the
- 32 set of number of information bits per frame as follows.
- 33 The *i*th member of the set
- 34 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] is
- 35 equal to
- 36 NUM_BITS_s[FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r]]
- 37 [N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][i]], where
- 38 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][i] denotes the *i*th
- 39 member of the set
- 40 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] and,

- 1 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 2 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 3 AUX_WALSH_r with the Walsh Code length specified by
- 4 WALSH_LENGTH_r.
- 5 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
- 6 AUX_TD_POWER_LEVEL_r.
- 7 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 8 ◇ If PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:
- 9 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 10 SR3_PRIMARY_PILOT_r.
- 11 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 12 SR3_PILOT_POWER1_r.
- 13 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 14 SR3_PILOT_POWER2_r.
- 15 ◇ If PILOT_REC_TYPE_r is equal to ‘100’, the mobile station shall:
- 16 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
- 17 SR3_PRIMARY_PILOT_r.
- 18 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
- 19 SR3_PILOT_POWER1_r.
- 20 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
- 21 SR3_PILOT_POWER2_r.
- 22 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 23 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
- 24 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 25 WALSH_LENGTH_r.
- 26 – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1
- 27 field of PILOT_REC to QOF1_r and set the
- 28 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 29 AUX_PILOT_WALSH1_r with the Walsh Code length specified
- 30 by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1
- 31 field of PILOT_REC to QOF_r and set the
- 32 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
- 33 AUX_PILOT_WALSH_r with the Walsh Code length specified by
- 34 WALSH_LENGTH_r.

- 1 o If $CCSH_ENCODER_ACTION_TIME_r$ is received, then the mobile
2 station shall set $CCSH_ENCODER_ACTION_TIME_s$ to
3 $CCSH_ENCODER_ACTION_TIME_r$, and the mobile station shall apply
4 each $CCSH_ENCODER_TYPE_s$ at the time specified by
5 $CCSH_ENCODER_ACTION_TIME_r$.
- 6 o If $CCSH_ENCODER_ACTION_TIME_r$ is not received, the mobile
7 station shall apply each $CCSH_ENCODER_TYPE_s$ at the action time
8 of the message.
- 9 + If $3X_DCCH_INFO_INCL_r$ equals '1', for each included member of the
10 Active Set, the mobile station store the following:
- 11 o If $3X_DCCH_LOW_INCL_r$ equals '1', set the
12 $QOF_MASK_ID_DCCH_LOW$ field to $QOF_MASK_ID_DCCH_LOW_r$
13 and the $CODE_CHAN_DCCH_LOW$ field to
14 $CODE_CHAN_DCCH_LOW_r$. Otherwise, set the
15 $QOF_MASK_ID_DCCH_LOW$ field to $QOF_MASK_ID_FCH_r$ and the
16 $CODE_CHAN_DCCH_LOW$ to $CODE_CHAN_FCH_r$.
- 17 o If $3X_DCCH_HIGH_INCL_r$ equals '1', set the
18 $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_DCCH_HIGH_r$
19 and the $CODE_CHAN_DCCH_HIGH$ field to
20 $CODE_CHAN_DCCH_HIGH_r$. Otherwise, set the
21 $QOF_MASK_ID_DCCH_HIGH$ field to $QOF_MASK_ID_FCH_r$ and the
22 $CODE_CHAN_DCCH_HIGH$ to $CODE_CHAN_FCH_r$.
- 23 o If $3X_SCH_INFO_INCL_r$ equals '1', for each Supplemental Channel
24 included, the mobile station store the following:
- 25 If $3X_SCH_LOW_INCL_r$ equals '1', set
26 $QOF_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
27 $QOF_MASK_ID_SCH_LOW_r$ and
28 $FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ field
29 to $CODE_CHAN_SCH_LOW_r$. Otherwise, set
30 $QOF_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
31 $QOF_MASK_ID_SCH_r$, and
32 $FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
33 $CODE_CHAN_SCH_r$.
- 34 If $3X_SCH_HIGH_INCL_r$ equals '1', set
35 $QOF_ID_SCH_HIGH[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
36 $QOF_MASK_ID_SCH_HIGH_r$ and the
37 $FOR_SCH_CC_INDEX_HIGH[FOR_SCH_ID_r][SCCL_INDEX_r][i]$
38 field to $CODE_CHAN_SCH_HIGH_r$. Otherwise, set
39 $QOF_ID_SCH_HIGH[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
40 $QOF_MASK_ID_SCH_r$, and
41 $FOR_SCH_CC_INDEX_HIGH[FOR_SCH_ID_r][SCCL_INDEX_r][i]$ to
42 $CODE_CHAN_SCH_r$.

- 1 + The mobile station shall set FUNDICATED_BCMC_IND_S to
2 FUNDICATED_BCMC_IND_T.
- 3 + If FUNDICATED_BCMC_IND_T equals '1', for each included member of the
4 Active Set, the mobile station shall store the following:
- 5 o Set FOR_CPCCH_WALSH_S to FOR_CPCCH_WALSH_T.
- 6 o Set FOR_CPCSCH_S to FOR_CPCSCH_T.
- 7 + The mobile station shall delete all pilots that are not listed in the
8 NUM_PILOTS field from the Active Set.
- 9 + The mobile station shall delete all pilots that are not listed in the Active
10 Set from the Active Set of the Supplemental Channel for the Forward
11 Supplemental Channel Assignment (if any). If these deleted pilots
12 include all pilots in the Active Set of the Supplemental Channel, the
13 mobile station shall cancel the Forward Supplemental Channel
14 Assignment.
- 15 - If CH_IND_T is equal to '111', the mobile station shall perform the following:
- 16 + The mobile station shall set CH_IND_S = '11'.
- 17 + If SCH_INCL_T is equal to '1' and NUM_FOR_SCH is not equal to '00000',
18 for all the NUM_FOR_SCH occurrences, the mobile station shall perform
19 the following:
- 20 o The mobile station shall determine,
21 N_FSCH_BITS_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T], the number of
22 information bits per Forward Supplemental Channel frame identified
23 by FOR_SCH_ID and corresponding to the index SCCL_INDEX
24 according to the following rules:
- 25 If FSCH_VAR_TABLE_ID_S[FOR_SCH_ID_T] is equal to '000', then:
- 26 - If USE_FLEX_NUM_BITS_S is equal to '0' or if
27 USE_FLEX_NUM_BITS_S is equal to '1' and
28 FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_T] is equal to '0000',
29 then the mobile station shall set the number of information
30 bits per frame,
31 N_FSCH_BITS_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T] and
32 number of CRC bits per frame,
33 FSCH_CRC_LEN_SET_S[FOR_SCH_ID_T][SCCL_INDEX_T],
34 according to Table 3.7.3.3.2.37-2 using
35 FOR_SCH_NUM_BITS_IDX_T as the index to the table.

- 1 + the mobile station shall set
2 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the
3 set of number of information bits per frame as follows.
4 The *i*th member of the set
5 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] is
6 equal to
7 NUM_BITS_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]]
8 [N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*]], where
9 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*] denotes the *i*th
10 member of the set
11 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] and,
- 12 + the mobile station shall set
13 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the
14 set of number CRC bits per frame as follows.
15 The *i*th member of the set
16 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r]
17 using Table 3.7.5.20-1 and
18 CRC_LEN_IDX_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]][N
19 _FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*]] as the index to
20 the table, where
21 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*] denotes the *i*th
22 member of the set
23 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r].
- 24 + If SCH_INCL_r is equal to '1' and NUM_REV_SCH is not equal to '00000',
25 for all the NUM_REV_SCH occurrences, the mobile station shall perform
26 the following:
- 27 o Set REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r] to
28 REV_SCH_NUM_BITS_IDX_r.
 - 29 o Set REV_WALSH_ID_s[REV_SCH_ID_r][REV_SCH_NUM_BITS_IDX_s] to
30 REV_WALSH_ID_r.
- 31 + For each member in the Active Set included in the message, the mobile
32 station shall perform the followings:
- 33 o Set PILOT_PN to PILOT_PN_r.
 - 34 o If SRCH_OFFSET_INCL_r equals '1', set the SRCH_OFFSET field of
35 PILOT_REC to SRCH_OFFSET_r; otherwise, set the SRCH_OFFSET
36 field of PILOT_REC to '000'.
 - 37 o Set ADD_PILOT_REC_INCL to ADD_PILOT_REC_INCL_r.
 - 38 o If ADD_PILOT_REC_INCL_r equals '1', the mobile station shall also
39 perform the following:
 - 40 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
41 PILOT_REC_TYPE_r.

- 1 ◇ If PILOT_REC_TYPE_r is equal to '000', the mobile station shall set
2 the TD_POWER_LEVEL field of PILOT_REC to
3 TD_POWER_LEVEL_r and set the TD_MODE field of PILOT_REC to
4 TD_MODE_r.
- 5 ◇ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
6 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
7 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
8 AUX_PILOT_WALSH_r with the Walsh Code length specified by
9 WALSH_LENGTH_r.
- 10 ◇ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
11 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
12 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
13 AUX_WALSH_r with the Walsh Code length specified by
14 WALSH_LENGTH_r.
15 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
16 AUX_TD_POWER_LEVEL_r.
17 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 18 ◇ If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
19 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
20 SR3_PRIMARY_PILOT_r.
21 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
22 SR3_PILOT_POWER1_r.
23 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
24 SR3_PILOT_POWER2_r.
- 25 ◇ If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
26 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
27 SR3_PRIMARY_PILOT_r.
28 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
29 SR3_PILOT_POWER1_r.
30 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
31 SR3_PILOT_POWER2_r.
32 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
33 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
34 AUX_PILOT_WALSH_r with the Walsh Code length specified by
35 WALSH_LENGTH_r.

- 1 ◇ If PILOT_INCL is equal to '1' and CCSH_INCLUDED is set to '0',
2 then for each Supplemental Channel included in this record, the
3 mobile station shall set
4 CCSH_ENCODER_TYPE_S[FOR_SCH_ID_r][SCCL_INDEX_r][i] to '0'
5 (default Turbo Encoder type).
6 ◇ The mobile station shall delete all pilots that are not included in
7 the list specified by the NUM_PILOTS field from the Active Set of
8 Supplemental Channel for the corresponding SCCL_INDEX_r.
- 9 + If CCSH_INCLUDED is equal to '1', the mobile station shall perform the
10 following:
- 11 o If CCSH_ENCODER_ACTION_TIME_r is received, then the mobile
12 station shall set CCSH_ENCODER_ACTION_TIME_S to
13 CCSH_ENCODER_ACTION_TIME_r, and the mobile station shall apply
14 each CCSH_ENCODER_TYPE_S at the time specified by
15 CCSH_ENCODER_ACTION_TIME_r.
- 16 o If CCSH_ENCODER_ACTION_TIME_r is not received, the mobile
17 station shall apply each CCSH_ENCODER_TYPE_S at the action time
18 of the message.
- 19 + If 3X_FCH_INFO_INCL_r equals '1', for each included member of the
20 Active Set, the mobile station store the following:
- 21 o If 3X_FCH_LOW_INCL_r equals '1', set the QOF_MASK_ID_FCH_LOW
22 field to QOF_MASK_ID_FCH_LOW_r and the CODE_CHAN_FCH_LOW
23 field to CODE_CHAN_FCH_LOW_r. Otherwise, set the
24 QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_r and the
25 CODE_CHAN_FCH_LOW to CODE_CHAN_FCH_r.
- 26 o If 3X_FCH_HIGH_INCL_r equals '1', set the QOF_MASK_ID_FCH_HIGH
27 field to QOF_MASK_ID_FCH_HIGH_r and the
28 CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH_r.
29 Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
30 QOF_MASK_ID_FCH_r and the CODE_CHAN_FCH_HIGH to
31 CODE_CHAN_FCH_r.
- 32 + If 3X_DCCH_INFO_INCL_r equals '1', for each included member of the
33 Active Set, the mobile station store the following:
- 34 o If 3X_DCCH_LOW_INCL_r equals '1', set the
35 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW_r
36 and the CODE_CHAN_DCCH_LOW field to
37 CODE_CHAN_DCCH_LOW_r. Otherwise, set the
38 QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH_r and the
39 CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH_r.

- 1 o If 3X_DCCH_HIGH_INCL_T equals '1', set the
2 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGH_T
3 and the CODE_CHAN_DCCH_HIGH field to
4 CODE_CHAN_DCCH_HIGH_T. Otherwise, set the
5 QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCH_T and the
6 CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCH_T.
- 7 + If 3X_FCH_INFO_INCL_T or 3X_DCCH_INFO_INCL_T equals '1', for each
8 included member of the Active Set, the mobile station store the following:
- 9 o If 3X_SCH_INFO_INCL_T equals '1', for each Supplemental Channel
10 included, the mobile station store the following:
- 11 If 3X_SCH_LOW_INCL_T equals '1', set
12 QOF_ID_SCH_LOW[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
13 QOF_MASK_ID_SCH_LOW_T and the
14 FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_T][SCCL_INDEX_T][i] field
15 to CODE_CHAN_SCH_LOW_T. Otherwise, set
16 QOF_ID_SCH_LOW[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
17 QOF_MASK_ID_SCH_T, and
18 FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
19 CODE_CHAN_SCH_T.
- 20 If 3X_SCH_HIGH_INCL_T equals '1', set
21 QOF_ID_SCH_HIGH[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
22 QOF_MASK_ID_SCH_HIGH_T and the
23 FOR_SCH_CC_INDEX_HIGH[FOR_SCH_ID_T][SCCL_INDEX_T][i]
24 field to CODE_CHAN_SCH_HIGH_T. Otherwise, set
25 QOF_ID_SCH_HIGH[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
26 QOF_MASK_ID_SCH_T, and
27 FOR_SCH_CC_INDEX_HIGH[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
28 CODE_CHAN_SCH_T.
- 29 + The mobile station shall set FUNDICATED_BCNC_IND_S to
30 FUNDICATED_BCNC_IND_T.
- 31 + If FUNDICATED_BCNC_IND_T equals '1', the mobile station shall store
32 the following:
- 33 o Set REV_FCH_ASSIGNED_S to REV_FCH_ASSIGNED_T.
- 34 + If FUNDICATED_BCNC_IND_T equals '1', the mobile station shall set
35 FCH_BCNC_IND to '1'; otherwise, the mobile station shall set
36 FCH_BCNC_IND to '0'.
- 37 + If FUNDICATED_BCNC_IND_T equals '1' and FOR_CPCCH_INFO_INCL_T is
38 included and is set to '1', for each included member of the Active Set, the
39 mobile station shall store the following:
- 40 o Set FOR_CPCCH_WALSH_S to FOR_CPCCH_WALSH_T.
- 41 o Set FOR_CPCSCH_S to FOR_CPCSCH_T.

- 1 + If FUNDICATED_BCNC_IND_r equals '1' and ADD_PLCM_FOR_FCH_INCL_r
2 is included and is set to '1', the mobile station shall store the following:
- 3 o Set ADD_PLCM_FOR_FCH_TYPE_s to ADD_PLCM_FOR_FCH_TYPE_r.
4 o Set ADD_PLCM_FOR_FCH_39_s to ADD_PLCM_FOR_FCH_39_r if
5 ADD_PLCM_FOR_FCH_TYPE_r is equal to '1'.
- 6 + The mobile station shall delete all pilots that are not listed in the
7 NUM_PILOTS field from the Active Set.
- 8 + The mobile station shall delete all pilots that are not listed in the Active
9 Set from the Active Set of the Supplemental Channel for the Forward
10 Supplemental Channel Assignment (if any). If these deleted pilots
11 include all pilots in the Active Set of the Supplemental Channel, the
12 mobile station shall cancel the Forward Supplemental Channel
13 Assignment.
- 14 - If CH_IND_r is equal to '000', the mobile station shall perform the following:
- 15 + If this message assigns a Forward Packet Data Channel or Reverse
16 Packet Data Channel which was not assigned prior to the action time of
17 this message, Layer 3 shall send SIG-HandoffPDCH.Indication
18 (handoff_type = HANDOFF) to the MAC layer; otherwise, Layer 3 shall
19 send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC
20 layer.
- 21 + If the message includes a Reverse Packet Data Channel assignment, the
22 mobile station shall cancel the Reverse Supplemental Channel
23 assignment, if any, at the action time of the message.
- 24 + The mobile station shall set CH_IND_s to '000'.
- 25 + The mobile station shall set EXT_CH_IND_s to EXT_CH_IND_r.
- 26 + If PDCH_CONTROL_HOLD_r is equal to '0' and
27 PILOT_GATING_USE_RATE is equal to '1', the mobile station shall set
28 PILOT_GATING_USE_RATE to '0' and shall start the continuous reverse
29 pilot at the specified action time of the message and, if a F-PDCH is
30 assigned, the mobile station shall start the continuous R-CQICH as
31 defined in [3].
- 32 + If PDCH_CONTROL_HOLD_r is equal to '1', the mobile station may
33 perform the following:
- 34 o Set PILOT_GATING_USE_RATE equal to '1' and start the reverse pilot
35 gating and Reverse CQI Channel gating at PILOT_GATING_RATE_s at
36 the action time of the message.
- 37 o The mobile station shall cancel the forward and reverse supplemental
38 channel assignment, if any.

- 1 + The mobile station shall set FULL_CI_FEEDBACK_IND_s to
2 FULL_CI_FEEDBACK_IND_r.
- 3 + If EXT_CH_IND_r equals '01000', the mobile station shall set
4 FOR_CPCCH_RATE_s to FOR_CPCCH_RATE_r, and
5 FOR_CPCCH_UPDATE_RATE_s to FOR_CPCCH_UPDATE_RATE_r;
6 otherwise, the mobile station shall set FOR_CPCCH_RATE_s to '00', and
7 FOR_CPCCH_UPDATE_RATE_s to '00'.
- 8 + The mobile station shall set REV_CQICH_FRAME_OFFSET_s to
9 REV_CQICH_FRAME_OFFSET_r.
- 10 + The mobile station shall set REV_CQICH_REPS_s to REV_CQICH_REPS_r.
- 11 + The mobile station shall set REV_ACKCH_REPS_s to REV_ACKCH_REPS_r.
- 12 + If SCH_INCL_r is equal to '1', and EXT_CH_IND_r signals the allocation of a
13 F-FCH or a F-DCCH, and NUM_FOR_SCH is not equal to '00000', for all
14 the NUM_FOR_SCH occurrences, the mobile station shall perform the
15 following:
- 16 o The mobile station shall determine,
17 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the number of
18 information bits per Forward Supplemental Channel frame identified
19 by FOR_SCH_ID and corresponding to the index SCCL_INDEX
20 according to the following rules:
- 21 If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is equal to '000', then:
- 22 - If USE_FLEX_NUM_BITS_s is equal to '0' or if
23 USE_FLEX_NUM_BITS_s is equal to '1' and
24 FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is equal to '0000',
25 then the mobile station shall set the number of information
26 bits per frame,
27 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and
28 number of CRC bits per frame,
29 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
30 according to Table 3.7.3.3.2.37-2 using
31 FOR_SCH_NUM_BITS_IDX_r as the index to the table.

- 1 + the mobile station shall set
2 $N_FSCH_BITS_SET_S[FOR_SCH_ID_R][SCCL_INDEX_R]$, the
3 set of number of information bits per frame as follows.
4 The i^{th} member of the set
5 $N_FSCH_BITS_SET_S[FOR_SCH_ID_R][SCCL_INDEX_R]$ is
6 equal to
7 $NUM_BITS_S[FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_R]]$
8 $[N_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R][i]]$, where
9 $N_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R][i]$ denotes the i^{th}
10 member of the set
11 $N_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R]$ and,
- 12 + the mobile station shall set
13 $FSCH_CRC_LEN_SET_S[FOR_SCH_ID_R][SCCL_INDEX_R]$, the
14 set of number CRC bits per frame as follows.
15 The i^{th} member of the set
16 $FSCH_CRC_LEN_SET_S[FOR_SCH_ID_R][SCCL_INDEX_R]$
17 using Table 3.7.5.20-1 and
18 $CRC_LEN_IDX_S[FSCH_NBIT_TABLE_ID_S[FOR_SCH_ID_R]][N$
19 $_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R][i]]$ as the index to
20 the table, where
21 $N_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R][i]$ denotes the i^{th}
22 member of the set
23 $N_FSCH_BITS_IDX_SET_S[FOR_SCH_ID_R]$.
- 24 + If SCH_INCL_R is equal to '1' and NUM_REV_SCH is not equal to '00000',
25 for all the NUM_REV_SCH occurrences, the mobile station shall perform
26 the following:
- 27 o Set $REV_SCH_NUM_BITS_IDX_S[REV_SCH_ID_R]$ to
28 $REV_SCH_NUM_BITS_IDX_R$.
 - 29 o Set $REV_WALSH_ID_S[REV_SCH_ID_R][REV_SCH_NUM_BITS_IDX_S]$ to
30 $REV_WALSH_ID_R$.
- 31 + If $FOR_PDCH_RLGAIN_INCL_R$ is included and equal to '1', the mobile
32 station shall set $RLGAIN_ACKCH_PILOT_S$ to $RLGAIN_ACKCH_PILOT_R$,
33 and $RLGAIN_CQICH_PILOT_S$ to $RLGAIN_CQICH_PILOT_R$.
- 34 + If $FOR_PDCH_PARMS_INCL_R$ is equal to '1', the mobile station shall set
35 $NUM_SOFT_SWITCHING_FRAMES_S$ to
36 $NUM_SOFT_SWITCHING_FRAMES_R + 1$, and
37 $NUM_SOFTER_SWITCHING_FRAMES_S$ to
38 $NUM_SOFTER_SWITCHING_FRAMES_R + 1$.
- 39 + If $CHM_SWITCHING_PARMS_INCL_R$ is included and equal to '1', the
40 mobile station shall set $NUM_SOFT_SWITCHING_FRAMES_CHM_S$ to
41 $NUM_SOFT_SWITCHING_FRAMES_CHM_R + 1$, and
42 $NUM_SOFTER_SWITCHING_FRAMES_CHM_S$ to
43 $NUM_SOFTER_SWITCHING_FRAMES_CHM_R + 1$.

- 1 + If CHM_SWITCHING_PARAMS_INCL_T is included and equal to '0', the
2 mobile station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_S to
3 NUM_SOFT_SWITCHING_FRAMES_T + 1, and
4 NUM_SOFT_SWITCHING_FRAMES_CHM_S to
5 NUM_SOFT_SWITCHING_FRAMES_T + 1.
- 6 + If FOR_PDCH_PARAMS_INCL_T is equal to '1', the mobile station shall
7 set NUM_SOFT_SWITCHING_SLOTS_S according to Table 3.7.2.3.2.21-9
8 based on the value of NUM_SOFT_SWITCHING_SLOTS_T.
- 9 + If FOR_PDCH_PARAMS_INCL_T is equal to '1', the mobile station shall
10 set NUM_SOFT_SWITCHING_SLOTS_S according to Table 3.7.2.3.2.21-
11 9 based on the value of NUM_SOFT_SWITCHING_SLOTS_T.
- 12 + If CHM_SWITCHING_PARAMS_INCL_T is included and equal to '1', the
13 mobile station shall:
- 14 o Set NUM_SOFT_SWITCHING_SLOTS_CHM_S according to Table
15 3.7.2.3.2.21-9 based on the value of
16 NUM_SOFT_SWITCHING_SLOTS_CHM_T.
- 17 o Set NUM_SOFT_SWITCHING_SLOTS_CHM_S according to Table
18 3.7.2.3.2.21-9 based on the value of
19 NUM_SOFT_SWITCHING_SLOTS_CHM_T.
- 20 + If CHM_SWITCHING_PARAMS_INCL_T is included and equal to '0', the
21 mobile station shall:
- 22 o Set NUM_SOFT_SWITCHING_SLOTS_CHM_S according to Table
23 3.7.2.3.2.21-9 based on the value of
24 NUM_SOFT_SWITCHING_SLOTS_T.
- 25 o Set NUM_SOFT_SWITCHING_SLOTS_CHM_S according to Table
26 3.7.2.3.2.21-9 based on the value of
27 NUM_SOFT_SWITCHING_SLOTS_T.
- 28 + If FOR_PDCH_PARAMS_INCL_T is equal to '1', the mobile station shall set
29 PDCH_SOFT_SWITCHING_DELAY_S to PDCH_SOFT_SWITCHING_DELAY_T
30 + 1, and PDCH_SOFT_SWITCHING_DELAY_S to
31 PDCH_SOFT_SWITCHING_DELAY_T + 1.
- 32 + If FOR_PDCH_PARAMS_INCL_T is equal to '1', and
33 FOR_PDCH_COMMON_PARAMS_T is equal to '1', the mobile station shall
34 store the following parameters that are common to all pilots in the Active
35 Set:
- 36 o The mobile station shall set FOR_PDCH_COMMON_PARAMS_S to '1'.
37 o The mobile station shall set WALSH_TABLE_ID_S to
38 WALSH_TABLE_ID_T.
- 39 o The mobile station shall set NUM_PDCCH_S to NUM_PDCCH_T.

- 1 o The mobile station shall set FOR_PDCCH_WALSH_S[i] to the ith
2 occurrence of FOR_PDCCH_WALSH_r.
- 3 o The mobile station shall set TX_DISABLED_TIMER_S to
4 TX_DISABLED_TIMER_r.
- 5 + If FOR_PDCH_PARAMS_INCL_r is equal to '0', and
6 FOR_PDCH_COMMON_PARAMS_S is equal to '0', the mobile station shall
7 send a *Mobile Station Reject Order* with ORDQ equal to '00000011'
8 (message structure not acceptable) and remain in the current state.
- 9 + If EXT_CH_IND_r signals the allocation of a R-PDCH, the mobile station
10 shall:
- 11 o Set FOR_GCH_ASSIGNED_S to FOR_GCH_ASSIGNED_r.
- 12 o Set FOR_RCCH_ASSIGNED_S to FOR_RCCH_ASSIGNED_r.
- 13 o If FOR_RCCH_ASSIGNED_S is equal to '1', the mobile station shall:
- 14 ◇ Set FOR_RCCH_DRC_MODE_S to FOR_RCCH_DRC_MODE_r.
- 15 ◇ Set FOR_RCCH_REPETITION_S to FOR_RCCH_REPETITION_r.
- 16 ◇ Set FOR_RCCH_UPDATE_RATE_S to FOR_RCCH_UPDATE_RATE_r.
- 17 o If FOR_ACKCH_ASSIGNED_r is equal to '1', the mobile station shall
18 set FOR_ACKCH_MODE_S to FOR_ACKCH_MODE_r.
- 19 o If FOR_ACKCH_COMB_SEL_r is included, the mobile station shall set
20 FOR_ACKCH_COMB_SEL_S to FOR_ACKCH_COMB_SEL_r; otherwise,
21 the mobile station shall set FOR_ACKCH_COMB_SEL_S to '0'.
- 22 o If REV_PDCH_RLGAIN_INCL_r is included and equal to '1', the mobile
23 station shall perform the following:
- 24 ◇ The mobile station shall set RLGAIN_SPICH_PILOT_S to
25 RLGAIN_SPICH_PILOT_r.
- 26 ◇ The mobile station shall set RLGAIN_REQCH_PILOT_S to
27 RLGAIN_REQCH_PILOT_r.
- 28 ◇ The mobile station shall set RLGAIN_PDCCH_PILOT_S to
29 RLGAIN_PDCCH_PILOT_r.
- 30 o If REV_PDCH_PARAMS_1_INCL_r is included and equal to '1', the
31 mobile station shall perform the following:
- 32 ◇ The mobile station shall set REV_PDCH_TABLE_SEL_S to
33 REV_PDCH_TABLE_SEL_r.
- 34 ◇ The mobile station shall set REV_PDCH_MAX_AUTO_TPR_S to
35 REV_PDCH_MAX_AUTO_TPR_r.
- 36 + Otherwise, the mobile station shall:
- 37 o Set FOR_GCH_ASSIGNED_S to NULL.

- 1 o Set FOR_RCCH_ASSIGNED_s to NULL.
- 2 + For each member of the Active Set included in the message, the mobile
3 station shall perform the following:
- 4 o Set PILOT_PN to PILOT_PN_r.
- 5 o If SRCH_OFFSET_INCL_r equals '1', set the SRCH_OFFSET field of
6 PILOT_REC to SRCH_OFFSET_r; otherwise, set the SRCH_OFFSET
7 field of PILOT_REC to '000'.
- 8 o Set ADD_PILOT_REC_INCL to ADD_PILOT_REC_INCL_r.
- 9 o If ADD_PILOT_REC_INCL_r equals '1', the mobile station shall also
10 perform the following:
- 11 ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
12 PILOT_REC_TYPE_r.
- 13 ◇ If PILOT_REC_TYPE_r is equal to '000', the mobile station shall set
14 the TD_POWER_LEVEL field of PILOT_REC to
15 TD_POWER_LEVEL_r and set the TD_MODE field of
16 NGHBR_PILOT_REC to TD_MODE_r.
- 17 ◇ If PILOT_REC_TYPE_r is equal to '001', the mobile station shall:
- 18 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 19 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
20 AUX_PILOT_WALSH_r with the Walsh Code length specified by
21 WALSH_LENGTH_r.
- 22 ◇ If PILOT_REC_TYPE_r is equal to '010', the mobile station shall:
- 23 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 24 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
25 AUX_WALSH_r with the Walsh Code length specified by
26 WALSH_LENGTH_r.
- 27 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
28 AUX_TD_POWER_LEVEL_r.
- 29 – Set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 30 o Set FOR_PDCH_INCL_s to FOR_PDCH_INCL_r.
- 31 o If FOR_PDCH_INCL_r is equal to '1', the mobile station shall perform
32 the following:
- 33 ◇ If FOR_PDCH_PARAMS_INCL_r is equal to '1', and
34 FOR_PDCH_COMMON_PARAMS_r is equal to '0', the mobile station
35 shall store the following parameters:
- 36 – The mobile station shall set FOR_PDCH_COMMON_PARAMS_s
37 to '0'.

- 1 – The mobile station shall set WALSH_TABLE_ID_S to
2 WALSH_TABLE_ID_T.
- 3 – The mobile station shall set NUM_PDCCH_S to NUM_PDCCH_T.
- 4 – The mobile station shall set FOR_PDCCH_WALSH_S[i] to the ith
5 occurrence of FOR_PDCCH_WALSH_T.
- 6 ◇ The mobile station shall set MAC_ID_S to MAC_ID_T.
- 7 ◇ The mobile station shall set REV_CQICH_COVER_S to
8 REV_CQICH_COVER_T.
- 9 ◇ If EXT_CH_IND_T signals the allocation of a F-CPCCH, the mobile
10 station shall set FOR_CPCCH_WALSH_S to FOR_CPCCH_WALSH_T,
11 and FOR_CPCSCH_S to FOR_CPCSCH_T.
- 12 ◇ The mobile station shall store FOR_PDCCH_WALSH_S[i] to the ith
13 occurrence of FOR_PDCCH_WALSH_T.
- 14 o The mobile station shall set PWR_COMB_IND_S to PWR_COMB_IND_T.
- 15 o If PDCH_GROUP_IND_INCL_T is equal to '1', the mobile station shall
16 set PDCH_GROUP_IDENTIFIERS as follows:
- 17 ◇ If this is the first pilot in the list that has a F-PDCH assignment,
18 the mobile station shall perform the following:
- 19 – The mobile station shall set PDCH_GROUP_IDENTIFIERS to
20 '000';
- 21 ◇ Otherwise, the mobile station shall perform the following:
- 22 – If PDCH_GROUP_IND_T is set to '1', the mobile station shall set
23 PDCH_GROUP_IDENTIFIERS to the same value as that of the
24 previous pilot in the list that has a F-PDCH assigned;
25 otherwise, the mobile station shall set
26 PDCH_GROUP_IDENTIFIERS to the value one greater than
27 that of the previous pilot in the list that has a F-PDCH
28 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,
31 the mobile station shall perform the following:
- 32 – The mobile station shall set PDCH_GROUP_IDENTIFIERS to
33 '000';
- 34 ◇ Otherwise, the mobile station shall perform the following:
- 35 – If F-PDCH is assigned for this pilot, the mobile station shall
36 perform the following:

- 1 + If PWR_COMB_IND_r is set to '1', and there are no pilots
2 between this pilot and the previous pilot in the list that
3 has a F-PDCH assigned, the mobile station shall set
4 PDCH_GROUP_IDENTIFIER_s to the same value as that of
5 the previous pilot in the list that has a F-PDCH assigned.
- 6 + If PWR_COMB_IND_r is set to '1', and all pilots between
7 this pilot and the previous pilot in the list that has a F-
8 PDCH assigned have PWR_COMB_IND set to '1', the
9 mobile station shall set PDCH_GROUP_IDENTIFIER_s to
10 the same value as that of the previous pilot in the list that
11 has a F-PDCH assigned.
- 12 + Otherwise, the mobile station shall set
13 PDCH_GROUP_IDENTIFIER_s 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_s to NULL.
- 17 o If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station
18 shall set CODE_CHAN_FCH_s to CODE_CHAN_FCH_r, and
19 QOF_MASK_ID_FCH_s to QOF_MASK_ID_FCH_r.
- 20 o If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile
21 station shall set CODE_CHAN_DCCH_s to CODE_CHAN_DCCH_r, and
22 QOF_MASK_ID_DCCH_s to QOF_MASK_ID_DCCH_r.
- 23 o If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile
24 station shall set CODE_CHAN_DCCH_s to CODE_CHAN_DCCH_r, and
25 QOF_MASK_ID_DCCH_s to QOF_MASK_ID_DCCH_r.
- 26 o If FOR_PDCH_INCL_r is equal to '1', EXT_CH_IND_r signals the
27 allocation of a R-PDCH, and if FOR_ACKCH_ASSIGNED_r is equal to
28 '1', the mobile station shall set FOR_ACKCH_WALSH_INDEX_s to
29 FOR_ACKCH_WALSH_INDEX_r, and FOR_ACKSCH_INDEX_s to
30 FOR_ACKSCH_INDEX_r.
- 31 o If FOR_RCCH_INCL_r is included and set to '1', the mobile station
32 shall do the following:
- 33 ◇ set FOR_RCCH_WALSH_INDEX_s to FOR_RCCH_WALSH_INDEX_s.
- 34 ◇ set FOR_RCSCH_INDEX_s to FOR_RCSCH_INDEX_r.
- 35 o If FOR_PDCH_INCL_r is equal to '1', and if FOR_GCH_ASSIGNED_r is
36 included and set to '1', the mobile station shall perform the following;
- 37 ◇ set NUM_FOR_GCH_s to NUM_FOR_GCH_r, and
- 38 ◇ for each of the NUM_FOR_GCH_s occurrences of
39 FOR_GCH_WALSH_INDEX_r, the mobile station shall set
40 FOR_GCH_WALSH_INDEX_s[j] to FOR_GCH_WALSH_INDEX_r[j].

- 1 o Otherwise, the mobile station shall perform the following:
- 2 ◇ set NUM_FOR_GCH_S to 0, and
- 3 ◇ set FOR_GCH_WALSH_INDEX_S to NULL.
- 4 o If SCH_INCL_T is equal to '1' and NUM_SCH is equal to '00000', the
- 5 mobile station shall delete the corresponding pilot from the all entries
- 6 of the corresponding Supplemental Channel.
- 7 o If SCH_INCL_T is equal to '1' and NUM_SCH is not equal to '00000', for
- 8 each Supplemental Channel included in this record, the mobile
- 9 station shall:
- 10 ◇ If PILOT_INCL is equal to '0', then the mobile station shall delete
- 11 the corresponding pilot from the Active Set of Supplemental
- 12 Channel for the corresponding SCCL_INDEX_T.
- 13 ◇ If PILOT_INCL is equal to '1', then for each Supplemental Channel
- 14 included in this record, the mobile station shall set PILOT_PN_S
- 15 [FOR_SCH_ID_T][SCCL_INDEX_T][i] to PILOT_PN_T,
- 16 QOF_ID_S[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
- 17 QOF_MASK_ID_SCH_T, and
- 18 FOR_SCH_CC_INDEX_S[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
- 19 CODE_CHAN_SCH_T.
- 20 ◇ If PILOT_INCL is equal to '1' and CCSH_INCLUDED is set to '1',
- 21 then for each Supplemental Channel included in this record, the
- 22 mobile station shall set
- 23 CCSH_ENCODER_TYPE_S[FOR_SCH_ID_T][SCCL_INDEX_T][i] to
- 24 CCSH_ENCODER_TYPE_T.
- 25 ◇ If PILOT_INCL is equal to '1' and CCSH_INCLUDED is set to '0',
- 26 then for each Supplemental Channel included in this record, the
- 27 mobile station shall set
- 28 CCSH_ENCODER_TYPE_S[FOR_SCH_ID_T][SCCL_INDEX_T][i] to '0'
- 29 (default Turbo Encoder type).
- 30 ◇ The mobile station shall delete all pilots that are not included in
- 31 the list specified by the NUM_PILOTS field from the Active Set of
- 32 Supplemental Channel for the corresponding SCCL_INDEX_T.
- 33 + If CCSH_INCLUDED is equal to '1', the mobile station shall perform the
- 34 following:
- 35 o If CCSH_ENCODER_ACTION_TIME_T is received, then the mobile
- 36 station shall set CCSH_ENCODER_ACTION_TIME_S to
- 37 CCSH_ENCODER_ACTION_TIME_T, and the mobile station shall apply
- 38 each CCSH_ENCODER_TYPE_S at the time specified by
- 39 CCSH_ENCODER_ACTION_TIME_T.

- 1 o If $CCSH_ENCODER_ACTION_TIME_r$ is not received, the mobile
2 station shall apply each $CCSH_ENCODER_TYPE_s$ at the action time
3 of the message.
- 4 + The mobile station shall set $FUNDICATED_BCMC_IND_s$ to
5 $FUNDICATED_BCMC_IND_r$. If $FUNDICATED_BCMC_IND_r$ equals '1' and
6 the $EXT_CH_IND_r$ signals the allocation of a F-FCH, the mobile station
7 shall set FCH_BCMC_IND to '1'; otherwise, the mobile station shall set
8 FCH_BCMC_IND to '0'.
- 9 + If $FUNDICATED_BCMC_IND_r$ equals '1' and $ADD_PLCM_FOR_FCH_INCL_r$
10 is included and is set to '1', the mobile station shall store the following:
- 11 o Set $ADD_PLCM_FOR_FCH_TYPE_s$ to $ADD_PLCM_FOR_FCH_TYPE_r$.
- 12 o Set $ADD_PLCM_FOR_FCH_39_s$ to $ADD_PLCM_FOR_FCH_39_r$ if
13 $ADD_PLCM_FOR_FCH_TYPE_r$ is equal to '1'.
- 14 + The mobile station shall delete all pilots that are not listed in the
15 NUM_PILOTS field from the Active Set.
- 16 + The mobile station shall delete all pilots that are not listed in the Active
17 Set from the Active Set of the Supplemental Channel for the Forward
18 Supplemental Channel Assignment (if any). If these deleted pilots
19 include all pilots in the Active Set of the Supplemental Channel, the
20 mobile station shall cancel the Forward Supplemental Channel
21 Assignment.
- 22 • If the CH_IND_r is set to '111' and $FUNDICATED_BCMC_IND_r$ equals '1', the
23 mobile station shall change the R-FCH assignment as specified in
24 $REV_FCH_ASSIGNED_r$, at the specified action time.
- 25 • If the most significant bit of CH_IND_r is set to '1' and
26 $PILOT_GATING_USE_RATE$ is equal to '1', the mobile station shall set
27 $PILOT_GATING_USE_RATE$ to '0' and shall start the continuous reverse pilot at
28 the specified action time. If the most significant bit of CH_IND_r is set to '0',
29 CH_IND_r is not equal to '000', and $PILOT_GATING_USE_RATE$ is equal to '0', the
30 mobile station shall perform the following:
- 31 – The mobile station shall set $PILOT_GATING_USE_RATE$ to '1' and shall start
32 the reverse pilot gating at the specified action time.
- 33 – If the Fundamental Channel is also being released, the mobile station shall
34 store the configuration used for the Fundamental Channel.
- 35 – The mobile station shall cancel the forward and reverse supplemental
36 channel assignment, if any.
- 37 • The mobile station shall set $IGNORE_ESCAM_s$ and $IGNORE_SCAM_s$ to '0'.
- 38 • Set the pilot detection threshold for the Target Frequency and the Candidate
39 Frequency:
- 40 – Set $TF_T_ADD_s$ to T_ADD_s .

- 1 – If the Target Frequency is the same as the Candidate Frequency
2 (TF_CDMABAND_S is equal to CF_CDMABAND_S and TF_CDMACH_S is equal
3 to CF_CDMACH_S), set CF_T_ADD_S to T_ADD_S.
- 4 • If PERIODIC_SEARCH_S is equal to '0' and a periodic search is in progress, the
5 mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and
6 2.6.6.2.10.4).
- 7 • The mobile station shall determine its roaming status (see 2.6.5.3). The mobile
8 station should indicate to the user whether the mobile station is roaming.
- 9 • Perform a soft or hard handoff depending on the following conditions:
- 10 – If any of the following conditions is true, the mobile station shall perform a hard
11 handoff:
- 12 + EXTRA_PARMS is set to '1' and either BAND_CLASS_R is not equal to
13 SF_CDMABAND_S, CDMA_FREQ_R is not equal to SF_CDMACH_S, or
14 FRAME_OFFSET_R is not equal to SF_FRAME_OFFSET_S, or
- 15 + The set of pilots specified by the message is disjoint from the Active Set prior
16 to the action time of the message.
- 17 – If the mobile station performs a hard handoff, it shall perform the following:
- 18 + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the
19 mobile station shall abort the procedure (see 2.6.6.2.12).
- 20 + If a Candidate Frequency periodic search is in progress, the mobile station
21 shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
- 22 + If a Forward Supplemental Channel assignment or a Reverse Supplemental
23 Channel assignment is in progress, the mobile station shall abort it.
- 24 + The mobile station shall cancel any outstanding Forward Supplemental
25 Channel assignment or Reverse Supplemental Channel assignment that
26 is not specified by this message.
- 27 + The mobile station shall cancel the current Forward Supplemental Channel
28 assignment or the Reverse Supplemental Channel assignment, if it is in
29 progress. If the message does not specify another Forward Supplemental
30 Channel assignment or Reverse Supplemental Channel assignment, the
31 mobile station shall cancel the outstanding Forward Supplemental Channel
32 assignment or Reverse Supplemental Channel assignment, if any.
- 33 + If RETURN_IF_HANDOFF_FAIL_S is equal to '0', the mobile station shall
34 perform actions specified in 2.6.6.2.8.1. If the message specifies more than
35 one pilot, the mobile station shall also perform actions specified in
36 2.6.6.2.7.1 and 2.6.6.2.7.2.
- 37 + If RETURN_IF_HANDOFF_FAIL_S is equal to '1', the mobile station shall
38 perform actions specified in 2.6.6.2.8.2. If the message specifies more than
39 one pilot, the mobile station shall also perform actions specified in
40 2.6.6.2.7.1 and 2.6.6.2.7.2.

- 1 – Otherwise, the mobile station shall perform a soft handoff as specified in
2 2.6.6.2.7.
- 3 12. *Mobile Assisted Burst Operation Parameters Message:* The mobile station shall
4 process this message as follows:
- 5 • The mobile station shall set ORDER_FLAG_s to ORDER_FLAG_r.
 - 6 • If ORDER_FLAG_r is equal to '1', the mobile station shall perform the
7 following:
8 – The mobile station shall set PS_MIN_DELTA_s to PS_MIN_DELTA_r + 1.
9 – The mobile station shall set ORDER_INTERVAL_s to ORDER_INTERVAL_r.
 - 10 • If ORDER_FLAG_r is equal to '0', the mobile station shall perform the
11 following:
12 – The mobile station shall set PS_MIN_DELTA_s to 0.
13 – The mobile station shall set ORDER_INTERVAL_s to 0.
 - 14 • The mobile station shall set PERIODIC_FLAG_s to PERIODIC_FLAG_r.
 - 15 • If PERIODIC_FLAG_r is equal to '1', the mobile station shall perform the
16 following:
17 – The mobile station shall set NUM_PILOTS_s to NUM_PILOTS_r.
18 – The mobile station shall set PERIODIC_INTERVAL_s to
19 PERIODIC_INTERVAL_r.
 - 20 • If PERIODIC_FLAG_r is equal to '0', the mobile station shall perform the
21 following:
22 – The mobile station shall set NUM_PILOTS_s to 0.
23 – The mobile station shall set PERIODIC_INTERVAL_s to 0.
 - 24 • The mobile station shall set THRESHOLD_FLAG_s to THRESHOLD_FLAG_r.
 - 25 • If THRESHOLD_FLAG_r is equal to '1', the mobile station shall perform the
26 following:
27 – The mobile station shall set PS_FLOOR_LOW_s to PS_FLOOR_LOW_r.
28 – The mobile station shall set PS_FLOOR_HIGH_s to PS_FLOOR_HIGH_r.
29 – The mobile station shall set PS_CEILING_LOW_s to PS_CEILING_LOW_r.
30 – The mobile station shall set PS_CEILING_HIGH_s to PS_CEILING_HIGH_r.
 - 31 • If THRESHOLD_FLAG_r is equal to '0', the mobile station shall perform the
32 following:
33 – The mobile station shall set PS_FLOOR_LOW_s to '0'.
34 – The mobile station shall set PS_FLOOR_HIGH_s to '0'.
35 – The mobile station shall set PS_CEILING_LOW_s to '0'.

- The mobile station shall set PS_CEILING_HIGH_s to '0'.

13. *Extended Supplemental Channel Assignment 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 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 *Extended Supplemental Channel Assignment 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 Channels specified in the *Extended Supplemental Channel Assignment Message* is greater than the maximum number of Supplemental Channels supported by the mobile station.
- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000100' (message field not in valid range), if PILOT_PN specified in the *Extended Supplemental Channel Assignment Message* is not in the Active Set.
- 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 the message includes a reverse Supplemental Channel assignment, and any of the following conditions is true:
 - any of the mobile station's reverse supplemental channel configuration parameter for the corresponding Supplemental Channel is NULL, or,
 - the Reverse Packet Data Channel is assigned.
- 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 the message includes a forward Supplemental Channel assignment and any of the mobile station's forward supplemental channel configuration parameter for the corresponding Supplemental Channel is NULL.

If none of the above conditions is true, the mobile station shall perform the following:

- The mobile station shall store REV_SCH_DTX_DURATION_r, Reverse Supplemental Channel Discontinuous Transmission Duration, as REV_SCH_DTX_DURATION_s at the action time of the message.
- The mobile station shall store the unit for START_TIME_UNIT_s = START_TIME_UNIT_r.
- The mobile station shall store USE_T_ADD_ABORT_r, Reverse Supplemental Channel assignment T_ADD abort indicator, as USE_T_ADD_ABORT_s.
- If IGNORE_ESCAM_s is equal to '1' and SCRM_SEQ_NUM_r is not present or is present and is not equal to SCRM_SEQ_NUM_s, then the mobile station shall

- 1 not process the remaining Reverse Supplemental Channel assignment
2 information in this message.
- 3 • If IGNORE_ESCAM_s is equal to '1' and SCRM_SEQ_NUM_r is present and is
4 equal to SCRM_SEQ_NUM_s, then the mobile station shall set
5 IGNORE_ESCAM_s to '0'.
 - 6 • If ADD_INFO_INCL_r is equal to '1', the message includes a Supplemental
7 Channel assignment (that is, NUM_FOR_SCH_r is not equal to '00' and/or
8 NUM_REV_SCH_r is not equal to '00'), and PILOT_GATING_USE_RATE is
9 equal to '1', the mobile station shall process the following information of the
10 *Extended Supplemental Channel Assignment Message* as follows:
 - 11 – The mobile station shall set FPC_PRI_CHAN_s = FPC_PRI_CHAN_r at the
12 action time of the message.
 - 13 • If REV_CFG_INCLUDED is equal to '1', for all the (NUM_REV_CFG_RECS +
14 1) occurrences of the reverse configuration record, the mobile station shall
15 store the REV_WALSH_ID matrix as follows:
 - 16 – REV_WALSH_ID_s[REV_SCH_ID_r][REV_SCH_NUM_BITS_IDX_r] =
17 REV_WALSH_ID_r
 - 18 • If NUM_REV_SCH_r is not equal to '00', then the mobile station shall store
19 the following information for each occurrence of the record and process the
20 Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:
 - 21 – REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] =
22 REV_SCH_START_TIME_INCL_r
 - 23 – If REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] is set to '1', set
24 REV_SCH_START_TIME_s[REV_SCH_ID_r] = REV_SCH_START_TIME_r
 - 25 – REV_SCH_DURATION_s[REV_SCH_ID_r] = REV_SCH_DURATION_r
 - 26 – REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r] = REV_SCH_NUM_BITS_IDX_r
 - 27 • If NUM_FOR_SCH_r is not equal to '00', then the mobile station shall store
28 the following information for each occurrence of the record and process the
29 Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:
 - 30 – FOR_SCH_START_TIME_INCL_s[FOR_SCH_ID_r] =
31 FOR_SCH_START_TIME_INCL_r
 - 32 – If FOR_SCH_START_TIME_INCL_s[FOR_SCH_ID_r] is set to '1', set
33 FOR_SCH_START_TIME_s[FOR_SCH_ID_r] = FOR_SCH_START_TIME_r
 - 34 – FOR_SCH_DURATION_s[FOR_SCH_ID_r] = FOR_SCH_DURATION_r
 - 35 – FOR_SCH_FER_REP_s[FOR_SCH_ID_r] = FOR_SCH_FER_REP_r
 - 36 – SCCL_INDEX_s[FOR_SCH_ID_r] = SCCL_INDEX_r
 - 37 – If SCH_BCMC_IND field is included the mobile station shall perform the
38 following:

- 1 + If SCH_BCMC_IND_r equals '1' and USE_ADD_PLCM_FOR_SCH_r
2 equals '1', set corresponding SCH_BCMC_IND[FOR_SCH_ID_r] to '1';
3 otherwise, set SCH_BCMC_IND[FOR_SCH_ID_r] = '0'.
- 4 - If SCH_BCMC_IND_r is included and equals '1' and
5 ADD_PLCM_FOR_SCH_INCL_r is included and is set to '1', the mobile
6 station shall store following fields:
7 + Set ADD_PLCM_FOR_SCH_TYPE_s to ADD_PLCM_FOR_SCH_TYPE_r.
8 + Set ADD_PLCM_FOR_SCH_35_s to ADD_PLCM_FOR_SCH_35_r if
9 ADD_PLCM_FOR_SCH_TYPE_r is equal to '1'.
- 10 - If SCH_BCMC_IND_r is included and equals '1', the mobile station shall
11 store following fields:
12 + USE_ADD_PLCM_FOR_SCH_s[FOR_SCH_ID_r] =
13 USE_ADD_PLCM_FOR_SCH_r
14 + FSCH_OUTERCODE_INCL_s[FOR_SCH_ID_r] =
15 FSCH_OUTERCODE_INCL_r
16 + If FSCH_OUTERCODE_INCL_r equals '1', the mobile station shall store
17 following fields:
18 o FSCH_OUTERCODE_RATE_s[FOR_SCH_ID_r] =
19 FSCH_OUTERCODE_RATE_r
20 o FSCH_OUTERCODE_OFFSET_s[FOR_SCH_ID_r] =
21 FSCH_OUTERCODE_OFFSET_r
- 22 • If FOR_CFG_INCLUDED is equal to '1', the mobile station shall perform the
23 following:
24 - Set FOR_SCH_FER_REP_s to FOR_SCH_FER_REP_r.
25 - If FOR_SCH_FER_REP_r is equal to '0', set SCH_TOT_FRAMES_s and
26 SCH_BAD_FRAMES_s to 0.
27 - Store NUM_FOR_CFG_RECS occurrences of Forward Supplemental
28 Channel Configuration associated with the identification of Forward
29 Supplemental Channel.
- 30 • For each record of the Forward Supplemental Channel Code list the mobile
31 station shall store the Forward Supplemental Channel Code list associated
32 with the FOR_SCH_ID_r as follows:
33 - NUM_SUP_SHO_s[FOR_SCH_ID_r][SCCL_INDEX_r] = NUM_SUP_SHO_r.
34 - The mobile station shall determine,
35 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the number of
36 information bits per Forward Supplemental Channel frame identified by
37 FOR_SCH_ID and corresponding to the index SCCL_INDEX according to
38 the following rules:
39 + If FSCH_VAR_TABLE_IDS_s[FOR_SCH_ID_r] is equal to '000', then:

- 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 the number of information bits per
5 frame, N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and
6 number of CRC bits per frame,
7 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], according
8 to Table 3.7.3.3.2.37-2 using FOR_SCH_NUM_BITS_IDX_r as the
9 index to the table.
- 10 o If USE_FLEX_NUM_BITS_s is equal to '1' and
11 FSCH_NBIT_TABLE_IDS[FOR_SCH_ID_r] is not equal to '0000',
12 then the mobile station shall set the number of CRC bits per
13 frame, FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
14 using Table 3.7.5.20-1 and
15 CRC_LEN_IDX_s[FSCH_NBIT_TABLE_IDS[FOR_SCH_ID_r]][FOR_SC
16 H_NUM_BITS_IDX_r] 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_r,
19 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], to
20 NUM_BITS_s[FSCH_NBIT_TABLE_IDS[FOR_SCH_ID_r]][FOR_SCH_N
21 UM_BITS_IDX_r].
- 22 + If FSCH_VAR_TABLE_IDS[FOR_SCH_ID_r] is not equal to '000', then:
- 23 o The mobile station shall set
24 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r], the set of indices to the
25 number of information bits per frame as follows:
- 26 ◇ If FOR_SCH_NUM_BITS_IDX_r is equal to '0000', then
27 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] = {
28 FOR_SCH_NUM_BITS_IDX_r },
- 29 ◇ otherwise the mobile station shall set (initialize)
30 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] =
31 {FOR_SCH_NUM_BITS_IDX_r} and for i=1, ...,
32 FOR_SCH_NUM_BITS_IDX_r the mobile station shall add
33 FOR_SCH_NUM_BITS_IDX_r -
34 VAR_FSCH_RATE_OFFSET_s[FOR_SCH_ID_r][FOR_SCH_NUM_
35 BITS_IDX_r][i] to the set specified by
36 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]

- 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_s[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 table.
- 11 o If USE_FLEX_NUM_BITS_s is equal to '1' and
12 FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r] is not equal to '0000',
13 then
- 14 ◇ the mobile station shall set
15 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the set of
16 number of information bits per frame as follows.
17 The *i*th member of the set
18 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] is equal to
19 NUM_BITS_s[FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r]]
20 [N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*]], where
21 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*] denotes the *i*th
22 member of the set N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]
23 and,
- 24 ◇ the mobile station shall set
25 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the set
26 of number CRC bits per frame as follows.
27 The *i*th member of the set
28 FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] using
29 Table 3.7.5.20-1 and
30 CRC_LEN_IDX_s[FSCH_NBIT_TABLE_IDS_s[FOR_SCH_ID_r]][N_FS
31 CH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*]] as the index to the
32 table, where N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r][*i*]
33 denotes the *i*th member of the set
34 N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r].
- 35 – For the *i*th record of the Forward Supplemental Channel Active Set (for all
36 values of *i* between 1 and NUM_SUP_SHO+1) specified in this message,
37 the mobile station shall store the following entries corresponding to the
38 SCCL_INDEX_r as follows:
- 39 + PILOT_PN_s[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] = PILOT_PN_r,
- 40 + Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_r. If
41 ADD_PILOT_REC_INCL_r equals '1', the mobile station shall store the
42 following:

- 1 o Set the PILOT_REC_TYPE field of PILOT_REC to
2 PILOT_REC_TYPE_r.
- 3 o If PILOT_REC_TYPE_r equals '000', the mobile station shall set the
4 TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_r
5 and set the TD_MODE field of PILOT_REC to TD_MODE_r.
- 6 o If PILOT_REC_TYPE_r is equal to '001', the mobile station shall.
- 7 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 8 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
9 AUX_PILOT_WALSH_r with the Walsh Code length specified by
10 WALSH_LENGTH_r.
- 11 o If NGHBR_PILOT_REC_TYPE_r is equal to '010', the mobile station
12 shall:
- 13 – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
- 14 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
15 AUX_WALSH_r with the Walsh Code length specified by
16 WALSH_LENGTH_r.
- 17 – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to
18 AUX_TD_POWER_LEVEL_r.
- 19 – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_r.
- 20 o If PILOT_REC_TYPE_r is equal to '011', the mobile station shall:
- 21 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
22 SR3_PRIMARY_PILOT_r.
- 23 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
24 SR3_PILOT_POWER1_r.
- 25 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
26 SR3_PILOT_POWER2_r.
- 27 o If PILOT_REC_TYPE_r is equal to '100', the mobile station shall:
- 28 – Set the SR3_PRIMARY_PILOT field of PILOT_REC to
29 SR3_PRIMARY_PILOT_r.
- 30 – Set the SR3_PILOT_POWER1 field of PILOT_REC to
31 SR3_PILOT_POWER1_r.
- 32 – Set the SR3_PILOT_POWER2 field of PILOT_REC to
33 SR3_PILOT_POWER2_r.
- 34 – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- 35 – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
36 AUX_PILOT_WALSH_r with the Walsh Code length specified by
37 WALSH_LENGTH_r.

- 1 – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1
2 field of PILOT_REC to QOF1_r and set the
3 AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
4 AUX_PILOT_WALSH1_r with the Walsh Code length specified
5 by WALSH_LENGTH1_r.
- 6 – Otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to
7 QOF_r and set the AUX_PILOT_WALSH_CODE1 field of
8 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
9 length specified by WALSH_LENGTH_r.
- 10 – If ADD_INFO_INCL2_r is equal to ‘1’, set the AUX_PILOT_QOF2
11 field of PILOT_REC to QOF2_r and set the
12 AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
13 AUX_PILOT_WALSH2_r with the Walsh Code length specified
14 by WALSH_LENGTH2_r.
- 15 – Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to
16 QOF_r and set the AUX_PILOT_WALSH_CODE2 field of
17 PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code
18 length specified by WALSH_LENGTH_r.
- 19 + QOF_MASK_ID_SCH_s[FOR_SCH_ID_r][SCCL_INDEX_r][i] =
20 QOF_MASK_ID_SCH_r,
- 21 + FOR_SCH_CC_INDEX_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]=
22 CODE_CHAN_SCH_r.
- 23 + If the mobile station supports Code Combining Soft Handoff, and
24 CCSH_INCLUDED is set to ‘1’, set
25 CCSH_ENCODER_TYPE_s[FOR_SCH_ID_r][SCCL_INDEX_r][i]=
26 CCSH_ENCODER_TYPE_r.
- 27 + If the mobile station supports Code Combining Soft Handoff, and
28 CCSH_INCLUDED is set to ‘0’, set
29 CCSH_ENCODER_TYPE_s[FOR_SCH_ID_r][SCCL_INDEX_r][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_r is equal to ‘1’, the mobile station shall:
- 37 + Set FPC_MODE_SCH_s to FPC_MODE_SCH_r.
- 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_s to FPC_SEC_CHAN_r.

- 1 + Set FPC_BCMC_CHAN_s to FPC_BCMC_CHAN_r.
- 2 – If NUM_SUP_r is included and not equal to ‘00’, for each Supplemental
- 3 Channel included in the message, the mobile station shall:
- 4 + Set SCH_ID_s to SCH_ID_r.
- 5 + Set FPC_SCH_FER_s to FPC_SCH_FER_r.
- 6 + Set FPC_SCH_INIT_SETPT_s as follows:
- 7 o If FPC_SCH_INIT_SETPT_OP_r is set to ‘0’, set
- 8 FPC_SCH_INIT_SETPT_s to FPC_SCH_INIT_SETPT_r.
- 9 o If FPC_SCH_INIT_SETPT_OP_r is set to ‘1’:
- 10 ◊ If FPC_PRI_CHAN_r is equal to ‘0’, set FPC_SCH_INIT_SETPT_s
- 11 to (FPC_FCH_CURR_SETPT_s + FPC_SCH_INIT_SETPT_r).
- 12 ◊ Otherwise, set FPC_SCH_INIT_SETPT_s to
- 13 (FPC_DCCH_CURR_SETPT_s + FPC_SCH_INIT_SETPT_r).
- 14 + Set FPC_SCH_MIN_SETPT_s to FPC_SCH_MIN_SETPT_r.
- 15 + Set FPC_SCH_MAX_SETPT_s to FPC_SCH_MAX_SETPT_r.
- 16 – If FPC_THRESH_SCH_INCL is included and equal to ‘1’, the mobile
- 17 station shall set FPC_SETPT_THRESH_SCH_s to SETPT_THRESH_SCH_r.
- 18 • If RPC_INCL is equal to ‘1’, the mobile station shall set RLGAIN_SCH_PILOT_s
- 19 to RLGAIN_SCH_PILOT_r.
- 20 • If NUM_3X_CFG_r 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_s =
- 23 NUM_3X_CFG_r).
- 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_r as follows:
- 27 – For the *i*th 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 to
- 30 the SCCL_INDEX_r as follows:
- 31 + If 3X_SCH_LOW_INCL_r equals ‘1’, set
- 32 QOF_MASK_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] to
- 33 QOF_MASK_ID_SCH_LOW_r and
- 34 FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] to
- 35 CODE_CHAN_SCH_LOW_r. Otherwise, set
- 36 QOF_MASK_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] to
- 37 QOF_MASK_ID_SCH[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] and
- 38 FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][*i*] to
- 39 CODE_CHAN_SCH[FOR_SCH_ID_r][SCCL_INDEX_r][*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*, the
19 mobile station shall start processing F-FCH and start transmitting on R-
20 FCH at the action time of the message. The mobile station shall establish
21 the Fundamental Channel with the same configuration as previously
22 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 channel
25 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_r is equal to '1', the mobile station shall set
- 2 FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '10' (i.e., 80 ms frame
- 3 length).
- 4 - F_MAX_RATE_IDX_s[FOR_SCH_ID_r] = MAX_RATE_r.
- 5 • If REV_SCH_CC_INCL_r equals '1', the mobile station shall store the
- 6 NUM_REV_SCH_r 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_r]_s = REV_SCH_ID_r).
- 10 - The mobile station shall store the Reverse Supplemental Channel
- 11 Multiplex Option (REV_SCH_MUX[REV_SCH_ID_r]_s = REV_SCH_MUX_r).
- 12 - The mobile station shall store the Reverse Supplemental Channel Radio
- 13 Configuration (REV_SCH_RC[REV_SCH_ID_r]_s = SCH_RC_r).
- 14 - The mobile station shall store the Reverse Supplemental Channel Coding
- 15 Type (REV_SCH_CODING[REV_SCH_ID_r]_s = CODING_r).
- 16 - If FRAME_40_USED_r and FRAME_80_USED_r are both equal to '0', the
- 17 mobile station shall set REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to
- 18 '00' (i.e., 20 ms frame length).
- 19 - If FRAME_40_USED_r is equal to '1', the mobile station shall set
- 20 REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '01' (i.e., 40 ms frame
- 21 length).
- 22 - If FRAME_80_USED_r is equal to '1', the mobile station shall set
- 23 REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '10' (i.e., 80 ms frame
- 24 length).
- 25 - R_MAX_RATE_IDX_s[REV_SCH_ID_r] = MAX_RATE_r.

26 14. *Forward Supplemental Channel Assignment Mini Message:* The mobile station shall
27 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_s[FOR_SCH_ID_r] to '1'
- 35 • FOR_SCH_START_TIME_s[FOR_SCH_ID_r] = FOR_SCH_START_TIME_r
- 36 • FOR_SCH_DURATION_s[FOR_SCH_ID_r] = FOR_SCH_DURATION_r
- 37 • SCCL_INDEX_s[FOR_SCH_ID_r] = SCCL_INDEX_r
- 38 • If PILOT_GATING_USE_RATE is set to '1', the mobile station shall perform
- 39 the following:

- 1 – The mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall
2 start the continuous reverse pilot at the specified action time and, if a F-
3 PDCH is assigned, the mobile station shall start the continuous R-
4 CQICH as defined in [3].
- 5 – If a F-PDCH is not assigned and the Fundamental Channel was
6 previously established prior to transitioning to the *Control Hold Mode*, the
7 mobile station shall start processing F-FCH and start transmitting on R-
8 FCH at the action time of the message. The mobile station shall establish
9 the Fundamental Channel with the same configuration as previously
10 used.

11 15. *Reverse Supplemental Channel Assignment Mini Message*: The mobile station shall
12 process this message as follows:

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 any of the mobile station’s reverse supplemental channel
16 configuration parameters for the corresponding Supplemental Channel is NULL,
17 or if the Reverse Packet Data Channel is assigned.

18 If IGNORE_ESCAM_s is equal to ‘1’, the mobile station shall not process the
19 Reverse Supplemental Channel assignment information in this message.

20 Otherwise, the mobile station shall store the following information and process
21 the Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:

- 22 • Set REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] to ‘1’
- 23 • REV_SCH_START_TIME_s[REV_SCH_ID_r] = REV_SCH_START_TIME_r
- 24 • REV_SCH_DURATION_s[REV_SCH_ID_r] = REV_SCH_DURATION_r
- 25 • REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r] = REV_SCH_NUM_BITS_IDX_r
- 26 • If PILOT_GATING_USE_RATE is set to ‘1’, the mobile station shall perform
27 the following:

- 28 – The mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall
29 start the continuous reverse pilot at the specified action time and, if a F-
30 PDCH is assigned, the mobile station shall start the continuous R-
31 CQICH as defined in [3].
- 32 – If a F-PDCH is not assigned and the Fundamental Channel was
33 previously established prior to transitioning to the *Control Hold Mode*, the
34 mobile station shall start processing F-FCH and start transmitting on R-
35 FCH at the action time of the message. The mobile station shall establish
36 the Fundamental Channel with the same configuration as previously
37 used.

38 2.6.6.2.5.1.1 Processing of the Forward Supplemental Burst Assignment

39 A Forward Supplemental Assignment specifies the explicit start time identified by
40 FOR_SCH_START_TIME or the implicit start time (if FOR_SCH_START_TIME_INCL is set to

1 '0'), FOR_SCH_DURATION, and SCCL_INDEX of a forward burst assignment. The time
 2 interval of duration is specified by FOR_SCH_DURATION (see Table 3.7.3.3.2.37-3) and
 3 starts at the time specified by the explicit start time FOR_SCH_START_TIME or the implicit
 4 start time (if FOR_SCH_START_TIME_INCL is set to '0'). This time interval for a Forward
 5 Supplemental Assignment is called the Forward Supplemental Assignment Interval. A
 6 value of FOR_SCH_DURATION equal to '1111' indicates infinite duration. The variable
 7 SCCL_INDEX_s[FOR_SCH_ID] specifies the rate, QOF index and the Active Set for the
 8 Forward Supplemental Channel identified by FOR_SCH_ID for a given Forward
 9 Supplemental Assignment. A value of FOR_SCH_DURATION equal to '0000' indicates that
 10 the mobile station should stop processing the forward Supplemental Channels at the
 11 explicit start time specified by FOR_SCH_START_TIME or the implicit start time (if
 12 FOR_SCH_START_TIME_INCL is set to '0'). The implicit start time is the time occurring no
 13 later than the first 80 ms boundary (relative to System Time) which occurs at least 80 ms
 14 after the end of the frame containing the last bit of the *Extended Supplemental Channel*
 15 *Assignment Message* or the action time of the *Universal Handoff Direction Message*.

16 If the mobile station receives an *Extended Supplemental Channel Assignment Message* with
 17 FOR_SCH_CC_INCL set to '1', the mobile station shall begin to use the Forward
 18 Supplemental Channel configuration specified by this message at the start time of this
 19 Forward Supplemental Assignment.

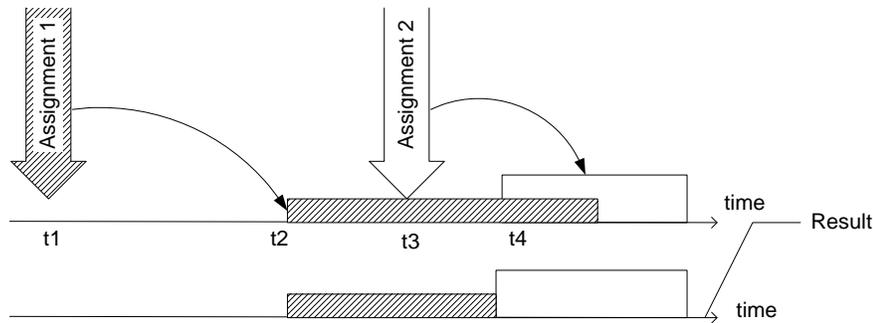
20 For each Forward Supplemental Assignment the mobile station shall determine the start
 21 time for processing forward supplemental channel as the time for which the following
 22 equation holds:

$$23 \quad (\lfloor t / (\text{START_TIME_UNIT}_s + 1) \rfloor - \text{FOR_SCH_START_TIME}_r) \bmod 32 = 0,$$

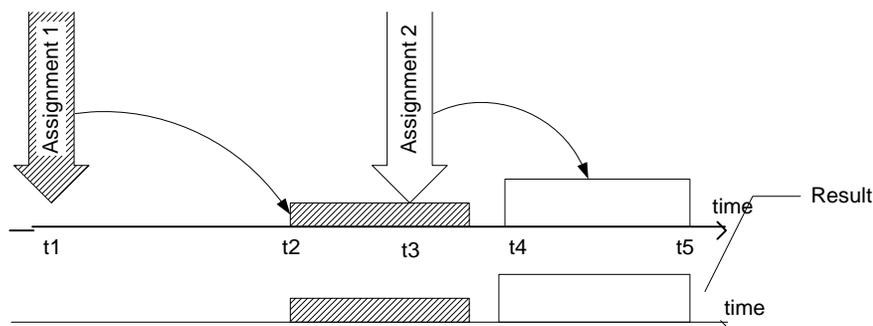
24 where t is the System Time in units of 20 ms.

25 Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Forward Supplemental
 26 Assignment is received while the mobile station is processing the forward supplemental
 27 channel according to a previously received assignment. Two cases are displayed in Figure
 28 2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the start time of the
 29 second assignment and Case b) where the first assignment ends before the second one
 30 starts.

31



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.

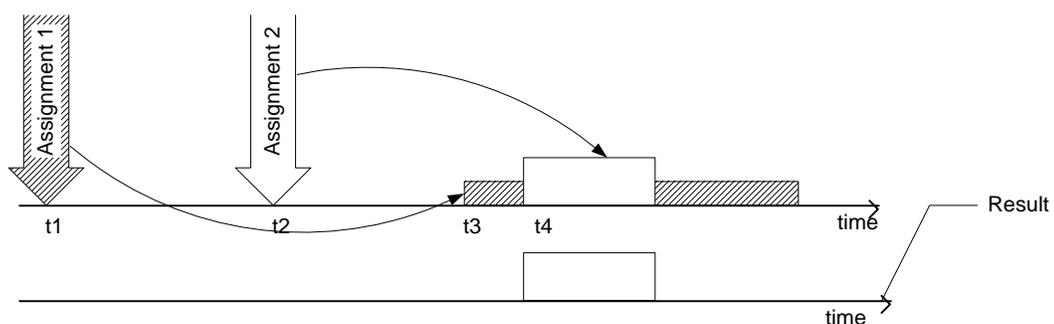


Figure 2.6.6.2.5.1.1-2. New Supplemental Channel Assignment Received before a Previous Supplemental Channel Assignment starts

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.

1 For each Forward Supplemental Channel assignment corresponding to each Forward
 2 Supplemental Channel (identified by FOR_SCH_ID), the mobile station should perform the
 3 following:

- 4 • If FOR_SCH_DURATION_s[FOR_SCH_ID] is not equal to '0000', then
 - 5 - If the mobile station is currently processing the Forward Supplemental Channel
 6 identified by FOR_SCH_ID, then the mobile station should continue processing
 7 the Forward Supplemental Channel identified by FOR_SCH_ID according to the
 8 Forward Supplemental Assignment previously received for the Forward
 9 Supplemental Channel identified by FOR_SCH_ID up to the time specified by
 10 the FOR_SCH_START_TIME_s[FOR_SCH_ID] (i.e., the mobile station should stop
 11 processing the forward supplemental channel identified by FOR_SCH_ID at
 12 either the time specified by the start time of the new assignment, or at the time
 13 the previously received assignment ends, whichever time is earlier).

14 At the time specified by FOR_SCH_START_TIME_s[FOR_SCH_ID], the mobile
 15 station should start processing the Forward Supplemental Channel identified by
 16 FOR_SCH_ID for a duration of time specified by
 17 FOR_SCH_DURATION[FOR_SCH_ID]_s with FOR_SCH_MUX_s[FOR_SCH_ID_r],
 18 FOR_SCH_RC_s[FOR_SCH_ID_r], FOR_SCH_CODING_s[FOR_SCH_ID_r],
 19 FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r], the QOF index, the Supplemental
 20 Channel Active Set indexed by SCCL_INDEX_s[FOR_SCH_ID], and number of
 21 information bits per frame (or set of number of bits per frame if
 22 FSCH_VAR_TABLE_IDS_s[FOR_SCH_ID_r] is not equal to '000') specified by
 23 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r].

24 If the set of number of bits per frame,
 25 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], has more than one member
 26 and F_INC_RATE_ALLOWED_s is equal to '0', then the following rule applies for
 27 the duration of this assignment:

- 28 + Once the mobile station determines the forward Supplemental Channel
 29 number of bits per frame, the number of bits per frame in the subsequent
 30 Forward Supplemental Channel frames may be any member of the set
 31 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] which is smaller or equal
 32 to the number of bits in the current frame.
- 33 - Otherwise, if the mobile station is not currently processing the Forward
 34 Supplemental Channel identified by FOR_SCH_ID, then at the time specified by
 35 FOR_SCH_START_TIME_s[FOR_SCH_ID], the mobile station should start
 36 processing the Forward Supplemental Channel identified by FOR_SCH_ID for a
 37 duration of time specified by FOR_SCH_DURATION_s[FOR_SCH_ID] with the
 38 QOF index, the Supplemental Channel Active Set indexed by
 39 SCCL_INDEX_s[FOR_SCH_ID], and number of bits per frame (or set of number of
 40 information bits per frame if FSCH_VAR_TABLE_IDS_s[FOR_SCH_ID_r] is not equal
 41 to '000') specified by N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r].

42 If the set of number of bits per frame,
 43 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and

1 F_INC_RATE_ALLOWED_s is equal to '0', has more than one member, then the
2 following rule applies for the duration of this assignment:

3 + Once the mobile station determines the forward Supplemental Channel
4 number of bits per frame, the number of bits per frame in the subsequent
5 Forward Supplemental Channel frames may be any member of the set
6 N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] which is smaller or equal
7 to the number of bits in the current frame.

8 • If FOR_SCH_DURATION_s[FOR_SCH_ID] is equal to '0000', the mobile station should
9 perform the following:

10 - If the mobile station is currently processing the Forward Supplemental Channel
11 identified by FOR_SCH_ID, then the mobile station should continue processing
12 the Forward Supplemental Channel identified by FOR_SCH_ID according to the
13 Forward Supplemental Assignment previously received for the Forward
14 Supplemental Channel identified by FOR_SCH_ID up to the time specified by
15 the implicit start time (FOR_SCH_START_TIME_INCL_s is set to '0') or the explicit
16 start time (FOR_SCH_START_TIME_INCL_s is set to '1') (i.e., the mobile station
17 should stop processing the forward supplemental channel identified by
18 FOR_SCH_ID at the time specified by the implicit start time or the explicit start
19 time, or at the time the previously received assignment ends, whichever time is
20 earlier). The mobile station should cancel the pending Forward Supplemental
21 Channel assignment if any.

22 + If FOR_SCH_START_TIME_INCL_s is equal to '1', the mobile station should
23 stop processing the Forward Supplemental Channel identified by
24 FOR_SCH_ID at the time specified by
25 FOR_SCH_START_TIME_s[FOR_SCH_ID].

26 + If FOR_SCH_START_TIME_INCL_s is equal to '0', the mobile station should
27 stop processing the Forward Supplemental Channel identified by
28 FOR_SCH_ID no later than the first 80 ms boundary (relative to System
29 Time) occurring at least 80 ms after the end of the frame containing the last
30 bit of the *Extended Supplemental Channel Assignment Message* or the action
31 time of the *Universal Handoff Direction Message*.

32 - Otherwise, if the mobile station is not currently processing the Forward
33 Supplemental Channel identified by FOR_SCH_ID, the mobile station should
34 cancel the pending Forward Supplemental Channel assignment if any.

35 2.6.6.2.5.1.2 Processing of the Reverse Supplemental Burst Assignment

36 A Reverse Supplemental Assignment specifies the explicit start time identified by
37 REV_SCH_START_TIME or the implicit start time (if REV_SCH_START_TIME_INCL is set to
38 '0'), REV_SCH_DURATION, and REV_SCH_NUM_BITS_IDX of a reverse burst assignment.
39 The time interval of duration is specified by REV_SCH_DURATION (see Table 3.7.3.3.2.37-
40 3) and starts at the time specified by the explicit start time REV_SCH_START_TIME or the
41 implicit start time (if REV_SCH_START_TIME_INCL is set to '0'). This time interval for a
42 Reverse Supplemental Assignment is called the reverse supplemental assignment interval.

1 A value of REV_SCH_DURATION equal to '1111' indicates infinite duration. A value of
 2 REV_SCH_DURATION equal to '0000' indicates that the mobile station should stop
 3 transmitting the reverse Supplemental Channels at the explicit start time specified by
 4 REV_SCH_START_TIME or the implicit start time (if REV_SCH_START_TIME_INCL is set to
 5 '0'). The implicit start time is the time occurring no later than the first 80 ms boundary
 6 (relative to System Time) which occurs at least 80 ms after the end of the frame containing
 7 the last bit of the *Extended Supplemental Channel Assignment Message* or the action time of
 8 the *Universal Handoff Direction Message*.

9 If the mobile station receives an *Extended Supplemental Channel Assignment Message* with
 10 REV_SCH_CC_INCL set to '1', the mobile station shall begin to use the Reverse
 11 Supplemental Channel configuration specified by this message at the start time of this
 12 Reverse Supplemental Assignment.

13 For each Reverse Supplemental Assignment the mobile station shall determine the start
 14 time for processing reverse supplemental channel as the time for which the following
 15 equation holds:

$$\lfloor t / (\text{START_TIME_UNIT}_s + 1) \rfloor - \text{REV_SCH_START_TIME}_r \bmod 32 = 0,$$

17 where t is the System Time in units of 20 ms.

18 Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Reverse Supplemental
 19 Assignment is received while the mobile station is transmitting on the reverse
 20 supplemental channel according to a previously received assignment. Two cases are
 21 displayed in Figure 2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the
 22 start time of the second assignment and Case b) where the first assignment ends before the
 23 second one starts.

24 Figure 2.6.6.2.5.1.1-2 shows an example scenario in which the mobile station receives a
 25 second Reverse Supplemental Assignment before it starts transmitting on the supplemental
 26 channel according to the first assignment. In this case, the second assignment simply
 27 replaces the first assignment.

28 For each Reverse Supplemental Channel assignment corresponding to each Reverse
 29 Supplemental Channel (identified by REV_SCH_ID), the mobile station shall perform the
 30 following:

- 31 • The mobile station shall determine, $N_{\text{RSCH_BITS}_s}[\text{REV_SCH_ID}_r]$, the number of
 32 information bits per Reverse Supplemental Channel frame identified by
 33 REV_SCH_ID according to the following rules:
 - 34 - If $\text{RSCH_VAR_TABLE_ID}_s[\text{REV_SCH_ID}_r]$ is equal to '000', then:
 - 35 + If $\text{USE_FLEX_NUM_BITS}_s$ is equal to '0' or if $\text{USE_FLEX_NUM_BITS}_s$ is equal
 36 to '1' and $\text{RSCH_NBIT_TABLE_ID}_s[\text{REV_SCH_ID}_r]$ is equal to '0000', then the
 37 mobile station shall set the number of information bits per frame,
 38 $N_{\text{RSCH_BITS_SET}_s}[\text{REV_SCH_ID}_r]$ and number of CRC bits per frame,
 39 $\text{RSCH_CRC_LEN_SET}_s[\text{REV_SCH_ID}_r]$, according to Table 3.7.3.3.2.37-2
 40 using $\text{REV_SCH_NUM_BITS_IDX}_r$ as the index to the table.

- 1 + If USE_FLEX_NUM_BITS_s is equal to '1' and
2 RSCH_NBIT_TABLE_IDS[REV_SCH_ID_r] is not equal to '0000', then the
3 mobile station shall set the number of CRC bits per frame,
4 RSCH_CRC_LEN_SET_s[REV_SCH_ID_r], according to Table 3.7.5.20-1 using
5 CRC_LEN_IDX_s[RSCH_NBIT_TABLE_IDS[REV_SCH_ID_r]][REV_SCH_NUM_BI
6 TS_IDX_r] as the index to the table. The mobile station shall also set the
7 number of information bits per frame, N_SCH_BITS_SET_s[REV_SCH_ID_r], to
8 NUM_BITS_s[RSCH_NBIT_TABLE_IDS[REV_SCH_ID_r]]
9 [REV_SCH_NUM_BITS_IDX_r].
- 10 - If RSCH_VAR_TABLE_IDS[REV_SCH_ID_r] is not equal to '000', then:
- 11 + The mobile station shall set N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r], the set
12 of indices to the number of information bits per frame as follows:
- 13 ○ If REV_SCH_NUM_BITS_IDX_r is equal to '0000', then
14 N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r] = {REV_SCH_NUM_BITS_IDX_r},
- 15 ○ otherwise, the mobile station shall set (initialize)
16 N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r] = { REV_SCH_NUM_BITS_IDX_r
17 }, and for i=1, ..., REV_SCH_NUM_BITS_IDX_r the mobile station shall
18 add REV_SCH_NUM_BITS_IDX_r -
19 VAR_RSCH_RATE_OFFSET_s[REV_SCH_ID_r][REV_SCH_NUM_BITS_IDX_r][i
20] to the set specified by N_RSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]
- 21 + If USE_FLEX_NUM_BITS_s is equal to '0' or if USE_FLEX_NUM_BITS_s is equal
22 to '1' and RSCH_NBIT_TABLE_IDS[REV_SCH_ID_r] is equal to '0000', then the
23 mobile station shall determine N_RSCH_BITS_SET_s[REV_SCH_ID_r], the set
24 of number of information bits per frame as follows. The *i*th member of the set
25 N_RSCH_BITS_SET_s[REV_SCH_ID_r] is obtained using Table 3.7.3.3.2.37-1
26 and the *i*th member of the set N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r] as the
27 index to the table.
- 28 + If USE_FLEX_NUM_BITS_s is equal to '1' and
29 RSCH_NBIT_TABLE_IDS[FOR_SCH_ID_r] is not equal to '0000', then
- 30 ○ the mobile station shall set N_RSCH_BITS_SET_s[REV_SCH_ID_r], the set
31 of number of information bits per frame as follows.
32 The *i*th member of the set N_RSCH_BITS_SET_s[REV_SCH_ID_r] is equal to
33 NUM_BITS_s[SCH_NBIT_TABLE_IDS[REV_SCH_ID_r]]
34 [N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r][i]], where
35 N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r][i] denotes the *i*th member of the
36 set N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r].

- 1 ○ the mobile station shall set $RSCH_CRC_LEN_SET_s[REV_SCH_ID_r]$, the
2 set of number of information bits per frame as follows.
3 The i^{th} member of the set $RSCH_CRC_LEN_IDX_SET_s[REV_SCH_ID_r]$ is
4 equal to
5 $CRC_LEN_IDX_s[RSCH_NBIT_TABLE_ID_s[REV_SCH_ID_r]][N_RSCH_BITS_I$
6 $DX_SET_s[REV_SCH_ID_r][i]]$, where
7 $N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r][i]$ denotes the i^{th} member of the
8 set $N_RSCH_BITS_IDX_SET_s[REV_SCH_ID_r]$.
- 9 • If $REV_SCH_DURATION_s[REV_SCH_ID]$ 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 $REV_WALSH_ID_s[REV_SCH_ID][REV_SCH_NUM_BITS_IDX[REV_SCH_ID_r]]$
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 $REV_SCH_START_TIME_s[REV_SCH_ID_r]$ (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 $REV_SCH_START_TIME_s[REV_SCH_ID_r]$, the mobile
22 station may start transmitting on the Reverse Supplemental Channel identified
23 by REV_SCH_ID with $REV_SCH_MUX_s[REV_SCH_ID_r]$,
24 $REV_SCH_RC_s[REV_SCH_ID_r]$, $REV_SCH_CODING_s[REV_SCH_ID_r]$,
25 $REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r]$, the Walsh cover specified by
26 $REV_WALSH_ID_s[REV_SCH_ID][REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r]]$ and
27 number of bits per frame (or set of number of information bits per frame if
28 $RSCH_VAR_TABLE_ID_s[REV_SCH_ID_r]$ is not equal to '000') specified by
29 $N_RSCH_BITS_SET_s[REV_SCH_ID_r]$.
- 30 If the set of number of bits per frame, $N_RSCH_BITS_SET_s[REV_SCH_ID_r]$, has
31 more than one member and $R_INC_RATE_ALLOWED_s$ 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 specified by REV_SCH_ID , where n is a member of
35 the set $N_RSCH_BITS_SET_s[REV_SCH_ID_r]$, 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.
- 38 - If the mobile station is not currently transmitting on the Reverse Supplemental
39 Channel identified by $REV_SCH_ID_r$, then at the time specified by
40 $REV_SCH_START_TIME_s[REV_SCH_ID_r]$, the mobile station may start
41 transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID
42 with the Walsh cover specified by
43 $REV_WALSH_ID_s[REV_SCH_ID][REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r]]$ and

1 number of bits per frame (or set of number of information bits per frame if
 2 RSCH_VAR_TABLE_IDS_s[REV_SCH_ID_r] is not equal to '000') specified by
 3 N_RSCH_BITS_SET_s[REV_SCH_ID_r]. If the set of number of bits per frame,
 4 N_RSCH_BITS_SET_s[REV_SCH_ID_r], has more than one member and
 5 R_INC_RATE_ALLOWED_s is equal to '0', then the following rule applies for the
 6 duration of this assignment:

- 7 + Once the mobile station transmits n number of bits per Reverse
 8 Supplemental Channel specifies by REV_SCH_ID, where n is a member of
 9 the set N_RSCH_BITS_SET_s[REV_SCH_ID_r], the mobile station shall not
 10 transmit at a rate higher than the one specifies by n information bits per
 11 frame for the duration of the assignment.
- 12 • If REV_SCH_DURATION_s[REV_SCH_ID_r] is equal to '0000', the mobile station shall
 13 perform the followings:
 - 14 - If the mobile station is currently transmitting on the Reverse Supplemental
 15 Channel identified by REV_SCH_ID, then the mobile station may continue
 16 transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID
 17 with the Walsh cover specified by
 18 REV_WALSH_IDS[REV_SCH_ID][REV_SCH_NUM_BITS_IDX[REV_SCH_ID_r]]
 19 according to the current Reverse Supplemental Assignment for the Reverse
 20 Supplemental Channel identified by REV_SCH_ID up to the time specified by
 21 the implicit start time (if REV_SCH_START_TIME_INCL_s is equal to '1') or the
 22 explicit start time (if REV_SCH_START_TIME_INCL_s is equal to '1') (i.e., the
 23 mobile station shall stop transmitting on the reverse supplemental channel
 24 identified by REV_SCH_ID at the implicit start time or the explicit start time, or
 25 at the time the previously received assignment ends, whichever time is earlier).
 26 The mobile station shall cancel the pending Reverse Supplemental Channel
 27 assignment if any.
 - 28 + If REV_SCH_START_TIME_INCL_s is equal to '1', the mobile station shall stop
 29 transmitting on the Reverse Supplemental Channel identified by
 30 REV_SCH_ID_r at the time specified by
 31 REV_SCH_START_TIME_s[REV_SCH_ID_r].
 - 32 + If REV_SCH_START_TIME_INCL_s is equal to '0', the mobile station shall stop
 33 transmitting on the Reverse Supplemental Channel identified by
 34 REV_SCH_ID_r no later than the first 80 ms boundary (relative to System
 35 Time) occurring at least 80 ms after the end of the frame containing the last
 36 bit of the *Extended Supplemental Channel Assignment Message* or the action
 37 time of the *Universal Handoff Direction Message*.
 - 38 - Otherwise, if the mobile is not currently transmitting on the Reverse
 39 Supplemental Channel identified by REV_SCH_ID, the mobile station shall
 40 cancel the pending Forward Supplemental Channel assignment if any.
- 41 • If REV_SCH_DTX_DURATION_s is not equal to '1111', the mobile station shall
 42 perform the following:

- 1 - The mobile station shall maintain a
2 REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_ID_r] counter counting
3 discontinuous transmission time in units of 20 ms as follows:
- 4 + The mobile station shall reset the
5 REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_ID_r] counter to 0:
- 6 ○ For each Reverse Supplemental Channel assignment corresponding to
7 REV_SCH_ID_r, at action time specified by the REV_SCH_START_TIME_r
8 field for that assignment, if included; otherwise at the action time of the
9 message.
- 10 ○ Each time the mobile station resumes transmission on Reverse
11 Supplemental Channelc after discontinued operation on the Reverse
12 Supplemental Channel.
- 13 + The mobile station shall increment the
14 REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_ID_r] counter by one
15 at each 20ms interval for which the mobile station is not transmitting on the
16 Reverse Supplemental Channel during the Reverse Supplemental Channel
17 duration.
- 18 - If the REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_ID_r] counter value
19 exceeds REV_SCH_DTX_DURATION_s (i.e., the mobile station discontinues
20 transmission on the Reverse Supplemental Channel for more than the duration
21 specified by REV_SCH_DTX_DURATION_s), the mobile station shall perform the
22 following:
- 23 + The mobile station shall not resume transmission on the Reverse
24 Supplemental Channel corresponding to REV_SCH_ID_r.
- 25 + The mobile station shall send an indication to each affected service instance
26 indicating that the mobile station has terminated transmission on the
27 supplemental channel corresponding to REV_SCH_ID_r due to expiration of
28 the discontinued transmission period.

29 2.6.6.2.5.2 Processing of Reverse Traffic Channel Handoff Messages

30 The mobile station sends the following messages on the Reverse Traffic Channel in support
31 of handoff when its transmitter is enabled, following the receipt of a *forward dedicated*
32 *channel acquired* indication from Layer 2 (see [4]):

33 1. *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement*

34 *Message*: The mobile station shall send an autonomous *Pilot Strength Measurement*
35 *Message* if P_REV_IN_USE_s is less than seven or *Extended Pilot Strength*
36 *Measurement Message* if P_REV_IN_USE_s is equal to or greater than seven in
37 assured mode. The mobile station shall send either *Pilot Strength Measurement*
38 *Message* or *Extended Pilot Strength Measurement Message* containing measurements
39 consistent with the event whenever any of the following events occur:

- 40 • P_REV_IN_USE_s is less than or equal to three or SOFT_SLOPE_s is equal to
41 ‘000000’ and the strength of a Neighbor Set or Remaining Set pilot is found to
42 be above T_ADD_s.

- P_REV_IN_USE_s is greater than three, SOFT_SLOPE_s is not equal to '000000', and the strength PS, as specified in 2.6.6.2.2, of any Candidate Set pilot is found to satisfy the following inequality:

$$10 \times \log_{10} PS > \frac{\text{SOFT_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD_INTERCEPT}_s}{2}$$

where the summation is performed over all pilots currently in the Active Set and a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message* carrying this information has not been sent since the last *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* was received.

- P_REV_IN_USE_s is greater than three, SOFT_SLOPE_s is not equal to '000000', and the strength PS, as specified in 2.6.6.2.2, of any Neighbor Set or Remaining Set pilot is found to satisfy the following inequality:

$$10 \times \log_{10} PS > \max\left(\frac{\text{SOFT_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD_INTERCEPT}_s}{2}, -\frac{T_ADD_s}{2}\right)$$

where the summation is performed over all pilots currently in the Active Set.

- P_REV_IN_USE_s is less than or equal to three or SOFT_SLOPE_s is equal to '000000', the strength of a Candidate Set pilot exceeds the strength of an Active Set pilot by T_COMP_s × 0.5 dB, and a *Pilot Strength Measurement Message* carrying this information has not been sent since the last *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* was received.
- P_REV_IN_USE_s is greater than three, SOFT_SLOPE_s is not equal to '000000', and the strength of a Candidate Set pilot exceeds the strength of an Active Set pilot by T_COMP_s × 0.5 dB and satisfies the following inequality:

$$10 \times \log_{10} PS > \frac{\text{SOFT_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD_INTERCEPT}_s}{2}$$

where the summation is performed over all pilots currently in the Active Set and a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message* carrying this information has not been sent since the last *Extended Handoff Direction Message*, *General Handoff Direction Message* or *Universal Handoff Direction Message* was received.

- The handoff drop timer of an Active Set pilot has expired and a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message* carrying this information has not been sent since the last *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal handoff Direction Message* was received.
- A Candidate Set pilot has been autonomously promoted to the Active Set (see 2.6.6.2.6.1), and an *Extended Pilot Strength Measurement Message* carrying this information has not been sent since the last *Extended Handoff Direction*

1 *Message, General Handoff Direction Message, or Universal Handoff Direction*
2 *Message* was received.

3 2. *Handoff Completion Message or Extended Handoff Completion Message*: The mobile
4 station shall send a *Handoff Completion Message* if $P_REV_IN_USE_s$ is less than
5 seven or an *Extended Handoff Completion Message* if $P_REV_IN_USE_s$ is equal to or
6 greater than seven in assured mode as follows:

7 • If the handoff message (*Extended Handoff Direction Message, General Handoff*
8 *Direction Message or Universal Handoff Direction Message*) specifies a soft
9 handoff, the mobile station shall send the *Handoff Completion Message* if
10 $P_REV_IN_USE_s$ is less than seven or an *Extended Handoff Completion Message*
11 if $P_REV_IN_USE_s$ is equal to or greater than seven within T_{56m} seconds after
12 the action time of the received handoff message.

13 • If the handoff message (*Extended Handoff Direction Message, General Handoff*
14 *Direction Message or Universal Handoff Direction Message*) specifies a hard
15 handoff without return on failure (see 2.6.6.2.8.1), the mobile station shall send
16 the *Handoff Completion Message* if $P_REV_IN_USE_s$ is less than seven or an
17 *Extended Handoff Completion Message* if $P_REV_IN_USE_s$ is equal to or greater
18 than seven within T_{73m} seconds after the action time of the received handoff
19 message.

20 • If the handoff message (*General Handoff Direction Message or Universal Handoff*
21 *Direction Message*) specifies a hard handoff with return on failure (see
22 2.6.6.2.8.2), the mobile station shall send the *Handoff Completion Message* if
23 $P_REV_IN_USE_s$ is less than seven or an *Extended Handoff Completion Message*
24 if $P_REV_IN_USE_s$ is equal to or greater than seven within T_{56m} seconds after
25 mobile station declares the handoff to be successful (see 2.6.6.2.8.2).

26 3. *Candidate Frequency Search Report Message*: The mobile station shall send a
27 *Candidate Frequency Search Report Message* in assured mode, whenever any of the
28 following events occur:

29 • $RETURN_IF_HANDOFF_FAIL_s$ is equal to '1', and a handoff attempt is
30 unsuccessful (see 2.6.6.2.8.2). In this case, the mobile station shall send a
31 *Candidate Frequency Search Report Message* within T_{56m} seconds after
32 completing a search of all pilots in the Candidate Frequency Search Set and
33 resuming the use of the Serving Frequency Active Set (see 2.6.6.2.8.2.1).

34 • $RETURN_IF_HANDOFF_FAIL_s$ is equal to '1', an inter-frequency handoff attempt
35 is unsuccessful (see 2.6.6.2.8.2), and $PERIODIC_SEARCH_s$ is equal to '1'. In
36 this case, the mobile station shall send a *Candidate Frequency Search Report*
37 *Message* in a search period if the conditions specified in 2.6.6.2.8.3.2 are met.

38 • The mobile station receives a *Candidate Frequency Search Request Message* or a
39 *Candidate Frequency Search Control Message* with $SEARCH_TYPE$ set to '01'. If
40 none of the conditions requiring the mobile station to send a *Mobile Station*
41 *Reject Order* is true (see 2.6.6.2.5.1), the mobile station shall send a *Candidate*
42 *Frequency Search Report Message*, as described in 2.6.6.2.8.3.1 and
43 2.6.6.2.10.1.

- 1 • The mobile station receives a *Candidate Frequency Search Request Message* or
2 *Candidate Frequency Search Control Message* with SEARCH_TYPE set to '11',
3 SEARCH_MODE_s is equal to '0000' and the Candidate Frequency Search Set is
4 not empty. If none of the conditions requiring the mobile station to send a
5 *Mobile Station Reject Order* is true (see 2.6.6.2.5.1), the mobile station shall send
6 a *Candidate Frequency Search Report Message* in a search period if the
7 conditions specified in 2.6.6.2.8.3.2 are met.
- 8 4. *Periodic Pilot Strength Measurement Message*: The mobile station shall send a
9 *Periodic Pilot Strength Measurement Message* in unassured mode, as specified in
10 2.6.6.2.5.1 and 2.6.6.2.12.
- 11 5. *Pilot Strength Measurement Mini Message*: If the mobile station supports the Mobile
12 Assisted Burst operation capability, the mobile station shall send this message
13 while processing any Supplemental Channel, according to the following:
- 14 • The mobile station shall transmit a *Pilot Strength Measurement Mini Message* for
15 a pilot *p* in the Active Set on the r-dsch logical channel whenever all of the
16 following conditions are true:
- 17 – ORDER_FLAG_s is equal to '1'.
- 18 – The pilot *p* in the Active Set has a received signal strength that is greater
19 than the signal strength of another pilot in the Active Set by
20 PS_MIN_DELTA_s, in units of 0.5 dB, at the current time and has been for
21 ORDER_INTERVAL_s most recent successive 20 ms frame intervals since this
22 pilot was last reported in a rank order based *Pilot Strength Measurement Mini*
23 *Message*.
- 24 – The rank order of pilot *p* has changed.
- 25 • If PERIODIC_FLAG_s is equal to '1', the mobile station shall transmit a *Pilot*
26 *Strength Measurement Mini Message* within PERIODIC_INTERVAL_s 20 ms frame
27 intervals on the r-dsch for each of the *n* pilots in the Active Set with the largest
28 signal strengths, where *n* = (min (NUM_PILOTS, the number of pilots in the
29 Active Set)), whenever the following condition is true:
- 30 – The mobile station has not transmitted another *Pilot Strength*
31 *Measurement Mini Message* for the corresponding pilot during the last
32 PERIODIC_INTERVAL_s 20 ms frame intervals.
- 33 • If THRESHOLD_FLAG_s is equal to '1', the mobile station shall transmit a *Pilot*
34 *Strength Measurement Mini Message* for pilot *p* on the r-dsch logical channel
35 whenever all of the following conditions are true:
- 36 – The mobile station has not transmitted a previous *Pilot Strength*
37 *Measurement Mini Message* for pilot *p* within the most recent
38 THRESHOLD_INTERVAL_s 20 ms frames intervals.
- 39 – Pilot *p* is in the Active Set.

- 1 – The signal strength of pilot p is greater than $PS_CEILING_HIGH_s$ and the
2 signal strength of pilot p was less than or equal to $PS_CEILING_LOW_s$ at any
3 time since the mobile station last sent a *Pilot Strength Measurement Mini*
4 *Message* for pilot p ; or the signal strength of pilot p is less than
5 $PS_FLOOR_LOW_s$ and the signal strength for pilot p was greater than or
6 equal to $PS_FLOOR_HIGH_s$ at any time since the last time that the mobile
7 station sent a *Pilot Strength Measurement Mini Message* for pilot p .

8 2.6.6.2.6 Set Maintenance

9 2.6.6.2.6.1 Maintenance of the Active Set

10 The mobile station shall support a maximum Active Set size of N_{6m} pilots. The mobile
11 station shall track the pilot strengths of all pilots in the Active Set.

12 When the mobile station is first assigned Forward Traffic Channels, the mobile station shall
13 initialize the Active Set to contain the pilots associated with the assigned Forward Traffic
14 Channels. When the mobile station processes an *Extended Handoff Direction Message*, a
15 *General Handoff Direction Message* or *Universal Handoff Direction Message*, then at the
16 action time of the message the mobile station shall replace the pilots in the Active Set with
17 the pilots listed in the message.

18 If the call rescue allowed timer is enabled, then the mobile station shall autonomously add
19 one or more Candidate Set pilots whose strength exceeds T_ADD_s to the Active Set,
20 beginning with the strongest, provided that:

- 21 • the $NGHBR_RESQ_CONFIGURED$ field of the $NGHBR_REC$ for the corresponding
22 pilot is equal to '1', and
- 23 • the resulting Active Set size does not exceed N_{6m} pilots.

24 When autonomously adding Rescue Channel pilots to the Active Set, the mobile station
25 may autonomously drop one or more of the existing pilots in the Active Set, beginning with
26 the weakest, to allow for adding pilots when the Active Set is full.

27 2.6.6.2.6.2 Maintenance of the Candidate Set

28 The mobile station shall support a maximum Candidate Set size of N_{7m} pilots.

29 When the mobile station is first assigned a Forward Traffic Channel, the mobile station
30 shall initialize the Candidate Set to contain no pilots. The mobile station shall adjust the
31 Candidate Set whenever any of the following events occur:

- 32 • If the mobile station detects that the strength of a Neighbor Set pilot or a Remaining
33 Set pilot exceeds T_ADD_s , the mobile station shall add the pilot to the Candidate
34 Set.
- 35 • If the mobile station processes an *Extended Handoff Direction Message*, a *General*
36 *Handoff Direction Message* or a *Universal Handoff Direction Message* which does not
37 list a pilot in the current Active Set, and the handoff drop timer corresponding to
38 that pilot has not expired at the action time of the message, the mobile station shall
39 add the pilot to the Candidate Set at the action time of the message.

- 1 • If the mobile station autonomously drops an existing pilot in the Active Set (see
2 2.6.6.2.6.1), and the handoff drop timer corresponding to that pilot has not expired,
3 the mobile station shall add the pilot to the Candidate Set.
- 4 • If $P_REV_IN_USE_s$ is greater than three, and $SOFT_SLOPE_s$ is not equal to '000000',
5 the mobile station shall perform the following:
 - 6 - If the mobile station processes a *General Handoff Direction Message* or a
7 *Universal Handoff Direction Message* which does not list a pilot in the current
8 Active Set, the handoff drop timer corresponding to that pilot has expired at the
9 action time of the message, and that pilot is found to be above T_DROP_s , the
10 mobile station shall add the pilot to the Candidate Set at the action time of the
11 message.
 - 12 - If the mobile station autonomously drops an existing pilot in the Active Set (see
13 2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and
14 that pilot is found to be above T_DROP_s , the mobile station shall add the pilot to
15 the Candidate Set.
- 16 • If the mobile station processes an *Extended Handoff Direction Message*, a *General*
17 *Handoff Direction Message* or *Universal Handoff Direction Message*, which lists a
18 pilot in the current Candidate Set, the mobile station shall delete the pilot from the
19 Candidate Set at the action time of the message.
- 20 • If the handoff drop timer corresponding to a Candidate Set pilot expires, the mobile
21 station shall delete the pilot from the Candidate Set.
- 22 • If the mobile station autonomously adds a Candidate Set pilot to the Active Set (see
23 2.6.6.2.6.1), the mobile station shall delete the pilot from the Candidate Set.
- 24 • If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate
25 Set size exceeds N_{7m} , the mobile station shall delete from the Candidate Set the
26 pilot whose handoff drop timer is closest to expiration. If more than one such pilot
27 exists, the mobile station shall delete one such pilot that has the lowest strength. If
28 no pilot in the Candidate Set has an enabled handoff drop timer, the mobile station
29 shall delete from the Candidate Set the pilot that has the lowest strength.

30 2.6.6.2.6.3 Maintenance of the Neighbor Set

31 The mobile station shall support a Neighbor Set size of at least N_{8m} pilots.

32 When the mobile station is first assigned a Forward Traffic Channel, the mobile station
33 shall initialize the Neighbor Set to contain all the pilots specified in the most recently
34 received *Neighbor List Message*, *Extended Neighbor List Message* or *General Neighbor List*
35 *Message*.

36 The mobile station shall maintain a counter, AGE_s , for each pilot in the Neighbor Set. The
37 mobile station shall initialize this counter to zero when it moves the pilot from the Active
38 Set or the Candidate Set to the Neighbor Set. The mobile station shall initialize this
39 counter to $NGHBR_MAX_AGE_s$ when it moves the pilot from the Remaining Set to the
40 Neighbor Set. The mobile station shall increment AGE_s for each pilot in the Neighbor Set
41 upon receipt of a *Neighbor List Update Message* or an *Extended Neighbor List Update*

1 *Message*. When the mobile station is first assigned to a Forward Traffic Channel, the
2 mobile station shall set AGE_S for each pilot in the Neighbor Set to $NGHBR_MAX_AGE_S$.

3 The mobile station shall adjust the Neighbor Set whenever any of the following events
4 occur:

- 5 • If the mobile station receives a *Neighbor List Update Message* or an *Extended*
6 *Neighbor List Update Message*, it shall perform the following:
 - 7 - Increment AGE_S for each pilot in the Neighbor Set.
 - 8 - Delete from the Neighbor Set all pilots whose AGE_S exceeds $NGHBR_MAX_AGE_S$.
 - 9 - Add to the Neighbor Set each pilot named in the message, if it is not already a
10 pilot of the Active Set, Candidate Set, or Neighbor Set. If the mobile station can
11 store in the Neighbor Set only k additional pilots, and more than k new pilots
12 were sent in the *Neighbor List Update Message* or the *Extended Neighbor List*
13 *Update Message*, the mobile station shall store the first k new pilots listed in the
14 message.
- 15 • If the handoff drop timer of a pilot in the Candidate Set expires, the mobile station
16 shall add the pilot to the Neighbor Set.
- 17 • If $P_REV_IN_USE_S$ is less than or equal to three or $SOFT_SLOPE_S$ is equal to
18 '000000', the mobile station shall perform the following:
 - 19 - If the mobile station processes an *Extended Handoff Direction Message*, a
20 *General Handoff Direction Message*, or a *Universal Handoff Direction Message* in
21 which a pilot in the Active Set is not listed, and the handoff drop timer
22 corresponding to the pilot has expired, the mobile station shall add the pilot to
23 the Neighbor Set.
 - 24 - If the mobile station autonomously drops an existing pilot in the Active Set (see
25 2.6.6.2.6.1) and the handoff drop timer corresponding to the pilot has expired,
26 the mobile station shall add the pilot to the Neighbor Set.
- 27 • If $P_REV_IN_USE_S$ is greater than three, and $SOFT_SLOPE_S$ is not equal to '000000',
28 the mobile station shall perform the following:
 - 29 - If the mobile station processes an *Extended Handoff Direction Message*, a
30 *General Handoff Direction Message*, or a *Universal Handoff Direction Message*
31 which does not list a pilot in the current Active Set, the handoff drop timer
32 corresponding to that pilot has expired, and that pilot is found to be below
33 T_DROP_S , the mobile station shall add the pilot to the Neighbor Set.
 - 34 - If the mobile station autonomously drops an existing pilot in the Active Set (see
35 2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and
36 that pilot is found to be below T_DROP_S , the mobile station shall add the pilot to
37 the Neighbor Set.
- 38 • If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate
39 Set size exceeds the size supported by the mobile station, the mobile station shall
40 add the deleted Candidate Set pilot to the Neighbor Set (see 2.6.6.2.6.2).

- 1 • If the mobile station detects that the strength of a Neighbor Set pilot exceeds
2 T_ADD_S , the mobile station shall delete the pilot from the Neighbor Set.
- 3 • If the mobile station processes an *Extended Handoff Direction Message*, a *General*
4 *Handoff Direction Message* or a *Universal Handoff Direction Message* which lists a
5 pilot in the current Neighbor Set, the mobile station shall delete the pilot from the
6 Neighbor Set.
- 7 • If the mobile station adds a pilot to the Neighbor Set, and the resulting Neighbor Set
8 size exceeds the size supported by the mobile station, the mobile station shall delete
9 from the Neighbor Set the pilot whose AGE_S is the largest. If more than one such
10 pilot exists, the mobile station shall delete one such pilot that has the lowest
11 strength.

12 2.6.6.2.7 Soft Handoff

13 2.6.6.2.7.1 Forward Traffic Channel Processing

14 All Forward Traffic Channels associated with pilots in the Active Set of the mobile station
15 carry identical modulation symbols with the exception of the power control subchannel (see
16 [2]).

17 When the Active Set contains more than one pilot, the mobile station should provide
18 diversity combining of the associated Forward Traffic Channels. The mobile station shall
19 provide for differential propagation delays from zero to at least 150 μ s.

20 2.6.6.2.7.2 Reverse Traffic Channel Power Control During Soft Handoff

21 The *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a
22 *Universal Handoff Direction Message* identifies sets of Forward Fundamental Channels or
23 Forward Dedicated Control Channels that carry identical closed loop power control
24 subchannels. A set consists of one or more Forward Fundamental Channels or Forward
25 Dedicated Control Channels with identical power control information.

26 The *Universal Handoff Direction Message* identifies sets of Forward Common Power Control
27 Channels that carry identical closed loop power control subchannels. A set consists of one
28 or more Forward Common Power Control Channels with identical power control
29 information.

30 Each Rescue Channel that has been autonomously promoted to the Active Set as part of
31 Call Rescue Soft Handoff (see 2.6.6.2.13) shall form its own set. The mobile station shall
32 not diversity combine the closed loop power control subchannel of any Rescue Channel
33 with any other Forward Fundamental Channel until directed otherwise by an *Extended*
34 *Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff*
35 *Direction Message*.

36 In each power control group containing valid power control bits (see [2]), the mobile station
37 should provide diversity combining of the identical closed loop power control subchannels
38 and shall obtain at most one power control bit from each set of identical closed loop power
39 control subchannels. The mobile station should only combine reliable power control bits
40 (see [11]) as follows:

- 1 • If the reliable power control bits obtained from all sets are equal to '0', the mobile
2 station shall increase its power as specified in [2].
- 3 • If the reliable power control bit obtained from any set is equal to '1', the mobile
4 station shall decrease its power as specified in [2].

5 2.6.6.2.7.3 Starting Periodic Search following Soft Handoff

6 If the PERIODIC SEARCH_s is equal to '1', a periodic search is not already in progress, and
7 the Frequency Assignment after handoff is different from the Candidate Frequency
8 (CDMABAND_s is not equal to CF_CDMABAND_s or CDMACH_s is not equal to
9 CF_CDMACH_s), the mobile station shall perform the following:

- 10 • The mobile station shall set ALIGN_TIMING_USED_s to '0' and SEARCH_OFFSET_s to
11 '000000'.
- 12 • The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

13 2.6.6.2.8 CDMA-to-CDMA Hard Handoff

14 The base station directs the mobile station to perform a CDMA-to-CDMA hard handoff by
15 sending an *Extended Handoff Direction Message*, a *General Handoff Direction Message* or a
16 *Universal Handoff Direction Message* in which the mobile station is transitioned between
17 disjoint sets of base stations, different Frequency Assignments, or different frame offsets.
18 When the base station uses a *Extended Handoff Direction Message*, a *General Handoff*
19 *Direction Message*, *MEID Universal Handoff Direction Message* or a *Universal Handoff*
20 *Direction Message* to direct the mobile to a channel with flexible channel spacing between
21 the forward and reverse channels, the base station extends these message using the
22 *General Extension Message* and include channel records that specify the forward and
23 reverse frequencies to be used by the mobile station for handoff. The mobile station shall
24 process this message as specified in section 2.6.18. If RETURN_IF_HANDOFF_FAIL_s is
25 equal to '0', the mobile station performs the actions described in 2.6.6.2.8.1. If
26 RETURN_IF_HANDOFF_FAIL_s is equal to '1', the mobile station performs the actions
27 described in 2.6.6.2.8.2.

28 2.6.6.2.8.1 Hard Handoff without Return on Failure

29 At the action time specified in the *Extended Handoff Direction Message*, the *General*
30 *Handoff Direction Message* or *Universal Handoff Direction Message* the mobile station shall
31 disable its transmitter, reset the fade timer specified in 2.6.4.1.8, suspend incrementing
32 TOT_FRAMES_s, BAD_FRAMES_s, DCCH_TOT_FRAMES_s, and DCCH_BAD_FRAMES_s if
33 applicable as specified in 2.6.4.1.1, and tune to the assigned Forward Traffic Channel. The
34 mobile station shall perform acquisition of the pilots in the new Active Set.

35 If a periodic Serving Frequency pilot report procedure is in progress, the mobile station
36 shall abort it (see 2.6.6.2.12).

37 The mobile station shall begin monitoring the assigned Forward Traffic Channel within the
38 time specified below:

- 1 • If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or
2 *Universal Handoff Direction Message* specifies a CDMA Frequency Assignment
3 different from the Serving Frequency and an Active Set containing pilots with pilot
4 PN sequence offsets identical to those of the pilots in the Serving Frequency Active
5 Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel
6 within T_{60m} seconds after the action time.
- 7 • If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or
8 *Universal Handoff Direction Message* specifies a CDMA Frequency Assignment
9 different from the Serving Frequency and an Active Set containing a pilot with pilot
10 PN sequence offset not equal to that of any pilot in the Serving Frequency Active
11 Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel
12 within T_{61m} seconds after the action time.
- 13 • If the *Extended Handoff Direction Message*, *General Handoff Direction Message* or
14 *Universal Handoff Direction Message* specifies a CDMA-to-CDMA hard handoff
15 without changing the CDMA Frequency Assignment, the mobile station shall begin
16 monitoring the assigned Forward Traffic Channel within T_{62m} seconds after the
17 action time.

18 If the Target Frequency is the same as the Candidate Frequency ($TF_CDMABAND_S$ is equal
19 to $CF_CDMABAND_S$, and TF_CDMACH_S is equal to CF_CDMACH_S) and is different from the
20 Serving Frequency ($TF_CDMABAND_S$ is not equal to $SF_CDMABAND_S$, or TF_CDMACH_S is
21 not equal to SF_CDMACH_S), the mobile station shall perform the following:

- 22 • If applicable, the mobile station shall replace its Neighbor Set with its Candidate
23 Frequency Neighbor Set, excluding the pilots in its Active Set. When the mobile
24 station adds a pilot from its Candidate Frequency Neighbor Set to its Active Set, it
25 shall maintain $SEARCH_PRIORITY_S$, $SRCH_WIN_NGHBR_S$, and
26 $SRCH_OFFSET_NGHBR_S$ associated with the pilot.
- 27 • The mobile station shall set $PILOT_INC_S$ to $CF_PILOT_INC_S$, $SRCH_WIN_N_S$ to
28 $CF_SRCH_WIN_N_S$, and $SRCH_WIN_R_S$ to $CF_SRCH_WIN_R_S$.
- 29 • The mobile station shall set $SEARCH_PRIORITY_INCL_S$ to
30 $CF_SEARCH_PRIORITY_INCL_S$, $SRCH_OFFSET_INCL_S$ to $CF_SRCH_OFFSET_INCL_S$,
31 and $SRCH_WIN_NGHBR_INCL_S$ to $CF_SRCH_WIN_NGHBR_INCL_S$.

32 If a F-CPCCH is not assigned, the mobile station shall perform the following:

- 33 • After the action time, upon receiving a period of $(N_{11m} \times 20)$ ms with sufficient
34 signal quality on the physical channel corresponding to $FPC_PRI_CHAN_S$ on the
35 assigned Forward Traffic Channel, the mobile station shall re-enable its transmitter.
36 The mobile station shall transmit the Traffic Channel Preamble, as described in [2],
37 followed by a Handoff Completion Message or Extended Handoff Completion
38 Message.
- 39 • After the action time, upon receiving a period of $(N_{3m} \times 20)$ ms with sufficient signal
40 quality on the physical channel corresponding to $FPC_PRI_CHAN_S$, the mobile
41 station shall resume incrementing TOT_FRAMES_S , BAD_FRAMES_S ,

1 DCCH_TOT_FRAMES_s, and DCCH_BAD_FRAMES_s if applicable as specified in
2 2.6.4.1.1.

3 If a F-CPCCH is assigned, the mobile station shall perform the following:

- 4 • After the action time, upon receiving a period of $(N_{19m} \times 1.25)$ ms with sufficient
5 signal quality on the Forward Common Power Control Subchannels assigned to this
6 mobile station, the mobile station shall re-enable its transmitter. The mobile station
7 shall transmit the Traffic Channel Preamble, as described in [2], followed by an
8 *Extended Handoff Completion Message*. The mobile station shall also transmit the
9 Reverse Channel Quality Indicator Channel as described in [2] and [3].

10 If the PERIODIC_SEARCH_s is equal to '1', a periodic search is not already in progress, and
11 the Frequency Assignment after handoff is different from the Candidate Frequency
12 (CDMABAND_s is not equal to CF_CDMABAND_s or CDMACH_s is not equal to
13 CF_CDMACH_s), the mobile station shall perform the following:

- 14 • The mobile station shall set ALIGN_TIMING_USED_s to '0' and SEARCH_OFFSET_s to
15 '000000'.
- 16 • The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

17 2.6.6.2.8.2 Hard Handoff with Return on Failure

18 At the action time specified in the *General Handoff Direction Message* or *Universal Handoff*
19 *Direction Message*, the mobile station shall perform the following:

- 20 • The mobile station shall stop processing the Forward Fundamental Channel, the
21 Forward Dedicated Control Channel, the Forward Supplemental Code Channels (if
22 any), and the Forward Supplemental Channels (if any).
- 23 • The mobile station shall stop transmitting on the Reverse Fundamental Channel, on
24 the Reverse Dedicated Control Channel, and on the Reverse Supplemental Code
25 Channels (if any), and on the Reverse Supplemental Channels (if any).
- 26 • The mobile station shall disable the fade timer (see 2.6.4.1.8) and the handoff drop
27 timers corresponding to the Serving Frequency Active Set and Candidate Set (see
28 2.6.6.2.3), and shall suspend incrementing TOT_FRAMES_s, BAD_FRAMES_s,
29 DCCH_TOT_FRAMES_s, and DCCH_BAD_FRAMES_s if applicable (see 2.6.4.1.1).
- 30 • The mobile station shall lock the accumulation of valid level changes in the closed
31 loop mean output power and shall ignore received power control bits related to the
32 period that the transmitter is disabled (see [2]).
- 33 • If the Serving Frequency is different from the Target Frequency (SF_CDMACH_s is
34 not equal to TF_CDMACH_s or SF_CDMABAND_s is not equal to TF_CDMABAND_s),
35 the mobile station shall set CDMACH_s to TF_CDMACH_s and CDMABAND_s to
36 TF_CDMABAND_s, and shall tune to the Target Frequency.

37 The mobile station shall not change its time reference (see [2]) until the handoff is
38 successfully completed (as described later in this section) or the mobile station resumes
39 using the Serving Frequency Active Set (as described in 2.6.6.2.8.2.1).

1 The mobile station shall maintain a *handoff* timer. The mobile station shall set the
 2 expiration time for the handoff timer to $(0.08 \times TF_WAIT_TIME_S)$ seconds and enable the
 3 timer at the action time of the *General Handoff Direction Message* or *Universal Handoff*
 4 *Direction Message*.

5 The mobile station shall perform the following actions:

- 6 • If the Target Frequency is different from the Serving Frequency ($TF_CDMABAND_S$ is
 7 not equal to $SF_CDMABAND_S$, or TF_CDMACH_S is not equal to SF_CDMACH_S), the
 8 mobile station shall measure the mean input power on the Target Frequency
 9 ($target_freq_pwr$, in dBm/1.23 MHz) and may use $target_freq_pwr$ along with the
 10 measurement of the average input power on the Serving Frequency
 11 ($avg_serving_freq_pwr$, in dBm/1.23 MHz) in the handoff procedure. The mobile
 12 station may declare the handoff attempt to be unsuccessful if all of the following
 13 conditions are true:
 - 14 – $DIFF_RX_PWR_THRESH_S$ is not equal to '00000',
 - 15 – the mobile station has been measuring the received power on the Serving
 16 Frequency for at least the last N_{12m} frames, and
 - 17 – $(target_freq_pwr - avg_serving_freq_pwr)$ is less than $(-30 + 2 \times$
 18 $DIFF_RX_PWR_THRESH_S)$ dB.

19 If the mobile station declares the handoff attempt to be unsuccessful, it shall
 20 restore the configuration to what it was before the handoff attempt (see 2.6.6.2.5.1)
 21 and send a *Candidate Frequency Search Report Message* as described in
 22 2.6.6.2.8.2.1.

- 23 • The mobile station shall measure E_C/I_0 for each pilot in the Active Set using the
 24 procedures specified in 2.6.6.2.2, if any of the following conditions is true:
 - 25 – the Target Frequency is the same as the Serving Frequency ($TF_CDMABAND_S$ is
 26 equal to $SF_CDMABAND_S$, and TF_CDMACH_S is equal to SF_CDMACH_S),
 - 27 – the mobile station does not use the power measurements in the handoff
 28 procedure,
 - 29 – $DIFF_RX_PWR_THRESH_S$ is equal to '00000',
 - 30 – the mobile station has not been measuring the received power on the Serving
 31 Frequency for at least the last N_{12m} frames, or
 - 32 – $(target_freq_pwr - avg_serving_freq_pwr)$ is not less than $(-30 + 2 \times$
 33 $DIFF_RX_PWR_THRESH_S)$ dB.

34 If the mobile station measures E_C/I_0 for pilots in the Active Set, it shall compare the
 35 sum of the measured E_C/I_0 for all pilots with the minimum total pilot E_C/I_0
 36 threshold ($MIN_TOTAL_PILOT_EC_IO_S$).

- 37 – If $MIN_TOTAL_PILOT_EC_IO_S$ is not equal to '00000', and $(-20 \times \log_{10}$
 38 $(E_C/I_0)_{total})$ is greater than $MIN_TOTAL_PILOT_EC_IO_S$, where $(E_C/I_0)_{total}$ is the
 39 sum of the measured E_C/I_0 for the pilots in the Active Set, the mobile station

1 shall declare the handoff attempt to be unsuccessful, and shall perform the
2 following:

3 + If COMPLETE_SEARCH_s is equal to '1', and the Target Frequency is the
4 same as the Candidate Frequency (TF_CDMABAND_s is equal to
5 CF_CDMABAND_s, and TF_CDMACH_s is equal to CF_CDMACH_s) and is
6 different from the Serving Frequency (TF_CDMABAND_s is not equal to
7 SF_CDMABAND_s, or TF_CDMACH_s is not equal to SF_CDMACH_s), the
8 mobile station shall measure the strength of each pilot in its Candidate
9 Frequency Search Set using the procedures specified in 2.6.6.2.2; otherwise,
10 the mobile station shall end the search.

11 + The mobile station shall then restore its configuration to what it was before
12 the handoff attempt (see 2.6.6.2.5.1) and send a *Candidate Frequency Search*
13 *Report Message* as described in 2.6.6.2.8.2.1.

14 - If MIN_TOTAL_PILOT_EC_IO_s is equal to '00000', or $(-20 \times \log_{10} (E_c/I_o)_{total})$ is
15 not less than MIN_TOTAL_PILOT_EC_IO_s, where $(E_c/I_o)_{total}$ is the sum of the
16 measured E_c/I_o for the pilots in the Active Set, the mobile station shall attempt
17 to demodulate the Forward Traffic Channel(s). If the Active Set contains more
18 than one pilot, the mobile station shall perform the actions specified in
19 2.6.6.2.7. If the Target Frequency is the same as the Candidate Frequency
20 (TF_CDMABAND_s is equal to CF_CDMABAND_s, and TF_CDMACH_s is equal to
21 CF_CDMACH_s), and is different from the Serving Frequency (TF_CDMABAND_s is
22 not equal to SF_CDMABAND_s, or TF_CDMACH_s is not equal to SF_CDMACH_s),
23 the mobile station shall measure the strength of each pilot in its Candidate
24 Frequency Search Set using the procedures specified in 2.6.6.2.2, and the
25 mobile station shall wait for the first of the following events to occur:

26 + If the handoff timer expires, the mobile station shall declare the handoff
27 attempt to be unsuccessful, and perform the following:

28 o If COMPLETE_SEARCH_s is equal to '1', and if the Target Frequency is the
29 same as the Candidate Frequency (TF_CDMABAND_s is equal to
30 CF_CDMABAND_s, and TF_CDMACH_s is equal to CF_CDMACH_s) and is
31 different from the Serving Frequency (TF_CDMABAND_s is not equal to
32 SF_CDMABAND_s, or TF_CDMACH_s is not equal to SF_CDMACH_s), and
33 the mobile station has not completed the search of all pilots in its
34 Candidate Frequency Search Set, then it shall complete the search, i.e.,
35 it shall obtain at least one measurement of the strength of each pilot in
36 its Candidate Frequency Search Set, using the search procedures
37 specified in 2.6.6.2.8.3.

38 o Otherwise, the mobile station shall end the search.

39 The mobile station shall then restore its configuration to what it was before
40 the handoff attempt (see 2.6.6.2.5.1) and send a *Candidate Frequency Search*
41 *Report Message* as described in 2.6.6.2.8.2.1.

- 1 + If a F-CPCCH is not assigned, and the mobile station receives a period of
2 ($N_{11m} \times 20$) ms with sufficient signal quality on the physical channel
3 corresponding to FPC_PRI_CHAN_s, or if a F-CPCCH is assigned, and the
4 mobile station receives a period of ($N_{19m} \times 1.25$) ms with sufficient signal
5 quality on the Forward Common Power Control Subchannels assigned to
6 this mobile station, then, the mobile station shall declare the handoff
7 attempt to be successful, and perform the following:
- 8 o The mobile station shall disable the handoff timer.
 - 9 o If TF_RESET_L2_s is equal to '1', Layer 3 shall send a L2-
10 Supervision.Request primitive to Layer 2 to reset the acknowledgment
11 procedures as specified in [4].
 - 12 o If TF_RESET_FPC_s is equal to '1', the mobile station shall initialize the
13 Forward Traffic Channel power control counters as specified in
14 2.6.4.1.1.1.
 - 15 o 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
17 equal to CF_CDMACH_s) and is different from the Serving Frequency
18 (TF_CDMABAND_s is not equal to SF_CDMABAND_s, or TF_CDMACH_s is
19 not equal to SF_CDMACH_s), the mobile station shall perform the
20 following:
 - 21 ◇ If applicable, the mobile station shall replace its Neighbor Set with its
22 Candidate Frequency Neighbor Set, excluding the pilots in its Active
23 Set. When the mobile station adds a pilot from its Candidate
24 Frequency Neighbor Set to its Active Set, it shall maintain
25 SEARCH_PRIORITY_s, SRCH_WIN_NGHBR_s, and
26 SRCH_OFFSET_NGHBR_s associated with the pilot.
 - 27 ◇ The mobile station shall set PILOT_INC_s to CF_PILOT_INC_s,
28 SRCH_WIN_N_s to CF_SRCH_WIN_N_s, and SRCH_WIN_R_s to
29 CF_SRCH_WIN_R_s.
 - 30 ◇ The mobile station shall set SEARCH_PRIORITY_INCL_s to
31 CF_SEARCH_PRIORITY_INCL_s, SRCH_OFFSET_INCL_s to
32 CF_SRCH_OFFSET_INCL_s, and SRCH_WIN_NGHBR_INCL_s to
33 CF_SRCH_WIN_NGHBR_INCL_s.
 - 34 o The mobile station shall re-enable its transmitter and shall re-enable the
35 fade timer (see 2.6.4.1.8) and reset it for T_{5m} seconds. Then, the mobile
36 station shall transmit the Traffic Channel Preamble, as described in [2],
37 followed by a *Handoff Completion Message* if P_REV_IN_USE_s is less than
38 seven or an *Extended Handoff Completion Message* if P_REV_IN_USE_s is
39 equal to or greater than seven.

- 1 o If a F-CPCCH is not assigned, after starting the handoff timer, upon
2 receiving the first period of $(N_{3m} \times 20)$ ms with sufficient signal quality
3 on the physical channel corresponding to $FPC_PRI_CHAN_s$, the mobile
4 station shall resume incrementing TOT_FRAMES_s , BAD_FRAMES_s ,
5 $DCCH_TOT_FRAMES_s$, and $DCCH_BAD_FRAMES_s$ if applicable as
6 specified in 2.6.4.1.1.
- 7 o If the Target Frequency is same as the Candidate Frequency
8 ($TF_CDMABAND_s$ is equal to $CF_CDMABAND_s$ and TF_CDMACH_s is
9 equal to CF_CDMACH_s), then the mobile station shall set
10 $PERIODIC_SEARCH_s$ to '0'.
- 11 o If $PERIODIC_SEARCH_s$ is equal to '1', the mobile station shall perform
12 the following:
- 13 ◇ The mobile station shall set $ALIGN_TIMING_USED_s$ to '0' and
14 $SEARCH_OFFSET_s$ to '000000'.
- 15 ◇ The mobile station shall start a periodic search as described in
16 2.6.6.2.8.3.2.
- 17 o The mobile station shall maintain its pilot sets using the procedures
18 described in 2.6.6.2.6.

19 2.6.6.2.8.2.1 Restoring the Configuration

20 If the mobile station declares a handoff attempt to be unsuccessful (see 2.6.6.2.8.2), it shall
21 perform the following actions:

- 22 • If the handoff timer is enabled, the mobile station shall disable it.
- 23 • The mobile station shall restore the following parameters:
- 24 – Message encryption mode: If $SF_ENCRYPT_MODE_s$ is equal to '0', the mobile
25 station shall turn off message encryption; otherwise, it shall turn on message
26 encryption.
- 27 – Service configuration: The mobile station shall use the service configuration
28 stored in $SF_SERVICE_CONFIG_s$ to process Forward and Reverse Traffic
29 Channel frames.
- 30 – The mobile station shall restore the list of calls stored in SF_CALLS_s .
- 31 – Protocol revision level ($P_REV_s = SF_P_REV_s$)
- 32 – Protocol revision level in use on the serving frequency ($P_REV_IN_USE_s =$
33 $SF_P_REV_IN_USE_s$)
- 34 – Service negotiation type ($SERV_NEG_s = SF_SERV_NEG_s$)
- 35 – Private long code mask: If $SF_PRIVATE_LCM_s$ is set to '1' then the mobile
36 station shall set $PVTLCM_42$ to $SF_PVTLCM_42_s$.
- 37 – Long code mask: If $SF_PRIVATE_LCM_s$ is equal to '1', the mobile station shall
38 use the private long code mask; otherwise, it shall use the public long code
39 mask derived from $SF_PLCM_TYPE_s$ and $SF_PLCM_39_s$ (if any).

- 1 – Search window size for the Active Set and Candidate Set
- 2 (SRCH_WIN_A_s = SF_SRCH_WIN_A_s)
- 3 – Search window size for the Neighbor Set
- 4 (SRCH_WIN_N_s = SF_SRCH_WIN_N_s)
- 5 – Search window size for the Remaining Set
- 6 (SRCH_WIN_R_s = SF_SRCH_WIN_R_s)
- 7 – Pilot detection threshold (T_ADD_s = SF_T_ADD_s)
- 8 – Pilot drop threshold (T_DROP_s = SF_T_DROP_s)
- 9 – Soft slope for the dynamic add and drop threshold (SOFT_SLOPE_s =
- 10 SF_SOFT_SLOPE_s)
- 11 – Intercept for the dynamic add threshold (ADD_INTERCEPT_s =
- 12 SF_ADD_INTERCEPT_s)
- 13 – Intercept for the dynamic drop threshold (DROP_INTERCEPT_s =
- 14 SF_DROP_INTERCEPT_s)
- 15 – Active Set versus Candidate Set comparison threshold (T_COMP_s =
- 16 SF_T_COMP_s)
- 17 – Drop timer value (T_TDROPS_s = SF_T_TDROPS_s)
- 18 – Drop timer range value (T_TDROPS_RANGE_s = SF_T_TDROPS_RANGE_s)
- 19 – Frame offset (FRAME_OFFSET_s = SF_FRAME_OFFSET_s)
- 20 – Nominal power setting (NOM_PWR_s = SF_NOM_PWR_s)
- 21 – Extended nominal power setting (NOM_PWR_EXT_s = SF_NOM_PWR_EXT_s)
- 22 – Power control step (PWR_CNTL_STEP_s = SF_PWR_CNTL_STEP_s)
- 23 – CDMA band class (CDMABAND_s = SF_CDMABAND_s)
- 24 – Frequency assignment (CDMACH_s = SF_CDMACH_s)
- 25 – Active Set (For each pilot in the Serving Frequency Active Set: (PILOT_REC,
- 26 PWR_COMB_IND))
- 27 – Code channel list (CODE_CHAN_LIST_s = SF_CODE_CHAN_LIST_s)
- 28 • The mobile station shall tune to the Serving Frequency and resume using the
- 29 Serving Frequency Active Set as follows:
- 30 – If the mobile station was processing the Forward Fundamental Channel prior to
- 31 tuning to the Candidate Frequency, the mobile station shall resume processing
- 32 the Forward Fundamental Channel. If the mobile station was transmitting on
- 33 the Reverse Fundamental Channel prior to tuning to the Candidate Frequency,
- 34 the mobile station shall resume transmitting on the Reverse Fundamental
- 35 Channel.

- 1 – If the mobile station was processing the Forward Dedicated Control Channel
2 prior to tuning to the Candidate Frequency, the mobile station shall resume
3 processing the Forward Dedicated Control Channel. If the mobile station was
4 transmitting on the Reverse Dedicated Control Channel prior to tuning to the
5 Candidate Frequency, the mobile station shall resume transmitting on the
6 Reverse Dedicated Control Channel.
- 7 – The mobile station shall not resume transmitting on the Reverse Supplemental
8 Code Channels and Reverse Supplemental Channels (if any). The mobile station
9 shall not process on the Forward Supplemental Code Channels and Forward
10 Supplemental Channels (if any).
- 11 – When the mobile station resumes transmission on the Reverse Traffic Channel,
12 it shall use the following rules to re-enable its transmitter:
- 13 + If the interval between the time that the mobile station disables its
14 transmitter and the time that it resumes using the Serving Frequency Active
15 Set is equal to or greater than $(N_{2m} \times 20)$ ms, then:
- 16 o If a F-CPCCH is not assigned, the mobile station shall wait to receive a
17 period of $(N_{3m} \times 20)$ ms with sufficient signal quality on the physical
18 channel corresponding to $FPC_PRI_CHAN_S$ before it re-enables its
19 transmitter.
- 20 o If a F-CPCCH is assigned, the mobile station shall wait to receive a
21 period of $(N_{17m} \times 1.25)$ ms with sufficient signal quality on the Forward
22 Common Power Control Subchannels assigned to this mobile station
23 before it re-enables its transmitter.
- 24 + Otherwise, after the mobile station tunes to the Serving Frequency, the
25 mobile station shall re-enable its transmitter no later than $N_{3m} \times 20$ ms if a
26 F-CPCCH is not assigned, and no later than $(N_{17m} \times 1.25)$ ms if a F-CPCCH
27 is assigned. The mobile station should re-enable its transmitter earlier.
28 After the mobile station re-enables its transmitter, the mean output power
29 shall be as specified in [2] for a step change in input power. If the mobile
30 station re-enables its transmitter earlier than $(N_{3m} \times 20)$ ms if a F-CPCCH is
31 not assigned, or earlier than $(N_{17m} \times 1.25)$ ms if a F-CPCCH is assigned,
32 after it tunes to the Serving Frequency, the initial mean output power shall
33 be as specified in [2], where the initial mean input power estimate is either:
- 34 o within 6 dB of the actual mean input power, or
- 35 o equal to the mean input power before the mobile station tuned to the
36 Target Frequency.
- 37 • The mobile station shall enable the fade timer and the handoff drop timers
38 corresponding to the pilots in its Active Set and Candidate Set. The mobile station
39 shall resume incrementing TOT_FRAMES_S , BAD_FRAMES_S , $DCCH_TOT_FRAMES_S$,
40 and $DCCH_BAD_FRAMES_S$ if applicable as specified in 2.6.4.1.1.
- 41 • The mobile station shall send a *Candidate Frequency Search Report Message* within
42 T_{56m} seconds of declaring the handoff attempt to be unsuccessful. The mobile

1 station shall report the contents of the *Candidate Frequency Search Report Message*
2 as follows:

- 3 – The mobile station shall report the two components of the Target Frequency
4 in the CDMA_FREQ and BAND_CLASS fields.
- 5 – The mobile station shall report the received power on the Target Frequency and
6 on the Serving Frequency in the CF_TOTAL_RX_PWR and SF_TOTAL_RX_PWR
7 fields, respectively.
- 8 – For each pilot in the Target Frequency Active Set that measures above
9 TF_T_ADD_s, the mobile station shall report its phase and strength in the fields
10 PILOT_PN_PHASE and PILOT_STRENGTH, respectively.
- 11 – If the Target Frequency is the same as the Candidate Frequency
12 (TF_CDMABAND_s is equal to CF_CDMABAND_s, and TF_CDMACH_s is equal to
13 CF_CDMACH_s), and is different from the Serving Frequency (TF_CDMABAND_s is
14 not equal to SF_CDMABAND_s or TF_CDMACH_s is not equal to SF_CDMACH_s),
15 the mobile station shall also report the strength of each pilot in the Candidate
16 Frequency Search Set that measures above CF_T_ADD_s.
- 17 • If the Serving Frequency is the same as the Candidate Frequency (SF_CDMABAND_s
18 is equal to CF_CDMABAND_s and SF_CDMACH_s is equal to CF_CDMACH_s), then the
19 mobile station shall set PERIODIC_SEARCH_s to '0'.
- 20 • If PERIODIC_SEARCH_s is equal to '1' and the Candidate Frequency Search Set is
21 not empty, the mobile station shall perform the following:
 - 22 – The mobile station shall set ALIGN_TIMING_USED_s to '0' and
23 SEARCH_OFFSET_s to '000000'.
 - 24 – The mobile station shall carry out the periodic search procedures described in
25 2.6.6.2.8.3.2.

26 2.6.6.2.8.3 Search of Pilots on the CDMA Candidate Frequency
27 If SEARCH_MODE_s is equal to '0000', the mobile station shall perform the following: If
28 PERIODIC_SEARCH_s is equal to '0', the mobile station shall search the Candidate
29 Frequency Search Set once, as described in 2.6.6.2.8.3.1; otherwise, the mobile station
30 shall search the Candidate Frequency Search Set periodically, as described in
31 2.6.6.2.8.3.2.

32 2.6.6.2.8.3.1 CDMA Candidate Frequency Single Search

33 The mobile station does a single search of the Candidate Frequency Search Set by
34 performing the following actions at the action time of the *Candidate Frequency Search*
35 *Control Message* or the *Candidate Frequency Search Request Message* that started the
36 search:

- 37 • If ALIGN_TIMING_USED_s is set to '0', the mobile station shall measure the strength
38 of all pilots in the Candidate Frequency Search Set in one or more visits to the
39 Candidate Frequency, as described in 2.6.6.2.8.3.3.

- 1 • If $ALIGN_TIMING_USED_s$ is set to '1', the mobile station shall measure the strength
2 of all pilots in the Candidate Frequency Search Set in one or more scheduled visits
3 (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

4 The mobile station shall schedule visits to the Candidate Frequency only at $((0.00125 \times$
5 $SEARCH_OFFSET_s) + k \times (SEARCH_TIME_RESOLUTION_s \times inter_visit_time))$ seconds after
6 the action time of the *Candidate Frequency Search Request Message* or the *Candidate*
7 *Frequency Search Control Message* that started the search, where

8 $k =$ an integer between 0 and max_num_visits , inclusive, where
9 max_num_visits is the value of MAX_NUM_VISITS field of the
10 last *Candidate Frequency Search Response Message* sent by the
11 mobile station,

12 and

13 $inter_visit_time =$ the value of the $INTER_VISIT_TIME$ field of the last *Candidate*
14 *Frequency Search Response Message* sent by the mobile station.

- 15 • The mobile station shall complete the measurements and send a *Candidate*
16 *Frequency Search Report Message* within $((0.00125 \times SEARCH_OFFSET_s) +$
17 $freshness_interval)$ seconds after the action time of the *Candidate Frequency Search*
18 *Control Message*, or the *Candidate Frequency Search Request Message*, where
19 $freshness_interval$ is determined as follows:

- 20 – If the value of the $TOTAL_OFF_TIME_FWD$ field or of the $TOTAL_OFF_TIME_REV$
21 field of the last *Candidate Frequency Search Response Message* sent by the
22 mobile station to the base station is greater than or equal to $\lceil (T_{70m} - T_{71m}) /$
23 $SEARCH_TIME_RESOLUTION_s \rceil$, then

24 $freshness_interval = (\max(fwd_time, rev_time) + T_{71m})$ seconds,

25 where

26 $fwd_time = SEARCH_TIME_RESOLUTION_s \times$ (value of the
27 $TOTAL_OFF_TIME_FWD$ field of the last *Candidate Frequency*
28 *Search Response Message* sent by the mobile station),

29 and

30 $rev_time = SEARCH_TIME_RESOLUTION_s \times$ (value of the
31 $TOTAL_OFF_TIME_REV$ field of the last *Candidate Frequency*
32 *Search Response Message* sent by the mobile station).

- 33 – Otherwise,

34 $freshness_interval = T_{70m}$ seconds.

35 The mobile station shall set the fields of the *Candidate Frequency Search Report Message* as
36 follows:

- 37 – The mobile station shall report the two components of the Candidate Frequency
38 in the $CDMA_FREQ$ and $BAND_CLASS$ fields.

- 1 – The mobile station shall report the received power on the Candidate Frequency
2 and on the Serving Frequency in the CF_TOTAL_RX_PWR and
3 SF_TOTAL_RX_PWR fields, respectively.
- 4 – For each pilot in the Candidate Frequency Search Set that measures above
5 CF_T_ADD_s, the mobile station shall report its phase and strength in the fields
6 PILOT_PN_PHASE and PILOT_STRENGTH, respectively.

7 2.6.6.2.8.3.2 Candidate Frequency Periodic Search

8 When the mobile station performs a periodic search, it periodically searches the Candidate
9 Frequency Search Set and reports the results to the base station in the *Candidate*
10 *Frequency Search Report Message*, as described in this section. The mobile station may
11 measure all pilots in the Candidate Frequency Search Set in one visit to the Candidate
12 Frequency, or it may visit the Candidate Frequency several times in a search period, each
13 time measuring all or some of the pilots in the Candidate Frequency Search Set, as
14 described in 2.6.6.2.8.3.3.

15 If SF_TOTAL_EC_THRESH_s is not equal to '11111', while tuned to the Serving Frequency
16 (specified by CDMACH_s and CDMABAND_s), the mobile station shall measure the total
17 received power spectral density, in mW/1.23 MHz, on the Serving Frequency at least once
18 every 20 ms frame. The mobile station shall maintain the average of the spectral density
19 (*spec_density*) over the last N_{12m} frames.

20 (In the following, (E_c/I_o)_{total} is the total E_c/I_o of the pilots in the Active Set, measured as
21 specified in 2.6.6.2.2, and *total_ec* is defined as (10 × log₁₀ ((E_c/I_o)_{total} × *spec_density*)).

22 The mobile station shall maintain a periodic search timer as follows:

- 23 • When the mobile station starts a periodic search, it shall set the periodic search
24 timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD_s and
25 shall enable the timer.
 - 26 – If the periodic search is started by a *Candidate Frequency Search Request*
27 *Message* or a *Candidate Frequency Search Control Message*, then the mobile
28 station shall start the periodic search (0.00125 × SEARCH_OFFSET_s) seconds
29 after the action time of the *Candidate Frequency Search Request Message* or the
30 *Candidate Frequency Search Control Message* that started the search.
 - 31 – If the periodic search is started following successful or unsuccessful handoff
32 attempt, the mobile station shall start the periodic search:
 - 33 + Upon sending the *Handoff Completion Message* or *Extended Handoff*
34 *Completion Message*, in the case that the handoff was successful.
 - 35 + Upon sending the *Candidate Frequency Search Report Message*, in the case
36 that the handoff was unsuccessful.
- 37 • When the periodic search timer expires, the mobile station shall reset the periodic
38 search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to
39 SEARCH_PERIOD_s and shall re-enable the timer.

- 1 • If ALIGN_TIMING_USED_s is set to '0', SF_TOTAL_EC_THRESH_s is not equal to
2 '11111' and SF_TOTAL_EC_IO_THRESH_s is equal to '11111', the mobile station
3 shall perform the following actions once per frame:
- 4 – Disable the periodic search timer if *total_ec* is not less than
5 (-120 + 2 × SF_TOTAL_EC_THRESH_s).
- 6 – Reset the expiration time of the periodic search timer to the value in
7 Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD_s, and re-enable the
8 timer if the following conditions are true:
9 + the periodic search timer is disabled, and
10 + *total_ec* is less than (-120 + 2 × SF_TOTAL_EC_THRESH_s).
- 11 • If ALIGN_TIMING_USED_s is set to '0', SF_TOTAL_EC_THRESH_s is equal to '11111'
12 and SF_TOTAL_EC_IO_THRESH_s is not equal to '11111', the mobile station shall
13 perform the following actions once per frame:
- 14 – Disable the periodic search timer if $(-20 \times \log_{10} (E_c/I_o)_{total})$ is not greater than
15 SF_TOTAL_EC_IO_THRESH_s.
- 16 – Reset the expiration time of the periodic search timer to the value in
17 Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD_s, and re-enable the
18 timer if the following conditions are true:
19 + the periodic search timer is disabled, and
20 + $(-20 \times \log_{10} (E_c/I_o)_{total})$ is greater than SF_TOTAL_EC_IO_THRESH_s.
- 21 • If ALIGN_TIMING_USED_s is set to '0', SF_TOTAL_EC_THRESH_s is not equal to
22 '11111' and SF_TOTAL_EC_IO_THRESH_s is not equal to '11111', the mobile station
23 shall perform the following actions once per frame:
- 24 – Disable the periodic search timer if the following conditions are true:
25 + *total_ec* is not less than (-120 + 2 × SF_TOTAL_EC_THRESH_s), and
26 + $(-20 \times \log_{10} (E_c/I_o)_{total})$ is not greater than SF_TOTAL_EC_IO_THRESH_s.
- 27 – Reset the expiration time of the periodic search timer to the value in
28 Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD_s, and re-enable the
29 timer if the following conditions are true:
30 + the periodic search timer is disabled, and
31 + *total_ec* is less than (-120 + 2 × SF_TOTAL_EC_THRESH_s), or $(-20 \times \log_{10}$
32 $(E_c/I_o)_{total})$ is greater than SF_TOTAL_EC_IO_THRESH_s.
- 33 • The mobile station shall maintain the periodic search timer independent of the total
34 E_c and the total E_c/I_o of the pilots in the Serving Frequency Active Set, if any of the
35 following conditions is true:
- 36 – ALIGN_TIMING_USED_s is set to '1', or

- 1 – SF_TOTAL_EC_THRESH_s is equal to ‘11111’ and SF_TOTAL_EC_IO_THRESH_s is
2 equal to ‘11111’.
3

4 **Table 2.6.6.2.8.3.2-1. Search Period Values**

SEARCH_PERIOD _s	Search Period (seconds)	SEARCH_PERIOD _s	Search Period (seconds)
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

5
6 If the periodic search timer is enabled, the mobile station shall perform the following
7 actions before the timer expires:

- 8 • If ALIGN_TIMING_USED_s is set to ‘0’, the mobile station shall measure the strength
9 of all pilots in the Candidate Frequency Search Set at least once in one or more
10 visits to the Candidate Frequency, as described in 2.6.6.2.8.3.3.
11 • If ALIGN_TIMING_USED_s is set to ‘1’, the mobile station shall measure the strength
12 of all pilots in the Candidate Frequency Search Set in one or more scheduled visits
13 (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

14 The mobile station shall schedule visits to the Candidate Frequency only at $((0.00125 \times$
15 $SEARCH_OFFSET_s) + k \times (SEARCH_TIME_RESOLUTION_s \times inter_visit_time))$ seconds after
16 the action time of the *Candidate Frequency Search Request Message* or the *Candidate*
17 *Frequency Search Control Message* that started the search, where

18 $k =$ an integer between 0 and max_num_visits , inclusive, where
19 max_num_visits is the value of MAX_NUM_VISITS field of the
20 last *Candidate Frequency Search Response Message* sent by the
21 mobile station,

22 and

23 $inter_visit_time =$ the value of the INTER_VISIT_TIME field of the last *Candidate*
24 *Frequency Search Response Message* sent by the mobile station.

- 25 – The mobile station shall abort a scheduled visit to the Candidate Frequency
26 if at the scheduled time, one or both of the following conditions hold:

- 1 + SF_TOTAL_EC_THRESH_s is not equal to '11111' and *total_ec* is not less than
2 (-120 + 2 × SF_TOTAL_EC_THRESH_s), or
- 3 + SF_TOTAL_EC_IO_THRESH_s is not equal to '11111' and (-20 × log₁₀
4 (E_c/I_o)_{total}) is not greater than SF_TOTAL_EC_IO_THRESH_s.
- 5 – If the mobile station aborts a scheduled visit during a search period, it may
6 abort all remaining scheduled visits in that search period.
- 7 • The mobile station shall send a *Candidate Frequency Search Report Message* if
8 MIN_TOTAL_PILOT_EC_IO_s is equal to '00000' or if (- 20 × log₁₀ (E_c/I_o)_{total}) is less
9 than or equal to MIN_TOTAL_PILOT_EC_IO_s, where (E_c/I_o)_{total} is the sum of E_c/I_o
10 for all those pilots that measure above CF_T_ADD_s in the current search period.

11 The mobile station shall report the contents of the *Candidate Frequency Search*
12 *Report Message* as follows:

- 13 – The mobile station shall report the two components of the Candidate Frequency
14 in the CDMA_FREQ and BAND_CLASS fields.
- 15 – The mobile station shall report the received power on the Candidate Frequency
16 and on the Serving Frequency in the CF_TOTAL_RX_PWR and
17 SF_TOTAL_RX_PWR fields, respectively.
- 18 – For each pilot in the Candidate Frequency Search Set that measures above
19 CF_T_ADD_s, the mobile station shall report its phase and strength in the fields
20 PILOT_PN_PHASE and PILOT_STRENGTH, respectively.
- 21 • The mobile station shall ensure that the strength measurement for all pilots in the
22 Candidate Frequency Search Set were obtained within *freshness_interval* before the
23 *Candidate Frequency Search Report Message* is sent, where *freshness_interval* is
24 determined as follows:

- 25 – If the value of the TOTAL_OFF_TIME_FWD field or of the TOTAL_OFF_TIME_REV
26 field of the last *Candidate Frequency Search Response Message* sent by the
27 mobile station to the base station is greater than or equal to
28 $\lceil (T_{70m} - T_{71m}) / \text{SEARCH_TIME_RESOLUTION}_s \rceil$, then

29
$$\text{freshness_interval} = (\max(\text{fwd_time}, \text{rev_time}) + T_{71m}) \text{ seconds,}$$

30 where

31
$$\text{fwd_time} = \text{SEARCH_TIME_RESOLUTION}_s \times (\text{value of the}$$

32 TOTAL_OFF_TIME_FWD field of the last *Candidate Frequency*
33 *Search Response Message* sent by the mobile station),

34 and

35
$$\text{rev_time} = \text{SEARCH_TIME_RESOLUTION}_s \times (\text{value of the}$$

36 TOTAL_OFF_TIME_REV field of the last *Candidate Frequency*
37 *Search Response Message* sent by the mobile station).

- 38 – Otherwise,

39
$$\text{freshness_interval} = T_{70m} \text{ seconds.}$$

2.6.6.2.8.3.3 Candidate Frequency Pilot Measurements

The mobile station measures the strength of all pilots in the Candidate Frequency Search Set in one or more visits to the Candidate Frequency. The mobile station shall perform the following actions each time it visits the Candidate Frequency to measure pilot strengths:

- If the mobile station is processing the Forward Fundamental Channel, the mobile station shall stop processing the Forward Fundamental Channel. If the mobile station is transmitting on the Reverse Fundamental Channel, the mobile station shall stop transmitting on the Reverse Fundamental Channel.
- If the mobile station is processing the Forward Dedicated Control Channel, the mobile station shall stop processing the Forward Dedicated Control Channel. If the mobile station is transmitting on the Reverse Dedicated Control Channel, the mobile station shall stop transmitting on the Reverse Dedicated Control Channel.
- The mobile station shall stop processing the Forward Supplemental Code Channels and Forward Supplemental Channels (if any). The mobile station shall stop transmitting on the Reverse Supplemental Code Channels and 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 its current Active Set and Candidate Set (see 2.6.6.2.3), and shall suspend incrementing TOT_FRAMES_S , BAD_FRAMES_S , $DCCH_TOT_FRAMES_S$, $DCCH_BAD_FRAMES_S$, $SCH_TOT_FRAMES_S$, and $SCH_BAD_FRAMES_S$ if applicable (see 2.6.4.1.1).
- The mobile station shall lock the accumulation of valid level changes in the closed loop mean output power and shall ignore received power control bits related to the period that the transmitter is disabled (see [2]).
- The mobile station shall store the following parameters from its current configuration:
 - CDMA band class ($SF_CDMABAND_S = CDMABAND_S$)
 - Frequency Assignment ($SF_CDMACH_S = CDMACH_S$)
 - Pilot detection threshold ($SF_T_ADD_S = T_ADD_S$)
- The mobile station shall set the following parameters:
 - $CDMABAND_S = CF_CDMABAND_S$
 - $CDMACH_S = CF_CDMACH_S$
 - $T_ADD_S = CF_T_ADD_S$

The mobile station shall tune to the Candidate Frequency.

- The mobile station shall not change its time reference (see [2]) until it resumes using the Serving Frequency Active Set, as described below.
- The mobile station shall measure the mean input power on the Candidate Frequency ($cand_freq_pwr$, in dBm / 1.23 MHz), and may use $cand_freq_pwr$ along

- 1 with the measurement of the mean input power on the Serving Frequency
 2 (*avg_serving_freq_pwr*, in dBm / 1.23 MHz) in the search procedure as follows:
- 3 – If $\text{DIFF_RX_PWR_THRESH}_s$ is not equal to '00000', and (*cand_freq_pwr* -
 4 *avg_serving_freq_pwr*) is less than $(-30 + 2 \times \text{DIFF_RX_PWR_THRESH}_s)$ dB, the
 5 mobile station may terminate the search for pilots in the current visit to the
 6 Candidate Frequency.
 - 7 – If $\text{DIFF_RX_PWR_THRESH}_s$ is equal to '00000', the mobile station does not use
 8 the power measurements in the search procedure, or (*cand_freq_pwr* -
 9 *avg_serving_freq_pwr*) is not less than $(-30 + 2 \times \text{DIFF_RX_PWR_THRESH}_s)$ dB,
 10 the mobile station shall measure E_c/I_o for all or some of the pilots in its
 11 Candidate Frequency Search Set, using the search procedures specified in
 12 2.6.6.2.2.
- 13 • The mobile station shall restore the following parameters:
 - 14 – Pilot detection threshold ($T_ADD_s = SF_T_ADD_s$)
 - 15 – CDMA band class ($CDMABAND_s = SF_CDMABAND_s$)
 - 16 – Frequency assignment ($CDMACH_s = SF_CDMACH_s$)
 - 17 • The mobile station shall tune to the Serving Frequency and shall resume using the
 18 Serving Frequency Active Set as follows:
 - 19 – If the mobile station was processing the Forward Fundamental Channel prior to
 20 tuning to the Candidate Frequency, the mobile station shall resume processing
 21 the Forward Fundamental Channel. If the mobile station was transmitting on
 22 the Reverse Fundamental Channel prior to tuning to the Candidate Frequency,
 23 the mobile station shall resume transmitting on the Reverse Fundamental
 24 Channel.
 - 25 – If the mobile station was processing the Forward Dedicated Control Channel
 26 prior to tuning to the Candidate Frequency, the mobile station shall resume
 27 processing the Forward Dedicated Control Channel. If the mobile station was
 28 transmitting on the Reverse Dedicated Control Channel prior to tuning to the
 29 Candidate Frequency, the mobile station shall resume transmitting on the
 30 Reverse Dedicated Control Channel.
 - 31 – If the Forward Supplemental Code Channels and Forward Supplemental
 32 Channels assignment has not expired, the mobile station shall resume
 33 processing the Forward Supplemental Code Channels and Forward
 34 Supplemental Channels (if any). If the Reverse Supplemental Code Channel and
 35 Reverse Supplemental Channels assignment has not expired, the mobile station
 36 may resume transmitting on the Reverse Supplemental Code Channels and
 37 Reverse Supplemental Channels (if any).
 - 38 – When the mobile station resumes transmission on the Reverse Traffic Channel,
 39 it shall use the following rules to re-enable its transmitter:

- 1 + If the interval between the time that the mobile station disables its
2 transmitter and the time that it resumes using the Serving Frequency Active
3 Set is equal to or greater than $(N_{2m} \times 20)$ ms, then the mobile station shall
4 wait to receive a period of $(N_{3m} \times 20)$ ms with sufficient signal quality on the
5 physical channel corresponding to $FPC_PRI_CHAN_S$ before it re-enables its
6 transmitter.
- 7 + Otherwise, the mobile station shall re-enable its transmitter no later than
8 $N_{3m} \times 20$ ms after the mobile station tunes to the Serving Frequency. The
9 mobile station should re-enable its transmitter earlier. After the mobile
10 station re-enables its transmitter, the mean output power shall be as
11 specified in 2.1.2.4.1 for a step change in input power. If the mobile station
12 re-enables its transmitter earlier than $N_{3m} \times 20$ ms after it tunes to the
13 Serving Frequency, the initial mean output power shall be as specified in [2],
14 where the initial mean input power estimate is either:
- 15 o within 6 dB of the actual mean input power, or
 - 16 o equal to the mean input power before the mobile station tuned to the
17 Target Frequency.
- 18 • The mobile station shall enable the fade timer and the handoff drop timers
19 corresponding to the pilots in its Active Set and Candidate Set. The mobile station
20 shall resume incrementing TOT_FRAMES_S , BAD_FRAMES_S , $DCCH_TOT_FRAMES_S$,
21 $DCCH_BAD_FRAMES_S$, $SCH_TOT_FRAMES_S$, and $SCH_BAD_FRAMES_S$ if applicable
22 as specified in 2.6.4.1.8.

23 2.6.6.2.8.3.4 Aborting CDMA Candidate Frequency Periodic Search

24 When the mobile station aborts a periodic search, it shall perform the following:

- 25 • The mobile station shall cancel any remaining visits to the Candidate Frequency in
26 the current search period, and shall not send a *Candidate Frequency Search Report*
27 *Message* for the current search period.
- 28 • The mobile station shall disable the periodic search timer.

29 2.6.6.2.9 Reserved

30 2.6.6.2.10 Reserved

31 2.6.6.2.11 Processing of Reverse Supplemental Code Channels and Reverse Supplemental 32 Channels

33 Reverse Supplemental Code Channels are not supported for $P_REV_IN_USE_S$ greater than
34 or equal to nine.

35 If $USE_T_ADD_ABORT_S$ is set to '1', and the strength of a Neighbor Set or Remaining Set
36 pilot is found to be above T_ADD_S , then the mobile station shall terminate any active
37 transmission on Reverse Supplemental Code Channels or Reverse Supplemental Channels
38 at the end of the current 20 ms frame. The mobile station shall perform the following:

- 39 • Any previously active Reverse Supplemental Code Channel or Reverse Supplemental
40 Channel assignment shall be considered implicitly terminated.

- 1 • If active transmission on Reverse Supplemental Code Channels is terminated, the
2 mobile station shall set NUM_REV_CODES_s to '000' and shall set IGNORE_SCAM_s
3 to '1'.
- 4 • If active transmission on Reverse Supplemental Channels is terminated, the mobile
5 station shall set IGNORE_ESCAM_s to '1'.
- 6 • The mobile station shall set SCRM_SEQ_NUM_s to (SCRM_SEQ_NUM_s + 1) mod 16.
- 7 • The mobile station shall transmit a *Supplemental Channel Request Message* with
8 USE_SCRM_SEQ_NUM set to '1', SCRM_SEQ_NUM set to SCRM_SEQ_NUM_s, and
9 SIZE_OF_REQ_BLOB set to '0000'.

10 2.6.6.2.12 Periodic Serving Frequency Pilot Report Procedure

11 While the mobile station is tuned to the Serving Frequency (specified by CDMACH_s and
12 CDMABAND_s), the mobile station shall measure the total received power spectral density,
13 in mW/1.23 MHz, on the Serving Frequency at least once every 20 ms frame. The mobile
14 station shall maintain the average value of the total received power spectral density,
15 *spec_density*, over the last N_{12m} frames. The mobile station shall maintain the PPSMM
16 timer as follows:

- 17 • When the mobile station starts a Periodic Serving Frequency Pilot Report Procedure,
18 it shall set the PPSMM timer to PPSMM_PERIOD_s × 0.08 seconds and shall enable
19 the timer.
- 20 • When the PPSMM timer expires, the mobile station shall send a *Periodic Pilot*
21 *Strength Measurement Message* (2.6.6.2.5.2) to the base station, reset the PPSMM
22 timer to PPSMM_PERIOD_s × 0.08 seconds and shall re-enable the timer.
- 23 • When the mobile station receives an *Extended Handoff Direction Message*, a *General*
24 *Handoff Direction Message* or a *Universal Handoff Direction Message* directing the
25 mobile station to perform a hard handoff (see 2.6.6.2.5.1), it shall abort the Periodic
26 Serving Frequency Pilot Report Procedure and disable the PPSMM timer if it is
27 enabled.
- 28 • If MIN_PILOT_PWR_THRESH_s is not equal to '11111' and
29 MIN_PILOT_EC_IO_THRESH_s is equal to '11111', the mobile station shall perform
30 the following actions once per frame:
 - 31 – Disable the PPSMM timer if the received total energy per PN chip, E_C, of the
32 pilots in the Active Set is not less than (-120 + 2 × MIN_PILOT_PWR_THRESH_s),
33 where the value of E_C is computed as 10 × log₁₀ (PS × *spec_density*) and PS is
34 the total E_C/I₀ of the pilots in the Active Set measured as specified in 2.6.6.2.2.
 - 35 – Reset the expiration time of the PPSMM timer to PPSMM_PERIOD_s × 0.08
36 seconds and re-enable the timer if the following conditions are true:
 - 37 o the PPSMM timer is disabled, and
 - 38 o the received total energy per PN chip, E_C, of the pilots in the Active Set is
39 less than (-120 + 2 × MIN_PILOT_PWR_THRESH_s).

- 1 • If $\text{MIN_PILOT_PWR_THRESH}_s$ is equal to '11111' and $\text{MIN_PILOT_EC_IO_THRESH}_s$
 2 is not equal to '11111', the mobile station shall perform the following actions once
 3 per frame:
- 4 – Disable the PPSMM timer if the total pilot strength of the pilots in the Active Set,
 5 PS, satisfies the condition that $(-20 \times \log_{10}(\text{PS}))$ 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 total pilot strength of the pilots in the Active Set, PS, satisfies the
 11 condition that $(-20 \times \log_{10}(\text{PS}))$ is greater than $\text{MIN_PILOT_EC_IO_THRESH}_s$.
- 12 • If $\text{MIN_PILOT_PWR_THRESH}_s$ is not equal to '11111' and
 13 $\text{MIN_PILOT_EC_IO_THRESH}_s$ is not equal to '11111', the mobile station shall
 14 perform the following actions once per frame:
- 15 – Disable the PPSMM timer if the following conditions are true:
- 16 o the received total energy per PN chip, E_C , of the pilots in the Active Set is not
 17 less than $(-120 + 2 \times \text{MIN_PILOT_PWR_THRESH}_s)$, and
- 18 o the total pilot strength of the pilots in the Active Set, PS, satisfies the
 19 condition that $(-20 \times \log_{10}(\text{PS}))$ is not greater than
 20 $\text{MIN_PILOT_EC_IO_THRESH}_s$.
- 21 – Reset the expiration time of the PPSMM timer to $\text{PPSMM_PERIOD}_s \times 0.08$
 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 $(-120 + 2 \times \text{MIN_PILOT_PWR_THRESH}_s)$, or the total pilot strength
 26 of the pilots in the Active Set, PS, satisfies the condition that $(-20 \times$
 27 $\log_{10}(\text{PS}))$ is greater than $\text{MIN_PILOT_EC_IO_THRESH}_s$.
- 28 • If $\text{MIN_PILOT_PWR_THRESH}_s$ is equal to '11111' and $\text{MIN_PILOT_EC_IO_THRESH}_s$
 29 is equal to '11111', the mobile station shall maintain the PPSMM timer independent
 30 of the received power and the total E_C/I_0 of the pilots.

31 2.6.6.2.13 Call Rescue Soft Handoff

32 This section presents an overview and mobile station requirements for the support of call
 33 rescue soft handoff while the mobile station is in the *Mobile Station Control on the Traffic*
 34 *Channel State*.

35 2.6.6.2.13.1 Overview

36 Support for the call rescue feature is mandatory for the mobile station. The mobile station
 37 initiates call rescue soft handoff after disabling its transmitter due to:

- 38 • insufficient signal quality on the Forward Traffic Channel (see 2.6.4.1.8)

- 1 • an acknowledgment failure.

2 In order for a pilot to be autonomously added to the Active Set, it must be a valid soft
3 handoff candidate on the mobile station's neighbor list, and must also support a Rescue
4 Channel. A Rescue Channel is a Fundamental Channel that is used for call rescue soft
5 handoff, and has a pre-allocated Walsh Code that is provided to the mobile station as part
6 of the *General Neighbor List Message*, *Universal Neighbor List Message*, and *Extended*
7 *Neighbor List Update Message*.

8 If the mobile station is eligible to attempt call rescue soft handoff, then it re-enables its
9 transmitter and monitors the Rescue Channel (as well as the other Traffic Channels in the
10 Active Set) for good frames. Once good frames are received, then the call continues
11 normally.

12 Three timers are used as part of call rescue soft handoff: the rescue delay timer, the rescue
13 allowed timer, and the rescue attempt timer.

14 2.6.6.2.13.2 Requirements

15 If the rescue delay timer expires and the interval specified by $RESQ_MIN_PERIOD_S$ has
16 elapsed since the last successful call rescue, then the mobile station shall enable the
17 rescue allowed timer with an initial value of $(RESQ_ALLOWED_TIME_S \times 80)$ ms.

18 While the rescue allowed timer is enabled, if the mobile station is able to promote any new
19 pilots to the Active Set (see 2.6.6.2.6.1), then the mobile station shall perform the following:

- 20 • disable the rescue allowed timer,
21 • update the service configuration as specified in 2.6.6.2.13.3.
22 • cancel any current and pending Forward or Reverse Supplemental Channel
23 assignments.
24 • re-enable its transmitter at the last closed-loop power level plus
25 $RESQ_POWER_DELTA_S$,
26 • enable the rescue attempt timer with an initial value of $(RESQ_ATTEMPT_TIME_S \times$
27 40) ms.
28 • transmit the Traffic Channel preamble followed by a *Extended Pilot Strength*
29 *Measurement Message*, where the length of the Traffic Channel preamble is
30 determined as follows:
- 31 – If operating in Radio Configuration 1 or 2, the length of the Traffic Channel
32 preamble is given by $RESQ_NUM_PREAMBLE_RC1_RC2_S \times 20$ ms.
33 – If operating in Radio Configuration greater than 2, the length of the Traffic
34 Channel preamble is given by the duration corresponding to
35 $RESQ_NUM_PREAMBLE_S$ as specified by the Table 3.7.3.3.2.17-1.

36 If the rescue allowed timer expires, then the mobile station shall not autonomously
37 promote any new pilots to the Active Set.

1 While the rescue attempt timer is enabled, the mobile station shall not perform the
 2 Forward or Reverse Traffic Channel power control procedures specified in 2.6.4.1.1 and
 3 2.6.6.2.7.2, respectively.

4 If the rescue attempt timer expires, then the mobile station shall disable its transmitter.

5 2.6.6.2.13.3 Service Configuration Update Due to Call Rescue

6 The mobile station shall set CH_IND_s to '01'.

7 The mobile station shall replace the current Logical-to-Physical Mapping with the default
 8 Logical-to-Physical Mapping as specified in Table 2.6.4.2-1, where:

- 9 • requirement 1 is as follows: The SR_ID field shall be set to the SR_ID corresponding
 10 to the services mapped to the Fundamental Channel, and
- 11 • requirements 2 and 3 are as follows: the PHYSICAL_RESOURCE field shall be set
 12 to '0000'.

13 The mobile station shall replace the current Service Configuration information record with
 14 a new Service Configuration information record created as follows:

- 15 • The mobile station shall delete all Service Option Connection Records corresponding
 16 to an SR_ID that is not listed in the Call Rescue Logical-to-Physical Mapping
 17 created above and the Layer 3 shall terminate the corresponding call control
 18 instance (currently existing or pending instantiation).
- 19 • The mobile station shall identify the Call Control instance corresponding to the first
 20 service option connection listed in this newly created Service Configuration
 21 information record by the NULL identifier.

22 The mobile station shall set SYNC_ID_s to NULL.

23 2.6.6.3 Typical Message Exchanges During Handoffs

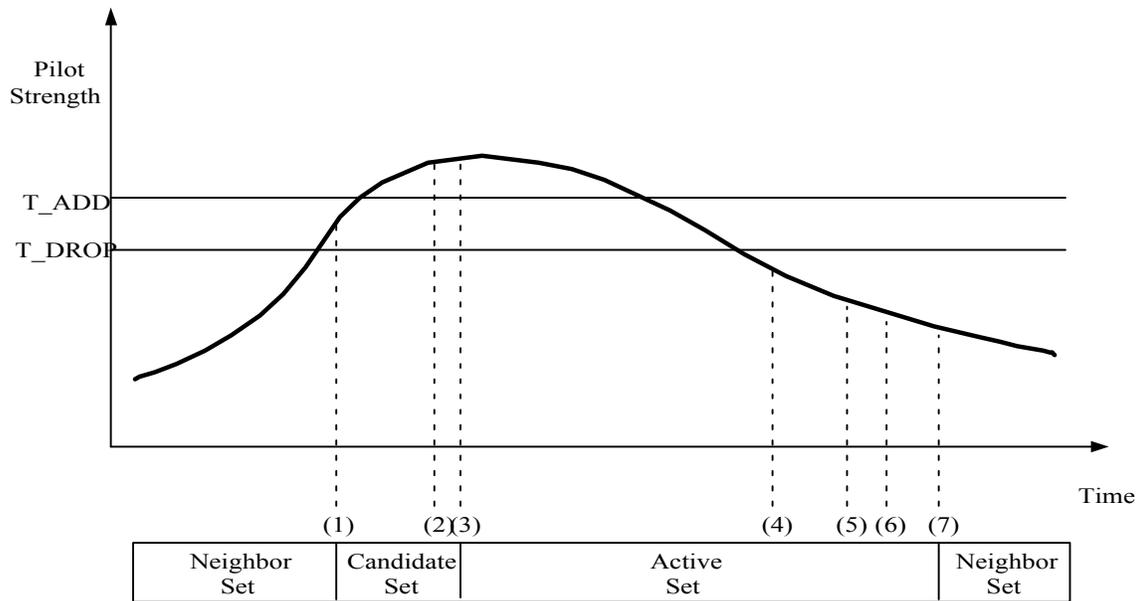
24 The following examples illustrate typical message exchanges between the mobile station
 25 and the base station during handoff. Refer to Annex B for examples of call processing
 26 during handoff.

27 Figure 2.6.6.3-1 shows an example of the messages exchanged between the mobile station
 28 and the base station during a typical handoff process if P_REV_IN_USE_s is less than or
 29 equal to three or SOFT_SLOPE_s is equal to '000000'.

30 Figure 2.6.6.3-2 shows an example of the messages exchanged between the mobile station
 31 and the base station during a typical handoff process if P_REV_IN_USE_s is greater than
 32 three and SOFT_SLOPE_s is not equal to '000000'.

33 Figure 2.6.6.3-3 illustrates the messaging triggered by a pilot of the Candidate Set as its
 34 strength gradually rises above the strength of each pilot of the Active Set if P_REV_IN_USE_s
 35 is less than or equal to three, or SOFT_SLOPE_s is equal to '000000'. Note that the mobile
 36 station reports that a Candidate Set pilot is stronger than an Active Set pilot only if the
 37 difference between their respective strengths is at least $T_COMP \times 0.5$ dB.

1 Figure 2.6.6.3-4 illustrates the messaging triggered by a pilot of the Candidate Set as its
2 strength gradually rises above the strength of each pilot of the Active Set if $P_REV_IN_USE_s$
3 is greater than three and $SOFT_SLOPE_s$ is not equal to '000000'. Note that the mobile
4 station reports that a Candidate Set pilot is stronger than an Active Set pilot only if the
5 difference between their respective strengths is at least $T_COMP \times 0.5$ dB and Pilot P_0
6 strength exceeds $[(SOFT_SLOPE/8) \times 10 \times \log_{10}(PS_1 + PS_2) + ADD_INTERCEPT/2]$.
7

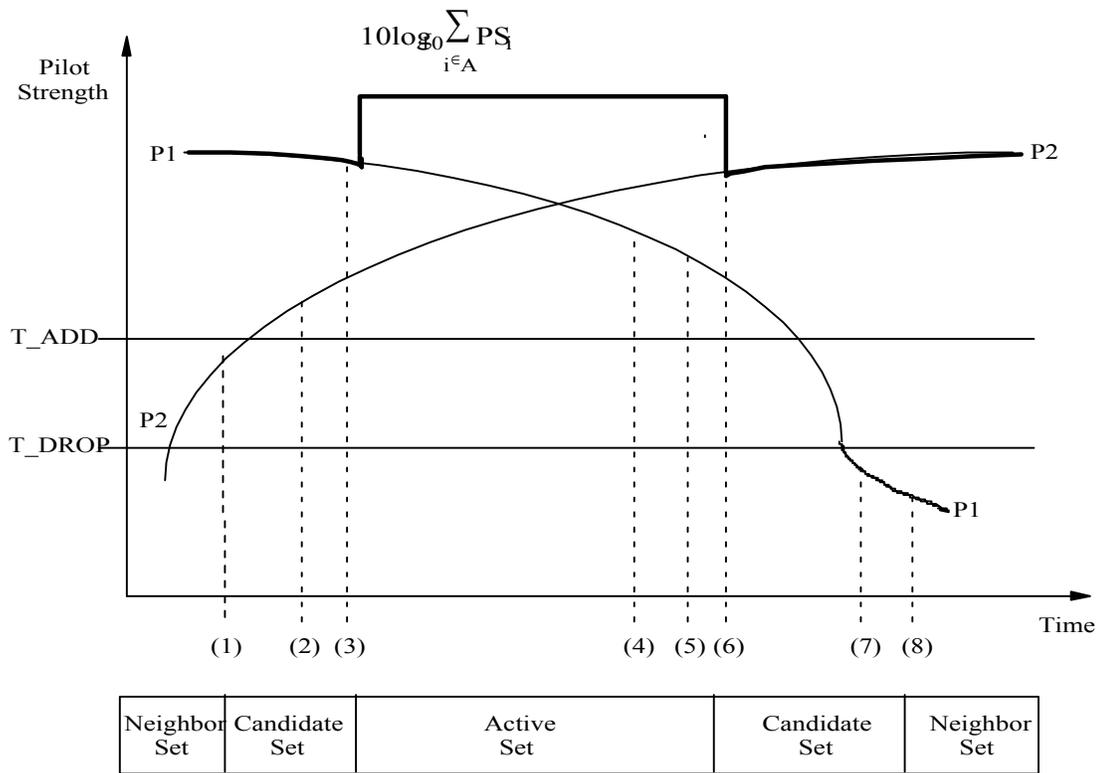


1
2

- 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 $P_REV_IN_USE_s$ is Less Than or Equal**
17 **to Three, or $SOFT_SLOPE_s$ is Equal to '000000'**

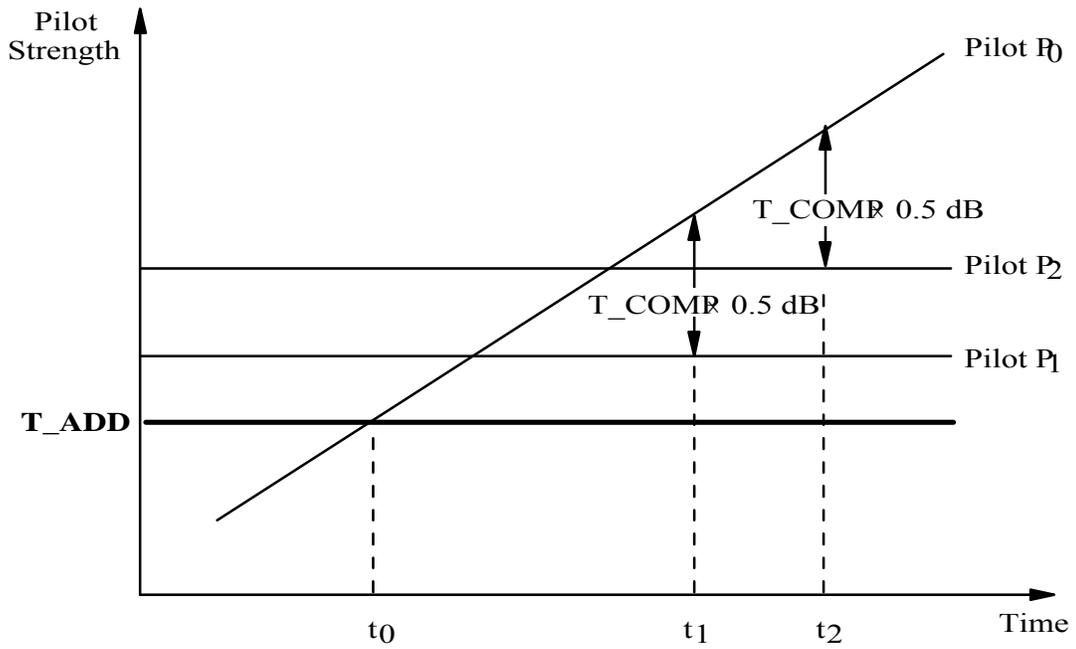
18



1

- 2 (1) Pilot P₂ strength exceeds T_ADD. Mobile station transfers the pilot to the Candidate Set.
- 3 (2) Pilot P₂ strength exceeds $[(SOFT_SLOPE/8) \times 10 \times \log_{10}(PS_1) + ADD_INTERCEPT/2]$.
- 4 Mobile station sends a *Pilot Strength Measurement Message*.
- 5 (3) Mobile station receives an *Extended Handoff Direction Message*, a *General Handoff*
- 6 *Direction Message* or a *Universal Handoff Direction Message*, transfers the pilot P₂ to the
- 7 Active Set, and sends a *Handoff Completion Message*.
- 8 (4) Pilot P₁ strength drops below $[(SOFT_SLOPE/8) \times 10 \times \log_{10}(PS_2) +$
- 9 $DROP_INTERCEPT/2]$. Mobile station starts the handoff drop timer.
- 10 (5) Handoff drop timer expires. Mobile station sends a *Pilot Strength Measurement*
- 11 *Message*.
- 12 (6) Mobile station receives an *Extended Handoff Direction Message*, a *General Handoff*
- 13 *Direction Message* or a *Universal Handoff Direction Message*, transfers the pilot P₁ to the
- 14 Candidate Set and sends a *Handoff Completion Message*.
- 15 (7) Pilot P₁ strength drops below T_DROP. Mobile station starts the handoff drop timer.
- 16 (8) Handoff drop timer expires. Mobile station moves the pilot P₁ from the Candidate Set
- 17 to the Neighbor Set.

1 **Figure 2.6.6.3-2. Handoff Threshold Example if P_REV_IN_USE_s is Greater Than**
2 **Three, and SOFT_SLOPE_s is Not Equal to '000000'**
3



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Candidate Set: Pilot P₀

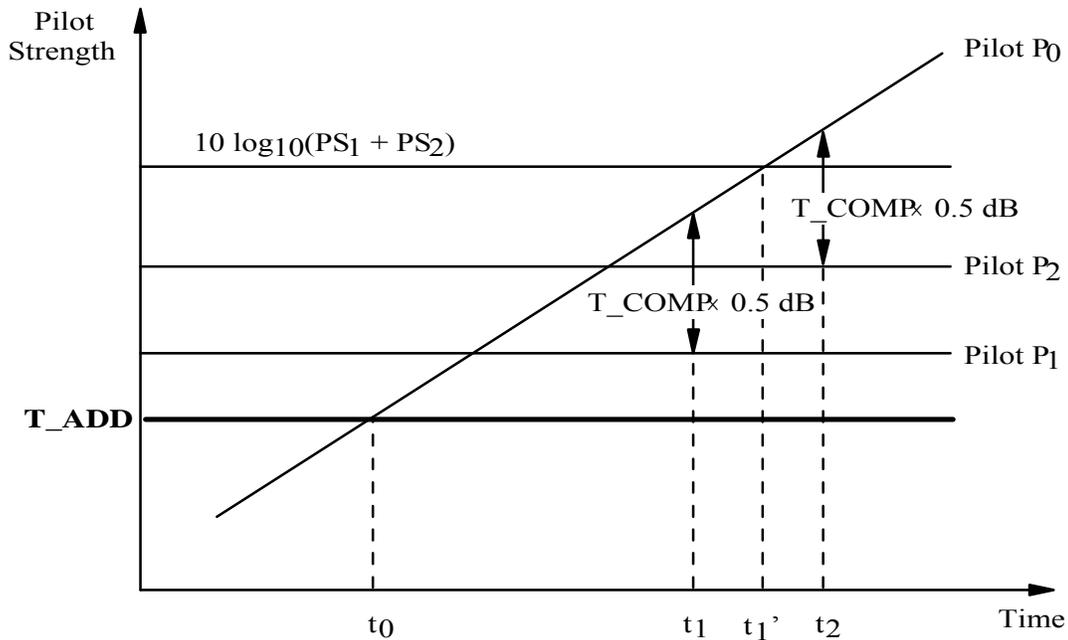
Active Set: Pilots P₁, P₂

t₀ – Pilot Strength Measurement Message sent, P₀ > T_ADD

t₁ – Pilot Strength Measurement Message sent, P₀ > P₁ + T_COMP × 0.5 dB

t₂ – Pilot Strength Measurement Message sent, P₀ > P₂ + T_COMP × 0.5 dB

Figure 2.6.6.3-3. Pilot Strength Measurements Triggered by a Candidate Pilot if P_REV_IN_USE_s = 3 or SOFT_SLOPE_s = '000000'



1

2 Candidate Set: Pilot P₀

3

Active Set: Pilots P₁, P₂

4

t₀ – Pilot Strength Measurement Message not sent because

5

[10 × log₁₀(PS₀)] < [(SOFT_SLOPE/8) × 10 × log₁₀(PS₁ + PS₂) + ADD_INTERCEPT/2]

6

t₁ – Pilot Strength Measurement Message not sent because

7

P₀ > [P₁ + T_COMP × 0.5 dB] but

8

[10 × log₁₀(PS₀)] < [(SOFT_SLOPE/8) × 10 × log₁₀(PS₁ + PS₂) + ADD_INTERCEPT/2]

9

t₁' – Pilot Strength Measurement Message sent because

10

[10 × log₁₀(PS₀)] > [(SOFT_SLOPE/8) × 10 × log₁₀(PS₁ + PS₂) + ADD_INTERCEPT/2]

11

t₂ – Pilot Strength Measurement Message sent because

12

P₀ > [P₂ + T_COMP × 0.5 dB] and

13

[10 × log₁₀(PS₀)] > [(SOFT_SLOPE/8) × 10 × log₁₀(PS₁ + PS₂) + ADD_INTERCEPT/2]

14

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'

15

16

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 $(\text{IMSI_O_S1} + 2^{24} \times \text{IMSI_O_S2})$.

8 Define:

- 9 • Word L to be bits 0-15 of HASH_KEY
- 10 • Word H to be bits 16-31 of HASH_KEY

11 where bit 0 is the least significant bit of HASH_KEY.

12 For determining CDMA Band, CDMA Channel Number, Paging Channel Number, Forward
 13 Common Control Channel Number, Quick Paging Channel Number, and Paging Slot
 14 Number, the hash value is computed as follows:⁷⁰

$$15 \quad R = \lfloor N \times ((40503 \times (L \oplus H \oplus \text{DECORR})) \bmod 2^{16}) / 2^{16} \rfloor$$

16 For determining a mobile station's assigned paging indicator bit positions, the hash value
 17 is computed as follows:

$$18 \quad R_1 = \lfloor N \times ((40503 \times (L \oplus H \oplus \text{DECORR}_1)) \bmod 2^{16}) / 2^{16} \rfloor$$

19 and

$$20 \quad R_2 = \lfloor (1 - \lfloor (2 \times R_1) / (N+4) \rfloor) \times (N+4) / 2 + \lfloor (2 \times R_1) / (N+4) \rfloor \times ((N+4) / 2 - 4) \times ((40503 \times (L \\ 21 \quad \oplus H \oplus \text{DECORR}_2)) \bmod 2^{16}) / 2^{16} \rfloor + N + 4 + \lfloor (2 \times R_1) / (N+4) \rfloor \times ((N+4) / 2) \text{ for Quick} \\ 22 \quad \text{Paging Channel indicator rate of 4800 bps, or}$$

$$23 \quad R_2 = \lfloor (1 - \lfloor (2 \times R_1) / (N+8) \rfloor) \times (N+8) / 2 + \lfloor (2 \times R_1) / (N+8) \rfloor \times ((N+8) / 2 - 8) \times ((40503 \\ 24 \quad \times (L \oplus H \oplus \text{DECORR}_2)) \bmod 2^{16}) / 2^{16} \rfloor + N + 8 + \lfloor (2 \times R_1) / (N+8) \rfloor \times ((N+8) / 2) \text{ for} \\ 25 \quad \text{Quick Paging Channel indicator rate of 9600 bps.}$$

26 The mobile station shall choose the range N and the modifiers DECORR, DECORR₁, and
 27 DECORR₂ according to the application as shown in Table 2.6.7.1-1. In the table,
 28 HASH_KEY [0...11] denotes the 12 least significant bits of HASH_KEY.

⁷⁰ 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

Application	N	DECORR	Return Value
CDMA Band Number	Number of band entries	$2 \times \text{HASH_KEY} [0\dots11]$	R + 1
CDMA Channel Number	Number of channel entries	0	R + 1
Paging Channel Number	PAGE_CHAN _s from <i>System Parameters Message</i> (up to 7)	$2 \times \text{HASH_KEY} [0\dots11]$	R + 1
Quick Paging Channel Number	NUM_QPCH _s from <i>Extended System Parameters Message</i> or <i>MC-RR Parameters Message</i> (up to 3)	$2 \times \text{HASH_KEY} [0\dots11]$	R + 1
Paging Slot Number	2048	$6 \times \text{HASH_KEY}[0\dots11]$	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 _s from <i>MC-RR Parameters Message</i> (up to 7)	$2 \times \text{HASH_KEY} [0\dots11]$	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.⁷¹

⁷¹ 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, 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 During the *Mobile Station Initialization State*, the mobile station shall seed its generator with

$$2 \quad z_0 = (\text{ESN} \oplus \text{RANDOM_TIME}) \bmod m$$

3 where RANDOM_TIME shall be the least-significant 32-bits of SYS_TIME_s stored from the
4 *Sync Channel Message*. If the initial value so produced is found to be zero, it shall be
5 replaced with one. The mobile station shall compute a new z_n for each subsequent use.

6 The mobile station shall use the value $u_n = z_n / m$ for those applications that require a
7 binary fraction u_n , $0 < u_n < 1$.

8 The mobile station shall use the value $k_n = \lfloor N \times z_n / m \rfloor$ for those applications that require
9 a small integer k_n , $0 \leq k_n \leq N - 1$.

10 2.6.8 CODE_CHAN_LIST_s Maintenance

11 The CODE_CHAN_LIST_s is a descriptive structure used to manage the Forward
12 Fundamental Channel and Forward Supplemental Code Channels, if any, associated with
13 the mobile station's Active Set. Associated with each member of the mobile station's Active
14 Set, there is an ordered array of code channels. The first entry of the ordered array
15 specifies the Forward Fundamental Channel associated with the pilot and the subsequent
16 entries, if any, specify the Forward Supplemental Code Channels associated with the pilot.
17 The CODE_CHAN_LIST_s is the collection of ordered arrays of code channels for each
18 member of the mobile station's Active Set. The i^{th} entry in every array (of code channels
19 associated with a member of the Active Set) corresponds to the i^{th} code channel.

20 The mobile station shall maintain the CODE_CHAN_LIST_s as follows:

- 21 • When the mobile station is first assigned a Forward Fundamental Channel, it shall
22 initialize the CODE_CHAN_LIST_s to contain the Forward Fundamental Channel for
23 each member of the Active Set.
- 24 • When the mobile station processes the *Extended Handoff Direction Message*, the
25 mobile station shall update the CODE_CHAN_LIST_s as follows:
 - 26 – For each pilot listed in the *Extended Handoff Direction Message* which does not
27 have a corresponding code channel in the CODE_CHAN_LIST_s, the mobile
28 station shall add the code channel, CODE_CHAN, of that pilot to the
29 CODE_CHAN_LIST_s, as the Forward Fundamental Channel for the pilot.
 - 30 – The mobile station shall delete all information in the CODE_CHAN_LIST_s
31 associated with a pilot that is not included in the *Extended Handoff Direction*
32 *Message*.
- 33 • When the mobile station processes the *General Handoff Direction Message*, the
34 mobile station shall update the CODE_CHAN_LIST_s to contain the Forward
35 Fundamental Channel associated with each pilot included in the *General Handoff*
36 *Direction Message*. The first code channel occurrence associated with each pilot
37 included in the *General Handoff Direction Message* corresponds to the Forward
38 Fundamental Channel. The mobile station shall perform the following:
 - 39 – If FOR_SUP_CONFIG_r is included and FOR_SUP_CONFIG_r is equal to '10' or
40 '11', the mobile station shall perform the following actions:

- 1 + For each pilot listed in the *General Handoff Direction Message*, the mobile
2 station shall set the Forward Supplemental Code Channels (associated with
3 the pilot) in the CODE_CHAN_LIST_s to the Forward Supplemental Code
4 Channels specified in the *General Handoff Direction Message*.
- 5 + The mobile station shall delete all information in the CODE_CHAN_LIST_s
6 associated with a pilot that is not included in the *General Handoff Direction*
7 *Message*.
- 8 – If FOR_SUP_CONFIG_r is equal to ‘00’ or ‘01’ or if FOR_SUP_CONFIG_r is not
9 included in the *General Handoff Direction Message*, the mobile station shall not
10 update Supplemental Code Channels associated with the pilots included in the
11 *General Handoff Direction Message*. The mobile station shall perform the
12 following actions:
- 13 + For each pilot listed in the *General Handoff Direction Message* which does
14 not have a corresponding code channel in the CODE_CHAN_LIST_s, the
15 mobile station shall add the code channel, CODE_CHAN, of that pilot to the
16 CODE_CHAN_LIST_s, as the Forward Fundamental Channel for the pilot.
- 17 + The mobile station shall delete all information in the CODE_CHAN_LIST_s
18 associated with a pilot that is not included in the *General Handoff Direction*
19 *Message*.
- 20 • When the mobile station processes the *Supplemental Channel Assignment Message*
21 it shall follow the following rules:
- 22 – If FOR_SUP_CONFIG_r is equal to ‘10’ or ‘11’, the mobile station shall update the
23 Forward Supplemental Code Channels for each pilot in the Active Set.
- 24 – If the pilot is not listed in the *Supplemental Channel Assignment Message*, the
25 mobile station shall delete all occurrences of Forward Supplemental Code
26 Channels associated with the pilot from the Code Channel List.
- 27 – If a pilot is listed in the *Supplemental Channel Assignment Message*, then the
28 mobile station shall set the Forward Supplemental Code Channels (associated
29 with the pilot) in the CODE_CHAN_LIST_s to the Forward Supplemental Code
30 Channels specified in the *Supplemental Channel Assignment Message*.
- 31 – If FOR_SUP_CONFIG_r is equal to ‘00’ or ‘01’, the mobile station shall not update
32 Supplemental Code Channels associated with the pilots included in the
33 *Supplemental Channel Assignment Message*.

34 2.6.9 CDMA Tiered Services

35 This section presents an overview and mobile station requirements for the support of
36 CDMA Tiered services while the mobile station is in the *Mobile Station Idle State* and in the
37 *Mobile Station Control on the Traffic Channel State*.

1 2.6.9.1 Overview

2 2.6.9.1.1 Definition

3 The mobile station may support Tiered Services based upon User Zones. Tiered Services
4 provide the user custom services and special features based upon the mobile station
5 location. Tiered Services also provides private network support. Important to the
6 operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones by
7 which the base station offers custom services based upon the mobile station location.

8 User Zones are associated with a set of features and services, plus a geographic area in
9 which the User Zone features/services are made available to the customers that have
10 subscribed to that User Zone. The boundary of the User Zone Geographic area may be
11 established based on the coverage area of a public or private base station or it may be
12 established independent of RF topology.

13 User Zones may be supported by the public system on the same frequency as the serving
14 base station, or they may be supported on a private system operating on a different
15 frequency.

16 2.6.9.1.2 Types of User Zones

17 User Zones may be of two basic types:

- 18 • *Broadcast User Zones*: Broadcast User Zones are identified to the mobile station
19 using the Paging Channel or the Primary Broadcast Control Channel. In this case,
20 the base station broadcasts on the Paging Channel or the Primary Broadcast Control
21 Channel messages identifying the User Zones that fall within the coverage area of the
22 particular cell/sector. Mobile stations, as part of their monitoring of the Paging
23 Channel or the Primary Broadcast Control Channel, will identify the presence of a
24 particular User Zone.
- 25 • *Mobile Specific User Zones*: Mobile Specific User Zones are not broadcast by the base
26 station. The mobile station may use other overhead message parameters and
27 compare them with internally stored User Zone parameters to identify the presence
28 of a particular User Zone. These parameters may include: SID, NID, BASE_ID,
29 BASE_LAT, and BASE_LONG.

30 *Broadcast User Zones* allow for permanent as well as temporary subscription. Temporary
31 subscription provides User Zone features and capabilities to users who are not subscribed
32 to the User Zone. In this case, a mobile station, upon entering a new coverage area, may
33 detect the presence of a User Zone that it presently does not subscribe to, but one that
34 supports temporary subscription. The mobile station then queries the network to obtain
35 the User Zone parameters. Once these parameters are received, the mobile station offers to
36 the user via the mobile station user interface, the option of subscribing to the particular
37 User Zone.

38 Some User Zones may require active registration (Active User Zones) upon the mobile
39 station's entry to immediately trigger a change in a feature(s). For others, the implicit
40 registration at call setup is sufficient (Passive User Zones). Active User Zones are used
41 where inbound features change as a result of being in the User Zone. During the *Mobile*

1 *Station Idle State*, a mobile stations needs to register to update the User Zone ID whenever
2 the User Zone that the mobile station is entering and/or leaving is of the Active type.

3 A mobile station that supports User Zone services may store a list of User Zones, where
4 each User Zone is identified by a User Zone ID (UZID). Associated with each stored User
5 Zone, the mobile station may also store a number of determinant parameters used for
6 identifying User Zones.

7 2.6.9.2 Requirements

8 If the mobile station supports User Zone services, it shall maintain and update UZID_s
9 according the following rule:

10 If the mobile station selects a User Zone supported by the base station, the mobile station
11 shall set UZID_s to the User Zone Identifier associated with the User Zone; otherwise, the
12 mobile station shall set UZID_s to '0000000000000000'. The precise process for
13 determining how to select a User Zone that is supported by the base station is left to the
14 mobile station manufacturer.

15 If the mobile station does not support User Zone services, the mobile station shall set
16 UZID_s to '0000000000000000'.

17 The mobile station may search pilots of private neighbor base stations on other frequencies
18 and band classes as identified in the *Private Neighbor List Message*. Search performance
19 criteria are defined [11].

20 2.6.9.2.1 User Zone Operation in the Mobile Station Idle State:

21 When a mobile station performs an idle handoff, it selects User Zones based on internally
22 stored parameters and information broadcast on the Paging Channel or on the Primary
23 Broadcast Control Channel as described in 2.6.9.1.

24 After the mobile station performs idle handoff, if the mobile station determines that a
25 change from one Broadcast User Zone to another Broadcast User Zone is required, the
26 mobile station shall not update UZID_s, UZ_EXIT_IN_USE_s and shall not perform User Zone
27 registration until the pilot strength of the currently serving base station exceeds that of the
28 base station corresponding to the old User Zone by the value of UZ_EXIT_IN_USE_s.

29 If the mobile station determines that it needs to change User Zone, and if the difference
30 between the pilot strengths exceeds UZ_EXIT_IN_USE_s, then the mobile station shall
31 perform the following:

- 32 • Perform User Zone registration.
- 33 • Update UZID_s.
- 34 • Set UZ_EXIT_IN_USE_s to UZ_EXIT_RCVD_s.

35 The mobile station may also implement other means to avoid the premature exiting of a
36 User Zone due to rapid changes in signal strength. The exact implementation of such
37 techniques is left to mobile station implementation.

38 If the mobile station is in the *Mobile Station Idle State* and it receives a *User Zone Reject*
39 *Message* the mobile station shall perform the following:

- 1 • Set REJECT_ACTION_INDI_S to REJECT_ACTION_INDI_R.
- 2 • If UZID_ASSIGN_INCL_R = '0', the mobile station shall set UZID_S to
- 3 '0000000000000000', otherwise; the mobile station shall set UZID_S to
- 4 ASSIGN_UZID_R.

5 If the mobile station is in the *Mobile Station Idle State* and it selects an active User Zone,

6 then the mobile station shall perform User Zone registration (see 2.6.5.1.10) by entering

7 the *System Access State* with a registration indication.

8 The mobile station should provide the user with a User Zone indication corresponding to

9 the User Zone in service each time UZID_S is updated.

10 2.6.9.2.2 User Zone Operation in the Mobile Station Control on the Traffic Channel State

11 If the mobile station is in the *Traffic Channel Substate* of the *Mobile Station Control on the*

12 *Traffic Channel State* and if it determines that the User Zone has changed, it shall update

13 UZID_S and send a *User Zone Update Request Message* to the base station.

14 If the mobile station is in the *Traffic Channel Substate or Release Substate* of the *Mobile*

15 *Station Control on the Traffic Channel State* and it receives a *User Zone Update Message*,

16 then the mobile station shall update UZID_S and set it equal to UZID_R.

17 If the mobile station is in the *Traffic Channel Substate or Release Substate* of the *Mobile*

18 *Station Control on the Traffic Channel State* and it receives a *User Zone Reject Message*, then

19 the mobile station shall perform the following:

- 20 • Set REJECT_ACTION_INDI_S to REJECT_ACTION_INDI_R.
- 21 • If UZID_ASSIGN_INCL_R = 0, the mobile station shall set UZID_S to '0', otherwise; the
- 22 mobile station shall set UZID_S to ASSIGN_UZID_R.

23 The mobile station should provide the user with a User Zone indication corresponding to

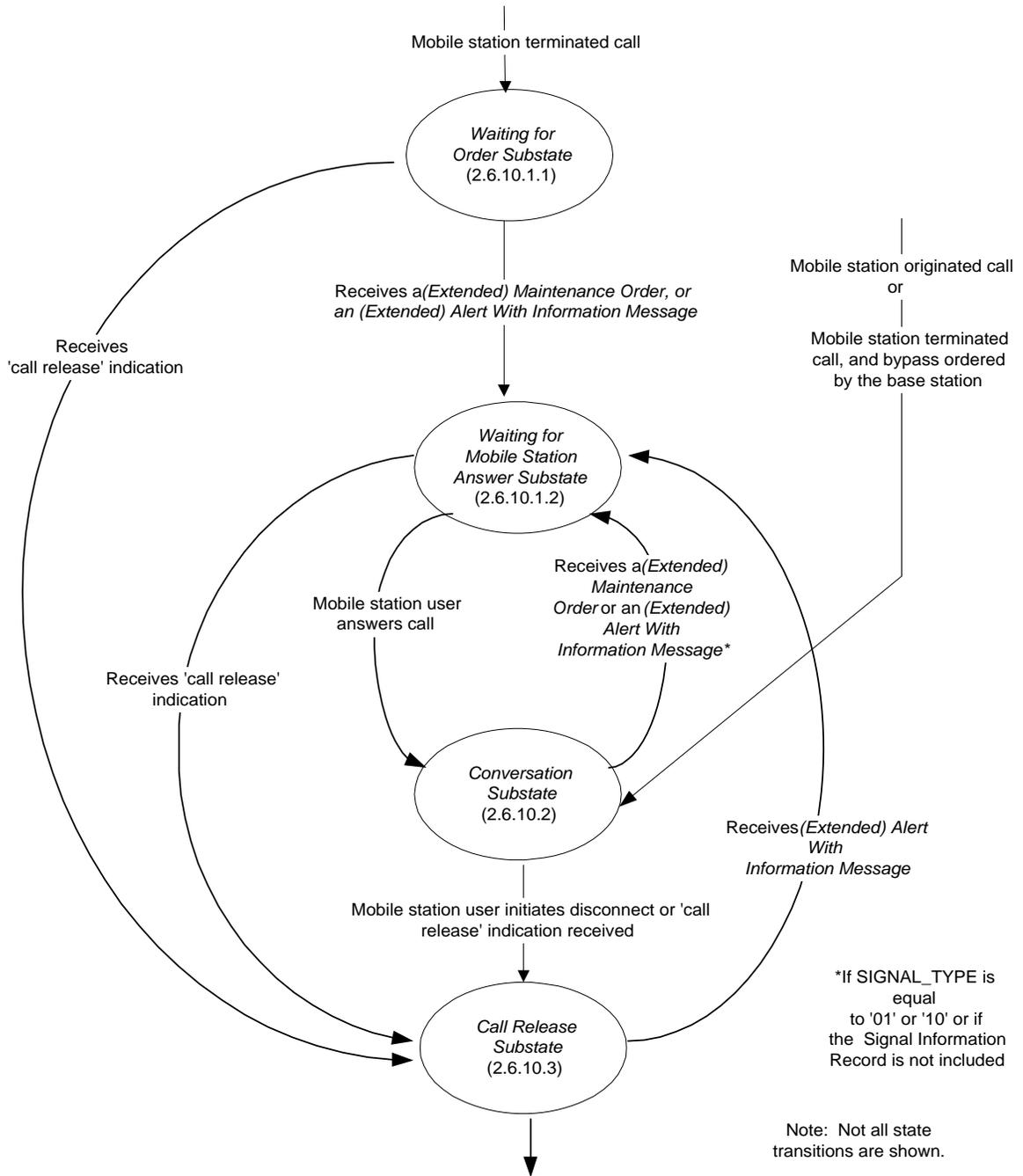
24 the User Zone in service each time UZID_S is updated.

25 2.6.10 Call Control Processing

26 As illustrated in Figure 2.6.10-1, the Call Control consists of the following states:

- 27 • *Waiting for Order Substate* - In this substate, the Call Control instance waits for an
- 28 *Alert With Information Message* or an *Extended Alert With Information Message*.
- 29 • *Waiting for Mobile Station Answer Substate* - In this substate, the Call Control
- 30 instance waits for the user to answer the call.
- 31 • *Conversation Substate* - In this substate, the parties involved in this call
- 32 communicate.
- 33 • *Call Release Substate* - In this substate, the Call Control instance waits for the call
- 34 to be disconnected.

35



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Figure 2.6.10-1. Call Control

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_s 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 the
19 mobile station, to the reverse link without the knowledge of the user.
- 20 • If the call is mobile station terminated and BYPASS_ALERT_ANSWER_s 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 an
27 *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_{52m} seconds.

30 While in the *Waiting for Order Substate*, the Call Control instance shall perform the
31 following:

- 1 • If the substate timer expires, the Call Control instance shall send a “substate timer
2 expired indication” to the Layer 3 and shall enter the *Call Release Substate*.
- 3 • If the Call Control instance receives a “reset waiting for order substate timer
4 indication” from the Layer 3, the Call Control instance shall reset the substate timer
5 for T_{52m} seconds.
- 6 • If the Call Control instance receives a “release indication” from the Layer 3, the Call
7 Control instance shall enter the *Call Release Substate*.
- 8 • If the Call Control instance receives an indication that the user has originated an
9 emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*
10 *Message* or an *Extended Flash With Information Message* in assured mode with a
11 Global Emergency Call Information Record (see 2.7.4.31), as follows:
- 12 - If this Call Control instance is identified by NULL, the mobile station shall send
13 either a *Flash With Information Message* or an *Extended Flash With Information*
14 *Message* (with either the CON_REF_INCL field of the message set to ‘0’ or the
15 CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection
16 reference of the service option connection corresponding to this call); otherwise,
17 the mobile station shall send an *Extended Flash With Information Message*, with
18 the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the
19 message set to the connection reference of the service option connection
20 corresponding to this call.
- 21 • If the Call Control instance receives a message from the Layer 3 which is included
22 in the following list and every message field value is within its permissible range,
23 the Call Control instance shall process the message as described below and in
24 accordance with the message’s action time (see 2.6.4.1.5).
- 25 1. *Alert With Information Message*: If the message contains a Signal information
26 record, the mobile station should alert the user in accordance with the Signal
27 information record; otherwise, the mobile station should use standard alert as
28 defined in 3.7.5.5. The Call Control instance shall enter the *Waiting for Mobile*
29 *Station Answer Substate* (see 2.6.10.1.2).
- 30 2. *Extended Alert with Information Message*: If the message contains a Signal
31 information record, the mobile station should alert the user in accordance with
32 the Signal information record; otherwise, the mobile station should use
33 standard alert as defined in 3.7.5.5. The Call Control instance shall enter the
34 *Waiting for Mobile Station Answer Substate* (see 2.6.10.1.2).
- 35 3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Mobile*
36 *Station Answer Substate*.
- 37 • If the Call Control instance receives a message that is not included in the above list,
38 cannot be processed, or requires a capability which is not supported, the Call
39 Control instance shall discard the message and send a ‘message rejected indication’

1 to the Layer 3, with the reject reason indicated except when the following condition
2 applies.

- 3 - If the Call Control instance fails to meet the criteria solely due to receipt of the
4 Extended Record Type – International information record, the information record
5 shall be discarded and the message shall be processed in accordance with the
6 above procedures specified for the applicable message.

7 2.6.10.1.2 Waiting for Mobile Station Answer Substate

8 In this substate, the Call Control instance waits for the user to answer the mobile station
9 terminated call or to invoke special treatment.

10 Upon entering the *Waiting for Mobile Station Answer Substate*, the Call Control instance
11 shall set the substate timer for T_{53m} seconds.

12 While in the *Waiting for Mobile Station Answer Substate*, the Call Control instance shall
13 perform the following:

- 14 • If the substate timer expires, the Call Control instance shall send a “substate timer
15 expired indication” to the Layer 3 and shall enter the *Call Release Substate*.
- 16 • If the Call Control instance receives a “release indication” from the Layer 3, the Call
17 Control instance shall enter the *Call Release Substate*.
- 18 • If the Call Control instance is directed by the user to answer the call, the mobile
19 station shall send a *Connect Order* in assured mode:
 - 20 - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall
21 perform the following: If this Call Control instance is identified by NULL, the
22 mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or
23 set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection
24 reference of the service option connection corresponding to this call; otherwise,
25 the mobile station shall set the CON_REF_INCL field of the message to ‘1’ and
26 the CON_REF field of the message to the connection reference of the service
27 option connection corresponding to this call.

28 The Call Control instance shall enter the *Conversation Substate*.

- 29 • If the Call Control instance is directed by the user to forward the incoming call, the
30 mobile station shall send a *Flash With Information Message* or an *Extended Flash
31 With Information Message* in assured mode with a *Keypad Facility* information record
32 (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with
33 the CHARi field set to a pre-programmed feature code which indicates User
34 Selective Call Forwarding with a pre-registered number, as follows:
 - 35 - If P_REV_IN_USE_s is less than seven, the mobile station shall send a *Flash With
36 Information Message*.

1 - If P_REV_IN_USE_s 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 send either a *Flash With Information Message* or an
4 *Extended Flash With Information Message* (with either the CON_REF_INCL field
5 of the message set to '0' or the CON_REF_INCL field set to '1' and the CON_REF
6 field set to the connection reference of the service option connection
7 corresponding to this call); otherwise, the mobile station shall send an *Extended*
8 *Flash With Information Message*, with the CON_REF_INCL field of the message
9 set to '1' and the CON_REF field of the message set to the connection reference
10 of the service option connection corresponding to this call.

11 • If the Call Control instance is directed by user to forward the incoming call to a
12 number stored in the mobile station, the mobile station shall send a *Flash With*
13 *Information Message* or an *Extended Flash With Information Message* in assured
14 mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended*
15 *Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to the
16 following:

- 17 - a pre-programmed feature code which indicates User Selective Call Forwarding
18 to a number stored in the mobile station as the first digits in the field and
- 19 - the forwarding to number immediately following the pre-programmed feature
20 code.

21 The mobile station shall send the message as follows:

22 - If P_REV_IN_USE_s is less than seven, the mobile station shall send a *Flash With*
23 *Information Message*.

24 - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall
25 perform the following: if this Call Control instance is identified by NULL, the
26 mobile station shall send either a *Flash With Information Message* or an
27 *Extended Flash With Information Message* (with either the CON_REF_INCL field
28 of the message set to '0' or the CON_REF_INCL field set to '1' and the CON_REF
29 field set to the connection reference of the service option connection
30 corresponding to this call); otherwise, the mobile station shall send an *Extended*
31 *Flash With Information Message*, with the CON_REF_INCL field of the message
32 set to '1' and the CON_REF field of the message set to the connection reference
33 of the service option connection corresponding to this call.

34 • If the Call Control instance is directed by the user to forward the incoming call to
35 network-based voice mail, the mobile station shall send a *Flash With Information*
36 *Message* or an *Extended Flash With Information Message* in assured mode with a
37 *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*
38 information record (see 2.7.4.35) with the CHARi field set to a pre-programmed
39 feature code which indicates User Selective Call Forwarding to voice mail, as
40 follows:

- 1 - If P_REV_IN_USE_S is less than seven, the mobile station shall send a *Flash With*
2 *Information Message*.
- 3 - If P_REV_IN_USE_S 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 *Extended*
10 *Flash With Information Message*, with the CON_REF_INCL field of the message
11 set to '1' and the CON_REF field of the message set to the connection reference
12 of the service option connection corresponding to this call.
- 13 • If the Call Control instance is directed by the user to activate answer holding, the
14 mobile station shall send a *Flash With Information Message* or an *Extended Flash*
15 *With Information Message* in assured mode requiring confirmation of delivery with a
16 *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*
17 information record (see 2.7.4.35) with the CHARi field set to a pre-programmed
18 feature code which indicates Answer Holding:
- 19 - If P_REV_IN_USE_S is less than seven, the mobile station shall send a *Flash With*
20 *Information Message*.
- 21 - If P_REV_IN_USE_S is equal to or greater than seven, the mobile station shall
22 perform the following: if this Call Control instance is identified by NULL, the
23 mobile station shall send either a *Flash With Information Message* or an
24 *Extended Flash With Information Message* (with either the CON_REF_INCL field
25 of the message set to '0' or the CON_REF_INCL field set to '1' and the CON_REF
26 field set to the connection reference of the service option connection
27 corresponding to this call); otherwise, the mobile station shall send an *Extended*
28 *Flash With Information Message*, with the CON_REF_INCL field of the message
29 set to '1' and the CON_REF field of the message set to the connection reference
30 of the service option connection corresponding to this call.

31 After receiving confirmation of delivery of the *Flash With Information Message* or the
32 *Extended Flash With Information Message*, the mobile station shall send a *Connect*
33 *Order* in assured mode:

- 34 - If P_REV_IN_USE_S is equal to or greater than seven, the mobile station shall
35 perform the following: If this Call Control instance is identified by NULL, the
36 mobile station shall either set the CON_REF_INCL field of the message to '0' or
37 set the CON_REF_INCL field to '1' and set the CON_REF field to the connection
38 reference of the service option connection corresponding to this call; otherwise,
39 the mobile station shall set the CON_REF_INCL field of the message to '1' and
40 the CON_REF field of the message to the connection reference of the service
41 option connection corresponding to this call.

1 The Call Control instance shall enter the *Conversation Substate*.

- 2 • If the Call Control instance receives an indication that the user has originated an
3 emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*
4 *Message* or an *Extended Flash With Information Message* in assured mode with a
5 Global Emergency Call Information Record (see 2.7.4.31), as follows:
 - 6 - If this Call Control instance is identified by NULL, the mobile station shall send
7 either a *Flash With Information Message* or an *Extended Flash With Information*
8 *Message* (with either the CON_REF_INCL field of the message set to '0' or the
9 CON_REF_INCL field set to '1' and the CON_REF field set to the connection
10 reference of the service option connection corresponding to this call); otherwise,
11 the mobile station shall send an *Extended Flash With Information Message*, with
12 the CON_REF_INCL field of the message set to '1' and the CON_REF field of the
13 message set to the connection reference of the service option connection
14 corresponding to this call.
- 15 • If the Call Control instance receives a message from Layer 3 which is included in
16 the following list and every message field value is within its permissible range, the
17 Call Control instance shall process the message as described below and in
18 accordance with the message's action time (see 2.6.4.1.5).
 - 19 1. *Alert With Information Message*: The Call Control instance shall reset the
20 substate timer for T_{53m} seconds. If this message does not contain a Signal
21 information record, the mobile station should use standard alert as defined in
22 3.7.5.5.
 - 23 2. *Extended Alert With Information Message*: The Call Control instance shall reset
24 the substate timer for T_{53m} seconds. If this message does not contain a Signal
25 information record, the mobile station should use standard alert as defined in
26 3.7.5.5.
 - 27 3. *Maintenance Order*: The mobile station shall reset the substate timer for T_{53m}
28 seconds.
- 29 • If the Call Control instance receives a message that is not included in the above list,
30 cannot be processed, or requires a capability which is not supported, the Call
31 Control instance shall discard the message and send a 'message rejected indication'
32 to the Layer 3, with the reject reason indicated except when the following condition
33 applies.
 - 34 - If the Call Control instance fails to meet the criteria solely due to receipt of
35 the Extended Record Type – International information record, the information
36 record shall be discarded and the message shall be processed in accordance
37 with the above procedures specified for the applicable message.

38 2.6.10.2 Conversation Substate

39 While in the *Conversation Substate*, the Call Control instance shall perform the following:

- 1 • If the Call Control instance receives a “release indication” from the Layer 3, the Call
2 Control instance shall enter the *Call Release Substate*.
- 3 • The mobile station shall send an *Origination Continuation Message* in assured mode,
4 within T_{54m} seconds after the Call Control instance entering the *Conversation*
5 *Substate* if any of the following conditions occur:
- 6 - The mobile station originated the call, and did not send all the dialed digits in
7 the *Origination Message*.
- 8 - There is more than one calling party number associated with the mobile station.
- 9 - A calling party subaddress is used in the call.
- 10 - A called party subaddress is used in the call.

11 If more than one calling party number is associated with the mobile station, the mobile
12 station shall include the calling party number being used in the calling party number
13 information record in the *Origination Continuation Message*. If only one calling party
14 number is associated with the mobile station, the mobile station shall not include the
15 calling party number information record in the *Origination Continuation Message*. If a
16 calling party subaddress is used, the mobile station shall include the calling party
17 subaddress information record in the *Origination Continuation Message*; otherwise, the
18 mobile station shall omit the calling party subaddress information record. If a called party
19 subaddress is used, the mobile station shall include the called party subaddress
20 information record in the *Origination Continuation Message*; otherwise, the mobile station
21 shall omit the called party subaddress information record.

- 22 • If the Call Control instance is directed by the user to issue a flash, the mobile
23 station shall build a *Flash With Information Message* or an *Extended Flash With*
24 *Information Message* with the collected digits or characters contained in a *Keypad*
25 *Facility* information record, if needed, and shall send the message in assured mode,
26 as follows:
- 27 - If $P_REV_IN_USE_s$ is less than seven, the mobile station shall send a *Flash With*
28 *Information Message*.
- 29 - If $P_REV_IN_USE_s$ is equal to or greater than seven, the mobile station shall
30 perform the following: if this Call Control instance is identified by NULL, the
31 mobile station shall send either a *Flash With Information Message* or an
32 *Extended Flash With Information Message* (with either the CON_REF_INCL field
33 of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF
34 field set to the connection reference of the service option connection
35 corresponding to this call); otherwise, the mobile station shall send an *Extended*
36 *Flash With Information Message*, with the CON_REF_INCL field of the message
37 set to ‘1’ and the CON_REF field of the message set to the connection reference
38 of the service option connection corresponding to this call.
- 39 • If the Call Control instance is directed by the user to forward the incoming call, the
40 mobile station shall send a *Flash With Information Message* or an *Extended Flash*
41 *With Information Message* in assured mode with a *Keypad Facility* information record

1 (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with
 2 the CHARi field set to a pre-programmed feature code which indicates User
 3 Selective Call Forwarding with a pre-registered number, as follows:

- 4 - If P_REV_IN_USE_s is less than seven, the mobile station shall send a *Flash With*
 5 *Information Message*.
- 6 - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall
 7 perform the following: if this Call Control instance is identified by NULL, the
 8 mobile station shall send either a *Flash With Information Message* or an
 9 *Extended Flash With Information Message* (with either the CON_REF_INCL field
 10 of the message set to '0' or the CON_REF_INCL field set to '1' and the CON_REF
 11 field set to the connection reference of the service option connection
 12 corresponding to this call); otherwise, the mobile station shall send an *Extended*
 13 *Flash With Information Message*, with the CON_REF_INCL field of the message
 14 set to '1' and the CON_REF field of the message set to the connection reference
 15 of the service option connection corresponding to this call.
- 16 • If the Call Control instance is directed by the user to forward the incoming call to a
 17 number stored in the mobile station, the mobile station shall send a *Flash With*
 18 *Information Message* or an *Extended Flash With Information Message* in assured
 19 mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended*
 20 *Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to the
 21 following:
 - 22 - a pre-programmed feature code which indicates User Selective Call Forwarding
 23 to a number stored in the mobile station as the first digits in the field and
 - 24 - the forwarding to number immediately following the pre-programmed feature
 25 code.

26 The mobile station shall send the message as follows:

- 27 - If P_REV_IN_USE_s is less than seven, the mobile station shall send a *Flash With*
 28 *Information Message*.
- 29 - If P_REV_IN_USE_s is equal to or greater than seven and if this Call Control
 30 instance is identified by NULL, the mobile station shall send either a *Flash With*
 31 *Information Message* or an *Extended Flash With Information Message* (with either
 32 the CON_REF_INCL field of the message set to '0' or the CON_REF_INCL field set
 33 to '1' and the CON_REF field set to the connection reference of the service option
 34 connection corresponding to this call). Otherwise, the mobile station shall send
 35 an *Extended Flash With Information Message*, with the CON_REF_INCL field of
 36 the message set to '1' and the CON_REF field of the message set to the
 37 connection reference of the service option connection corresponding to this call.
- 38 • If the Call Control instance is directed by the user to forward the incoming call to
 39 network-based voice mail, the mobile station shall send a *Flash With Information*
 40 *Message* or an *Extended Flash With Information Message* in assured mode with a

1 *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*
2 information record (see 2.7.4.35) with the CHARi field set to a pre-programmed
3 feature code which indicates User Selective Call Forwarding to voice mail, as
4 follows:

- 5 - If P_REV_IN_USE_S is less than seven, the mobile station shall send a *Flash With*
6 *Information Message*.
- 7 - If P_REV_IN_USE_S is equal to or greater than seven and if this Call Control
8 instance is identified by NULL, the mobile station shall send either a *Flash With*
9 *Information Message* or an *Extended Flash With Information Message* (with either
10 the CON_REF_INCL field of the message set to '0' or the CON_REF_INCL field set
11 to '1' and the CON_REF field set to the connection reference of the service option
12 connection corresponding to this call). Otherwise, the mobile station shall send
13 an *Extended Flash With Information Message*, with the CON_REF_INCL field of
14 the message set to '1' and the CON_REF field of the message set to the
15 connection reference of the service option connection corresponding to this call.
- 16 • If the Call Control instance is directed by the user to activate answer holding, the
17 mobile station shall send a *Flash With Information Message* or an *Extended Flash*
18 *With Information Message* in assured mode requiring confirmation of delivery with a
19 *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility*
20 information record (see 2.7.4.35) with the CHARi field set to a pre-programmed
21 feature code which indicates Answer Holding, as follows:
 - 22 - If P_REV_IN_USE_S is less than seven, the mobile station shall send a *Flash With*
23 *Information Message*.
 - 24 - If P_REV_IN_USE_S is equal to or greater than seven, the mobile station shall
25 perform the following: if this Call Control instance is identified by NULL, the
26 mobile station shall send either a *Flash With Information Message* or an
27 *Extended Flash With Information Message* (with either the CON_REF_INCL field
28 of the message set to '0' or the CON_REF_INCL field set to '1' and the CON_REF
29 field set to the connection reference of the service option connection
30 corresponding to this call); otherwise, the mobile station shall send an *Extended*
31 *Flash With Information Message*, with the CON_REF_INCL field of the message
32 set to '1' and the CON_REF field of the message set to the connection reference
33 of the service option connection corresponding to this call.

- 1 • If answer holding is activated and the Call Control instance is directed by the user
2 to deactivate answer holding, 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 Answer Holding, as follows:
- 7 - If P_REV_IN_USE_S is less than seven, the mobile station shall send a *Flash With*
8 *Information Message*.
- 9 - If P_REV_IN_USE_S 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 *Extended*
16 *Flash With Information Message*, with the CON_REF_INCL field of the message
17 set to '1' and the CON_REF field of the message set to the connection reference
18 of the service option connection corresponding to this call.
- 19 • If the Call Control instance is directed by the user to send burst DTMF digits, the
20 mobile station shall build the *Send Burst DTMF Message* with the dialed digits and
21 shall send the message in assured mode requiring confirmation of delivery.
- 22 - If P_REV_IN_USE_S is equal to or greater than seven, the mobile station shall
23 perform the following: If this Call Control instance is identified by NULL, the
24 mobile station shall set the CON_REF_INCL field of the message to '0';
25 otherwise, the mobile station shall set the CON_REF_INCL field of the message
26 to '1' and the CON_REF field of the message to the connection reference of the
27 service option connection corresponding to this call.

28 The mobile station sending multiple *Send Burst DTMF Messages* shall preserve relative
29 ordering of these messages (see [4]). The mobile station should attempt to preserve the
30 user timing as much as possible, using recommended values of DTMF_ON_LENGTH (see
31 Table 2.7.2.3.2.7-1) and DTMF_OFF_LENGTH (see Table 2.7.2.3.2.7-2).

- 32 • If the Call Control instance is directed by the user to send a continuous DTMF digit,
33 the mobile station shall build the *Continuous DTMF Tone Order* with the dialed digit
34 and shall send the order in assured mode requiring confirmation of delivery, as
35 follows:

- 1 - If P_REV_IN_USE_s 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 When the Call Control instance is directed by the user to cease sending the
10 continuous DTMF digit, the mobile station shall send the *Continuous DTMF Tone*
11 *Order* (ORDQ = '11111111') in assured mode requiring confirmation of delivery, as
12 follows:

- 13 - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall
14 perform the following: If this Call Control instance is identified by NULL, the
15 mobile station shall either set the CON_REF_INCL field of the message to '0' or
16 set the CON_REF_INCL field to '1' and set the CON_REF field to the connection
17 reference of the service option connection corresponding to this call; otherwise,
18 the mobile station shall set the CON_REF_INCL field of the message to '1' and
19 the CON_REF field of the message to the connection reference of the service
20 option connection corresponding to this call.

21 The mobile station sending multiple *Continuous DTMF Tone Orders* shall preserve relative
22 ordering of these messages (see [2]). The mobile station shall send the *Continuous DTMF*
23 *Tone Order* with the ORDQ set to '11111111' indicating the completion of the current
24 continuous DTMF digit before sending the *Continuous DTMF Tone Order* for another digit or
25 the *Send Burst DTMF Message*.

- 26 • If the Call Control instance is directed by the user to disconnect the call, the Call
27 Control instance shall send a 'call release request' to the Layer 3 and shall enter the
28 *Call Release Substate*.
- 29 • If the Call Control instance receives an indication that this packet data service
30 instance has been inactivated, the Call Control instance shall send a "call inactive
31 indication" to the Layer 3 and shall enter the *Call Release Substate*.
- 32 • If the Call Control instance receives an indication that the user has originated an
33 emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information*
34 *Message* or an *Extended Flash With Information Message* in assured mode with a
35 Global Emergency Call Information Record (see 2.7.4.31), as follows:
- 36 – If this Call Control instance is identified by NULL, the mobile station shall
37 send either a *Flash With Information Message* or an *Extended Flash With*
38 *Information Message* (with either the CON_REF_INCL field of the message set to
39 '0' or the CON_REF_INCL field set to '1' and the CON_REF field set to the
40 connection reference of the service option connection corresponding to this call);
41 otherwise, the mobile station shall send an *Extended Flash With Information*
42 *Message*, with the CON_REF_INCL field of the message set to '1' and the

1 CON_REF field of the message set to the connection reference of the service
2 option connection corresponding to this call.

- 3 • If the Call Control instance receives a message from the Layer 3 which is included
4 in the following list and every message field value is within its permissible range,
5 the Call Control instance shall process the message as described below and in
6 accordance with the message's action time (see 2.6.4.1.5).
 - 7 1. *Alert With Information Message*: If the message contains a Signal information
8 record with the SIGNAL_TYPE field set to '01' or '10', or if the message does not
9 contain a Signal information record, the Call Control instance shall enter the
10 *Waiting For Mobile Station Answer Substate*. The mobile station should alert the
11 user in accordance with the Signal information record. If this message does not
12 contain a Signal information record, the mobile station should use standard
13 alert as defined in 3.7.5.5.
 - 14 2. *Continuous DTMF Tone Order*
 - 15 3. *Extended Alert With Information Message*: If the message contains a Signal
16 information record with the SIGNAL_TYPE field set to '01' or '10', or if the
17 message does not contain a Signal information record, the Call Control instance
18 shall enter the *Waiting For Mobile Station Answer Substate*. The mobile station
19 should alert the user in accordance with the Signal information record. If this
20 message does not contain a Signal information record, the mobile station should
21 use standard alert as defined in 3.7.5.5.
 - 22 4. *Flash With Information Message*
 - 23 5. *Extended Flash With Information Message*
 - 24 6. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Mobile*
25 *Station Answer Substate*.
 - 26 7. *Send Burst DTMF Message*:
 - 27 • If the Call Control instance receives a message that is not included in the above list,
28 cannot be processed, or requires a capability which is not supported, the Call
29 Control instance shall discard the message and send a 'message rejected indication'
30 to the Layer 3, with the reject reason indicated except when the following condition
31 applies.
 - 32 - If the Call Control instance fails to meet the criteria solely due to receipt of
33 the Extended Record Type – International information record, the information
34 record shall be discarded and the message shall be processed in accordance
35 with the above procedures specified for the applicable message.

36 2.6.10.3 Call Release Substate

37 In this substate, the Call Control instance waits for the call to be released.

1 While in the *Call Release Substate*, the Call Control instance shall perform the following:

- 2 • If the Call Control instance receives a message from the Layer 3 which is included
3 in the following list and every message field value is within its permissible range,
4 the Call Control instance shall process the message as described below and in
5 accordance with the message's action time (see 2.6.4.1.5).
 - 6 1. *Alert With Information Message*: The Call Control instance shall send an "enter
7 traffic channel substate indication" to the Layer 3 and shall enter the *Waiting for*
8 *Mobile Station Answer Substate*. If this message does not contain a Signal
9 information record, the mobile station should use standard alert as defined in
10 3.7.5.5.
 - 11 2. *Extended Alert With Information Message*: The Call Control instance shall send a
12 "enter traffic channel substate indication" to Layer 3 and shall enter the *Waiting*
13 *for Mobile Station Answer Substate*. If this message does not contain a Signal
14 information record, the mobile station should use standard alert as defined in
15 3.7.5.5.
- 16 • If the Call Control instance receives a message that is not included in the above list,
17 cannot be processed, or requires a capability which is not supported, the Call
18 Control instance shall discard the message and send a 'message rejected indication'
19 to the Layer 3, with the reject reason indicated except when the following condition
20 applies.
 - 21 - If the Call Control instance fails to meet the criteria solely due to receipt of the
22 Extended Record Type – International information record, the information record
23 shall be discarded and the message shall be processed in accordance with the
24 above procedures specified for the applicable message.

25 2.6.11 Common Procedures for Extended Encryption and Message Integrity

26 This section describes the common procedures for the messages used for extended
27 encryption and message integrity.

28 2.6.11.1 Registration Accepted Order

29 The mobile station shall perform the following procedures in the order listed below.

- 30 • If $ORDQ_R$ is equal to '00000101', the mobile station shall set $ROAM_INDI_S$ to
31 $ROAM_INDI_R$ and should display the roaming condition.
- 32 • If $ORDQ_R$ is equal to '00000111', the mobile station shall perform the following:
 - 33 - Set $ROAM_INDI_S$ to $ROAM_INDI_R$ and the mobile station should display the
34 roaming condition.
 - 35 - Set $C_SIG_ENCRYPT_MODE_S$ to $C_SIG_ENCRYPT_MODE_R$.
 - 36 - If $ENC_KEY_SIZE_R$ is included, the mobile station shall set $ENC_KEY_SIZE_S$ to
37 $ENC_KEY_SIZE_R$.

- 1 - If MSG_INTEGRITY_SUP_s is equal to '0' and C_SIG_ENCRYPT_MODE_r is not
2 equal to '000', the mobile station shall perform the following:
- 3 + Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
4 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
5 NEW_SSEQ_H included in the *Registration Message*.
- 6 + Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself
7 (the most recently generated CMEAKEY is associated with the AUTHR of the
8 *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 - If MSG_INTEGRITY_SUP_s is equal to '1', the mobile station shall perform the
12 following:
- 13 + If CHANGE_KEYS_r is equal to '0', the mobile station shall set RESTORE_KEY
14 to '0'.
- 15 + If CHANGE_KEYS_r is equal to '1', the mobile station shall perform the
16 following:
- 17 o Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
- 18 o Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
19 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
20 NEW_SSEQ_H included in the *Registration Message*.
- 21 o If KEY_ID is equal to '00' or '01', the mobile station shall perform the
22 following:
- 23 Form a 128-bit pattern by concatenating the CMEAKEY with a copy of
24 itself (the most recently generated CMEAKEY associated with the
25 AUTHR of the *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 Set LAST_2G_KEY_ID_s to KEY_ID.
- 29 o If KEY_ID is equal to '10' or '11', the mobile station shall perform the
30 following:
- 31 Set ENC_KEY[KEY_ID] to the CK generated by AKA.
- 32 Set INT_KEY[KEY_ID] to the IK generated by AKA.
- 33 Set LAST_3G_KEY_ID_s to KEY_ID.
- 34 If the mobile station supports R-UIM, then the mobile shall set
35 USE_UAK_s to USE_UAK_r; otherwise, the mobile station shall perform
36 the following:
- 37 - Set USE_UAK_s to '0'.

- 1 o Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- 2 o Set INT_KEY[KEY_ID] to the 128-bit pattern.
- 3 – If C_SIG_ENCRYPT_MODE_r is included, the mobile station shall set
- 4 C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.
- 5 • If P_REV_IN_USE_s is equal to or greater than 10 and MSG_INTEGRITY_SUP_s is
- 6 equal to ‘1’, the mobile station shall perform the following:
- 7 – If the LAC Layer indicates that the message does not contain a valid MACI, the
- 8 mobile station shall set D_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_s;
- 9 otherwise, the mobile station shall perform the following:
- 10 + Set D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r.
- 11 + If C_SIG_ENCRYPT_MODE is included, the mobile station shall set
- 12 C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.
- 13 + If ENC_KEY_SIZE_r is included, the mobile station shall set
- 14 ENC_KEY_SIZE_s to ENC_KEY_SIZE_r.
- 15 + If MSG_INTEGRITY_INFO_r is set to ‘1’, the mobile station shall perform
- 16 the following:
- 17 o If CHANGE_KEYS_r is equal to ‘0’, the mobile station shall set
- 18 RESTORE_KEY to ‘0’.
- 19 o If CHANGE_KEYS_r is equal to ‘1’, the mobile station shall perform the
- 20 following:
- 21 Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
- 22 Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
- 23 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to 1 + 256
- 24 × NEW_SSEQ_H included in the *Origination Message* or *Page*
- 25 *Response Message*.
- 26 If KEY_ID is equal to ‘00’ or ‘01’, the mobile station shall perform the
- 27 following:
- 28 – Form a 128-bit pattern by concatenating the CMEAKEY with
- 29 a copy of itself (the most recently generated CMEAKEY associated
- 30 with the AUTHR of the *Origination Message* or *Page Response*
- 31 *Message*).
- 32 – Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- 33 – Set INT_KEY[KEY_ID] to the 128-bit pattern.
- 34 – Set LAST_2G_KEY_ID_s to KEY_ID.
- 35 If KEY_ID is equal to ‘10’ or ‘11’, the mobile station shall perform the
- 36 following:
- 37 – Set ENC_KEY[KEY_ID] to the CK generated by AKA.

- 1 – Set INT_KEY[KEY_ID] to the IK generated by AKA.
- 2 – Set LAST_3G_KEY_ID_s to KEY_ID
- 3 – If the mobile station supports R-UIM, then the mobile shall
- 4 set USE_UAK_s to USE_UAK_r; otherwise, the mobile station shall
- 5 perform the following:
- 6 + Set USE_UAK_s to '0'.
- 7 + If USE_UAK_r is equal to '1', then the mobile station shall
- 8 send a *Mobile Station Reject Order* with ORDQ equal to
- 9 '00010100' (UAK not supported).

10 Set RESTORE_KEY to '0'.

11 Send a *Security Mode Completion Order*.

12 Disable the key setup timer if it is running.

- 13 o Set INTEGRITY_MODE_s to the SDU_INTEGRITY_ALGO delivered by the
- 14 LAC Layer.

- 15 • If ENC_KEY_SIZE_r is included and not set to reserved value and if current key
- 16 strength is greater than the desired key strength specified by ENC_KEY_SIZE_r
- 17 according to table 3.7.4.5-2, mobile station shall perform the key strength reduction
- 18 algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to
- 19 ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if
- 20 KEY_ID is equal to '00' or '01' and is 128 bit if KEY_ID is equal to '10' or '11'.

21 2.6.11.3 General Handoff Direction Message and Universal Handoff Direction Message

22 The mobile station shall perform the following procedures in the order listed below at the
23 action time of the message.

- 24 • If D_SIG_ENCRYPT_MODE_r is included, the mobile station shall set
- 25 D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r.
- 26 • If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to
- 27 ENC_KEY_SIZE_r.
- 28 • If REGISTER_IN_IDLE_r is included, the mobile station shall set
- 29 REGISTER_IN_IDLE_s to REGISTER_IN_IDLE_r.
- 30 • If MSG_INTEGRITY_SUP_r is included, the mobile station shall set
- 31 MSG_INTEGRITY_SUP_s to MSG_INTEGRITY_SUP_r.
- 32 • If GEN_2G_KEY_r is included and is set to '1', the mobile station shall perform the
- 33 following in the order listed below:
- 34 – Perform the CDMA_3G_2G_Conversion procedure as defined in [44] for 3G to 2G
- 35 one-way roaming to generate a new CMEAKEY from CK.

- 1 – Set TX_EXT_SSEQ[0][‘00’] to TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][‘00’]
2 to TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][‘00’] to
3 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][‘00’] to
4 RX_EXT_SSEQ[1][KEY_ID].
- 5 – Form a 128-bit pattern by concatenating the resultant CMEAKEY with a copy of
6 itself.
- 7 – Store the 128-bit pattern in ENC_KEY[‘00’] and INT_KEY[‘00’].
- 8 – Set KEY_ID and LAST_2G_KEY_IDS to ‘00’.
- 9 • If ENC_KEY_SIZE_r is included and not set to reserved value and if current key
10 strength is greater than the desired key strength specified by ENC_KEY_SIZE_r
11 according to table 3.7.4.5-2, mobile station shall perform the key strength reduction
12 algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to
13 ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if
14 KEY_ID is equal to ‘00’ or ‘01’ and is 128 bit if KEY_ID is equal to ‘10’ or ‘11’.

15 2.6.11.4 Security Mode Command Message on f-csch

16 The mobile station shall perform the following procedures in the order listed below.

- 17 • Set C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.
- 18 • If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to
19 ENC_KEY_SIZE_r.
- 20 • If MSG_INTEGRITY_SUP_s is equal to ‘0’, C_SIG_ENCRYPT_MODE_r is not equal to
21 ‘000’ and the mobile sent a *Security Mode Request Message* with the
22 NEW_SSEQ_H_INCL field equal to ‘1’ prior to receiving this message when
23 C_SIG_ENCRYPT_MODE_s was not equal to ‘000’, the mobile station shall perform
24 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 *Security Mode Request Message*.
- 28 • If MSG_INTEGRITY_SUP_s is equal to ‘1’ and MSG_INTEGRITY_INFO_r is equal to ‘1’,
29 the mobile station shall perform the following:
- 30 – If CHANGE_KEYS_r is equal to ‘0’, the mobile station shall set RESTORE_KEY to
31 ‘0’.
- 32 – If CHANGE_KEYS_r is equal to ‘1’, the mobile station shall perform the following:
- 33 + Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
- 34 + If KEY_ID is equal to ‘00’ or ‘01’, the mobile station shall perform the
35 following:
- 36 o Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID],
37 RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$
38 NEW_SSEQ_H included in the *Security Mode Request Message*.

- 1 o Form a 128-bit pattern by concatenating the CMEAKEY with a copy of
2 itself (the most recently generated CMEAKEY associated with the AUTHR
3 of the *Registration Message*, *Origination Message*, *Page Response Message*
4 or the CMEAKEY associated with the AUTHU generated during Unique
5 Challenge-Response procedure as described in 2.3.12.1.4).
- 6 o Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- 7 o Set INT_KEY[KEY_ID] to the 128-bit pattern.
- 8 o Set LAST_2G_KEY_ID_s to KEY_ID.
- 9 + If KEY_ID is equal to '10' or '11', the mobile station shall perform the
10 following:
- 11 o Set 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] to $1 + 256 \times$
13 NEW_SSEQ_H included in the *Authentication Response Message*, or
14 *Security Mode Request Message*.
- 15 o Set ENC_KEY[KEY_ID] to the CK generated by AKA.
- 16 o Set INT_KEY[KEY_ID] to the IK generated by AKA.
- 17 o Set LAST_3G_KEY_ID_s to KEY_ID.
- 18 o If the mobile station supports R-UIM, then the mobile station shall set
19 USE_UAK_s to USE_UAK_r; otherwise, the mobile station shall perform the
20 following:
- 21 ◇ Set USE_UAK_s to '0'.
- 22 ◇ If USE_UAK_r is equal to '1', then the mobile station shall send a
23 *Mobile Station Reject Order* with ORDQ equal to '00010100' (UAK not
24 supported).
- 25 + Set RESTORE_KEY to '0'.
- 26 + Perform the key strength reduction algorithm procedures to reduce the
27 key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZE_r as
28 described in 2.3.12.5.3.
- 29 + Send a *Security Mode Completion Order*.
- 30 + Disable the key setup timer if it is running.
- 31 – Set INTEGRITY_MODE_s to the SDU_INTEGRITY_ALGO delivered by the LAC
32 Layer.
- 33 • If ENC_KEY_SIZE_r is included and not set to reserved value and if current key
34 strength is greater than the desired key strength specified by ENC_KEY_SIZE_r
35 according to table 3.7.4.5-2, mobile station shall perform the key strength reduction
36 algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to
37 ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if
38 KEY_ID is equal to '00' or '01' and is 128 bit if KEY_ID is equal to '10' or '11'.

2.6.11.5 Base Station Reject Order on f-csch and f-dsch.

The mobile station shall perform the following procedures in the order listed below.

- If $ORDQ_R$ is equal to '00000000' or if $ORDQ_R$ is equal to '00000010', $REJECT_REASON_R = '0011'$, and $REJECTED_L3_MSG_TYPE_R$ indicates the rejected message is an *Origination Message*, the mobile station shall set $ENC_KEY[i]$ and $INT_KEY[i]$ to NULL, where i ranges from '00' to '11'. The mobile station shall set $C_SIG_ENCRYPT_MODE_S$ to '000'. The mobile station shall re-originate by sending 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 ⁷³ 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.

⁷³ 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 • The mobile station still cannot decrypt message or validate the MACI of message
 2 from the base station after successfully receiving and processing *Security Mode*
 3 *Command Message* in response to *Security Mode Request Message* sent by mobile
 4 station in resynchronization procedure as specified in 2.6.11.4 or 2.6.4.1.14.

5 2.6.12 Common Procedures for Processing f-csch Messages

6 This section describes the common procedures for processing messages received on the f-
 7 csch.

8 2.6.12.1 Fast Call Setup Order

9 The mobile station shall perform the following procedures in the order listed below:

- 10 • If $RER_MODE_ENABLED_r$ is included and equal to '1', and the mobile station
 11 supports operation in the radio environment reporting mode, the mobile station
 12 shall set $RER_MODE_ENABLED$ to YES, RER_COUNT to 0, and shall perform the
 13 following:
- 14 – The mobile station shall disable the radio environment report timer, if enabled.
 - 15 – The mobile station shall store the following:
 - 16 + Maximum number of *Radio Environment Messages* that the mobile station is
 17 permitted to transmit while in radio environment reporting mode
 18 ($RER_MAX_NUM_MSG_s = infinity$, if $RER_MAX_NUM_MSG_IDX_r$ is equal to
 19 '111'; otherwise, $RER_MAX_NUM_MSG_s = 2^{RER_MAX_NUM_MSG_IDX_r}$).
 - 20 + Maximum number of pilots to maintain in RER_PILOT_LIST
 21 ($MAX_RER_PILOT_LIST_SIZE_s = MAX_RER_PILOT_LIST_SIZE_r$).
 - 22 + System identification for radio environment reporting mode ($RER_SID_s =$
 23 SID_s).
 - 24 + Network identification for radio environment reporting mode ($RER_NID_s =$
 25 NID_s).
 - 26 – The initial radio environment report pilot list (RER_PILOT_LIST) is generated as
 27 follows:
 - 28 + If $ORDQ_r$ is equal to '00000001' and the size of the current RER_PILOT_LIST
 29 is greater than $MAX_RER_PILOT_LIST_SIZE_s$, the mobile station shall
 30 remove all but the first $MAX_RER_PILOT_LIST_SIZE_s$ pilots from
 31 RER_PILOT_LIST .
 - 32 + Otherwise, the initial RER_PILOT_LIST is generated according to the
 33 procedures specified in [4].
 - 34 – The mobile station shall enable the radio environment report timer with an
 35 initial value of *infinity* if RER_TIME_r is equal to '111'; otherwise, the mobile
 36 station shall enable the radio environment report timer with an initial value of
 37 $2^{RER_TIME_r}$ seconds if $RER_TIME_UNIT_r$ is equal to '00', or $2^{RER_TIME_r}$ minutes if
 38 $RER_TIME_UNIT_r$ is equal to '01', or $2^{RER_TIME_r}$ hours if $RER_TIME_UNIT_r$ is
 39 equal to '10'.

- 1 • If RER_MODE_ENABLED_r is included and equal to '0', and RER_MODE_ENABLED
2 is equal to YES, the mobile station shall perform the following:
- 3 – The mobile station shall disable the radio environment report timer and set
4 RER_MODE_ENABLED to NO.
- 5 – If TKZ_MODE_PENDING is equal to YES, then the mobile station shall set
6 TKZ_MODE_PENDING to NO.
- 7 • If TKZ_MODE_ENABLED_r is included and equal to '1', and the mobile station
8 supports tracking zone reporting, the mobile station shall set TKZ_COUNT to 0 and
9 perform the following:
- 10 – The mobile station shall disable the tracking zone update timer, if enabled.
- 11 – The mobile station shall store the following:
- 12 + Tracking zone list length (TKZ_LIST_LEN_s = TKZ_LIST_LEN_r).
- 13 + Tracking zone timer (TKZ_TIMER_s = TKZ_TIMER_r).
- 14 + Maximum number of *Radio Environment Messages* that the mobile station is
15 permitted to transmit while in tracking zone mode (TKZ_MAX_NUM_MSG_s =
16 *infinity*, if TKZ_MAX_NUM_MSG_IDX_r is equal to '111'; otherwise,
17 TKZ_MAX_NUM_MSG_s = 2^{TKZ_MAX_NUM_MSG_IDX_r}).
- 18 + System identification for tracking zone mode (TKZ_SID_s = SID_s).
- 19 + Network identification for tracking zone mode (TKZ_NID_s = NID_s).
- 20 + Tracking zone update period (TKZ_UPDATE_PRD_s = TKZ_UPDATE_PRD_r).
- 21 – If RER_MODE_ENABLED is equal to NO, the mobile station shall set
22 TKZ_MODE_ENABLED to YES; otherwise, the mobile station shall set
23 TKZ_MODE_PENDING to YES.
- 24 – If TKZ_MODE_ENABLED is equal to YES, the mobile station shall perform the
25 following:
- 26 + Initialize the tracking zone list (TKZ_LIST) to contain TKZ_ID_s.
- 27 + Enable the tracking zone update timer with an initial value of infinity if
28 TKZ_UPDATE_PRD_s is equal to '1111'; otherwise, the mobile station shall
29 enable the tracking zone update timer with an initial value of
30 2^{TKZ_UPDATE_PRD_s} + 6 seconds.
- 31 • If TKZ_MODE_ENABLED_r is included and equal to '0', and TKZ_MODE_ENABLED is
32 equal to YES, the mobile station shall perform the following:
- 33 – The mobile station shall disable the tracking zone update timer and set
34 TKZ_MODE_ENABLED to NO.

35 If ORDQ_r is equal to '00000000' (base station request for mobile station to operate in a fast
36 call setup mode), the mobile station shall respond with a *Fast Call Setup Order* (ORDQ =
37 '00000001') as follows:

- 1 • If RSC_MODE_SUPPORTED_r is equal to '1' and the mobile station accepts operation
2 in the reduced slot cycle mode, the mobile station shall set the RSC_MODE_IND
3 field to '1' and perform the following:
- 4 – Set RSC_MODE_ENABLED to YES.
- 5 – Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as specified in
6 2.7.3.6, and store the system time specified by these fields as RSC_END_TIME.
7 The value of RSC_END_TIME shall be no later than the system time specified by
8 MAX_RSC_END_TIME_UNIT_r and MAX_RSC_END_TIME_VALUE_r.
- 9 – Set the RSCI field as specified in 2.7.3.6 and store it as RSCI_s; if RSCI_s is equal
10 to '0111', set SLOTTED_s to NO.
- 11 – Set IGNORE_QPCH_s to IGNORE_QPCH_r.
- 12 • Otherwise, the mobile station shall set the RSC_MODE_IND field to '0'.

13 If ORDQ_r is equal to '0000001' (base station response to mobile station's request to
14 operate in a fast call setup mode), the mobile station shall perform the following:

- 15 • If RSC_MODE_SUPPORTED_r is equal to '1', the mobile station shall perform the
16 following:– Set RSC_END_TIME to the earlier of the current value of
17 RSC_END_TIME, and the system time specified by MAX_RSC_END_TIME_UNIT_r and
18 MAX_RSC_END_TIME_VALUE_r.
- 19 – Set IGNORE_QPCH_s to IGNORE_QPCH_r.
- 20 • If RSC_MODE_SUPPORTED_r is equal to '0', the mobile station shall set
21 RSC_MODE_ENABLED to NO and set SLOTTED_s to YES.

22

23 2.6.13 Mobile Station BCMC Operation

24 This section specifies the mobile station requirements for monitoring BCMC flows. If the
25 mobile station supports BCMC, the requirements in this section apply in addition to all
26 other requirements in the Mobile Station Idle State, System Access State, and Mobile
27 Station Control on the Traffic Channel State.

28 The operations performed by a mobile station that supports BCMC are as follows:

- 29 • Procedures for commencing reception of a BCMC flow while in Mobile Station Idle
30 State or System Access State (see 2.6.13.1)
- 31 • Procedures while monitoring a Forward Supplemental Channel in *Mobile Station Idle*
32 *State* or *System Access State* (see 2.6.13.2)
- 33 • Procedures for BCMC registration while in Mobile Station Idle State or System
34 Access State (see 2.6.13.3)
- 35 • Procedures for Idle Handoff while Monitoring Forward Supplemental Channel while
36 in Mobile Station Idle State or System Access State (see 2.6.13.4)
- 37 • Procedures for stopping reception of a BCMC flow while in Mobile Station Idle State
38 or System Access State (see 2.6.13.5)

- 1 • Procedures for processing *BCMC Service Parameters Message* Updates while in
2 Mobile Station Idle State or System Access State (see 2.6.13.6)
- 3 • Procedures for Browsing BCMC flows while in Mobile Station Idle State or System
4 Access State (see 2.6.13.7)
- 5 • Procedures for BCMC Operation while in Mobile Station Control on the Traffic
6 Channel State (see 2.6.13.8)
- 7 • Procedures for computation of Authorization Signature (see 2.6.13.9)
- 8 • Procedures for generating public long code mask for F-SCH *Mobile Station Idle State*
9 or *System Access State* (see 2.6.13.10)

10 The following primitives can be received by Layer 3 from the BCMC Service Layer:

- 11 • *BCMC-Monitor.Request(BCMC_FLOW_ID⁷⁴, priority)* - to request Layer 3 to commence
12 monitoring the specified BCMC flow, where
 - 13 – *BCMC_FLOW_ID* identifies the BCMC flow to monitor.
 - 14 – *priority* is to be used when current BCMC flow(s) and the new BCMC flow cannot
15 both be accommodated.
- 16 • *BCMC-Browse.Request* - to request Layer 3 to report all BCMC flows currently
17 available.
- 18 • *BCMC-Stop-Monitor.Request(BCMC_FLOW_ID)* - to request Layer 3 to stop monitoring
19 the specified BCMC flow, where
 - 20 – *BCMC_FLOW_ID* identifies the BCMC flow to stop monitoring.

21 The following primitives can be sent by Layer 3 to the BCMC Service Layer:

- 22 • *BCMC-Monitor.Response(BCMC_FLOW_ID, result, cause, reason_ind)* – response to
23 the BCMC Service Layer for a request to monitor a BCMC flow or due to mobility,
24 where
 - 25 – *BCMC_FLOW_ID* identifies the requested BCMC flow.
 - 26 – *result* indicates the result of the request and can be one of following:
 - 27 + SUCCESS indicates the request was successful
 - 28 + FAILURE indicates the request was unsuccessful
 - 29 – *cause* indicates the reason for failure when the request was unsuccessful and
30 can be one of the following
 - 31 + FLOW_NOT_AVAILABLE which indicates the requested BCMC flow is not
32 available in this base station

⁷⁴ 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 + CANNOT_ACCOMMODATE which indicates the requested BCMC flow cannot
- 2 be monitored due to monitoring other higher priority BCMC flow(s)
- 3 + UNSUPPORTED_BEARER_CONFIG which indicates that the requested
- 4 BCMC flow cannot be monitored due to a physical channel capability
- 5 mismatch
- 6 + FLOW_NOT_TRANSMITTED which indicates that the requested BCMC flow
- 7 is not being transmitted by this base station although it is configured for
- 8 transmission.
- 9 + FLOW_TRANSMITTED_IN_IDLE which indicates that the requested BCMC
- 10 flow is being transmitted by this base station in idle state.
- 11 + CALL_RELEASED which indicates that the call was released.
- 12 – *reason_ind* is included when the request is unsuccessful and can be one of the
- 13 following
- 14 + CURRENT_SYS to indicate it occurred in current system
- 15 + MOBILITY to indicate it occurred due to idle handoff
- 16 • *BCMC-Browse.Response(result, {BCMC_FLOW_IDS})* - response to the BCMC Service
- 17 Layer for a request to browse for BCMC flows, where
- 18 – *result* indicates the result of the request and can be one of following:
- 19 + SUCCESS indicates current sector is configured to transmit one or more
- 20 BCMC flows and this list of BCMC flows is passed as {BCMC_FLOW_IDS}
- 21 + FAILURE indicates current sector is not configured to transmit any BCMC
- 22 flows.

23 The following primitives are sent by Layer 3 to Multiplex sublayer:

- 24 • *BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID)* - to request the Multiplex sublayer to
- 25 start delivering the data blocks corresponding to the specified BCMC flow, where
- 26 – *FSCH_ID* identifies the physical channel on which this BCMC flow is being
- 27 carried
- 28 – *BSR_ID* identifies the BCMC Service Reference Identifier being used by this
- 29 BCMC flow on this physical channel
- 30 • *BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)* - to request the Multiplex sublayer to
- 31 stop delivering the data blocks corresponding to the specified BCMC flow, where
- 32 – *FSCH_ID* identifies the physical channel on which this BCMC flow is being
- 33 carried
- 34 – *BSR_ID* identifies the BCMC Service Reference Identifier being used by this
- 35 BCMC flow on this physical channel

36 If the mobile station is currently not monitoring a BCMC flow, the mobile station shall

37 perform the following:

- 1 • If Layer 3 receives a *BCMC-Monitor.Request(BCMC_FLOW_ID, priority)* from the
2 BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to
3 commence reception of the BCMC flow.
- 4 • If Layer 3 receives a *BCMC-Browse.Request* from the BCMC Service Layer, Layer 3
5 shall perform the procedures specified in 2.6.13.7 to determine which BCMC flows
6 are currently available.

7 2.6.13.1 Procedures for commencing reception of a BCMC Flow

8 If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow
9 (see 2.6.13), the mobile station shall perform the following procedures in the order
10 specified:

- 11 • If *SENDING_BSPM_s* equals '0', Layer 3 shall send a *BCMC-*
12 *Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause =*
13 *FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)* to the BCMC Service Layer
14 and shall not perform the remaining procedures in this section.
- 15 • If the stored *BCMC Service Parameters Message* parameters do not include this
16 *BCMC_FLOW_ID* (See section 2.6.13.11) and *FULL_BSPM_IND = '0'*, the mobile
17 station shall monitor the overhead channel to receive the *BCMC Service Parameters*
18 *Message* as specified in 2.6.2.2.18 until its stored *BCMC Service Parameters*
19 *Message* parameters include this *BCMC_FLOW_ID*, or until *FULL_BSPM_IND = '1'*
- 20 • The mobile station shall perform the following:
 - 21 – If *FLOW_INFO_ON_OTHER_FREQ* equals '1', the mobile station shall perform
22 the following:
 - 23 + If *FREQ_CHG_REG_REQUIRED_s* equals '1', the mobile station shall perform
24 BCMC registration procedures as specified in 2.6.13.3 to indicate change in
25 the frequency where the mobile station will reside to receive the *BCMC*
26 *Service Parameters Message*.
 - 27 + The mobile station shall tune to the frequency specified by
28 *BSPM_CDMA_FREQ* and *BSPM_BAND_CLASS*; the mobile station should
29 tune to the new frequency only after performing BCMC registration specified
30 above (if any). If *FREQ_CHG_REG_TIMER_s* is not equal to *NULL* and the
31 BCMC frequency registration timer for the previous frequency is not enabled
32 or has expired, the mobile station shall start the BCMC frequency
33 registration timer for the previous frequency with a value of
34 *FREQ_CHG_REG_TIMER_s*.
 - 35 + The mobile station shall monitor the overhead channel to receive the *BCMC*
36 *Service Parameters Message* as specified in 2.6.2.2.18, and shall perform the
37 following:

- 1 o If $SENDING_BSPM_s$ equals '0', Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause =*
2 *FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)* to the BCMC
3 Service Layer and shall not perform the remaining procedures in this
4 section.
5
- 6 o Otherwise, the mobile station shall perform the remaining procedures in
7 this section.
- 8 – If the stored *BCMC Service Parameters Message* parameters do not include this
9 BCMC_FLOW_ID (See section 2.6.13.11) and $AUTO_REQ_ALLOWED_IND_s$
10 equals '0', Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result*
11 *= FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)* to the
12 BCMC Service Layer and shall not perform the remaining procedures in this
13 section.
- 14 – If the *BCMC Service Parameters Message* includes the BCMC flow indicated by
15 BCMC_FLOW_ID, BCMC_FLOW_ON_IND corresponding to this BCMC flow
16 equals '1', and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC
17 flow equals '1', the mobile station shall either perform Mobile Station Origination
18 Operation as specified in 2.6.2.5 to request this flow in the *Mobile Station Control*
19 *on the Traffic Channel State* or monitor the flow in the *Mobile Station Idle State* as
20 specified in 2.6.13.2.
- 21 – If the stored *BCMC Service Parameters Message* does not include this
22 BCMC_FLOW_ID (See section 2.6.13.11), $AUTO_REQ_ALLOWED_IND_s$ equals '1'
23 and $BCMC_ON_TRAFFIC_SUP_s$ equals '1'; or the *BCMC Service Parameters*
24 *Message* includes the BCMC flow indicated by BCMC_FLOW_ID,
25 BCMC_FLOW_ON_IND corresponding to this BCMC flow equals '0', and
26 BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals '1',
27 the mobile station shall perform the following:
- 28 + The mobile station shall perform Mobile Station Origination Operation as
29 specified in 2.6.2.5 to request transmission of this BCMC flow. The mobile
30 station shall include the BCMC_FLOW_ID (See section 2.6.13.11) in the
31 *Origination Message*.
- 32 – If the stored *BCMC Service Parameters Message* parameters do not include this
33 BCMC_FLOW_ID (See section 2.6.13.11), $AUTO_REQ_ALLOWED_IND_s$ equals
34 '1', and $BCMC_ON_TRAFFIC_SUP_s$ equals '0'; or the stored *BCMC Service*
35 *Parameters Message* parameters include the BCMC flow indicated by
36 BCMC_FLOW_ID, BCMC_FLOW_ON_IND corresponding to this BCMC flow
37 equals '0', and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC
38 flow equals '0', the mobile station shall perform the following:
- 39 + The mobile station shall send a *Registration Message* to request transmission
40 of this BCMC flow. Upon receiving conformation of delivery of the
41 *Registration Message*, the mobile station shall enable the BCMC wait timer
42 with a value of $BSPM_WAIT_TIME$ seconds and shall wait for an updated
43 *BCMC Service Parameters Message*.

- 1 + If the BCMC wait timer expires, Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause =*
2 *FLOW_NOT_TRANSMITTED, reason_ind = CURRENT_SYS)* to the BCMC
3 Service Layer, and shall not perform the remaining procedures in this
4 section.
5
- 6 + If the mobile station receives a *BCMC Order* from the base station prior to
7 the expiration of the BCMC wait timer, the mobile station shall perform the
8 following:
- 9 o If *CLEAR_ALL_RETRY_DELAY_r* equals '1', the mobile station shall delete
10 the currently stored BCMC Retry Delay List.
- 11 o If *CLEAR_RETRY_DELAY_r* equals '1', the mobile station shall delete the
12 entry in the *BCMC_RETRY_DELAY_LIST_s[i]* corresponding to
13 *BCMC_FLOW_ID* (See section 2.6.13.11) in this message.
- 14 o If *ALL_BCMC_REASON_r* or *BCMC_REASON_r* equals '0000', Layer 3 shall
15 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause*
16 *= FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)* for each of the
17 corresponding *BCMC_FLOW_ID* to the BCMC Service Layer, and shall
18 not perform the remaining procedures in this section for the
19 corresponding *BCMC_FLOW_ID*.
- 20 o If *ALL_BCMC_REASON_r* or *BCMC_REASON_r* equals '0001', Layer 3 shall
21 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause*
22 *= FLOW_NOT_TRANSMITTED, reason_ind = CURRENT_SYS)* for each of
23 the corresponding *BCMC_FLOW_ID* to the BCMC Service Layer, and
24 shall not perform the remaining procedures in this section for the
25 corresponding *BCMC_FLOW_ID*.
- 26 o If *ALL_BCMC_REASON_r* or *BCMC_REASON_r* equals '0011', Layer 3 shall
27 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = SUCCESS,*
28 *reason_ind = REGISTRATION_ACCEPTED)* for each of the corresponding
29 *BCMC_FLOW_ID* to the BCMC Service Layer and shall not perform the
30 remaining procedures in this section for the corresponding
31 *BCMC_FLOW_ID*.
- 32 o If *ALL_BCMC_REASON_r* or *BCMC_REASON* equals '0100', Layer 3 shall
33 send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause*
34 *= AUTHORIZATION_FAILURE, reason_ind = CURRENT_SYS)* for each of the
35 corresponding *BCMC_FLOW_ID* to the BCMC Service Layer, and shall
36 not perform the remaining procedures in this section for the
37 corresponding *BCMC_FLOW_ID*.
- 38 o If *ALL_BCMC_REASON_r* or *BCMC_REASON* equals '0101', the mobile
39 station shall perform the following:
- 40 ◇ Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result*
41 *= FAILURE, cause = RETRY_LATER, reason_ind = CURRENT_SYS)* for

- 1 each of the corresponding BCMC_FLOW_ID to the BCMC Service
2 Layer.
- 3 ◇ For each of the corresponding BCMC_FLOW_ID, if there is a
4 BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID which is same as
5 BCMC_FLOW_ID (See section 2.6.13.11), the mobile station shall set
6 BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to current system
7 time plus ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY_r;
8 otherwise, Layer 3 shall add new BCMC_RETRY_DELAY_LIST_s[i] to
9 the BCMC Retry Delay List and shall set
10 BCMC_RETRY_DELAY_LIST_s[i].BCMC_FLOW_ID to BCMC_FLOW_ID,
11 BCMC_RETRY_DELAY_LIST_s[i].RETRY_DELAY to current system
12 time plus ALL_BCMC_RETRY_DELAY_r/BCMC_RETRY_DELAY_r.
- 13 ◇ The mobile station shall not perform the remaining procedures in
14 this section for the corresponding BCMC_FLOW_ID.
- 15 o If the BCMC flow corresponding to this BCMC_FLOW_ID (See section
16 2.6.13.11) is included in the stored *BCMC Service Parameters Message*
17 parameters and BCMC_FLOW_ON_IND corresponding to this BCMC flow
18 changes to '1' prior to the expiration of the BCMC wait timer, the mobile
19 station shall disable the BCMC wait timer and perform the remaining
20 procedures in this section.
- 21 • The mobile station shall determine the Forward Supplemental Channel
22 corresponding to this BCMC_FLOW_ID from BCMC_FLOW_LIST_s. If the BCMC flow
23 corresponding to this BCMC_FLOW_ID is configured for transmission in the mobile
24 station's hash-to-frequency, the mobile station shall choose the mobile station's
25 hash-to-frequency; otherwise, the mobile station shall use the hash algorithm
26 specified in 2.6.7.1 and the number of CDMA channels on which this
27 BCMC_FLOW_ID is configured for transmission to choose the frequency to monitor.
28 The mobile station shall perform the following:
- 29 – The mobile station shall determine the Band Class (FSCH_BAND_CLASS) and
30 the CDMA channel (FSCH_FREQ) corresponding to the selected Forward
31 Supplemental Channel from FBSCH_LIST_s. If FSCH_BAND_CLASS is not equal
32 to CDMA_BAND_s or FSCH_FREQ is not equal to CDMACH_s and the mobile
33 station is currently monitoring one or more BCMC flows in the current
34 frequency that have a higher priority than the requested BCMC flow, Layer 3
35 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause=*
36 *CANNOT_ACCOMMODATE, reason_ind = CURRENT_SYS)* to the BCMC Service
37 Layer, and shall not perform the remaining procedures in this section.
- 38 – If the mobile station will not be able to monitor the Forward Supplemental
39 Channel on which the BCMC flow is being transmitted due to a capability
40 mismatch, Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result*
41 *= FAILURE, cause = UNSUPPORTED_BEARER_CONFIG, reason_ind =*
42 *CURRENT_SYS)* to the BCMC Service Layer, and shall not perform the
43 remaining procedures in this section.

- 1 • If FSCH_BAND_CLASS is not equal to CDMA_BAND_s or FSCH_FREQ is not equal to
2 CDMA_BAND_s, the mobile station shall perform the following:
- 3 – If FREQ_CHG_REG_REQUIRED_s equals '1', the mobile station shall perform
4 BCMC registration procedures as specified in 2.6.13.3 to indicate change in the
5 frequency where the mobile station will reside while monitoring this BCMC flow.
- 6 – The mobile station shall tune to FSCH_FREQ in FSCH_BAND_CLASS; the
7 mobile station should tune to the new frequency only after performing BCMC
8 registration specified above (if any). If FREQ_CHG_REG_TIMER_s is not equal to
9 NULL and the BCMC frequency registration timer for the previous frequency is
10 not enabled or has expired, the mobile station shall start the BCMC frequency
11 registration timer for the previous frequency with a value of
12 FREQ_CHG_REG_TIMER_s.
- 13 – For each BCMC flow in current frequency that can no longer be monitored in
14 new frequency, the mobile station shall perform the following:
- 15 + Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result =*
16 *FAILURE, cause = CANNOT_ACCOMMODATE, reason_ind = CURRENT_SYS)* to
17 the BCMC Service Layer.
- 18 + Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)* to the
19 multiplex sublayer where *FSCH_ID* and *BSR_ID* are the values in
20 *BCMC_FLOW_LIST_s* corresponding to this *BCMC_FLOW_ID*.
- 21 • The mobile station shall set the Forward Supplemental Channel parameters as
22 given in *FBSCH_LIST_s* and shall start to monitor the Forward Supplemental
23 Channel.
- 24 • The mobile station shall send a *BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID)* to the
25 multiplex sublayer where *FSCH_ID* and *BSR_ID* are the values in
26 *BCMC_FLOW_LIST_s* corresponding to the logical-to-physical mapping selected for
27 this *BCMC_FLOW_ID*.
- 28 • The mobile station shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID,*
29 *result=SUCCESS)* to the BCMC Service Layer.
- 30 • The mobile station shall perform the procedures as specified in 2.6.13.2 while
31 monitoring the Forward Supplemental Channel

32 2.6.13.2 Procedures while monitoring an Forward Supplemental Channel

33 While monitoring a Forward Supplemental Channel, the mobile station shall perform the
34 following:

- 35 • The mobile station shall determine the hash-to frequency based on received CDMA
36 Channel List Message or the Extended CDMA Channel List Message but shall not
37 tune to the hash-to frequency. If FREQ_CHG_REG_REQUIRED_s equals '1' and the
38 mobile station determines that the hash-to frequency has changed and the mobile
39 station currently resides in the previous hash-to frequency, the mobile station shall
40 perform BCMC registration procedures as specified in 2.6.13.3 to indicate current
41 frequency.

- 1 • If the mobile station performs an idle handoff (see 2.6.2.1.4), the mobile station
2 shall perform the procedures as specified in 2.6.13.4. If the idle handoff results in
3 the mobile station residing in a frequency other than the frequency prior to the idle
4 handoff, the mobile station shall perform the following:
- 5 – If `FREQ_CHG_REG_REQUIREDs` equals '1', the mobile station shall perform
6 BCMC registration procedures as specified in 2.6.13.3 to indicate change in the
7 frequency where the mobile station will reside while monitoring this BCMC flow.
8 If `FREQ_CHG_REG_TIMERs` is not equal to NULL and the BCMC frequency
9 registration timer for the previous frequency is not enabled or is enabled and
10 has not expired, the mobile station shall start the BCMC frequency registration
11 timer for the previous frequency with a value of `FREQ_CHG_REG_TIMERs`.
- 12 • If the `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` is equal to '1' for any
13 BCMC flow being monitored by the mobile station, then the mobile station shall
14 perform BCMC registration procedures as specified in 2.6.13.3 if any of the
15 following conditions are true:
- 16 – The mobile station determines that
17 `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` was set to '0' since the last
18 time the mobile station initiated registration procedures due to
19 `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG`.
- 20 – The mobile station cannot determine that
21 `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG` was not set to '0' since the
22 last time the mobile station initiated registration procedures due to
23 `BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG`.
- 24 • If Layer 3 receives a *BCMC-Stop-Monitor.Request(BCMC_FLOW_ID)* from the BCMC
25 Service Layer, Layer 3 shall stop monitoring this BCMC flow as specified in
26 2.6.13.5.
- 27 • If Layer 3 receives a *BCMC-Monitor.Request(BCMC_FLOW_ID, priority)* from the
28 BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to
29 commence reception of the BCMC flow.
- 30 • If the mobile station determines that the content of the *BCMC Service Parameters*
31 *Message* has changed, Layer 3 shall perform the procedures as specified in
32 2.6.13.6.
- 33 • If the BCMC frequency registration timer for the frequency where the mobile station
34 is currently residing expires, the mobile station shall perform BCMC registration
35 procedures as specified in 2.6.13.3 to indicate current frequency.

36 2.6.13.3 Procedures for BCMC Registration

37 If the mobile station is to perform BCMC registration due to the
38 `REGISTRATION_REQ_FLAG` indicator being set, the mobile station shall perform the
39 following:

- 1 • If this is the first time $\text{BCMC_FLOW_LIST}_s[i].\text{REGISTRATION_REQ_FLAG}$ is set to '1'
- 2 for this BCMC flow received after an idle handoff, the mobile station shall perform a
- 3 BCMC registration immediately.
- 4 • Otherwise, if the BCMC registration required timer is not enabled, the mobile
- 5 station shall perform the following:
 - 6 – Enable the BCMC registration required timer with the initial value set to a
 - 7 pseudorandom value between 0 and $\text{REGISTRATION_REQ_TIMER_MAX}$.
 - 8 – Subsequently, if the $\text{BCMC_FLOW_LIST}_s[i].\text{REGISTRATION_REQ_FLAG}$ for all
 - 9 BCMC flows being monitored by the mobile station are equal to '0', the mobile
 - 10 station shall disable the BCMC registration required timer.
 - 11 – Otherwise, when the BCMC registration required timer expires, the mobile
 - 12 station shall perform a BCMC registration.

13 If the mobile station is to perform BCMC registration due to a frequency change, layer 3
14 shall perform the following:

- 15 • If the BCMC frequency registration timer for target frequency is enabled and has not
- 16 expired, the mobile station shall not perform the remaining procedures in this
- 17 section.
- 18 • Otherwise, the mobile station shall enter the System Access State with a
- 19 registration indication.

20 2.6.13.4 Procedures for Idle Handoff while Monitoring Forward Supplemental Channel

21 While monitoring a Forward Supplemental Channel, if the conditions for performing an idle
22 handoff are detected (see 2.6.2.1.4), the mobile station shall perform an idle handoff as
23 specified in this section.

24 When the mobile station performs an idle handoff the BCMC registration required timer
25 shall be disabled.

26 While performing an idle handoff, the mobile station should not begin operating in non-
27 slotted mode after the idle handoff if all of the following conditions hold:

- 28 • The mobile station supports the Quick Paging Channel;
- 29 • The mobile station has knowledge that the new base station supports configuration
- 30 change indicators;
- 31 • The mobile station determines that the Quick Paging Channel configuration change
- 32 indicator for the new Quick Paging Channel is set to "OFF" (see 2.6.2.1.2.1); and
- 33 • No more than T_{31m} seconds have elapsed since the mobile station last received a
- 34 valid message on the new Paging Channel or Forward Common Control
- 35 Channel/Primary Broadcast Control Channel.

36 Otherwise, the mobile station shall operate in non-slotted mode until the mobile station
37 has received at least one valid configuration message or mobile station-addressed page on
38 the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control
39 Channel. Following the reception of this message the mobile station may resume slotted

1 mode operation in accordance with 2.6.2.1.1.3. After performing an idle handoff, the
 2 mobile station shall discard all unprocessed messages received on the old Paging Channel
 3 or Forward Common Control Channel/Primary Broadcast Control Channel.

4 If the new base station is listed in NGHBR_REC_LIST for the old base station (see 2.6.2.2.3,
 5 2.6.2.2.7, and 2.6.2.1.4.1), the mobile station shall use the corresponding 3-bit
 6 NGHBR_CONFIG field to determine the actions required to transition to the new base
 7 station. If the new base station is not listed in NGHBR_REC_LIST for the old base station,
 8 the mobile station shall perform the handoff operation using the same procedure as for a
 9 pilot in NGHBR_REC_LIST with the NGHBR_CONFIG field set to '011'.

10 If the new base station is listed in BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k]
 11 record of the current base station, the mobile station shall use the corresponding 3-bit
 12 NGHBR_BCMC_CONFIG field to determine the actions required to monitor the Forward
 13 Supplemental Channel of the new base station. If the new base station is not listed in
 14 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k] record for the current base station, the
 15 mobile station shall determine the actions required to monitor the Forward Supplemental
 16 Channel of the new base station using the same procedure as for a pilot in
 17 BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k] record with the
 18 NGHBR_BCMC_CONFIG field set to '000'.

19 If the mobile station is currently monitoring the Paging Channel and selected a neighbor
 20 base station for idle handoff which supports Primary Broadcast Control Channel, the
 21 mobile station shall perform the following:

- 22 • If the mobile station has not received parameters for the Primary Broadcast Control
 23 Channel of the neighbor base station from the *BCMC System Parameters Message*,
 24 the mobile station shall enter the System Determination Substate of the Mobile
 25 Station Initialization State with a new system indication, upon performing idle
 26 handoff to this neighbor base station.
- 27 – Upon entering the Mobile Station Idle State of the new system, the mobile
 28 station shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
- 29 – The mobile station shall not perform any of the remaining procedures in this
 30 section.

31 If the NGHBR_CONFIG field is '011', the mobile station shall perform the following:

- 32 • Enter the System Determination Substate of the Mobile Station Initialization State
 33 with a new system indication (see 2.6.1.1)
- 34 • Upon entering the Mobile Station Idle State of the new system, the mobile station
 35 shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
- 36 • The mobile station shall not perform any of the remaining procedures in this
 37 section.

38 If the NGHBR_BCMC_CONFIG field is '000' or '011', the mobile station shall perform the
 39 following:

- 1 • The mobile station shall perform idle handoff according to the procedures in
2 2.6.2.1.4.1 just as if the mobile station is currently not monitoring a Forward
3 Supplemental Channel.
- 4 • Upon completing the idle handoff, the mobile station shall resume monitoring the
5 BCMC flow as specified in 2.6.13.6.

6 If the NGHBR_BCMC_CONFIG field is '001' or '010', the mobile station shall perform the
7 following:

- 8 • If the mobile station has monitored the Paging Channel before the idle handoff, or
9 the mobile station has monitored the Forward Common Control Channel/Primary
10 Broadcast Control Channel before the idle handoff and NGHBR_CONFIG field is set
11 to '001', the mobile station shall perform the following:
 - 12 – The mobile station shall set ACC_MSG_SEQ_s and CURR_ACC_MSG_SEQ to
13 NULL and shall set PILOT_PN_s to the pilot offset index of the base station
14 transmitting the new Paging Channel.
 - 15 – If the stored information for any of the Paging Channels on the associated
16 NGHBR_FSCH_FREQ of the new base station is current, the mobile station shall
17 perform the following:
 - 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_s, where
20 PAGE_CHAN_s 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_s. The mobile station shall perform the
23 following:
 - 24 o If the mobile station has not stored configuration parameters for the new
25 Paging Channel, or if the stored parameters are not current (see 2.6.2.2),
26 the mobile station shall set CONFIG_MSG_SEQ_s, SYS_PAR_MSG_SEQ_s,
27 NGHBR_LST_MSG_SEQ_s, EXT_NGHBR_LST_MSG_SEQ_s,
28 GEN_NGHBR_LST_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s,
29 EXT_SYS_PAR_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
30 PRI_NGHBR_LST_MSG_SEQ_s, and
31 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
32 FD_CHAN_LST_MSG_SEQ_s, AP_PILOT_INFO_MSG_SEQ_s,
33 AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s,
34 FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
35 GLOB_SERV_REDIR_MSG_SEQ_s to NULL.
 - 36 o If the stored information for the new Paging Channel is current, the
37 mobile station shall set CONFIG_MSG_SEQ_s to the stored information
38 for the new Paging Channel and set NGHBR_REC_LIST, FBSCH_LIST_s,
39 and BCMC_FLOW_LIST_s to the stored information for the new Paging
40 Channel.

- 1 + If the mobile station has monitored the Forward Common Control
2 Channel/Primary Broadcast Control Channel before the idle handoff, the
3 mobile station shall set $PRAT_S = '00'$.
- 4 + If $CDMACH_S$ is not equal to $NGHBR_FSCH_FREQ$, the mobile station shall
5 set $CDMACH_S$ to $NGHBR_FSCH_FREQ$ and tune to the new CDMA Channel.
6 The mobile station shall begin monitoring the new Paging Channel and the
7 Forward Supplemental Channel of the new base station.
- 8 – If none of the Paging Channel stored information on the associated
9 $NGHBR_FSCH_FREQ$ of the new base station are current, the mobile station
10 shall perform the following:
- 11 + The mobile station shall set $CONFIG_MSG_SEQ_S$, $SYS_PAR_MSG_SEQ_S$,
12 $NGHBR_LST_MSG_SEQ_S$, $EXT_NGHBR_LST_MSG_SEQ_S$,
13 $GEN_NGHBR_LST_MSG_SEQ_S$, $CHAN_LST_MSG_SEQ_S$,
14 $EXT_SYS_PAR_MSG_SEQ_S$, $GLOB_SERV_REDIR_MSG_SEQ_S$,
15 $EXT_GLOB_SERV_REDIR_MSG_SEQ_S$, $EXT_CHAN_LST_MSG_SEQ_S$,
16 $FD_CHAN_LST_MSG_SEQ_S$, $USER_ZONE_ID_MSG_SEQ_S$,
17 $AP_PILOT_INFO_MSG_SEQ_S$, $AP_IDT_MSG_SEQ_S$, $AP_ID_TEXT_MSG_SEQ_S$,
18 $GOI_MSG_SEQ_S$, $FREQ_GOI_MSG_SEQ_S$, $ATIM_MSG_SEQ_S$ and
19 $PRI_NGHBR_LST_MSG_SEQ_S$ to NULL.
- 20 + If the mobile station has monitored the Forward Common Control
21 Channel/Primary Broadcast Control Channel before the idle handoff, the
22 mobile station shall set $PRAT_S = '00'$.
- 23 + The mobile station shall set $PAGE_CHAN_S$ to '1' and $PAGECH_S$ to the
24 Primary Paging Channel. If $CDMACH_S$ is not equal to $NGHBR_FSCH_FREQ$,
25 the mobile station shall set $CDMACH_S$ to $NGHBR_FSCH_FREQ$ and tune to
26 the new CDMA Channel. The mobile station shall begin monitoring the
27 Primary Paging Channel and Forward Supplemental Channel of the new
28 base station.
- 29 If $PACA_S$ is equal to enabled, the mobile station shall enter the *Update Overhead*
30 *Information Substate* of the *System Access State* (see 2.6.3) with an origination
31 indication within T_{33m} seconds to re-originate the PACA call using the new base
32 station.
- 33 • If the mobile station has monitored the Forward Common Control Channel/Primary
34 Broadcast Control Channel before the idle handoff or if the mobile station has
35 monitored the Paging Channel before the idle handoff, and selected a neighbor base
36 station for idle handoff which supports Primary Broadcast Control Channel and the
37 mobile station has received parameters for the Primary Broadcast Control Channel
38 of the neighbor base station from the *BCMC System Parameters Message*, the mobile
39 station shall perform the following:
- 40 – The mobile station shall set $ACC_MSG_SEQ_S$ and $CURR_ACC_MSG_SEQ$ to
41 NULL and shall set $PILOT_PN_S$ to the pilot offset index of the base station
42 transmitting the new Forward Common Control Channel/Primary Broadcast
43 Control Channel.

- 1 – If the stored information for any of the Forward Common Control Channels and
2 Primary Broadcast Control Channel on the associated NGHBR_FSCH_FREQ of
3 the new base station is current, the mobile station shall perform the following:
- 4 + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select
5 a new Forward Common Control Channel number in the range 1 to
6 NUM_FCCCH_s, where NUM_FCCCH_s is the stored value. The mobile station
7 shall store the new Forward Common Control Channel number as
8 FCCCH_ID_s. The mobile station shall perform the following:
- 9 o If the mobile station has not stored configuration parameters for the new
10 Forward Common Control Channel and Primary Broadcast Control
11 Channel, or if the stored parameters are not current (see 2.6.2.2), the
12 mobile station shall set CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
13 UNI_NGHBR_LST_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
14 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
15 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
16 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s,
17 AP_ID_TEXT_MSG_SEQ_s, GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s,
18 ATIM_MSG_SEQ_s and PRI_NGHBR_LST_MSG_SEQ_s to NULL.
- 19 o If the stored information for the new Forward Common Control Channel
20 and Primary Broadcast Control Channel is current, the mobile station
21 shall set CONFIG_MSG_SEQ_s to the stored information for the new
22 Forward Common Control Channel and Primary Broadcast Control
23 Channel and set NGHBR_REC_LIST to the stored information for the new
24 Forward Common Control Channel and Primary Broadcast Control
25 Channel.
- 26 + If CDMACH_s is not equal to NGHBR_FSCH_FREQ, the mobile station shall
27 set CDMACH_s to NGHBR_FSCH_FREQ and tune to the new CDMA Channel.
28 The mobile station shall begin monitoring the new Forward Common Control
29 Channel/Primary Broadcast Control Channel and the Forward
30 Supplemental Channel of the new base station.
- 31 – If none of the Forward Common Control Channel and Primary Broadcast
32 Control Channel stored information on the associated NGHBR_FSCH_FREQ of
33 the new base station are current, the mobile station shall perform the following:
- 34 + The mobile station shall set the mobile station shall set
35 CONFIG_MSG_SEQ_s, A41_SYS_PAR_MSG_SEQ_s,
36 UNI_NGHBR_LST_MSG_SEQ_s, MC_RR_PAR_MSG_SEQ_s,
37 EXT_GLOB_SERV_REDIR_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s,
38 FD_CHAN_LST_MSG_SEQ_s, USER_ZONE_ID_MSG_SEQ_s,
39 AP_PILOT_INFO_MSG_SEQ_s, AP_IDT_MSG_SEQ_s, AP_ID_TEXT_MSG_SEQ_s,
40 GOI_MSG_SEQ_s, FREQ_GOI_MSG_SEQ_s, ATIM_MSG_SEQ_s and
41 PRI_NGHBR_LST_MSG_SEQ_s to NULL.

- 1 + If $CDMACH_s$ is not equal to $NGHBR_FSCH_FREQ$, the mobile station shall
 2 set $CDMACH_s$ to $NGHBR_FSCH_FREQ$ and tune to the new CDMA Channel.
 3 The mobile station shall begin monitoring the Primary Broadcast Control
 4 Channel of the new base station, using the same rate, code rate, and code
 5 channel. The mobile station shall begin monitoring the Forward
 6 Supplemental Channel of the new base station.
- 7 – If $PACA_s$ is equal to enabled, the mobile station shall enter the *Update Overhead*
 8 *Information Substate* of the *System Access State* (see 2.6.3) with an origination
 9 indication within T_{33m} seconds to re-originate the PACA call using the new base
 10 station.

11 2.6.13.5 Procedures for stopping reception of a BCMC Flow

12 If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow given by
 13 $BCMC_FLOW_ID$, the mobile station perform the following:

- 14 • Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)* to the multiplex
 15 sublayer where $FSCH_ID$ and BSR_ID are the values in $BCMC_FLOW_LIST_s$
 16 corresponding to this $BCMC_FLOW_ID$.
- 17 • If this is the only BCMC flow being monitored on this Forward Supplemental
 18 Channel, the mobile station shall stop monitoring this Forward Supplemental
 19 Channel.
- 20 • If this is the only BCMC flow being monitored on this frequency, the mobile station
 21 shall return to the hash-to frequency as follows:
- 22 – If the mobile station is currently monitoring the Paging Channel, the mobile
 23 station shall monitor the CDMA Channel List Message or Extended CDMA
 24 Channel List Message to determine the hash-to frequency as specified in
 25 2.6.2.2.4 and 2.6.2.2.12.1 respectively.
- 26 – If the mobile station is currently monitoring the Primary Broadcast Control
 27 Channel/Forward Common Control Channel, the mobile station shall monitor
 28 the *Extended CDMA Channel List Message* to determine the hash-to frequency as
 29 specified in 2.6.2.2.12.2.
- 30 – If this results in the mobile station residing in a frequency other than the
 31 frequency prior to stopping BCMC flow reception, the mobile station shall
 32 perform BCMC registration procedures as specified in 2.6.13.3 to indicate
 33 change in the frequency.

34 2.6.13.6 Procedures for Handling *BCMC Service Parameters Message* Updates

35 If the mobile station determines that the contents of the *BCMC Service Parameters Message*
 36 has changed or that the *BCMC Service Parameters Message* is not being transmitted
 37 anymore, the mobile station shall perform the following:

- 38 • If $SENDING_BSPM_s$ equals '0', the mobile station shall perform the following:
- 39 – For each BCMC flow currently being monitored, Layer 3 shall send a *BCMC-*
 40 *Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause =*

- 1 *FLOW_NOT_AVAILABLE, reason_ind*) to the BCMC Service Layer, where
 2 *reason_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS
 3 otherwise.
- 4 – For each BCMC flow currently being monitored, Layer 3 shall send a *BMAC-*
 5 *Stop-Deliver.Request(FSCH_ID, BSR_ID)* to the multiplex sublayer where *FSCH_ID*
 6 and *BSR_ID* are the values in the previous BCMC_FLOW_LIST corresponding to
 7 this BCMC_FLOW_ID.
 - 8 – The mobile station shall not perform the remaining procedures in this section.
 - 9 • For each BCMC flow that the mobile station is currently monitoring, if the mobile
 10 station determines that the base station is not transmitting this BCMC flow
 11 anymore, the mobile station shall perform the following:
 - 12 – Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE,*
 13 *cause= FLOW_NOT_AVAILABLE, reason_ind)* to the BCMC Service Layer, where
 14 *reason_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS
 15 otherwise, and shall stop monitoring this BCMC flow as specified in 2.6.13.5.
 - 16 • For each BCMC flow that the mobile station is currently monitoring, if the mobile
 17 station determines that this BCMC flow is being transmitted on a different Forward
 18 Supplemental Channel than currently transmitted, the mobile station shall perform
 19 the following:
 - 20 – If more than one BCMC flows that the mobile station is currently monitoring are
 21 still available, then the mobile station shall choose the frequency based on the
 22 BCMC flow with the highest priority; if the BCMC flow is configured for
 23 transmission in the mobile station's hash-to-frequency, the mobile station shall
 24 choose the mobile station's hash-to-frequency; otherwise, the mobile station
 25 shall use the hash algorithm specified in 2.6.7.1 and the number of CDMA
 26 channels on which this BCMC_FLOW_ID is configured for transmission to
 27 choose the frequency to monitor.
 - 28 – Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)* to the
 29 multiplex sublayer where *FSCH_ID* and *BSR_ID* are the values in the previous
 30 BCMC_FLOW_LIST corresponding to this BCMC_FLOW_ID.
 - 31 – The mobile station shall determine the band class (*FSCH_BAND_CLASS*) and
 32 CDMA channel (*FSCH_FREQ*) corresponding to the selected Forward
 33 Supplemental Channel from *FBSCH_LIST_s*. If *FSCH_BAND_CLASS* is not equal
 34 to *CDMA_BAND_s* or *FSCH_FREQ* is not equal to *CDMACH_s* and the mobile
 35 station is currently monitoring one or more BCMC flows in the current
 36 frequency that have a higher priority than this BCMC flow, Layer 3 shall send a
 37 *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause =*
 38 *CANNOT_ACCOMMODATE, reason_ind)* to the BCMC Service Layer, where
 39 *reason_ind* is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS
 40 otherwise, and shall not perform the remaining procedures in this section.
 - 41 – If the mobile station will not be able to monitor the Forward Supplemental
 42 Channel on which the BCMC flow is being transmitted due to a capability

- 1 mismatch, Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result*
 2 *= FAILURE, cause = UNSUPPORTED_BEARER_CONFIG, reason_ind)* to the BCMC
 3 Service Layer, where *reason_ind* is set to MOBILITY if this is due to idle handoff
 4 or to CURRENT_SYS otherwise, and shall not perform the remaining procedures
 5 in this section for this BCMC flow.
- 6 – If FSCH_BAND_CLASS is not equal to CDMA_BAND_S or FSCH_FREQ is not
 7 equal to CDMACH_S, the mobile station shall perform the following:
 - 8 + If FREQ_CHG_REG_REQUIRED_S equals '1', the mobile station shall perform
 9 BCMC registration procedures as specified in 2.6.13.3 to indicate change in
 10 the frequency where the mobile station will reside while monitoring this
 11 BCMC flow.
 - 12 + The mobile station shall tune to FSCH_FREQ in FSCH_BAND_CLASS; the
 13 mobile station should tune to the new frequency only after performing
 14 BCMC registration (if any) specified above. If FREQ_CHG_REG_TIMER_S is
 15 not equal to NULL and the BCMC frequency registration timer for the
 16 previous frequency is not enabled or is enabled and has not expired, the
 17 mobile station shall start the BCMC frequency registration timer for the
 18 previous frequency with a value of FREQ_CHG_REG_TIMER_S.
 - 19 + For each BCMC flow in current frequency that can no longer be monitored in
 20 new frequency, the mobile station shall perform the following:
 - 21 o Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID,*
 22 *result=FAILURE, cause= CANNOT_ACCOMMODATE, reason_ind)* to the
 23 BCMC Service Layer, where *reason_ind* is set to MOBILITY if this is due
 24 to idle handoff or to CURRENT_SYS otherwise.
 - 25 o Layer 3 shall send a *BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)* to the
 26 multiplex sublayer where *FSCH_ID* and *BSR_ID* are the values in
 27 BCMC_FLOW_LIST_S corresponding to this BCMC_FLOW_ID.
 - 28 – The mobile station shall set the Forward Supplemental Channel parameters as
 29 given in FBSCH_LIST_S and shall start to monitor the Forward Supplemental
 30 Channel.
 - 31 – The mobile station shall send a *BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID)* to
 32 the multiplex sublayer where *FSCH_ID* and *BSR_ID* are the values in
 33 BCMC_FLOW_LIST_S corresponding to the logical-to-physical mapping selected
 34 for this BCMC_FLOW_ID.
 - 35 • For any BCMC flow that the mobile station is currently monitoring, if the mobile
 36 station determines to monitor this BCMC flow on a traffic channel (e.g.,
 37 BCMC_FLOW_ON_IND corresponding to this BCMC flow equals '0', and
 38 BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals '1'), the
 39 mobile station shall perform the following:
 - 40 – For each BCMC flow currently being monitored in the *Mobile Station Idle State*,
 41 Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE,*

1 *cause= CANNOT_ACCOMMODATE, reason_ind*) to the BCMC Service Layer,
 2 where *reason_ind* is set to MOBILITY if this is due to idle handoff or to
 3 CURRENT_SYS otherwise, and shall stop monitoring this BCMC flow as
 4 specified in 2.6.13.5.

- 5 – The mobile station shall perform Mobile Station Origination Operation as
 6 specified in 2.6.2.5 to request monitoring of this BCMC flow on the *Traffic*
 7 *Channel Substate*. The mobile station shall include the BCMC_FLOW_ID (See
 8 section 2.6.13.11) in the *Origination Message*.
 9 2.6.13.7 Procedures for Browsing BCMC Flows

10 If Layer 3 is requested by the BCMC Service Layer to report list of all available BCMC flows
 11 (see 2.6.13), the mobile station shall perform the following procedures in the order
 12 specified:

- 13 • If SENDING_BSPM_s equals '0', Layer 3 shall send a *BCMC-*
 14 *Browse.Response(result=FAILURE)* to the BCMC Service Layer.
- 15 • Otherwise, if FULL_BSPM_IND = '0', the mobile station shall monitor the overhead
 16 channel to receive the *BCMC Service Parameters Message* as specified in 2.6.2.2.18
 17 or until FULL_BSPM_IND = '1', and shall perform the following:
 - 18 – Layer 3 shall send a *BCMC-Browse.Response(result = SUCCESS,*
 19 *{BCMC_FLOW_IDS}*) to the BCMC Service Layer where *{BCMC_FLOW_IDS}* is a
 20 list of all unique BCMC flows configured for transmission in this sector as
 21 determined from the stored *BCMC Service Parameters Message* parameters.

22 2.6.13.8 Procedures for BCMC Operation while on Traffic Channel

23 This section specifies the mobile station requirements for BCMC feature while in the Mobile
 24 Station Control on the Traffic Channel State.

25 If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow
 26 (see 2.6.13), the mobile station shall send *Enhanced Origination Message* as specified in
 27 2.6.4.3.

28 If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow (see
 29 2.6.13), the mobile station shall release a BCMC call as specified in 2.6.4.3.

30 If the mobile station is monitoring BCMC flow on traffic channel, when traffic channel is
 31 released and the BCMC Service Layer has not requested to stop monitoring the BCMC flow,
 32 the mobile station shall either continue monitoring the BCMC flow in idle state (see 2.6.13)
 33 or the Layer 3 shall send a *BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE,*
 34 *cause = CALL_RELEASED)* to the BCMC Service Layer.

35 2.6.13.9 Procedures for Computation of Authorization Signature

36 For each BCMC flow included in the *Registration Message, Origination Message, Page*
 37 *Response Message* and *Enhanced Origination Message*, if
 38 BCMC_FLOW_LIST_s[i].AUTH_SIGNATURE_REQ_IND equals '1', then the mobile station
 39 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_LENGTHs

4

5 TIME_STAMP_LONG The mobile station shall set this field to the LSBs of the CDMA
 6 System Time, in units of $2^{\text{TIME_STAMP_UNIT}_s}$ slots, corresponding to a
 7 time that is not later than when the Physical Layer will begin
 8 transmission of the *Registration Message*, *Origination Message*,
 9 *Page Response Message*, or *Enhanced Origination Message* that
 10 will carry this Authorization Signature. The mobile station shall
 11 use the same TIME_STAMP_LONG field for computing all
 12 Authorization Signature parameters included in a *Registration*
 13 *Message*, *Origination Message*, *Page Response Message* or a
 14 *Enhanced Origination Message*.

- The mobile terminal shall compute the Authorization Signature value as follows using the EHMACSHA procedure as specified in [43], section 3.3.
 - The KEY parameter of EHMACSHA shall be set to BAK.
 - The L_KEY parameter of EHMACSHA shall be set to 16, identifying the length of BAK in octets.
 - The MESSAGE parameter of EHMACSHA shall be set to the pointer to the most significant bit of the input working buffer.
 - The MESSAGE_OFFSET parameter of EHMACSHA shall be set to 0.
 - The MESSAGE_LENGTH parameter of EHMACSHA shall be set to the number of bits of data in the input working buffer
 - The HMAC parameter of EHMACSHA shall be set to the pointer to the most significant bit of the output buffer that will contain the computed MAC value.
 - The L_HMAC parameter of EHMACSHA shall be set to 4, identifying the length of the output in octets.

29 The mobile station shall set the AUTH_SIGNATURE field to the 32 least significant bits
 30 of the Message Digest computed MAC value obtained in the previous step.

31 2.6.13.10 Procedures for Public Long Code Mask schemes

32 2.6.13.10.1 Procedures for BCMC Flow ID based autonomous PLCM generation

33 The Public Long Code Mask of the Forward Supplemental Channel to be received in idle
 34 state is determined as follows:

- If the first occurrence of the BCMC_FLOW_ID (see section 2.6.13.11) in the *BCMC Service Parameters Message* multiplexed on this Forward Supplemental Channel is 16bits, FIRST_FLOW_ID shall be set as follows.

37

- 1 - The 16 MSBs shall be set to sixteen '0's.
- 2 - The 16 LSBs shall be set to the BCMC_FLOW_ID.
- 3 • If the first occurrence of the BCMC_FLOW_ID (see section 2.6.13.11) in the *BCMC*
4 *Service Parameters Message* multiplexed on this Forward Supplemental Channel is
5 24bits, FIRST_FLOW_ID shall be set as follows.
- 6 - The 8 MSBs shall be set to eight '0's.
- 7 - The 24 LSBs shall be set to the BCMC_FLOW_ID.
- 8 • If the first occurrence of the BCMC_FLOW_ID (see section 2.6.13.11) in the *BCMC*
9 *Service Parameters Message* multiplexed on this Forward Supplemental Channel is
10 32bits, FIRST_FLOW_ID shall be set to the BCMC_FLOW_ID.
- 11 • Set the FIRST_BSR_ID to the BSR_ID corresponding to the FIRST_FLOW_ID in the
12 *BCMC Service Parameters Message* multiplexed on this Forward Supplemental
13 Channel.
- 14 • PLCM_42 is set as follows.
- 15 - Bits P41 through P35 shall be set to '1100111'.
- 16 - Bits P34 through P3 shall be set to FIRST_FLOW_ID.
- 17 - Bits P2 through P0 shall be set to FIRST_BSR_ID.

18 2.6.13.10.2 Procedures for index based PLCM generation

19 The Public Long Code Mask of the Forward Supplemental Channel to be received in idle
20 state is determined as follows:

- 21 • PLCM_42 is set as follows.
- 22 - Bits P41 through P24 shall be set to '110011100110111000'.
- 23 - Bits P23 through P16 shall be set to FSCH_PLCM_INDEX_s.
- 24 - Bits P15 through P0 shall be set to '0000000000000000'.

25 2.6.13.11 BCMC_FLOW_ID generation

26 The BCMC_FLOW_ID structure is shown in Figure 2.6.13.11-1.

27

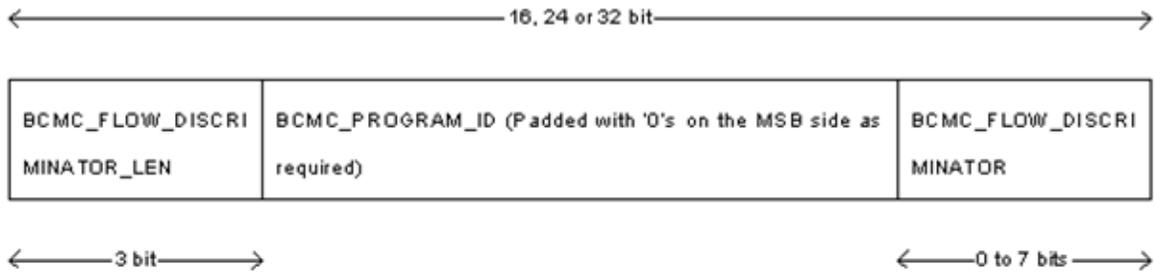


Figure 2.6.13.11-1. Structure of BCMC_FLOW_ID

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,

1 TDM_MASK, TDM_SUPER_PERIOD_MASK_INCL, TDM_SUPER_PERIOD_MASK,
2 TDM_MEGA_PERIOD_MASK_INCL, TDM_MEGA_PERIOD_MASK.

3 TDM parameters include 3 levels TDM masks TDM_MASK, TDM_SUPER_PERIOD_MASK
4 and TDM_MEGA_PERIOD_MASK. These masks indicate BCMC flow to F-SCH time slot
5 mapping.

6 Each bit of TDM_MASK indicates presence of a flow on a slot. Length of a slot is defined by
7 TDM_SLOT_LENGTH. Each bit of TDM_SUPER_PERIOD_MASK indicates presence of a flow
8 on a super slot. Super slot length is equal to slot length multiplied by number of bits in
9 TDM_MASK. Each bit of TDM_MEGA_PERIOD_MASK indicates presence of a flow on a
10 mega slot. Super slot length is equal to super slot length multiplied by number of bits in
11 TDM_SUPER_PERIOD_MASK.

12 When outer coding is used TDM_SUPER_PERIOD_MASK length is always 16 bits, but only
13 partial mask (first part) is included in the *BCMC Service Parameters Message*. Remaining
14 bits in the mask that are not included in the *BCMC Service Parameters Message* are “don’t
15 care” bits, and the mobile station can decide if remaining slots need to be received based on
16 outer coding algorithm.

17 Subsection 2.6.13.12.1 defines how TDM period is aligned with system time.

18 2.6.13.12.1 BCMC TDM period alignment requirement

19 Each TDM period for a BCMC flow on a particular Forward Supplemental Channel starts
20 when the system time (t) in 20 ms units satisfies the following equation:

- 21 • If outer coding is used for the FSCH where this BCMC flow is transmitted (i.e.
22 FSCH_OUTER_CODE_INCL for the FSCH is equal to ‘1’)

$$23 \quad t \bmod (\text{TDM period}) = \text{FSCH_OUTERCODE_OFFSET}$$

24 where FSCH_OUTERCODE_OFFSET is the outer coding buffer offset for the
25 FSCH where this BCMC flow is transmitted

- 26 • Otherwise

$$27 \quad t \bmod (\text{TDM period}) = 0$$

28 Here, TDM period is calculated as following:

- 29 • If TDM_MEGA_PERIOD_MASK_INCL for the BCMC flow on this particular Forward
30 Supplemental Channel is equal to ‘1’

31 TDM period = (duration of mega slot in 20 ms units) × (length of
32 TDM_MEGA_PERIOD_MASK in bits)

- 33 • Otherwise

$$34 \quad \text{TDM period} = \text{duration of mega slot in 20 ms units}$$

35 2.6.14 Common Procedures for Processing r-csch Messages

36 This section describes the common procedures for processing messages sent on the r-csch.

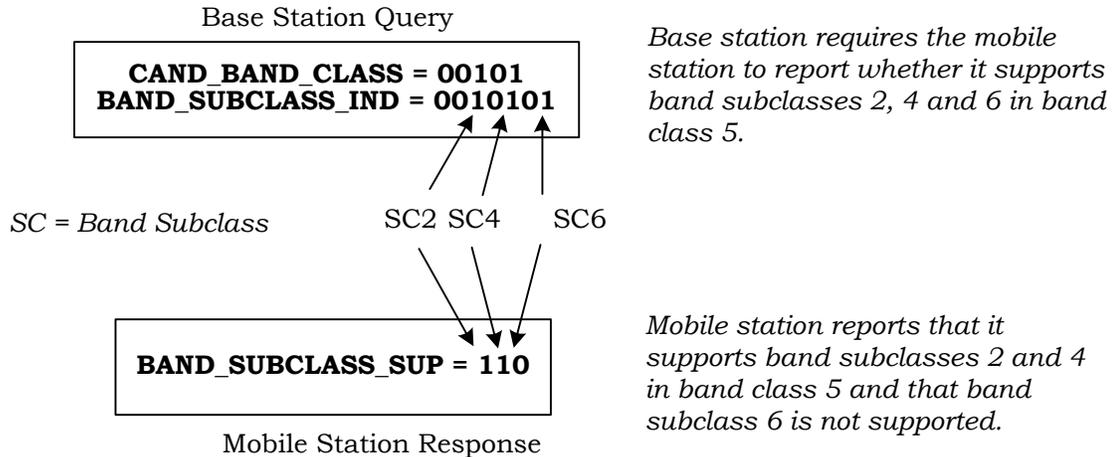
2.6.14.1 Reporting Band Class – Band Subclass Capabilities

If the `FD_CHAN_LST_INDs` is set to '0' and `CAND_BAND_INFO_REQr` 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_INDs` is set to '1' and `CAND_BAND_INFO_REQr` is set to '1' the mobile station shall use *General Extension Message* to carry the *Registration Message*, *Origination Message* or *Page Response Message* and include the 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:
 - For band classes defined with multiple band subclasses, the mobile station shall indicate support of this band class if at least one band subclass is supported.
 - If the mobile station supports a candidate band class but it is not aware of any band subclass definition for that band class, the mobile station shall report its capabilities as if it supports band subclass 0 of that band class.
- If the mobile station supports at least one band class and band subclass (if applicable) combination queried by the base station, the mobile station shall set `BAND_SUB_REP_INCL` to '1'; otherwise, the mobile station shall set this field to '0' and shall not perform the remaining procedures.
- If the mobile station is sending this information in a Bandclass - Subclass Information Record included in General Extension Message then the mobile station shall initialize `NUM_BAND_SUBCLASS` to '00000'.
- Otherwise, the mobile station shall initialize `NUM_BAND_SUBCLASS` to '0000'.
- If the mobile station supports all candidate band class and band subclass (if applicable) combinations queried by the base station, the mobile station shall not perform the remaining procedures; otherwise, for $i = 1$ to `NUM_CAND_BAND_CLASSs`, the mobile station shall perform the following:
 - If `CAND_BAND_CLASS_REC[i].SUBCLASS_INFO_INCL` is equal to '0', the mobile station shall perform the following:
 - + The mobile station shall include one instance of the `BAND_SUBCLASS_SUP` field and set it as follows. If the mobile station supports the candidate band class `CAND_BAND_CLASS_REC[i].CAND_BAND_CLASS`, the mobile station shall set this field to '1'; otherwise, it shall set it to '0'.
 - + The mobile station shall increment `NUM_BAND_SUBCLASS` by 1.
 - Otherwise, for $j = 0$ to `CAND_BAND_CLASS_REC[i].SUBCLASS_REC_LEN`, if `CAND_BAND_CLASS_REC[i].BAND_SUBCLASS_IND_REC[j]` is equal to '1', the mobile station shall perform the following:

- 1 + The mobile station shall include one instance of the BAND_SUBCLASS_SUP
- 2 field and set it as follows. If the mobile station supports the band subclass
- 3 CAND_BAND_CLASS_REC[i].BAND_SUBCLASS_IND_REC[j], the mobile
- 4 station shall set this field to '1'; otherwise, it shall set it to '0'.
- 5 + The mobile station shall increment NUM_BAND_SUBCLASS by 1.

6 Figure 2.6.14.1-1 illustrates the relationship between the base station
 7 CAND_BAND_CLASS, BAND_SUBCLASS_IND fields and the mobile station
 8 BAND_SUBCLASS_SUP fields for one possible scenario.



9
 10

11 **Figure 2.6.14.1-1. Illustration of Band Class - Band Subclass Reporting**

12 2.6.14.2 Reporting Additional Geo Location Type Capabilities

13 If the ADD_LOC_GEM_ALLOWED_s is set to '1' the mobile station may use⁷⁵ a *General*
 14 *Extension Message* to include a Additional Geo Location Type Record with Origination and
 15 Registration Messages⁷⁶.

16 2.6.15 MEID procedures when communicating with P_REV 6, 7, 8, 10 Base Stations

17 The mobile station shall conform to the requirements in [47] when communicating with a
 18 P_REV 6, 7, 8, or 10 base station.

19 2.6.16 Initialization of RC parameters

20 The mobile station shall initialize the RC parameters as follows:

⁷⁵ The mobile station may include this record for an emergency call.

⁷⁶ The mobile station will not use GEM to include a Additional Geo Location Type Record if the base station allows access entry handoff and the neighboring base station to which the mobile station could perform an access handoff and this neighboring base station does not support the use of GEM.

- 1 • The mobile station shall set FOR_FCH_ACK_MASK_RL_BLANKING_S to '0001 1001
- 2 1001 1000' and set FOR_FCH_ACK_MASK_NO_RL_BLANKING_S to '0000 1010 1010
- 3 1010'.
- 4 • The mobile station shall set REV_FCH_ACK_MASK_S to '0000 1010 1010 1010'.
- 5 • The mobile station shall set FOR_SCH_ACK_MASK_RL_BLANKING_S to '0000 0000
- 6 0001 1000' and set FOR_SCH_ACK_MASK_NO_RL_BLANKING_S to '0000 0000 0010
- 7 1000'.
- 8 • The mobile station shall set REV_SCH_ACK_MASK_S to '0000 0000 0010 1010'.
- 9 • The mobile station shall set FOR_SCH_DELAYED_ACK_MASK_S to '000'
- 10 • The mobile station shall set REV_SCH_DELAYED_ACK_MASK_S to '000'
- 11 • The mobile station shall set FOR_N2M_IND_S to '001' (4 bad frames).
- 12 • The mobile station shall set RPC_MODE_S to '00' (200 to 400 bps).
- 13 • The mobile station shall set PWR_CNTL_STEP_S to '000' (1 dB).
- 14 • The mobile station shall set FOR_FCH_BLANKING_DUTYCYCLE_S to '001' (N=4).
- 15 • The mobile station shall set REV_FCH_BLANKING_DUTYCYCLE_S to '000~~1~~' (N=4~~1~~).
- 16 • The mobile station shall set REV_FCH_BLANKING_DUTYCYCLE_IN_USE to '000~~1~~'
- 17 (N=4~~1~~).
- 18 • The mobile station shall set REV_ACKCH_GAIN_ADJ_ACS1_S to '0000 000'.
- 19 • The mobile station shall set REV_ACKCH_GAIN_ADJ_ACS2PLUS_S to '0000 000'.
- 20 • The mobile station shall initialize RC_PARAMS_RECORD_S to have entry
- 21 RC_PARAMS_RECORD_S[i] for each of the PILOT_PNs assigned to mobile and
- 22 initialize corresponding fields of each of the RC_PARAMS_RECORD_S[i] record as
- 23 follows:
- 24 – Set RC_PARAMS_RECORD_S[i].QOF_SET_IN_USE set to '000'.
- 25 – Set RC_PARAMS_RECORD_S[i].REV_SCH_ACK_CH_WALSH[00] to NULL.
- 26 – Set RC_PARAMS_RECORD_S[i].REV_SCH_ACK_BIT[00] to NULL.
- 27 – Set RC_PARAMS_RECORD_S[i].REV_SCH_ACK_CH_WALSH[01] to NULL.
- 28 – Set RC_PARAMS_RECORD_S[i].REV_SCH_ACK_BIT[01] to NULL.
- 29 – Set RC_PARAMS_RECORD_S[i].FOR_FCH_CCSH_INTERLEAVER_TYPE to '0'.

30 2.6.17 RC_PARAMS_RECORD update procedures

31 The mobile station shall update RC_PARAMS_RECORD in Traffic Channel Substate as
32 follows:

- 33 • When a pilot is added to the active set for which there is no entry present in
- 34 RC_PARAMS_RECORD_S, the mobile station shall update RC_PARAMS_RECORD_S to
- 35 add an entry RC_PARAMS_RECORD_S[i] and perform the following:

- 1 – Set RC_PARAMS_RECORD_s[i].PILOT_PN to the PILOT_PN of the added pilot.
- 2 – Set RC_PARAMS_RECORD_s[i].QOF_SET_IN_USE to '000'.
- 3 – Set RC_PARAMS_RECORD_s[i].REV_SCH_ACK_CH_WALSH[00] to NULL.
- 4 – Set RC_PARAMS_RECORD_s[i]. REV_SCH_ACK_BIT[00] to NULL.
- 5 – Set RC_PARAMS_RECORD_s[i]. REV_SCH_ACK_CH_WALSH[01] to NULL.
- 6 – Set RC_PARAMS_RECORD_s[i]. REV_SCH_ACK_BIT[01] to NULL.
- 7 – Set RC_PARAMS_RECORD_s[i]. FOR_FCH_CCSH_INTERLEAVER_TYPE to '0'.
- 8 • When a pilot is removed from the active set for which there was an entry present in
- 9 RC_PARAMS_RECORD_s, the mobile station shall update RC_PARAMS_RECORD_s to
- 10 remove the entry.
- 11 • When a ~~an~~ *Radio Configuration Parameters Message* or *General Extension Message*
- 12 *carrying the Radio Configuration Parameters record* is received, the mobile station
- 13 shall update RC_PARAMS_RECORD_s as described in section 2.6.4.3.

14 2.6.18 Processing of General Extension Message

15 The base station may extend layer 3 messages with additional fields using the *General*
16 *Extension Message*. The mobile station shall process this message at the action time:

- 17 • ~~E~~xplicitly specified in the message carried in the MESSAGE_REC field, or
- 18 • implicitly specified by the message carried in the MESSAGE_REC field when action
- 19 time is not carried explicitly in the message carried in the MESSAGE_REC field.

20 The mobile station shall process this message as follows:

- 21 • The mobile station shall store the ith occurrence of the GE_REC_TYPE_r in
- 22 GE_REC_TYPE_s[i].
- 23 • The mobile station shall store the ith occurrence of the GE_REC_LEN_r in
- 24 GE_REC_LEN_s[i].
- 25 • If any General Extension Record type is not supported, the mobile station shall
- 26 send a *Mobile Station Reject Order* with ORDQ equal to 00011101.
- 27 • If any field value in any of the General Extension Records is outside its permissible
- 28 range, the mobile station shall send a *Mobile Station Reject Order* with ORDQ equal
- 29 to 00011110.
- 30 • If any field value in any of the General Extension Records is not supported, the
- 31 mobile station shall send a *Mobile Station Reject Order* with ORDQ equal to
- 32 00011111.
- 33 • The mobile station shall store the ith occurrence of the GE_REC_r as follows.
- 34 • If GE_REC_TYPE_s[i] is equal to '00000000' the mobile station shall store the
- 35 BAND_CLASS_r field in the GE_REC_r as BAND_CLASS_s and REV_CHAN_r field in the
- 36 GE_REC_r as REV_CHAN_s. The mobile station shall use the REV_CHAN_s channel

- 1 number of BAND_CLASS_s as the associated reverse link for the channel carried in
2 the message carried by the MESSAGE_REC field.
- 3 • If GE_REC_TYPE_s[i] is equal to '00000001' the mobile station shall store and use
4 the fields included in the Radio Configuration Parameters Record at the action time.
5 If the USE_TIME field in the Radio Configuration Parameters Record is set to '0'⁷⁷,
6 the mobile station shall process the message contained in the MESSAGE_REC and
7 then update the stored parameters by the values of the fields included in the Radio
8 Configuration Parameters Record as follows:
- 9 - If Radio Configuration Parameters Record is received with an *Extended Channel*
10 *Assignment Message* or a *MEID Extended Channel Assignment Message*, the
11 mobile station should initialize the radio configuration parameters and
12 RC PARAMS RECORD according to section 2.6.16 and then update the
13 parameters and RC PARAMS RECORD using the values included in the Radio
14 Configuration Parameters Record as described in 2.6.4.3.
- 15 - If Radio Configuration Parameters Record is received with *Universal Handoff*
16 *Direction Message* or an *Extended Handoff Direction Message* or a *General*
17 *Handoff Direction Message* or a *MEID Universal Handoff Direction Message* that
18 requires a hard handoff, the mobile station should initialize the Radio
19 Configuration Parameters and RC PARAMS RECORD according to section
20 2.6.16 and then update the parameters and RC PARAMS RECORD using the
21 values included in the Radio Configuration Parameters Record as described in
22 2.6.4.3.
- 23 • The mobile station shall use the MESSAGE_TYPE field as specified in [4] and
24 process the reception of layer 3 message carried in the MESSAGE_REC field.

25 2.6.19 Delayed ACK Record update procedures

26 The mobile station shall update Delayed ACK Record as follows:

- 27 • If the mobile station receives a Delayed ACK record in a General Extension Message
28 that contains FOR_SCH_DELAYED_ACK_MASK or
29 REV_SCH_DELAYED_ACK_MASK values that the mobile station does not support,
30 the mobile station shall send a Mobile Station Reject Order with ORDQ equal to
31 00011111.
- 32 • If the mobile station receives a Delayed ACK record in a General Extension Message
33 that contains FOR_SCH_DELAYED_ACK_MASK or
34 REV_SCH_DELAYED_ACK_MASK values that the mobile station can support, the
35 mobile station shall:

⁷⁷ The base station will set the USE_TIME field for Radio Configuration Parameters Record to '0' when this record is sent in a General Extension Message.

- 1 • If the FOR_SCH_DELAYED_ACK_MASK_INCL_r is set to '1', the mobile station shall
2 set FOR_SCH_DELAYED_ACK_MASKs to FOR_SCH_DELAYED_ACK_MASK value
3 received in the Delayed ACK record.
- 4 • If the REV_SCH_DELAYED_ACK_MASK_INCL_r is set to '1', the mobile station shall
5 set REV_SCH_DELAYED_ACK_MASKs to REV_SCH_DELAYED_ACK_MASK value
6 received in the Delayed ACK record.

7 The base station and mobile station may use the FOR_SCH_DELAYED_ACK_MASK or
8 REV_SCH_DELAYED_ACK_MASK to transmit an ACK or NAK for frame n during the
9 reception of frame n+1.⁷⁸⁷⁹

10 The mobile station should use the FOR_SCH_DELAYED_ACK_MASK to transmit an
11 acknowledgement only when the F-SCH is assigned to the mobile station.

12 2.6.20 SO 73 support for RL RC 8, FL RC 11 and 12 Operation

13 If the mobile station supports RL RC 8 or FL RC 11 or FL RC 12 then the mobile station
14 shall support Service Option 73 NB Mode (i.e. Operating Point 1 through 7 of Service
15 Option 73) and shall indicate support for SO 73 to the base station.

16 **2.7 PDU Formats for Mobile Stations**

17 This section describes the formats of the PDUs corresponding to the messages sent by the
18 mobile station.

19 In any multi-bit field in the following messages, the most significant bit (MSB) shall be
20 transmitted first.

21 Some bits in the PDUs are marked as RESERVED. These bits allow extension of the PDUs
22 for future features and capabilities. The mobile station sets all reserved bits to '0'. Some
23 fields include values marked as reserved. The mobile station shall not set a field to a value
24 that is marked as reserved.

25

⁷⁸ The physical layer characteristics of acknowledgement transmission using FOR_SCH_DELAYED_ACK_MASK and REV_SCH_DELAYED_ACK_MASK are similar to transmission using REV_SCH_ACK_MASK and FOR_SCH_ACK_MASK_RL_BLANKING and FOR_SCH_ACK_MASK_NO_RL_BLANKING.

⁷⁹ The base station will set one of the bit of the FOR_SCH_DELAYED_ACK_MASK_INCL and REV_SCH_DELAYED_ACK_MASK_INCL to '1' and other to '0' to prevent unnecessary ACK channel transmissions.

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

Message Name	MSG_TAG	Section Number	P_REV_IN_USE⁸⁰
<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, ≥ 4
<i>PACA Cancel Message</i>	PACNM	2.7.1.3.2.9	≥ 4
<i>Extended Status Response Message</i>	ESTRPM	2.7.1.3.2.10	≥ 4
<i>Device Information Message</i>	DIM	2.7.1.3.2.11	≥ 7
<i>Security Mode Request Message</i>	SMRM	2.7.1.3.2.12	≥ 7
<i>Authentication Response Message</i>	AURSPM	2.7.1.3.2.13	≥ 10
<i>Authentication Resynchronization Message</i>	AURSYNM	2.7.1.3.2.14	≥ 10
<i>Reconnect Message</i>	RCNM	2.7.1.3.2.15	≥ 9
<i>Radio Environment Message</i>	REM	2.7.1.3.2.16	≥ 11
<i>Call Recovery Request Message</i>	CRRM	2.7.1.3.2.17	≥ 12
<i>General Extension Message</i>	GEM	2.7.1.3.2.18	≥ 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

⁸⁰ 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

Field	Length (bits)
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_BCNC_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
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} (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

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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).

Table 2.7.1.3.2.1-1. Registration Type (REG_TYPE) Codes

REG_TYPE (binary)	Type of Registration
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 If P_REV_IN_USE_s is less than 11, or if
- 5 MIN_SLOT_CYCLE_INDEX is equal to '0', the mobile station
- 6 shall perform the following:
- 7
- 8 • If the mobile station is configured for slotted mode
 - 9 operation, the mobile station shall set this field to max (0,
 - 10 SLOT_CYCLE_INDEX_p) (see 2.6.2.1.1). Otherwise, the
 - 11 mobile station shall set this field to '000'.
- Otherwise, the mobile station shall perform the following:
- 12 • If the mobile station is configured for slotted mode
 - 13 operation, the mobile station shall set this field to the
 - 14 absolute value of the preferred slot cycle index,
 - 15 SLOT_CYCLE_INDEX_p (see 2.6.2.1.1); otherwise, the
 - 16 mobile station shall set this field to '000'. The sign of the
 - 17 preferred slot cycle index, SLOT_CYCLE_INDEX_p, is
 - 18 specified in the SIGN_SLOT_CYCLE_INDEX field of this
 - 19 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.
- 24 See 2.3.3.
- 25 MOB_TERM – Mobile terminated calls accepted indicator.

1 If the mobile station is configured to accept mobile terminated
 2 calls while operating with the current roaming status (see
 3 2.6.5.3), the mobile station shall set this bit to '1'. Otherwise,
 4 the mobile station shall set this bit to '0'.

5 RETURN_CAUSE – Reason of the mobile station registration or access.
 6 The mobile station shall set this field to the RETURN_CAUSE
 7 value shown in Table 2.7.1.3.2.1-2 corresponding to the
 8 service redirection failure condition (see 2.6.1.1).

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10 **Table 2.7.1.3.2.1-2. RETURN_CAUSE Codes**

RETURN_CAUSE (binary)	Redirect Failure Condition
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.	

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12 QPCH_SUPPORTED – Quick Paging Channel supported indicator.
 13 If P_REV_IN_USE_s is less than six, the mobile station shall
 14 omit this field; otherwise, the mobile station shall include this
 15 field and set it as follows.

16 If the mobile station supports the Quick Paging Channel, the
 17 mobile station shall set this field to '1'; otherwise, the mobile
 18 station shall set this field to '0'.

19 ENHANCED_RC – Enhanced radio configuration supported indicator.
 20 If P_REV_IN_USE_s is less than six, the mobile station shall
 21 omit this field; otherwise, the mobile station shall include this
 22 field and set it as follows.

23 If the mobile station supports any radio configuration in the
 24 Radio Configuration Class 2 (see 1.1.1), the mobile station
 25 shall set this field to '1'; otherwise, the mobile station shall set
 26 this field to '0'.

27 UZID_INCL – User Zone Identifier included indicator.

- 1 If P_REV_IN_USE_S is less than six, the mobile station shall
 2 omit this field; otherwise, the mobile station shall include this
 3 field and set it as follows.
- 4 If the message is to contain the User Zone Identifier, the
 5 mobile station shall set this field to '1'; otherwise, the mobile
 6 station shall set this field to '0'.
- 7 UZID – User Zone Identifier.
- 8 If the UZID_INCL is included in the message and is set to '1',
 9 the mobile station shall include this field and set it to UZID_S;
 10 otherwise, the mobile station shall omit this field.
- 11 GEO_LOC_INCL – Geo-location included indicator.
- 12 If P_REV_IN_USE_S is less than seven, the mobile station shall
 13 omit this field; otherwise, the mobile station shall include this
 14 field and set it as follows.
- 15 If the message is to contain the GEO_LOC_TYPE field, the
 16 mobile station shall set this field to '1'; otherwise, the mobile
 17 station shall set this field to '0'.
- 18 GEO_LOC_TYPE – Geo-Location Type.
- 19 If GEO_LOC_INCL is included in the message and is set to '1',
 20 the mobile station shall include this field and shall set it to
 21 the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile
 22 station shall omit this field.
- 23 OTD_SUPPORTED – Orthogonal Transmit Diversity supported.
- 24 If P_REV_IN_USE_S is less than seven, the mobile station shall
 25 omit this field; otherwise, the mobile station shall include this
 26 field and set it as follows.
- 27 The mobile station shall set this field to '1' if Orthogonal
 28 Transmit Diversity is supported; otherwise, the mobile station
 29 shall set this field to '0'.
- 30 STS_SUPPORTED – Space Time Spreading Transmit Diversity supported.
- 31 If P_REV_IN_USE_S is less than seven, the mobile station shall
 32 omit this field; otherwise, the mobile station shall include this
 33 field and set it as follows.
- 34 The mobile station shall set this field to '1', if Space Time
 35 Spreading Transmit Diversity is supported; otherwise, the
 36 mobile station shall set this field to '0'.
- 37 3X_CCH_SUPPORTED – 3X Common Channels supported.
- 38 If P_REV_IN_USE_S is less than seven, the mobile station shall
 39 omit this field; otherwise, the mobile station shall include this
 40 field and set it as follows.
- 41 The mobile station shall set this field to '1' if the mobile
 42 station supports the Spreading Rate 3 common channels (3X
 43 BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile
 44 station shall set this field to '0'.

- 1 WLL_INCL – WLL information included indicator.
 2 If P_REV_IN_USE_s 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 If the mobile station is a Wireless Local Loop device, the
 6 mobile station shall set this field to ‘1’; otherwise, the mobile
 7 station shall set this field to ‘0’.
- 8 WLL_DEVICE_TYPE – WLL device type indicator.
 9 If WLL_INCL is not included, or if WLL_INCL is included and
 10 is set to ‘0’, the mobile station shall omit this field; otherwise,
 11 the mobile station shall set this field as follows.
 12 The mobile station shall set this field to the
 13 WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3
 14 corresponding to the mobile station device type.

15 **Table 2.7.1.3.2.1-3. WLL Device Types**

WLL_DEVICE_TYPE (binary)	Description
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

- 16
- 17 HOOK_STATUS – WLL terminal hook status.
 18 If WLL_INCL is not included, or if WLL_INCL is included and
 19 is set to ‘0’, the mobile station shall omit this field; otherwise,
 20 the mobile station shall set this field to the value shown in
 21 Table 2.7.1.3.2.1-4 corresponding to the hook state.

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Table 2.7.1.3.2.1-4. Hook Status Values

HOOK_STATUS (binary)	Description
0000	Subscriber terminal is on-hook
0001	Subscriber terminal is off-hook
0010	Subscriber terminal is stuck off-hook
0011 – 1111	Reserved

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ENC_INFO_INCL – Encryption fields included.

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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 set it as follows.

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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.

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SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

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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.

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1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
 2 5.

3 **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

4 If this field is included, the mobile station shall set the
 5 subfields as follows:

6 The mobile station shall set the CMEA subfield to '1'.

7 The mobile station shall set each other subfield to '1' if the
 8 corresponding signaling encryption algorithm is supported by
 9 the mobile station; otherwise, the mobile station shall set the
 10 subfield to '0'.

11 The mobile station shall set the RESERVED subfield to
 12 '00000'.

13 C_SIG_ENCRYPT_REQ – Common Channel signaling message encryption request
 14 indicator.

15 If ENC_INFO_INCL is included and is set to '1', the mobile
 16 station shall include this field; otherwise, the mobile station
 17 shall omit this field. If this field is included, the mobile
 18 station shall set this field to '1' to request signaling encryption
 19 to be turned on for signaling messages sent on f-csch and r-
 20 csch, and to '0' to request signaling encryption to be turned
 21 off for signaling messages sent on f-csch and r-csch.

22 NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of the crypto-
 23 sync.

24 If SIG_ENCRYPT_SUP is included and the ECMEA or REA
 25 subfield in SIG_ENCRYPT_SUP is set to '1', the mobile station
 26 shall include this field; otherwise, the mobile station shall
 27 omit this field. If this field is included, the mobile station
 28 shall set this field to a 24-bit value that will be used as the
 29 initial value of the 24 MSB of the crypto-sync for both forward
 30 and reverse link message encryption and integrity (if message
 31 integrity is performed).

32 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 2.7.1.3.2.4-
 13 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 station
 17 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_s is less than nine, the mobile station shall
 22 omit this field; otherwise, the mobile station shall include this
 23 field and set it as follows.
- 24 If MSG_INTEGRITY_SUP_s is equal to '0', the mobile station
 25 shall set this field to '0'; otherwise, the mobile station shall set
 26 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 set
 35 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.

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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:

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Table 2.7.1.3.2.1-8. Slot Cycle Index Values

Slot Cycle Index Value	SIGN_SLOT_CYCLE_INDEX	SLOT_CYCLE_INDEX	RSCI, REQ_RSCI	Slot Cycle Length
-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.				

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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 class,
17		as specified in [30], corresponding to the CDMA frequency
18		assignment for the CDMA Channel containing the Forward
19		Broadcast Supplemental Channel that the mobile station will
20		tune to upon receiving confirmation of delivery of this
21		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 for
29		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.
39		If the REG_TYPE field is not set to '1001', the mobile station
40		shall omit this field; otherwise, the mobile station shall
41		include this field and set it as follows:
42		The mobile station shall set this field to '1' to indicate that the
43		authorization signature is included in this message for some
44		of the BCMC flows included in this message; otherwise, the
45		mobile station shall set this field to '0'.

1 TIME_STAMP_SHORT_LENGTH - Length of time stamp included in this message.

2 If the AUTH_SIGNATURE_INCL field is not included or is
3 included and is set to '0', 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 the length of the time
7 stamp, in units of bits, included in this message.

8 TIME_STAMP_SHORT - Time stamp short.

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
14 TIME_STAMP_SHORT_LENGTH least significant bits of the
15 time stamp parameter used to generate the Authorization
16 signature included in this message.

17 The mobile station shall include NUM_BCMC_PROGRAMS occurrences of the following
18 fields:

19 BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

20 The mobile station shall set this field to one less than the
21 length, in bits, of the BCMC_PROGRAM_ID of this program.

22 BCMC_PROGRAM_ID - BCMC program Identifier

23 The length of this field shall be one more than the value of
24 BCMC_PROGRAM_ID_LEN bits.

25 The mobile station shall set this field to the identifier of the
26 BCMC program corresponding to one or more flows that the
27 mobile station will continue to monitor or start to monitor
28 upon receiving confirmation of delivery of this message or is
29 requesting transmission.

30 BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

31 The mobile station shall set this field to the length, in bits, of
32 the BCMC_FLOW_DISCRIMINATOR of this program. To
33 request all flows associated with this BCMC_PROGRAM_ID,
34 the mobile station may set this field to '000'.

35 NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators.

36 The length of this field shall be determined by the value of the
37 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
38 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
39 is omitted; otherwise, the length of this field shall be
40 BCMC_FLOW_DISCRIMINATOR_LEN bits.

41 The mobile station shall set this field to the number of flow
42 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 discriminator of
 12 the BCMC flow that the mobile station will continue to
 13 monitor or start to monitor upon receiving confirmation of
 14 delivery of this message or is requesting transmission.

15 AUTH_SIGNATURE_IND - Authorization signature indicator.

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 '1' to indicate that the
 21 authorization signature is included in this message for this
 22 BCMC flow; otherwise, the mobile station shall set this field to
 23 '0'.

24 AUTH_SIGNATURE_SAME_IND - Authorization signature same as previous BCMC
 25 flow indicator.

26 If the AUTH_SIGNATURE_IND field is not included or is
 27 included and is set to '0', the mobile station shall omit this
 28 field; otherwise, the mobile station shall include this field and
 29 set it as follows:

30 The mobile station shall set this field to '1' to indicate that the
 31 authorization signature generated for this BCMC flow is the
 32 same as the one generated for the BCMC flow listed prior to
 33 this BCMC flow in this message; otherwise, the mobile station
 34 shall set this field to '0'.

35 For the first BCMC flow listed in this message, the mobile
 36 station shall set this field to '0'.

37 BAK_ID - BAK identifier.

38 If the AUTH_SIGNATURE_SAME_IND field is not included or
 39 is included and is set to '1', the mobile station shall omit this
 40 field; otherwise, the mobile station shall include this field and
 41 set it as follows:

- 1 The mobile station shall set this field to BAK identifier used to
 2 generate the Authorization signature included in this
 3 message.
- 4 AUTH_SIGNATURE - Authorization signature.
- 5 If the AUTH_SIGNATURE_SAME_IND field is not included or
 6 is included and is set to '1', the mobile station shall omit this
 7 field; otherwise, the mobile station shall include this field and
 8 set it as follows:
- 9 The mobile station shall set this field to the Authorization
 10 signature computed for this BCMC flow as specified in
 11 2.6.13.9.
- 12 BAND_SUB_REP_INCL - Band class - band subclass report included
- 13 If P_REV_IN_USE_S is less than eleven, the mobile station shall
 14 omit this field; otherwise, the mobile station shall include this
 15 field and set it as follows:
- 16 If CAND_BAND_INFO_REQ_S is equal to '1' and the mobile
 17 station supports at least 1 band class and band subclass (if
 18 applicable) combination queried by the base station, the
 19 mobile station shall set this field to '1'; otherwise, the mobile
 20 station shall set this field to '0'.
- 21
- 22 NUM_BAND_SUBCLASS - Number of band class - band subclass capabilities reported
- 23 If BAND_SUB_REP_INCL is set to '0' or is not included, this
 24 field shall be omitted; otherwise, the mobile station shall
 25 include this field and set it as follows:
- 26 If the mobile station supports all candidate band class and
 27 band subclass (if applicable) combinations queried by the
 28 base station, the mobile station shall set this field to '0000';
 29 otherwise, the mobile station shall set this field to the number
 30 of band class-band subclass capabilities reported.
- 31 If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall
 32 include NUM_BAND_SUBCLASS occurrences of the BAND_SUBCLASS_SUP field:
- 33 BAND_SUBCLASS_SUP - Band class - Band subclass supported indicator
- 34 The mobile station shall set this field as specified in section
 35 2.6.14.1.
- 36 ADD_GEO_LOC_INCL - Additional Geo-location included indicator.
- 37 If P_REV_IN_USE_S is less than twelve, the mobile station shall
 38 omit this field; otherwise, the mobile station shall include this
 39 field and set it as follows.

1 If the message is to contain the ADD_GEO_LOC_TYPE field,
2 the mobile station shall set this field to '1'; otherwise, the
3 mobile station shall set this field to '0'.

4 ADD_GEO_LOC_TYPE_LEN_IND – Additional Geo-Location Type Length Indicator.

5 If ADD_GEO_LOC_INCL is included in the message and is set
6 to '1', the mobile station shall include this field and shall set it
7 as described below; otherwise, the mobile station shall omit
8 this field.

9 The mobile station shall set this field to '0' to indicate length
10 of the ADD_GEO_LOC_TYPE field is 16 bits. The mobile
11 station shall set this field to '1' to indicate length of the
12 ADD_GEO_LOC_TYPE field is 24 bits.

13 ADD_GEO_LOC_TYPE – Additional Geo-Location Type.

14 If ADD_GEO_LOC_INCL is included in the message and is set
15 to '1', the mobile station shall include this field and shall set it
16 as described below; otherwise, the mobile station shall omit
17 this field.

18 This field consists of the subfields shown in 2.7.4.46-1.

19 The mobile station shall set each subfield to '1' if the
20 corresponding capability is supported by the mobile station;
21 otherwise, the mobile station shall set the subfield to '0'.

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1 2.7.1.3.2.2 Order Message
 2 MSG_TAG: ORDM

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Field	Length (bits)
ORDER	6
ADD_RECORD_LEN	3
Order-specific fields (if used)	8 × ADD_RECORD_LEN

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- 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

2.7.1.3.2.3 Data Burst Message

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 _i	8
-------------------	---

} (NUM_FIELDS)

- MSG_NUMBER – Message number within the data burst stream.
The mobile station shall set this field to the number of this message within the data burst stream.
- BURST_TYPE – Data burst type.
The mobile station shall set the value of this field for the type of this data burst as defined in [30]. If the mobile station sets this field equal to ‘111110’, it shall set the first two CHAR_i fields of this message equal to EXTENDED_BURST_TYPE_INTERNATIONAL as described in the definition of CHAR_i below. If the mobile station sets this field equal to ‘111111’, it shall set the first two CHAR_i fields of this message equal to the EXTENDED_BURST_TYPE as described in the definition of CHAR_i below.
- NUM_MSGS – Number of messages in the data burst stream.
The mobile station shall set this field to the number of messages within this data burst stream.
- NUM_FIELDS – Number of characters in this message.
The mobile station shall set this field to the number of CHAR_i fields included in this message.
- CHAR_i – Character.
The mobile station shall include NUM_FIELDS occurrences of this field. The mobile station shall set these fields to the corresponding octet of the data burst stream.

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If the BURST_TYPE field of this message is equal to '111110', the first two CHAR_i 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 CHAR _i fields	8 × (NUM_FIELDS - 2)

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If the BURST_TYPE field of this message is equal to '111111', the first two CHAR_i 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 CHAR _i fields)	16
Remaining CHAR _i fields	8 × (NUM_FIELDS - 2)

21

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)

CHARi	4 or 8
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} (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
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} (NUM_ALT_SO)

(continues on next page)

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Field	Length (bits)
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)

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Field	Length (bits)
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 $2^{(1+SO_BITMAP_IND)}$
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_BCML_SUPPORTED	0 or 1
FUNDICATED_BCML 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

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- 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’.
- SLOT_CYCLE_INDEX – Slot cycle index.
- If P_REV_IN_USE_s is less than 11, or if MIN_SLOT_CYCLE_INDEX is equal to ‘0’, the mobile station shall perform the following:
- If the mobile station is configured for slotted mode operation, the mobile station shall set this field to max (0, SLOT_CYCLE_INDEX_p) (see 2.6.2.1.1). Otherwise, the mobile station shall set this field to ‘000’.
- Otherwise, the mobile station shall perform the following:
- 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_p (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_p, is specified in the SIGN_SLOT_CYCLE_INDEX field of this message (see Table 2.7.1.3.2.1-8).
- MOB_P_REV – Protocol revision of the mobile station.
- The mobile station shall set this field to ‘00001100’.
- SCM – Station class mark.
- The mobile station shall set this field to the station class mark of the mobile station. See 2.3.3.
- 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.

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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)

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SPECIAL_SERVICE – Special service option indicator.

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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'.

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SERVICE_OPTION – Requested service option for this origination.

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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.

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PM – Privacy mode indicator.

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To request voice privacy, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

15

DIGIT_MODE – Digit mode indicator.

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This field indicates whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan.

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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'.

23

NUMBER_TYPE – Type of number.

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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_s is less than 9, the mobile station shall omit this field.

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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

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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.

Table 2.7.1.3.2.4-3. Numbering Plan Identification

Description	NUMBER_PLAN (binary)
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.	

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MORE_FIELDS – More dialed digits indicator.

- 1 This field indicates whether additional dialed digits will be
 2 sent in a later *Origination Continuation Message*.
- 3 If all dialed digits will fit into this message, the mobile station
 4 shall set this field to '0'. If not, the mobile station shall set
 5 this field to '1'.
- 6 NUM_FIELDS – Number of dialed digits in this message.
 7 The mobile station shall set this field to the number of dialed
 8 digits included in this message.
- 9 CHARi – A dialed digit or character.
 10 The mobile station shall include NUM_FIELDS occurrences of
 11 this field. If the DIGIT_MODE field is set to '0', the mobile
 12 station shall set each occurrence of this field to the code value
 13 shown in Table 2.7.1.3.2.4-4 corresponding to the dialed
 14 digit. If the DIGIT_MODE field is set to '1', the mobile station
 15 shall set each occurrence of this field to the ASCII
 16 representation corresponding to the dialed digit, as specified
 17 in [9], with the most significant bit set to '0'.

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Table 2.7.1.3.2.4-4. Representation of DTMF Digits

Digit	Code (binary)	Digit	Code (binary)
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.			

20

- 21 NAR_AN_CAP – Narrow analog capability.
 22 If the mobile station is capable of narrow analog operation,
 23 the mobile station shall set this bit to '1'; otherwise, the
 24 mobile station shall set this bit to '0'. The mobile station shall
 25 set this bit to '0'.
- 26 PACA_REORIG – PACA re-origination.
 27 If this is a user directed origination, the mobile station shall
 28 set this field to '0'. If this is a PACA re-origination, the mobile
 29 station shall set this field to '1'.
- 30 RETURN_CAUSE – Reason for the mobile station registration or access.
 31 The mobile station shall set this field to the RETURN_CAUSE
 32 value shown in Table 2.7.1.3.2.1-2 corresponding to the
 33 service redirection failure condition (see 2.6.1.1).

- 1 **MORE_RECORDS** – More records indicator.
- 2 This field indicates whether information records will be sent
- 3 in a later *Origination Continuation Message*. If information
- 4 records will be sent, the mobile station shall set this field to
- 5 ‘1’; otherwise, the mobile station shall set this field to ‘0’.
- 6 **ENCRYPTION_SUPPORTED** – Encryption algorithms supported by the mobile station.
- 7 If P_REV_IN_USE_s is greater than or equal to seven or
- 8 AUTH_MODE is equal to ‘00’, the mobile station shall omit the
- 9 ENCRYPTION_SUPPORTED field. If P_REV_IN_USE_s is less
- 10 than seven and AUTH_MODE is not equal to ‘00’, the mobile
- 11 station shall set this field as specified in Table 2.7.1.3.2.4-5.

12
13 **Table 2.7.1.3.2.4-5. Encryption Algorithms Supported**

Description	ENCRYPTION_SUPPORTED (binary)
Basic encryption supported	0000
Basic and Enhanced encryption supported	0001
Reserved	0010 - 1111

- 14
- 15 **PACA_SUPPORTED** – CDMA PACA support indication.
- 16 This field identifies the mobile station’s support for PACA in
- 17 CDMA mode. The mobile station shall set this field to ‘1’.
- 18 **NUM_ALT_SO** – Number of alternative service options.
- 19 If P_REV_IN_USE_s is less than seven, the mobile station shall
- 20 set this field to the number of alternative service options it
- 21 supports other than the one specified in the
- 22 SERVICE_OPTION field. The mobile station shall set this field
- 23 to a value less than or equal to MAX_NUM_ALT_SO_s.
- 24 If P_REV_IN_USE_s is equal to or greater than seven, the
- 25 mobile station shall set this field to the number of alternate
- 26 service options, which either have no service option group
- 27 number assigned or do not belong to the same service option
- 28 group whose bitmap is being included. The alternate service
- 29 option numbers are other than the one specified in the
- 30 SERVICE_OPTION field. The mobile station shall set this field
- 31 to a value less than or equal to MAX_NUM_ALT_SO_s.
- 32 **ALT_SO** – Alternative service option.
- 33 If P_REV_IN_USE_s is less than 7, the mobile station shall
- 34 include NUM_ALT_SO occurrences of this field. The mobile
- 35 station shall set this field to the value specified in [30],
- 36 corresponding to the alternative service option supported by
- 37 the mobile station.

- 1 If P_REV_IN_USE_S is equal to or greater than seven, the
 2 mobile station shall include NUM_ALT_SO occurrences of this
 3 field. The mobile station shall set this field to the service
 4 option number defined in [30] corresponding to the alternate
 5 service options which either have no service option group
 6 number assigned or do not belong to the same service option
 7 group whose bitmap is included in this message.
- 8 DRS – Data Ready to Send.
- 9 If P_REV_IN_USE_S is less than six, the mobile station shall
 10 omit this field; otherwise, the mobile station shall include this
 11 field and set it as follows.
- 12 If the service instance corresponding to SR_ID has data to
 13 send, the mobile station shall set this field to ‘1’; otherwise,
 14 the mobile station shall set this field to ‘0’.
- 15 UZID_INCL – User Zone Identifier included indicator.
- 16 If P_REV_IN_USE_S is less than six, the mobile station shall
 17 omit this field; otherwise, the mobile station shall include this
 18 field and set it as follows.
- 19 If the message is to contain the User Zone Identifier, the
 20 mobile station shall set this field to ‘1’; otherwise, the mobile
 21 station shall set this field to ‘0’.
- 22 UZID – User Zone Identifier.
- 23 If the UZID_INCL field is included in the message and is set to
 24 ‘1’, the mobile station shall include this field and set it to
 25 UZID_S; otherwise, the mobile station shall omit this field.
- 26 CH_IND – Channel indicator.
- 27 If P_REV_IN_USE_S is less than six, the mobile station shall
 28 omit this field; otherwise, the mobile station shall include this
 29 field and set it, as shown in Table 2.7.1.3.2.4-6, to request
 30 physical resources.

Table 2.7.1.3.2.4-6. Channel Indicator

CH_IND (binary)	Channel(s) Requested
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_s is less than six, the mobile station shall
- 3 omit this field; otherwise, the mobile station shall include this
- 4 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 field
- 22 to the service reference identifier corresponding to one of
- 23 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_s is less than six, the mobile station shall
- 30 omit this field; otherwise, the mobile station shall include this
- 31 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 set
- 34 this field to '0'.
- 35 QPCH_SUPPORTED – Quick Paging Channel supported indicator.
- 36 If P_REV_IN_USE_s is less than six, the mobile station shall
- 37 omit this field; otherwise, the mobile station shall include this
- 38 field and set it as follows.
- 39 If the mobile station supports the Quick Paging Channel, the
- 40 mobile station shall set this field to '1'; otherwise, the mobile
- 41 station shall set this field to '0'.
- 42 ENHANCED_RC – Enhanced radio configuration supported indicator.

- 1 If P_REV_IN_USE_s is less than six, the mobile station shall
 2 omit this field; otherwise, the mobile station shall include this
 3 field and set it as follows.
- 4 If the mobile station supports any radio configuration in the
 5 Radio Configuration Class 2 (see 1.1.1), the mobile station
 6 shall set this field to '1'; otherwise, the mobile station shall set
 7 this field to '0'.
- 8 FOR_RC_PREF – Forward Radio Configuration preference.
- 9 If P_REV_IN_USE_s is less than six, the mobile station shall
 10 omit this field; otherwise, the mobile station shall include this
 11 field and set this field as follows.
- 12 The mobile station shall set this field to its preferred Radio
 13 Configuration for the Forward Fundamental Channel and/or
 14 Forward Dedicated Control Channel.
- 15 REV_RC_PREF – Reverse Radio Configuration Preference.
- 16 If P_REV_IN_USE_s is less than six, the mobile station shall
 17 omit this field; otherwise, the mobile station shall include this
 18 field and set it as follows.
- 19 The mobile station shall set this field to its preferred Radio
 20 Configuration for the Reverse Fundamental Channel and/or
 21 Reverse Dedicated Control Channel.
- 22 FCH_SUPPORTED – Fundamental Channel supported indicator.
- 23 If P_REV_IN_USE_s is less than six, the mobile station shall
 24 omit this field; otherwise, the mobile station shall include this
 25 field and set it as follows.
- 26 The mobile station shall set this field to '1' if the mobile
 27 station supports Fundamental Channel; otherwise, the mobile
 28 station shall set this field to '0'.
- 29 FCH Capability
- 30 Type-specific fields – Fundamental Channel capability information.
- 31 If the FCH_SUPPORTED field is included and is set to '1', the
 32 mobile station shall include this field and set it as defined in
 33 2.7.4.27.1; otherwise, the mobile station shall omit this field.
- 34 DCCH_SUPPORTED – Dedicated Control Channel supported indicator.
- 35 If P_REV_IN_USE_s is less than six, the mobile station shall
 36 omit this field; otherwise the mobile station shall include this
 37 field and set it as follows.
- 38 The mobile station shall set this field to '1' if the mobile
 39 station supports Dedicated Control Channel; otherwise, the
 40 mobile station shall set this field to '0'.
- 41 DCCH Capability
- 42 Type specific fields – Dedicated Control Channel capability information.

1 If the DCCH_SUPPORTED field is included and is set to '1',
 2 the mobile station shall include this field and set it as defined
 3 in 2.7.4.27.2; otherwise, the mobile station shall omit this
 4 field.

5 GEO_LOC_INCL – Geo-location included indicator.
 6 If P_REV_IN_USE_s is less than six, the mobile station shall
 7 omit this field. If P_REV_IN_USE_s is equal to six, the mobile
 8 station shall set this field to '0'. Otherwise, the mobile station
 9 shall include this field and set it as follows.

10 If the message is to contain the GEO_LOC_TYPE field, the
 11 mobile station shall set this field to '1'; otherwise, the mobile
 12 station shall set this field to '0'.

13 GEO_LOC_TYPE – Geo-Location Type.
 14 If GEO_LOC_INCL is included in the message and is set to '1',
 15 the mobile station shall include this field and shall set it to
 16 the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile
 17 station shall omit this field.

18 **Table 2.7.1.3.2.4-7. Geo-location Types**

GEO_LOC_ TYPE (binary)	Type of Geo-location
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.	

19 REV_FCH_GATING_REQ – Reverse Fundamental Channel eighth gating mode request
 20 indicator.
 21 If P_REV_IN_USE_s is less than six, the mobile station shall
 22 omit this field; otherwise, the mobile station shall include this
 23 field and set it as follows:

24 If the mobile station requests to turn on the reverse
 25 Fundamental Traffic Channel gating mode in Radio
 26 Configurations 3, 4, 5, and 6, the mobile station shall set this
 27 field to '1'; otherwise, the mobile station shall set this field to
 28 '0'.

29 ORIG_REASON – Re-Origination reason indicator.
 30 If P_REV_IN_USE_s is less than or equal to six, the mobile
 31 station shall omit this field; otherwise, the mobile station
 32 shall include this field and set it as follows.

1 The mobile station shall set this field to '1' if the mobile
 2 station initiates a silent-retry, i.e. an autonomous access re-
 3 attempt to re-originate this call without user interaction, after
 4 the mobile station received an access attempt failure from the
 5 ARQ Sublayer for a user initiated origination; otherwise, the
 6 mobile station shall set this field to '0'.

7 ORIG_COUNT - Re-Origination count.

8 If P_REV_IN_USE_S is less than or equal to six, the mobile
 9 station shall omit this field; otherwise, the mobile station
 10 shall include this field and set it as follows.

11 If the ORIG_REASON is set to '1', the mobile station shall set
 12 this field to the number of consecutive silent-retry, i.e. an
 13 autonomous access re-attempt that were made to re-originate
 14 the call, without user interaction, that were due to the mobile
 15 receiving an access attempt failure from the ARQ Sublayer. If
 16 the number of consecutive silent-retry is greater than three,
 17 the mobile station shall set this field to '11'.

18 If the ORIG_REASON is set to '0', the mobile station shall set
 19 this field according to Table 2.7.1.3.2.4-8 depending on the
 20 number of autonomous re-connection attempts for the
 21 desired service (specified by SERVICE_OPTION) that have
 22 failed since the last successful connection of that desired
 23 service⁸¹. The count shall only include attempts since the last
 24 power-up.

25 **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'

26
 27 STS_SUPPORTED - STS supported indicator.

⁸¹ For example, if the mobile station requests SO_x in the *Origination Message* and SO_y is granted by the base station, the counter associated with SO_x is reset.

1 If P_REV_IN_USE_S is less than seven, the mobile station shall
2 omit this field; otherwise, the mobile station shall include this
3 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_S is less than seven, the mobile station shall
9 omit this field; otherwise, the mobile station shall include this
10 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_S is less than seven, the mobile station shall
17 omit this field; otherwise, the mobile station shall include this
18 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_S is less than seven, the mobile station shall
31 omit this field; otherwise, the mobile station shall include this
32 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_S 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_s 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 set
8 this field to '0'. The mobile station shall not set this field to
9 '1', if MOB_QOS_s 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 station
16 shall set this field to the combined length in octets, of the
17 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 station
23 shall set it to the set of QoS parameter values as defined in
24 accordance with the requirements for the requested service
25 option and/or for the user, per subscription.
- 26 QOS_RESERVED - QoS reserved bits.
27 If QOS_PARMS_INCL is included and is set to '1', the mobile
28 station shall include the minimum number of bits of '0', such
29 that the combined length of the QOS_PARMS field and of this
30 field is an integer number of octets; otherwise, the mobile
31 station shall omit this field.
- 32 ENC_INFO_INCL - Encryption fields included.
33 If P_REV_IN_USE_s is less than seven, the mobile station shall
34 omit this field; otherwise, the mobile station shall include this
35 field and set it as follows.
36 The mobile station shall set this field to '1' if the encryption
37 related fields are included; otherwise the mobile station shall
38 set this field to '0'. The mobile station shall set this field to '0'
39 if the base station does not support encryption or the mobile
40 station does not support any of the encryption modes
41 supported by the base station.
- 42 SIG_ENCRYPT_SUP - Signaling encryption supported indicator.
43 If ENC_INFO_INCL is included and is set to '1', the mobile
44 station shall include this field; otherwise, the mobile station
45 shall omit this field. If this field is included, this field
46 indicates which signaling encryption algorithms are
47 supported by the mobile station.

- 1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
2 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 ENC_INFO_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 '1' to request signaling encryption
17 to be turned on for signaling messages sent on f-dsch and r-
18 dsch, and to '0' to request signaling encryption to be turned
19 off for signaling messages sent on f-dsch and r-dsch.
- 20 **C_SIG_ENCRYPT_REQ** – Common channel signaling encryption request indicator.
21 If ENC_INFO_INCL is included and is set to '1', the mobile
22 station shall include this field; otherwise, the mobile station
23 shall omit this field. If this field is included, the mobile
24 station shall set this field to '1' to request signaling encryption
25 to be turned on for signaling messages sent on f-csch and r-
26 csch, and to '0' to request signaling encryption to be turned
27 off for signaling messages sent on f-csch and r-csch.
- 28 **NEW_SSEQ_H** – The 24-bit value used to initialize the 24 MSB of the crypto-
29 sync.
30 If SIG_ENCRYPT_SUP is included and the ECMEA or REA
31 subfield in SIG_ENCRYPT_SUP is set to '1', the mobile station
32 shall include this field; otherwise, the mobile station shall
33 omit this field. If this field is included, the mobile station
34 shall set this field to a 24-bit value that will be used as the
35 initial value of the 24 MSB of the crypto-sync for both forward
36 and reverse link message encryption and integrity (if message
37 integrity is performed).
- 38 **NEW_SSEQ_H_SIG** – The signature of NEW_SSEQ_H
39 If NEW_SSEQ_H is included, the mobile station shall include
40 this field; otherwise, the mobile station shall omit this field. If
41 this field is included, the mobile station shall set this field to
42 the digital signature of the NEW_SSEQ_H as described in
43 2.3.12.4.5.
- 44 **UI_ENCRYPT_REQ** – Request for user information encryption on the traffic channel
45 indicator.

1 If ENC_INFO_INCL is included and is set to '1', the mobile
2 station shall include this field; otherwise, the mobile station
3 shall omit this field. If this field is included, the mobile
4 station shall set this field to '1' to request user information
5 encryption, and to '0' to request no user information
6 encryption.

7 UI_ENCRYPT_SUP – User information encryption supported indicator.

8 If ENC_INFO_INCL is included and is set to '1', the mobile
9 station shall include this field; otherwise, the mobile station
10 shall omit this field. If this field is included, the mobile
11 station shall set this field to indicate the supported user
12 information encryption algorithms.

1 This field consists of the subfields shown in Table 2.7.1.3.2.4-
 2 9.

3 **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

4 The mobile station shall set each subfield to '1' if the
 5 corresponding user information encryption algorithm is
 6 supported by the mobile station; otherwise, the mobile station
 7 shall set the subfield to '0'.

8 The mobile station shall set the RESERVED subfield to
 9 '000000'.

10 SYNC_ID_INCL - Service Configuration synchronization identifier included
 11 indicator.

12 If P_REV_IN_USE_s is less than seven, the mobile station shall
 13 omit this field; otherwise, the mobile station shall include this
 14 field and shall set it as follows:

15 The mobile station shall set this field to '1' if the SYNC_ID
 16 field is included in this message; otherwise, the mobile station
 17 shall set this field to '0'.

18 If SYNC_ID_SUPPORTED_s is equal to '0', the mobile station
 19 shall set this field to '0'.

20 SYNC_ID_LEN - Service Configuration synchronization identifier length
 21 indicator.

22 If the SYNC_ID_INCL field is not included or is included and
 23 is set to '0', the mobile station shall omit this field; otherwise
 24 the mobile station shall include this field and set it as follows:

25 The mobile station shall set this field to the length of the
 26 SYNC_ID field included in this message.

27 SYNC_ID - Service Configuration synchronization identifier.

28 If the SYNC_ID_INCL field is not included, or is included but
 29 is set to '0', the mobile station shall omit this field; otherwise,
 30 the mobile station shall include this field and set it as follows:

31 The mobile station shall set this field to the Service
 32 Configuration synchronization identifier corresponding to a
 33 stored service configuration.

- 1 PREV_SID_INCL - Previous System Identification (SID) included indicator.
2 If P_REV_IN_USE_s 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:
- 6 - The mobile station determines that the SID has been
 - 7 changed after a packet data dormant handoff, and
 - 8 - This message includes the main service instance (see
 - 9 [42]).
- 10 Otherwise, the mobile station shall set this field to '0'.
- 11 PREV_SID - Previous System Identification.
12 If PREV_SID_INCL is not included, or is included but is set to
13 '0', the mobile station shall omit this field; otherwise, the
14 mobile station shall include this field and set it as follows:
15 The mobile station shall set this field to the previous SID.
- 16 PREV_NID_INCL - Previous Network Identification (NID) included indicator.
17 If P_REV_IN_USE_s is less than seven, the mobile station shall
18 omit this field; otherwise, the mobile station shall include this
19 field and set it as follows:
20 The mobile station shall set this field to '1' if:
- 21 • The mobile station determines that NID has been changed
 - 22 after a packet data dormant handoff, and
 - 23 • This message includes the main service instance (see
 - 24 [42]).
- 25 Otherwise, the mobile station shall set this field to '0'.
- 26 PREV_NID - Previous Network Identification.
27 If PREV_NID_INCL is not included, or is included but is set to
28 '0', the mobile station shall omit this field; otherwise, the
29 mobile station shall include this field and set it as follows:
30 The mobile station shall set this field to the previous NID.
- 31 PREV_PZID_INCL - Previous Packet Zone ID (PZID) included indicator.
32 If P_REV_IN_USE_s is less than seven, the mobile station shall
33 omit this field; otherwise, the mobile station shall include this
34 field and set it as follows:

1 The mobile station shall set this field to '1' if:

- 2 • The mobile station determines that the Packet Zone ID
- 3 has been changed after a packet data dormant handoff,
- 4 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_PZID - Previous Packet Zone ID.

9 If PREV_PZID_INCL is not included, or is included but is set

10 to '0', the mobile station shall omit this field; otherwise, the

11 mobile station shall include this field and set it as follows:

12 The mobile station shall set this field to the previous PZID.

13 SO_BITMAP_IND - Service option bitmap indicator.

14 If P_REV_IN_USE_s is less than 7, the mobile station shall omit

15 this field; otherwise, [if the P_REV_IN_USE_s is less than 11,](#)

16 [the mobile station shall set this field as defined for the values](#)

17 ['00', '01', and '10' in Table 2.7.1.3.2.4-10, otherwise,](#) the

18 mobile station shall set this field as defined in Table

19 2.7.1.3.2.4-10.

20 **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

21

22 SO_GROUP_NUM - Service option group number.

23 If SO_BITMAP_IND is included and not set to '00', the mobile

24 station shall include this field and set this field to service

25 option group number defined in [30], of the bitmap to be

26 included in this message; otherwise, the mobile station shall

27 omit this field.

28 SO_BITMAP - Service option bitmap.

29 If the field SO_BITMAP_IND is included and is not set to '00',

30 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.

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 The mobile station shall set a bit in this bitmap to '1', if the
 8 mobile station is capable of supporting the service option for
 9 which the bit represents; otherwise, the mobile station shall
 10 set a bit in this bitmap to '0'.

11 SDB_DESIRED_ONLY – Short Data Burst Desired Only.

12 If P_REV_IN_USE_s is less than eight, the mobile station shall
 13 omit this field; otherwise, the mobile station shall include this
 14 field and set it as follows:

15 If the mobile station desires to exchange user data using only
 16 Short Data Bursts on common channels, it shall set this field
 17 to '1'; otherwise, it shall set this field to '0'.

18 ALT_BAND_CLASS_SUP – Alternate band class support indicator.

19 If P_REV_IN_USE_s is less than eight, then the mobile station
 20 shall omit this field; otherwise, the mobile station shall
 21 include this field and set it as follows:

22 If BAND_CLASS_INFO_REQ_s is equal to '1' and the mobile
 23 station supports the CDMA band class specified by
 24 ALT_BAND_CLASS_s, then the mobile station shall set this
 25 field to '1'; otherwise, the mobile station shall set this field to
 26 '0'.

1		This field consists of the subfields shown in Table 2.7.1.3.2.1-
2		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 mobile
10		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_s is less than nine, the mobile station shall
- 9 omit this field; otherwise, the mobile station shall include this
- 10 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 follows.
- 24 The mobile station shall set this field as shown in Table
- 25 2.7.1.3.2.4-11 to request a physical resource.
- 26

1

Table 2.7.1.3.2.4-11. Extended Channel Indicator

EXT_CH _IND (Binary)	Physical Resource(s) Requested
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

EXT_CH _IND (Binary)	Physical Resource(s) Requested
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_s 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_p (see 2.6.2.1.1). The absolute value of
9 the preferred slot cycle index, SLOT_CYCLE_INDEX_p, is
10 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_s 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 follows:
 5 If at least one occurrence of the ADD_SR_ID field is included
 6 in this message, the mobile station shall set this field to '1';
 7 otherwise, the mobile station shall set this field to '0'.
 8 If SYNC_ID_INCL is equal to '0' and
 9 MAX_ADD_SERV_INSTANCE_s is equal to '0', the mobile
 10 station shall set this field to '0'.
- 11 NUM_ADD_SERV_INSTANCE- Number of additional service instances included.
 12 If ADD_SERV_INSTANCE_INCL is not included or is included
 13 and set to '0', the mobile station shall omit this field;
 14 otherwise, the mobile station shall include this field and set it
 15 to the number of additional service instances included in this
 16 message.
 17 If SYNC_ID_INCL is equal to '0', the mobile station shall set
 18 this field to a value less than or equal to
 19 MAX_ADD_SERV_INSTANCE_s.
- 20 If ADD_SERV_INSTANCE_INCL is included and set to '1', the mobile station shall include
 21 NUM_ADD_SERV_INSTANCE occurrences of the following variable-field record:
- 22 ADD_SR_ID - Additional service reference identifier.
 23 If SYNC_ID_INCL is set to '0', the mobile station shall set this
 24 field as follows:
 25 • If the service instance provides a service reference
 26 identifier, the mobile station shall set this field to the
 27 service reference identifier specified by the service
 28 instance. If the service instance does not provide a service
 29 reference identifier, the mobile station shall set this field
 30 to the smallest unused service reference identifier value
 31 between 1 and 6 (inclusive).
 32 Otherwise, the mobile station shall set this field to the service
 33 reference identifier corresponding to the service option
 34 connection that the mobile station requests to be restored
 35 from the stored service configuration.
- 36 ADD_DRS - Additional Data Ready to Send indicator.
 37 If the service instance corresponding to the ADD_SR_ID field
 38 of this record has data to send, the mobile station shall set
 39 this field to '1'; otherwise, the mobile station shall set this
 40 field to '0'.
- 41 ADD_SERVICE_OPTION_INCL - Additional service option included indicator.
 42 If SYNC_ID_INCL is set to '1', the mobile station shall omit
 43 this field; otherwise, the mobile station shall include this field
 44 and set it as follows:

- 1 The mobile station shall set this field to '0' if the requested
2 service option number of the service instance corresponding
3 to the ADD_SR_ID field of this record is the same as
4 SERVICE_OPTION; otherwise, the mobile station shall set this
5 field to '1'.
- 6 ADD_SERVICE_OPTION – Additional service option number.
- 7 If the ADD_SERVICE_OPTION_INCL field of this record is not
8 included or is included and set to '0', the mobile station shall
9 omit this field; otherwise, the mobile station shall include this
10 field and set it to the value specified in [30], corresponding to
11 the requested service option number of the service instance
12 corresponding to the ADD_SR_ID field of this record.
- 13 ADD_QOS_PARMS_INCL – Additional QoS parameters included indicator.
- 14 If SYNC_ID_INCL is set to '1', the mobile station shall omit
15 this field; otherwise, the mobile station shall include this field
16 and set it as follows:
- 17 If QoS parameters for the service instance corresponding to
18 the ADD_SR_ID field of this record are included in this
19 message, the mobile station shall set this field to '1';
20 otherwise, the mobile station shall set this field to '0'.
- 21 The mobile station shall not set this field to '1' if MOB_QOS_s
22 is set to '0'.
- 23 ADD_QOS_PARMS_LEN – Additional Length of the block of QoS parameters.
- 24 If the ADD_QOS_PARMS_INCL field of this record is not
25 included or is included and is set to '0', the mobile station
26 shall omit this field; otherwise, the mobile station shall
27 include this field and set it to the combined length of the
28 ADD_QOS_PARMS field and the ADD_QOS_RESERVED field
29 of this record, in octets.
- 30 ADD_QOS_PARMS – Additional QoS parameters block.
- 31 If the ADD_QOS_PARMS_INCL field of this record is not
32 included or is included and is set to '0', the mobile station
33 shall omit this field; otherwise, the mobile station shall
34 include this field and set it to the set of QoS parameter values
35 as defined in accordance with the requirements for the
36 requested service option and/or for the user, per
37 subscription.
- 38 ADD_QOS_RESERVED – Additional QoS reserved bits.
- 39 If the ADD_QOS_PARMS_INCL field of this record is not
40 included or is included and is set to '0', the mobile station
41 shall omit this field; otherwise, the mobile station shall
42 include the minimum number of bits of '0', such that the
43 combined length of the QOS_PARMS field and of this field is
44 an integer number of octets.

- 1 BCMC_INCL - BCMC information included indicator
- 2 If the P_REV_IN_USE_s is less than eleven, the mobile station
- 3 shall omit this field; otherwise, the mobile station shall
- 4 include this field and set it as follows:
- 5 The mobile station shall set this field to '1' if one or more
- 6 BCMC_PROGRAM_IDs are included in the message;
- 7 otherwise, the mobile station shall set this field to '0'.
- 8 BCMC_ORIG_ONLY_IND - BMC origination only indicator
- 9 If the BCMC_INCL field is not included or is included and is
- 10 set to '0', the mobile station shall omit this field; otherwise,
- 11 the mobile station shall include this field and set it as follows:
- 12 The mobile station shall set this field to '1' to indicate that
- 13 this origination is only for BMC and no point to point call is
- 14 requested in this message; otherwise the mobile station shall
- 15 set this field to '0'.
- 16 FUNDICATED_BCMC_SUPPORTED - Fundicated BMC capability type-specific
- 17 supported indicator.
- 18 If the BCMC_INCL field is not included or is included and is
- 19 set to '0', the mobile station shall omit this field; otherwise,
- 20 the mobile station shall include this field and set it as follows.
- 21 If the mobile station supports Fundicated BMC channel
- 22 configurations, the mobile station shall set this field to '1';
- 23 otherwise, the mobile station shall set this field to '0'.
- 24 FUNDICATED_BCMC Capability
- 25 Type-specific fields - FUNDICATED_BCMC capability information.
- 26 If the FUNDICATED_BCMC_SUPPORTED field is included and
- 27 is set to '1', the mobile station shall include this field and set
- 28 it as defined in 2.7.4.27.7; otherwise, the mobile station shall
- 29 omit this field.
- 30 AUTH_SIGNATURE_INCL - Authorization signature included indication.
- 31 If the BCMC_INCL field is not included or is included and is
- 32 set to '0', the mobile station shall omit this field; otherwise,
- 33 the mobile station shall include this field and set it as follows.
- 34 The mobile station shall set this field to '1' to indicate that the
- 35 authorization signature is included in this message for some
- 36 of the BMC flows included in this message; otherwise, the
- 37 mobile station shall set this field to '0'.
- 38 TIME_STAMP_SHORT_LENGTH - Length of time stamp included in this message.
- 39 If the AUTH_SIGNATURE_INCL field is not included or is
- 40 included and is set to '0', the mobile station shall omit this
- 41 field; otherwise, the mobile station shall include this field and
- 42 set it as follows:

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 **AUTH_SIGNATURE_IND** - Authorization signature indicator.

14 If the **AUTH_SIGNATURE_INCL** field is not included or is
 15 included and is set to '0', the mobile station shall omit this
 16 field; otherwise, the mobile station shall include this field and
 17 set it as follows:

18 The mobile station shall set this field to '1' to indicate that the
 19 authorization signature is included in this message for this
 20 BCMC flow; otherwise, the mobile station shall set this field to
 21 '0'.

22 **AUTH_SIGNATURE_SAME_IND** - Authorization signature same as previous BCMC
 23 flow indicator.

24 If the **AUTH_SIGNATURE_IND** field is not included or is
 25 included and is set to '0', the mobile station shall omit this
 26 field; otherwise, the mobile station shall include this field and
 27 set it as follows:

28 The mobile station shall set this field to '1' to indicate that the
 29 authorization signature generated for this BCMC flow is the
 30 same as the one generated for the BCMC flow listed prior to
 31 this BCMC flow in this message; otherwise, the mobile station
 32 shall set this field to '0'.

33 For the first BCMC flow listed in this message, the mobile
 34 station shall set this field to '0'.

35 **BAK_ID** - BAK identifier.

36 If the **AUTH_SIGNATURE_SAME_IND** field is not included or
 37 is included and is set to '1', the mobile station shall omit this
 38 field; otherwise, the mobile station shall include this field and
 39 set it as follows:

40 The mobile station shall set this field to BAK identifier used to
 41 generate the Authorization signature included in this
 42 message.

- 1 AUTH_SIGNATURE - Authorization signature.
- 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 the Authorization
7 signature computed for this BCMC flow as specified in
8 2.6.13.9.
- 9 REV_PDCH_SUPPORTED - Reverse Packet Data Channel supported indicator.
- 10 If P_REV_IN_USE_S is less than 11 or
11 FOR_PDCH_SUPPORTED 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 follows.
- 14 If the mobile station supports the Reverse Packet Data
15 Channel (R-PDCH), the mobile station shall set this field to '1';
16 otherwise, the mobile station shall set this field to '0'.
- 17 REV_PDCH Capability
- 18 Type-specific fields - Reverse Packet Data Channel capability information.
- 19 If the REV_PDCH_SUPPORTED field is included and is set to
20 '1', the mobile station shall include this field and set it as
21 defined in 2.7.4.27.6; otherwise, the mobile station shall omit
22 this field.
- 23 BAND_SUB_REP_INCL - Band class – band subclass report included
- 24 If P_REV_IN_USE_S is less than eleven, the mobile station shall
25 omit this field; otherwise, the mobile station shall include this
26 field and set it as follows:
- 27

- 1 If CAND_BAND_INFO_REQ_s is equal to '1' and the mobile
 2 station supports at least 1 band class and band subclass (if
 3 applicable) combination queried by the base station, the
 4 mobile station shall set this field to '1'; otherwise, the mobile
 5 station shall set this field to '0'.
- 6 NUM_BAND_SUBCLASS – Number of band class - band subclass capabilities reported
 7
 8 If BAND_SUB_REP_INCL is set to '0' or is not included, this
 9 field shall be omitted; otherwise, the mobile station shall
 10 include this field and set it as follows:
 11
 12 If the mobile station supports all candidate band class and
 13 band subclass (if applicable) combinations queried by the
 14 base station, the mobile station shall set this field to '0000';
 otherwise, the mobile station shall set this field to the number
 of band class-band subclass capabilities reported.
- 15 If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall
 16 include NUM_BAND_SUBCLASS occurrences of the BAND_SUBCLASS_SUP field:
- 17 BAND_SUBCLASS_SUP – Band class-band subclass supported indicator
 18
 19 The mobile station shall set this field as specified in section
 2.6.14.1.
- 20 ADD_GEO_LOC_INCL – Additional Geo-location included indicator.
 21
 22 If P_REV_IN_USE_s is less than twelve, the mobile station shall
 23 omit this field; otherwise, the mobile station shall include this
 24 field and set it as follows.
 25
 26 If the message is to contain the ADD_GEO_LOC_TYPE field,
 the mobile station shall set this field to '1'; otherwise, the
 mobile station shall set this field to '0'.
- 27 ADD_GEO_LOC_TYPE_LEN_IND – Additional Geo-Location Type Length Indicator.
 28
 29 If ADD_GEO_LOC_INCL is included in the message and is set
 30 to '1', the mobile station shall include this field and shall set it
 31 as described below; otherwise, the mobile station shall omit
 this field.
 32
 33 The mobile station shall set this field to '0' to indicate length
 34 of the ADD_GEO_LOC_TYPE field is 16 bits. The mobile
 35 station shall set this field to '1' to indicate length of the
 ADD_GEO_LOC_TYPE field is 24 bits.
- 36 ADD_GEO_LOC_TYPE – Additional Geo-Location Type.
 37
 38 If ADD_GEO_LOC_INCL is included in the message and is set
 39 to '1', the mobile station shall include this field and shall set it
 40 as described below; otherwise, the mobile station shall omit
 this field.

1
2
3
4
5

This field consists of the subfields shown in 2.7.4.46-1.
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'.

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

Field	Length (bits)
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

Field	Length (bits)
SYNC_ID_INCL	0 or 1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × SYNC_ID_LEN)
SO_BITMAP_IND	0 or 2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or $2^{(1+SO_BITMAP_IND)}$
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

4

5

6

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'.

7

SLOT_CYCLE_INDEX – Slot cycle index.

8

9

10

If P_REV_IN_USE_s is less than 11, or if MIN_SLOT_CYCLE_INDEX is equal to '0', the mobile station shall perform the following:

11

12

13

14

15

- If the mobile station is configured for slotted mode operation, the mobile station shall set this field to max (0, SLOT_CYCLE_INDEX_p) (see 2.6.2.1.1). Otherwise, the mobile station shall set this field to '000'.

Otherwise, the mobile station shall perform the following:

16

17

18

19

20

21

22

23

- 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_p (see 2.6.2.1.1); otherwise, the mobile station shall set this field to '000'. The sign of SLOT_CYCLE_INDEX_p is specified in the SIGN_SLOT_CYCLE_INDEX field of this 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'.

1	SCM	– Station class mark.
2		The mobile station shall set this field to the station class mark
3		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 the
31		service option specified by the page record of the <i>General Page</i>
32		<i>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 ⁸² .
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.

⁸² 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_s 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_s 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_s 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 field
 16 to a value less than or equal to MAX_NUM_ALT_SO_s.
 17 If P_REV_IN_USE_s 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_s.
- 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_s 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_s is less than six, the mobile station shall
 39 omit this field; otherwise, the mobile station shall include this
 40 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.

1 If the UZID_INCL field is included in the message and is set to
 2 '1', the mobile station shall include this field and set it to
 3 UZID_S; otherwise, the mobile station shall omit this field.

4 CH_IND – Channel Indicator.

5 If P_REV_IN_USE_S is less than six, the mobile station shall
 6 omit this field; otherwise, the mobile station shall include this
 7 field and set it, as shown in Table 2.7.1.3.2.5-1, to request
 8 physical resources.

9 **Table 2.7.1.3.2.5-1. Channel indicator**

CH_IND (binary)	Channel(s) Requested
00	Refer to EXT_CH_IND
01	Fundamental Channel
10	Dedicated Control Channel
11	Fundamental Channel and Dedicated Control Channel

10

11 OTD_SUPPORTED – Orthogonal transmit diversity supported indicator

12 If P_REV_IN_USE_S is less than six, the mobile station shall
 13 omit this field; otherwise, the mobile station shall include this
 14 field and set it as follows.

15 If the mobile station supports orthogonal transmit diversity, it
 16 shall set this field to '1'; otherwise, the mobile station shall set
 17 this field to '0'.

18 QPCH_SUPPORTED – Quick Paging Channel supported indicator.

19 If P_REV_IN_USE_S is less than six, the mobile station shall omit
 20 this field; otherwise, the mobile station shall include this field
 21 and set it as follows.

22 If the mobile station supports the Quick Paging Channel, the
 23 mobile station shall set this field to '1'; otherwise, the mobile
 24 station shall set this field to '0'.

25 ENHANCED_RC – Enhanced radio configuration supported indicator.

26 If P_REV_IN_USE_S is less than six, the mobile station shall omit
 27 this field; otherwise, the mobile station shall include this field
 28 and set it as follows.

29 If the mobile station supports any radio configuration in the
 30 Radio Configuration Class 2 (see 1.1.1), the mobile station shall
 31 set this field to '1'; otherwise, the mobile station shall set this
 32 field to '0'.

33 FOR_RC_PREF – Forward Radio Configuration preference.

- 1 If P_REV_IN_USE_S is less than six, the mobile station shall
 2 omit this field; otherwise, the mobile station shall include this
 3 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_S is less than six, the mobile station shall
 9 omit this field; otherwise, the mobile station shall include this
 10 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_S is less than six, the mobile station shall
 16 omit this field; otherwise, the mobile station shall include this
 17 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 mobile
 20 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_S is less than six, 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 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 information.
- 34 If DCCH_SUPPORTED is included and is set to ‘1’, the mobile
 35 station shall include this field and set it as defined in
 36 2.7.4.27.2; otherwise, the mobile station shall omit this field.
- 37 REV_FCH_GATING_REQ – Reverse Fundamental Channel eighth gating mode request
 38 indicator.
- 39 If P_REV_IN_USE_S 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:

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_S is less than seven, the mobile station shall
8 omit this field; otherwise, the mobile station shall include this
9 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_S is less than seven, the mobile station shall
15 omit this field; otherwise, the mobile station shall include this
16 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_S 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_S 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 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 2.7.1.3.2.1-
- 18 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 encryption
- 33 to be turned on for signaling messages sent on f-dsch and r-
- 34 dsch, and to '0' to request signaling encryption to be turned
- 35 off for signaling messages sent on f-dsch and r-dsch.
- 36 C_SIG_ENCRYPT_REQ – Common channel signaling encryption request indicator.
- 37 If ENC_INFO_INCL is included and is set to '1', the mobile
- 38 station shall include this field; otherwise, the mobile station
- 39 shall omit this field. If this field is included, the mobile
- 40 station shall set this field to '1' to request signaling encryption
- 41 to be turned on for signaling messages sent on f-csch and r-
- 42 csch, and to '0' to request signaling encryption to be turned
- 43 off for signaling messages sent on f-csch and r-csch.
- 44 NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of the crypto-
- 45 sync.

1			If SIG_ENCRYPT_SUP is included and the ECMEA or REA
2			subfield in SIG_ENCRYPT_SUP is set to '1', the mobile station
3			shall include this field; otherwise, the mobile station shall
4			omit this field. If this field is included, the mobile station
5			shall set this field to a 24-bit value that will be used as the
6			initial value of the 24 MSB of the crypto-sync for both forward
7			and reverse link message encryption and integrity (if message
8			integrity is performed).
9	NEW_SSEQ_H_SIG	-	The signature of NEW_SSEQ_H
10			If the NEW_SSEQ_H field is included in the message, the
11			mobile station shall set this field to the digital signature of the
12			NEW_SSEQ_H as described in 2.3.12.4.5; otherwise, the
13			mobile station shall omit this field.
14	UI_ENCRYPT_REQ	-	Request for user information encryption on the traffic channel
15			indicator.
16			If ENC_INFO_INCL is included and is set to '1', the mobile
17			station shall include this field; otherwise, the mobile station
18			shall omit this field. If this field is included, the mobile
19			station shall set this field to '1' to request user information
20			encryption, and to '0' to request no user information
21			encryption.
22	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
23			If ENC_INFO_INCL is included and is set to '1', the mobile
24			station shall include this field; otherwise, the mobile station
25			shall omit this field. If this field is included, the mobile
26			station shall set this field to indicate the supported user
27			information encryption algorithms.
28			This field consists of the subfields shown in Table 2.7.1.3.2.4-
29			9.
30			The mobile station shall set each subfield to '1' if the
31			corresponding user information encryption algorithm is
32			supported by the mobile station; otherwise, the mobile station
33			shall set the subfield to '0'.
34			The mobile station shall set the RESERVED subfield to
35			'000000'.
36	SYNC_ID_INCL	-	Service Configuration synchronization identifier included
37			indicator.
38			If P_REV_IN_USE _s is less than seven, the mobile station shall
39			omit this field; otherwise, the mobile station shall include this
40			field and set it as follows.
41			The mobile station shall set this field to '1' if the SYNC_ID
42			field is included in this message; otherwise, the mobile station
43			shall set this field to '0'.
44			If SYNC_ID_SUPPORTED _s is equal to '0', the mobile station
45			shall set this field to '0'.

1 If BAND_CLASS_INFO_REQ_s is equal to '1' and the mobile
2 station supports the CDMA band class specified by
3 ALT_BAND_CLASS_s, then the mobile station shall set this
4 field to '1'; otherwise, the mobile station shall set this field to
5 '0'.

6 MSG_INT_INFO_INCL - Signaling message integrity information included indicator.
7 If P_REV_IN_USE_s is less than nine, the mobile station shall
8 omit this field; otherwise, the mobile station shall include this
9 field and set it as follows.
10 If MSG_INTEGRITY_SUP_s is set to '0', the mobile station shall
11 set this field to '0'; otherwise, the mobile station shall set this
12 field to '1'.

13 SIG_INTEGRITY_SUP_INCL - Signaling message integrity information included
14 indicator.
15 If MSG_INT_INFO_INCL is included and is set to '1', the
16 mobile station shall include this field and set it as follows;
17 otherwise, the mobile station shall omit this field.
18 If the mobile station supports other integrity algorithm(s) in
19 addition to the default integrity algorithm, the mobile station
20 shall set this field to '1'; otherwise, the mobile station shall set
21 this field to '0'.

22 SIG_INTEGRITY_SUP - Signaling integrity algorithm supported by the mobile station.
23 If SIG_INTEGRITY_SUP_INCL is included and is set to '1', the
24 mobile station shall set this field as follows; otherwise, the
25 mobile station shall omit this field.
26 The mobile station shall set this field to indicate the
27 supported message integrity algorithms in addition to the
28 default integrity algorithm.

1		This field consists of the subfields shown in Table 2.7.1.3.2.1-
2		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 mobile
10		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 The mobile station shall set this field to the
2 TIME_STAMP_SHORT_LENGTH least significant bits of the
3 time stamp parameter used to generate the Authorization
4 signature included in this message.

5 NUM_BCMC_PROGRAMS- Number of BCMC Programs

6 If the BCMC_INCL field is not included or is included and is
7 set to '0', the mobile station shall omit this field; otherwise,
8 the mobile station shall include this field and set it as follows:

9 The mobile station shall set this field to the number of BCMC
10 programs included in this message minus 1.

11 The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following
12 variable length record:

13 BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

14 The mobile station shall set this field to one less than the
15 length, in bits, of the BCMC_PROGRAM_ID of this program.

16 BCMC_PROGRAM_ID - BCMC program Identifier

17 The length of this field shall be one more than the value of
18 BCMC_PROGRAM_ID_LEN bits.

19 The mobile station shall set this field to the identifier of the
20 BCMC program corresponding to one or more flows that the
21 mobile station is requesting.

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'.

27 NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators

28 The length of this field shall be determined by the value of the
29 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
30 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
31 is omitted; otherwise, the length of this field shall be
32 BCMC_FLOW_DISCRIMINATOR_LEN bits.

33 The mobile station shall set this field to the number of flow
34 discriminators included for this program minus one.

35 If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include
36 NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;
37 otherwise, the mobile station shall include 1 occurrence of the following variable length
38 record:

39 BCMC_FLOW_DISCRIMINATOR - BCMC Flow discriminator.

40 The length of this field shall be determined by the value of the
41 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
42 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
43 is omitted; otherwise, the length of this field shall be
44 BCMC_FLOW_DISCRIMINATOR_LEN bits.

1		The mobile station shall set this field to the BCMC flow
2		discriminator requested.
3	BCMC_PREF	- BCMC preference indicator
4		If the BCMC_PREF_INCL field is not included or is included
5		and is set to '0', the mobile station shall omit this field;
6		otherwise, the mobile station shall include this field and set it
7		as follows:
8		The mobile station shall set this field to '1' to indicate that the
9		mobile station has higher preference for this BCMC flow than
10		the incoming call for which this message is sent; otherwise,
11		the mobile station shall set this field to '0'.
12	AUTH_SIGNATURE_IND	- Authorization signature indicator.
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 '1' to indicate that the
18		authorization signature is included in this message for this
19		BCMC flow; otherwise, the mobile station shall set this field to
20		'0'.
21	AUTH_SIGNATURE_SAME_IND	- Authorization signature same as previous BCMC
22		flow indicator.
23		If the AUTH_SIGNATURE_IND 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 the
28		authorization signature generated for this BCMC flow is the
29		same as the one generated for the BCMC flow listed prior to
30		this BCMC flow in this message; otherwise, the mobile station
31		shall set this field to '0'.
32		For the first BCMC flow listed in this message, the mobile
33		station shall set this field to '0'.
34	BAK_ID	- BAK identifier.
35		If the AUTH_SIGNATURE_SAME_IND field is not included or
36		is included and is set to '1', the mobile station shall omit this
37		field; otherwise, the mobile station shall include this field and
38		set it as follows:
39		The mobile station shall set this field to BAK identifier used to
40		generate the Authorization signature included in this
41		message.
42	AUTH_SIGNATURE	- Authorization signature.

1 If the AUTH_SIGNATURE_SAME_IND field is not included or
 2 is included and is set to '1', 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 Authorization
 6 signature computed for this BCMC flow as specified in
 7 2.6.13.9.

8 REV_PDCH_SUPPORTED - Reverse Packet Data Channel supported indicator.
 9 If P_REV_IN_USE_S is less than 11 or
 10 FOR_PDCH_SUPPORTED 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 follows.
 13 If the mobile station supports the Reverse Packet Data
 14 Channel (R-PDCH), the mobile station shall set this field to '1';
 15 otherwise, the mobile station shall set this field to '0'.

16 REV_PDCH Capability Type-specific fields - Reverse Packet Data Channel capability
 17 information.
 18 If the REV_PDCH_SUPPORTED field is included and is set to
 19 '1', the mobile station shall include this field and set it as
 20 defined in 2.7.4.27.6; otherwise, the mobile station shall omit
 21 this field.

22 BAND_SUB_REP_INCL - Band class - band subclass report included
 23 If P_REV_IN_USE_S is less than eleven, the mobile station shall
 24 omit this field; otherwise, the mobile station shall include this
 25 field and set it as follows:
 26 If CAND_BAND_INFO_REQ_S is equal to '1' and the mobile
 27 station supports at least 1 band class and band subclass (if
 28 applicable) combination queried by the base station, the
 29 mobile station shall set this field to '1'; otherwise, the mobile
 30 station shall set this field to '0'.

31

32 NUM_BAND_SUBCLASS - Number of band class - band subclass capabilities reported
 33 If BAND_SUB_REP_INCL is set to '0' or is not included, this
 34 field shall be omitted; otherwise, the mobile station shall
 35 include this field and set it as follows:
 36 If the mobile station supports all candidate band class and
 37 band subclass (if applicable) combinations queried by the
 38 base station, the mobile station shall set this field to '0000';
 39 otherwise, the mobile station shall set this field to the number
 40 of band class-band subclass capabilities reported.

41 If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall
 42 include NUM_BAND_SUBCLASS occurrences of the BAND_SUBCLASS_SUP field:

- 1 BAND_SUBCLASS_SUP – Band class-band subclass supported indicator
- 2 The mobile station shall set this field as specified in section
- 3 2.6.14.1.
- 4

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

2.7.1.3.2.7 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	$8 \times \text{RECORD_LEN}$

}

- 4 QUAL_INFO_TYPE – Qualification information type.
 5 The mobile station shall set this field to the QUAL_INFO_TYPE
 6 field in the corresponding *Status Request Message*.
- 7 QUAL_INFO_LEN – Qualification information length.
 8 The mobile station shall set this field to the QUAL_INFO_LEN
 9 field in the corresponding *Status Request Message*.
- 10 Type-specific fields – Type-specific fields.
 11 The mobile station shall set these fields to the qualification
 12 information in the corresponding *Status Request Message*.

13 The mobile station shall include all the records requested in the corresponding *Status*
 14 *Request Message*. The mobile station shall include one occurrence of the following fields
 15 for each information record to be included:

- 16 RECORD_TYPE – Information record type.
 17 The mobile station shall set this field to the record type value
 18 shown in Table 2.7.4-1 corresponding to the type of this
 19 information record.
- 20 RECORD_LEN – Information record length.
 21 The mobile station shall set this field to the number of octets
 22 included in the type-specific fields of this information record.
- 23 Type-specific fields – Type-specific fields.
 24 The mobile station shall set these fields to the information as
 25 specified in 2.7.4 for the specific type of records. The mobile
 26 station shall only specify the information corresponding to the
 27 included qualification information.

28

- 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 × 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 × RECORD_LEN

} (NUM_INFO_RECORDS)

4

5 QUAL_INFO_TYPE – Qualification information type.

6 The mobile station shall set this field to the QUAL_INFO_TYPE
 7 field in the corresponding *Status Request 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 NUM_INFO_RECORDS – Number of information records included.

15 The mobile station shall set this field to the number of
 16 information records which are included. The mobile station
 17 shall include all the records requested in the corresponding
 18 *Status Request Message*.

19 The mobile station shall include one occurrence of the following fields for each information
 20 record which is included:

21 RECORD_TYPE – Information record type.

22 The mobile station shall set this field to the record type value
 23 shown in Table 2.7.4-1 corresponding to the type of this
 24 information record.

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 this
 13 field. If this field is included, the mobile station shall set this
 14 field to indicate the supported user information encryption
 15 algorithms.

16 This field consists of the subfields shown in Table 2.7.1.3.2.4-
 17 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 station
 21 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 this
 3 message; otherwise, the mobile station shall set this field to
 4 '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 this
 8 field. If this field is included, the mobile shall set this field to
 9 indicate the supported signaling encryption algorithms
 10 supported by the mobile station.
- 11 This field consists of the subfields shown in Table 2.7.1.3.2.1-
 12 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 this
 25 field. If this field is included, the mobile station shall set this
 26 field to '1' to request signaling encryption to be turned on for
 27 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_s 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_s 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 this
 42 field. If this field is included, the mobile station shall set this
 43 field to a 24-bit value that will be used as the initial value of
 44 the 24 MSB of the crypto-sync for both forward and reverse
 45 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_s is equal to '0', the mobile station
- 9 shall set this field to '0'; otherwise, the mobile station shall set
- 10 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 this
- 15 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 set
- 19 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 2.7.1.3.2.1-
- 28 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 mobile
- 36 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

1 2.7.1.3.2.13 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 set
 16 this field to ‘0’.

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- SIG_INTEGRITY_SUP** – Signaling integrity algorithm supported indicator.
- If **SIG_INTEGRITY_SUP_INCL** 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 set this field to indicate the supported message integrity algorithms in addition to the 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’.
- 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 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.
- NEW_KEY_ID** – New key identifier.
- The mobile station shall set this field as follows:
- If **LAST_3G_KEY_ID** equals ‘10’, the mobile station shall set this field to ‘11’.
 - If **LAST_3G_KEY_ID** equals ‘11’, the mobile station shall set this field to ‘10’.
- NEW_SSEQ_H** – The 24-bit value used to initialize the 24 MSB of the crypto-sync.
- 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 integrity.

1 2.7.1.3.2.14 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 authentication code for resynchronization.
 10 The mobile station shall set this field to the output, MAC_S, of
 11 the function as specified in Figure 2.3.12.5.2-3.

12

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 _i	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 station
- 13 shall set this field to '0'.
- 14 If SYNC_ID_SUPPORTED_s is equal to '0', the mobile station
- 15 shall set this field to '0'.
- 16 SYNC_ID_LEN – Service Configuration synchronization identifier length
- 17 indicator.

1 If the SYNC_ID_INCL field is set to '0', the mobile station shall
2 omit this field; otherwise, the mobile station shall include this
3 field and set it as follows:

4 The mobile station shall set this field to the length of the
5 SYNC_ID field included in this message.

6 SYNC_ID – Service Configuration synchronization identifier.

7 If the SYNC_ID_INCL field is set to '0', the mobile station shall
8 omit this field; otherwise, the mobile station shall include this
9 field and set it as follows:

10 The mobile station shall set this field to the Service
11 Configuration synchronization identifier corresponding to the
12 stored service configuration.

13 SERVICE_OPTION – Service option number.

14 If the SYNC_ID_INCL field is set to '1', the mobile station shall
15 omit this field; otherwise, the mobile station shall include this
16 field and set it as follows:

17 If the ORIG_IND field is set to '1', the mobile station shall set
18 this field to the service option number corresponding to the
19 service being reconnected.

20 If the ORIG_IND field is set to '0', the mobile station shall set
21 this field as follows:

22 • If the mobile station accepts the service option specified
23 by the mobile-station-addressed page, the mobile station
24 shall set this field to the service option number specified
25 in the SERVICE_OPTION field of the page record to which
26 the mobile station is responding.

27 • If the mobile station does not accept the service option
28 specified by the mobile-station-addressed page to which
29 the mobile station is responding and the mobile station
30 has an alternative service option to request, the mobile
31 station shall set this field to the service option code
32 specified in [30] corresponding to the alternative service
33 option.

34 • If the mobile station does not accept the service option
35 specified by the mobile-station-addressed page to which
36 the mobile station is responding and the mobile station
37 does not have an alternative service option to request, the
38 mobile station shall set this field to '0000000000000000'
39 to reject the service option specified by the page record of
40 the *General Page Message* or *Universal Page Message* to
41 which the mobile station is responding.

- 1 SR_ID – Service reference identifier.
- 2 If the ORIG_IND field is set to '0', the mobile station shall omit
- 3 this field; otherwise, the mobile station shall include this field
- 4 and set it as follows.
- 5 If the SYNC_ID_INCL field is set to '0', the mobile station shall
- 6 set this field as follows:
- 7 • 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 • 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 • 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 field
- 22 to the service reference identifier corresponding to one of
- 23 the service option connections to be restored.
- 24 • 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 ADD_SERV_INSTANCE_INCL- Additional service instances included indicator.
- 29 If the ORIG_IND field is set to '0' or P_REV_IN_USE_s is less
- 30 than 11 or if SYNC_ID_INCL is set to '0' or if SR_ID is
- 31 included and set to '111', the mobile station shall omit this
- 32 field; otherwise, the mobile station shall include this field and
- 33 set it as follows:
- 34 If at least one occurrence of the ADD_SR_ID field is included
- 35 in this message, the mobile station shall set this field to '1';
- 36 otherwise, the mobile station shall set this field to '0'.
- 37 NUM_ADD_SERV_INSTANCE- Number of additional service instances included.
- 38 If ADD_SERV_INSTANCE_INCL is not included or is included
- 39 and set to '0', the mobile station shall omit this field;
- 40 otherwise, the mobile station shall include this field and set it
- 41 to the number of additional service instances included in this
- 42 message.

1 If ADD_SERV_INSTANCE_INCL is included and set to '1', the mobile station shall include
2 NUM_ADD_SERV_INSTANCE occurrences of the following record:

3 ADD_SR_ID – Additional service reference identifier.

4 The mobile station shall set this field to the service reference
5 identifier corresponding to the service option connection that
6 the mobile station requests to be restored from the stored
7 service configuration.

8 SDB_INCL – Short Data Burst included indicator.

9 If P_REV_IN_USE_s is less than eleven, the mobile station shall
10 omit this field; otherwise, the mobile station shall include this
11 field and set it as follows:

12 If a Short Data Burst (i.e., data burst message with burst type
13 equal to '000110', see [30]) is being included in this message,
14 the mobile station shall set this field to '1'; otherwise, the
15 mobile station shall set this field to '0'.

16 The mobile station shall set this field to '0' if
17 SDB_IN_RCNM_IND_s or SDB_SUPPORTED_s is equal to '0'.

18 NUM_FIELDS – Number of characters in this message.

19 If SDB_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 follows:

22 The mobile station shall set this field to the number of CHAR_i
23 fields included in this message.

24 If SDB_INCL is included and set to '1', the mobile station shall include NUM_FIELDS
25 occurrences of the following record:

26 CHAR_i – Character.

27 The mobile station shall set these fields to the corresponding
28 octet of the data burst stream.

29

30

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 $(RER_MAX_NUM_MSG_S - 1)$ and
7 the TKZ_MODE_IND field in this message is set to '0', or
- 8 • TKZ_COUNT is equal to $(TKZ_MAX_NUM_MSG_S - 1)$ 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 values**

GE_REC_TYPE (binary)	Description
00000000	Supported Band Class - Subclass
00000001	Additional Geo Location Type Record
00000010-11111111	Reserved

- 11 GE_REC_LEN - Length of the General Extension Record.
 12 The mobile station shall set this field to the length in octets of the
 13 general extension record following the GE_REC_LEN field.
- 14 GE_REC - General Extension Record.
 15 The mobile station shall set this field according to the previous
 16 occurrence of the GE_REC_TYPE in this message. If the
 17 GE_REC_TYPE is set to '00000000' then the mobile station shall
 18 set the GE_REC to the following:

19

NUM_BAND_SUBCLASS	5
-------------------	---

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 ‘00000’;
 5 otherwise, the mobile station shall set this field to the number
 6 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 length.
 15 All bits of this field shall be set to zeros.

16 If the GE_REC_TYPE is set to ‘00000001’ then the mobile station shall set the GE_REC to
 17 the following:

ADD_GEO_LOC_TYPE_LEN_IND	1
ADD_GEO_LOC_TYPE	16 or 24
Reserved	0-7

19 ADD_GEO_LOC_TYPE_LEN_IND – Additional Geo-Location Type Length Indicator.
 20 The mobile station shall set this field to ‘0’ to indicate length
 21 of the ADD_GEO_LOC_TYPE field is 16 bits. The mobile
 22 station shall set this field to ‘1’ to indicate length of the
 23 ADD_GEO_LOC_TYPE field is 24 bits.

24 ADD_GEO_LOC_TYPE – Additional Geo-Location Type.
 25 This field consists of the subfields shown in 2.7.4.46-1.
 26 The mobile station shall set each subfield to ‘1’ if the
 27 corresponding capability is supported by the mobile station;
 28 otherwise, the mobile station shall set the subfield to ‘0’.

29 RESERVED – Reserved bits.

- 1 This field shall contain the number of bits required to make
2 the entire GE_REC field an integer number of octets in length.
3 All bits of this field shall be set to zeros.
- 4 MESSAGE_TYPE - Message type of the message included in the *General*
5 *Extension Message*.
- 6 This field shall contain the message type value for the
7 message following this field. When transmitting the general
8 extension message over r-csch, then mobile station shall set
9 the first 2 MSB of this field to '00'. The mobile station shall
10 set this field according to [4].
- 11 MESSAGE_REC - Message extended through the General Extension message.
12 The mobile station shall set this field to the message that is
13 being extended using the *General Extension Message*.
14
15

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.

1

Table 2.7.2.3-1. Messages on r-dsch

Message Name	MSG_TAG	Section Number	P_REV_I N_USE⁸³
<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
<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

⁸³ P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

Message Name	MSG_TAG	Section Number	P_REV_I N_USE⁸³
<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	2.7.2.3.2.45	≥ 12

1

2

- 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 × 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, the
 17 mobile station shall include this field and set it as follows:
 18 The mobile station shall set this field to ‘1’ if the connection
 19 reference field is included in this message; otherwise, it shall
 20 set this field to ‘0’.
- 21 CON_REF – Connection reference.
 22 If the CON_REF_INCL field is not included, or is included but
 23 is set to ‘0’, the mobile station shall omit this field; otherwise,
 24 the mobile station shall include this field and shall set it to
 25 the value of the connection reference assigned to the service
 26 option connection of the call, to which this message
 27 corresponds.

28

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)
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Zero or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

}

4

5 The mobile station shall include one occurrence of the following record for each information
 6 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 _i	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_i
 12 fields of this message equal to
 13 EXTENDED_BURST_TYPE_INTERNATIONAL as described in
 14 the definition of CHAR_i below. If the mobile station sets this
 15 field equal to ‘111111’, it shall set the first two CHAR_i fields of
 16 this message equal to the EXTENDED BURST TYPE as
 17 described in the definition of CHAR_i 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_i
 23 fields included in this message.
- 24 CHAR_i – 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.

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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 × (NUM_FIELDS - 2)

16
17
18
19
20
21
22

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 × (NUM_FIELDS - 2)

23

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:

Field	Length (bits)
PILOT_PN_PHASE	15
PILOT_STRENGTH	6
KEEP	1

4

5

REF_PN – Time reference PN sequence offset.

6

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.

7

8

9

10

PILOT_STRENGTH – Pilot strength in dB.

11

The mobile station shall set this field to

12

$$\lfloor -2 \times 10 \log_{10} PS \rfloor,$$

13

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'.

14

15

16

17

18

19

KEEP – Keep pilot indicator.

20

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'.

21

22

23

24

25

If $P_REV_IN_USE_S$ 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 $P_REV_IN_USE_S$ is greater than three and $SOFT_SLOPE_S$ is equal to '000000', the mobile station shall include one

26

27

28

29

1 occurrence of the three-field record given below for each pilot in the Active Set and for each
 2 pilot in the Candidate Set, other than the pilot identified by the REF_PN field. If
 3 P_REV_IN_USE_s is greater than three and SOFT_SLOPE_s is not equal to '000000', the
 4 mobile station shall include one occurrence of the three-field record given below for each
 5 pilot in the Active Set, for each pilot in the Candidate Set whose strength exceeds T_ADD,
 6 and shall also include one occurrence of the three-field record given below for each pilot in
 7 the Candidate Set whose strength satisfies the following inequality:

$$8 \quad 10 \times \log_{10} PS > \frac{\text{SOFT_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD_INTERCEPT}_s}{2}$$

9 where the summation is performed over all pilots currently in the Active Set. The mobile
 10 station shall not include these fields for the pilot identified by the REF_PN field.

11 The mobile station shall order any occurrences of the three-field record given below which
 12 correspond to pilots in the Active Set such that they occur before any occurrences of the
 13 three-field record given below which correspond to pilots in the Candidate Set.

14 PILOT_PN_PHASE – Pilot measured phase.

15 The mobile station shall set this field to the phase of the pilot
 16 PN sequence relative to the zero offset pilot PN sequence of
 17 this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

18 PILOT_STRENGTH – Pilot strength in dB.

19 The mobile station shall set this field to

$$20 \quad \lfloor -2 \times 10 \log_{10} PS \rfloor,$$

21 where PS is the strength of this pilot, measured as specified
 22 in 2.6.6.2.2. If this value ($\lfloor -2 \times 10 \log_{10} PS \rfloor$) is less than 0,
 23 the mobile station shall set this field to '000000'. If this value
 24 is greater than '111111', the mobile station shall set this field
 25 to '111111'.

26 KEEP – Keep pilot indicator.

27 If the handoff drop timer (see 2.6.6.2.3) corresponding to this
 28 pilot has expired, the mobile station shall set this field to '0';
 29 otherwise, the mobile station shall set this field to '1'.

30

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_s, see 2.6.4.1.1] on the Forward
 9 Fundamental Channel.

10 If P_REV_IN_USE_s 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_s, 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
 3 When the Forward Fundamental Channel is assigned, the
 4 mobile station shall set this field to the number of frames
 5 received on the Forward Fundamental Channel within the
 6 measurement period (TOT_FRAMES_s, see 2.6.4.1.1).
 7
 8 If P_REV_IN_USE_s is greater than or equal to six and only the
 9 Dedicated Control Channel is assigned, the mobile station
 10 shall set this field to the number of frames received on the
 11 Dedicated Control Channel (DCCH_TOT_FRAMES_s, see
 12 2.6.4.1.1).
 13
 14 LAST_HDM_SEQ – *Extended Handoff Direction Message* or a *General Handoff*
 15 *Direction Message*, or *Universal Handoff Direction Message*
 16 *sequence number*.
 17
 18 If an *Extended Handoff Direction Message*, a *General Handoff*
 19 *Direction Message*, or *Universal Handoff Direction Message*
 20 has been received during this call, the mobile station shall set this
 21 field to the value of the HDM_SEQ field from the *Extended*
 22 *Handoff Direction Message*, the *General Handoff Direction*
 23 *Message* or the *Universal Handoff Direction Message* that
 24 determined the current Active Set. If no *Extended Handoff*
 25 *Direction Message*, *General Handoff Direction Message*, or
 26 *Universal Handoff Direction Message* has been received during
 27 this call, the mobile station shall set this field to ‘11’.
 28
 29 NUM_PILOTS – Number of pilots reported.
 30
 31 The mobile station shall set this field to the number of pilots
 32 in the current Active Set.
 33
 34 PILOT_STRENGTH – Pilot strength in dB.
 35
 36 The mobile station shall include one occurrence of this field
 37 for each pilot in the Active Set. If the Active Set contains
 38 more than one pilot, the mobile station shall include the pilot
 39 strengths in the same order as in the *Extended Channel*
 40 *Assignment Message*, *Extended Handoff Direction Message*,
 41 *General Handoff Direction Message* or the *Universal Handoff*
 42 *Direction Message* that determined the current Active Set.
 43
 44 The mobile station shall set each occurrence of this field to
 45
$$\lfloor -2 \times 10 \log_{10} PS \rfloor,$$

 46 where PS is the strength of the pilot, measured as specified in
 47 2.6.6.2.2. If this value ($\lfloor -2 \times 10 \log_{10} PS \rfloor$) is less than 0, the
 48 mobile station shall set this field to ‘000000’. If this value is
 49 greater than ‘111111’, the mobile station shall set this field to
 50 ‘111111’.
 51
 52 DCCH_PWR_MEAS_INCL - Forward Dedicated Control Channel power measurement
 53 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_s, 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_s) detected on the Forward Dedicated
 18 Control Channel.
- 19 If DCCH_BAD_FRAMES_s 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_s [see 2.6.4.1.1).
- 22 SCH_PWR_MEAS_INCL - Supplemental Channel power measurement included
 23 indicator.
- 24 If FOR_SCH_FER_REP_s 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 field
 37 to the total number of frames (SCH_TOT_FRAMES_s) received
 38 during the burst duration on the Supplemental Channel
 39 specified by SCH_ID. If this measurement is greater than or
 40 equal to $2^{16} - 1$, the mobile station shall set this field to
 41 '1111111111111111'.
- 42 SCH_ERRORS_DETECTED - Number of detected bad Supplemental Channel frames.

1
2
3
4
5
6
7
8
9
10

If SCH_PWR_MEAS_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of bad frame detected on the Forward Supplemental Channel of the SCH_ID for the duration of the forward burst on this channel.

If the number of bad frames (SCH_BAD_FRAMES_s) detected on the SCH_ID Supplemental Channel during the burst is greater than 1023, the mobile station shall set this field to '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 _i	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 digits included in this message.

7

8 DTMF_ON_LENGTH – DTMF pulse width code.

9

The mobile station shall set this field to the DTMF_ON_LENGTH value shown in Table 2.7.2.3.2.7-1 corresponding to the requested width of DTMF pulses to be generated by the base station.

10

11

12

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

1 DTMF_OFF_LENGTH – DTMF inter-digit interval code.
 2 The mobile station shall set this field to the
 3 DTMF_OFF_LENGTH value shown in Table 2.7.2.3.2.7-2
 4 corresponding to the requested minimum interval between
 5 DTMF pulses to be generated by the base station.

7 **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.	

8
 9 DIGIT_i – DTMF digit.
 10 The mobile station shall include one occurrence of this field
 11 for each DTMF digit to be generated by the base station. The
 12 mobile station shall set each occurrence of this field to the
 13 code value shown in Table 2.7.1.3.2.4-4 corresponding to the
 14 dialed digit.

15 CON_REF_INCL – Connection reference included indicator.
 16 The mobile station shall set this field to ‘1’ if the connection
 17 reference field is included in this message; otherwise, it shall
 18 set this field to ‘0’.

19 CON_REF – Connection reference.
 20 If the CON_REF_INCL field is set to ‘0’, the mobile station
 21 shall omit this field; otherwise, the mobile station shall
 22 include this field and shall set it to the value of the
 23 connection reference assigned to the service option
 24 connection of the call, to which this message corresponds.

25

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	$8 \times \text{RECORD_LEN}$

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

1 2.7.2.3.2.9 Origination Continuation Message
 2 MSG_TAG: ORCM

3

Field	Length (bits)
DIGIT_MODE	1
NUM_FIELDS	8

NUM_FIELDS occurrences of the following field:

{ (NUM_FIELDS)

CHARi	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

}

- 4 DIGIT_MODE – Digit mode indicator.
 5 The mobile station shall set this field to the DIGIT_MODE
 6 value from the *Origination Message* for which this message is
 7 a continuation.
- 8 NUM_FIELDS – Number of dialed digits in this message.
 9 The mobile station shall set this field to the number of dialed
 10 digits included in this message.
- 11 CHARi – A dialed digit or character.
 12 The mobile station shall include NUM_FIELDS occurrences of
 13 this field. The mobile station shall include occurrences of this
 14 field for all dialed digits after those sent in the *Origination*
 15 *Message* of which this message is a continuation. If the
 16 DIGIT_MODE field is set to ‘0’, the mobile station shall set
 17 each occurrence of this field to the code value shown in Table
 18 2.7.1.3.2.4-4 corresponding to the dialed digit. If the
 19 DIGIT_MODE field is set to ‘1’, the mobile station shall set
 20 each occurrence of this field to the ASCII representation
 21 corresponding to the dialed digit, as specified in [9], with the
 22 most significant bit set to ‘0’.

23 If the MORE_RECORDS field in the last *Origination Message*, of which this message is a
 24 continuation, is set to ‘1’, the mobile station shall include one or more occurrences of the
 25 following three-field record; otherwise, the mobile station shall not include the following
 26 record.

- 27 RECORD_TYPE – Information record type.

1 2.7.2.3.2.10 Handoff Completion Message
 2 MSG_TAG: HO CM

3

Field	Length (bits)
LAST_HDM_SEQ	2

One or more occurrences of the following field:

{

PILOT_PN	9
----------	---

}

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 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.

9

10

11

12

PILOT_PN – Pilot PN sequence offset.

13

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.

14

15

16

17

18

19

20

21

22

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 '111111111'.

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

1 2.7.2.3.2.12 Service Request Message
 2 MSG_TAG: SRQM

3

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

4

5 SERV_REQ_SEQ – Service request sequence number.

6 The mobile station shall set this field to the service request
 7 sequence number pertaining to this request message as
 8 specified in 2.6.4.1.2.1.1.

9 REQ_PURPOSE – Request purpose.

10 The mobile station shall set this field to the appropriate
 11 REQ_PURPOSE code from Table 2.7.2.3.2.12-1 to indicate the
 12 purpose of the message.

13 **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.	

14

15

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			

1 2.7.2.3.2.13 Service Response Message
 2 MSG_TAG: SRPM

3

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

4

5 SERV_REQ_SEQ – Service request sequence number.
 6 The mobile station shall set this field to the value of the
 7 SERV_REQ_SEQ field of the *Service Request Message* to which
 8 it is responding.

9

9 RESP_PURPOSE – Response purpose.
 10 The mobile station shall set this field to the appropriate
 11 RESP_PURPOSE code from Table 2.7.2.3.2.13-1 to indicate
 12 the purpose of the message.

13

14

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.	

15

16

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 ‘0000000’.
- 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

1 2.7.2.3.2.16 Status Response Message
 2 MSG_TAG: STRPM

3

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields.	8 × QUAL_INFO_LEN

One or more occurrences of the following record:

{

RECORD_TYPE	8
RECORD_LEN	8
Type-specific fields	8 × RECORD_LEN

}

4

- 5 QUAL_INFO_TYPE – Qualification information type.
 6 The mobile station shall set this field to the QUAL_INFO_TYPE
 7 field in the corresponding *Status Request 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 that is 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 as specified in 2.7.4
 26 for this type of record, according to the mobile station's
 27 capabilities under the qualification information included in
 28 this message.

29

- 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 × 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_NGHR_PN	0 or 3
-------------	--------

NUM_NGHR_PN occurrences of the following record:

{ (NUM_NGHR_PN)

NGHR_PN_PHASE	15
NGHR_PILOT_STRENGTH	6

} (NUM_NGHR_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 × 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 × RECORD_LEN

} (NUM_ACT_PN)

NUM_NGHR_PN occurrences of the following record:

{ (NUM_NGHR_PN)

PILOT_REC_INCL	1
PILOT_REC_TYPE	0 or 3
RECORD_LEN	0 or 3
Type-specific fields	0 or 8 × RECORD_LEN

} (NUM_NGHR_PN)

2

- 3 SIZE_OF_REQ_BLOB – Size of the request information block of bytes (REQ_BLOB).
4 The mobile station shall set this field to the number of bytes
5 in the Reverse Supplemental Code Channel or the Reverse
6 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 *Supplemental*
17 *Channel Request Message* sequence number is included in
18 this message; otherwise, the mobile station shall set this field
19 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 *Supplemental Channel Request Message*
 3 sequence number that the base station is to include in a
 4 *Supplemental Channel Assignment Message* or *Extended*
 5 *Supplemental Channel Assignment Message* 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 field
 12 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 field
 19 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 field
 31 to the number of reported pilots in the Active Set other than
 32 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 Active
 16 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 to
 4 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 to
 11 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:

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 RECORD_LEN
- 11 fields are included. The mobile station shall set this field to
- 12 ‘0’ if the corresponding pilot is the common pilot and there is
- 13 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_NGHBR_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 RECORD_LEN
- 38 fields are included. The mobile station shall set this field to
- 39 ‘0’ if the corresponding pilot is the common pilot and there is
- 40 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

2.7.2.3.2.19 Candidate Frequency Search Response Message

MSG_TAG: CFSRSM

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

LAST_CFSRM_SEQ – Candidate Frequency Search Request Message sequence number.

The mobile station shall set this field to the value of the CFSRM_SEQ field from the Candidate Frequency Search Request Message to which this message is a response.

TOTAL_OFF_TIME_FWD – Total time that the mobile station is off the Forward Traffic Channel.

The mobile station shall set this field to the mobile station's estimate of the total number of frames or power control groups for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the Candidate Frequency, to perform the requested search, and to re-tune to the Serving Frequency. If the mobile station requires multiple visits to the Candidate Frequency to complete the requested search, the mobile station shall set this field to the total number of frames (if PCG_OFF_TIME is set to '0') or power control groups (if PCG_OFF_TIME is set to '1') for all visits to the Candidate Frequency in a search period.

MAX_OFF_TIME_FWD – Maximum time the mobile station is away from the Forward Traffic Channel.

The mobile station shall set this field to the mobile station's estimate of the maximum number of frames (if PCG_OFF_TIME is set to '0') or power control groups (if PCG_OFF_TIME is set to '1') for which the mobile station will need to suspend its current Forward Traffic Channel processing during a visit to the Candidate Frequency, to perform a part of the requested search, and to re-tune to the Serving Frequency.

- 1 TOTAL_OFF_TIME_REV – Total time that the mobile station is away from the Reverse
2 Traffic Channel.
- 3 The mobile station shall set this field to the mobile station's
4 estimate of the total number of frames or power control
5 groups for which the mobile station will need to suspend its
6 current Reverse Traffic Channel processing in order to tune to
7 the Candidate Frequency, to perform the requested search,
8 and to re-tune to the Serving Frequency. If the mobile station
9 requires multiple visits to the Candidate Frequency to
10 complete the requested search, the mobile station shall set
11 this field to the total number of frames or power control
12 groups for all visits to the Candidate Frequency in a search
13 period.
- 14 MAX_OFF_TIME_REV – Maximum time the mobile station is away from the Reverse
15 Traffic Channel.
- 16 The mobile station shall set this field to the mobile station's
17 estimate of the maximum number of frames or power control
18 groups for which the mobile station will need to suspend its
19 current Forward Traffic Channel processing during a visit to
20 the Candidate Frequency, to perform a part of the requested
21 search, and to re-tune to the Serving Frequency.
- 22 PCG_OFF_TIMES – Indicator if off times are expressed in units of power control
23 groups.
- 24 If P_REV_IN_USE_s is less than six, the mobile station shall set
25 this field to '0'; otherwise, the mobile station shall set this
26 field as follows:
- 27 The mobile station shall set this field to '1' if it expresses
28 TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD,
29 TOTAL_OFF_TIME_REV, and MAX_OFF_TIME_REV in units of
30 power control groups; otherwise, the mobile station shall set
31 this field to '0' so that TOTAL_OFF_TIME_FWD,
32 MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV, and
33 MAX_OFF_TIME_REV are expressed in units of frames.
- 34 ALIGN_TIMING_USED – Alignment timing used indicator.
- 35 The mobile station shall set this field to '1' if it will align the
36 times of its visits away from the Serving Frequency, as
37 requested by the base station; otherwise, the mobile station
38 shall set this field to '0'.
- 39 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 include
8 this field and set it as described below; otherwise, the mobile
9 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 being
 6 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 type
 30 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.
 34 The mobile station shall include mode-specific fields based on
 35 the SEARCH_MODE of this message.

1 If SEARCH_MODE is equal to '0000', the mobile station shall include the following fields:

2

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 × RECORD_LEN

} (NUM_PILOTS)

3

4 BAND_CLASS - Band class.

5 If this message is being sent to report an unsuccessful hard
 6 handoff attempt, the mobile station shall set this field to the
 7 CDMA band class corresponding to the CDMA Frequency
 8 Assignment for the Target Frequency, as specified in [30]. If
 9 this message is being sent to report measurements on a
 10 Candidate Frequency, the mobile station shall set this field to
 11 the CDMA band class corresponding to the CDMA Frequency
 12 Assignment for the Candidate Frequency, as specified in [30].

13 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 *total_received_power* 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 *total_received_power* 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 ($-2 \times 10 \log_{10} PS$) 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 RECORD_LEN
 13 fields are included. The mobile station shall set this field to
 14 '0' if the corresponding pilot is the common pilot and there is
 15 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 × 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 *spec_density* 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 record,
 30 one for each pilot in the Active Set and one for each pilot in the Candidate Set, other than
 31 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 RECORD_LEN
- 10 fields are included. The mobile station shall set this field to
- 11 '0' if the corresponding pilot is the common pilot and there is
- 12 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 mobile
- 32 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_s 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_s is equal to '0'; otherwise, the mobile
- 41 station shall set this field to '0'.
- 42 If P_REV_IN_USE_s is greater than or equal to nine, the mobile
- 43 station shall do the following:

- 1 FPC_SCH_CURR_SETPT - The supplemental channel outer loop E_b/N_t setpoint.
2 The mobile station shall set this field to the value of the power
3 control outer loop E_b/N_t setpoint, in units of 0.125 dB,
4 currently in use in the Channel specified by SCH_ID.
5
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)

- 4
- 5 FCH_INCL – Fundamental Channel included indicator.
- 6 The mobile station shall set this field to ‘1’ if
- 7 FPC_FCH_CURR_SETPT is included; otherwise the mobile
- 8 station shall set this field to ‘0’.
- 9 FPC_FCH_CURR_SETPT – The outer loop E_b/N_t setpoint of the Fundamental Channel.
- 10 If FCH_INCL is set to ‘1’, the mobile station shall set this field
- 11 to the value of the E_b/N_t setpoint, in units of 0.125 dB,
- 12 currently in use in the Fundamental Channel power control
- 13 outer loop estimation; otherwise, the mobile station shall omit
- 14 this field.
- 15 DCCH_INCL – Dedicated Control Channel included indicator.
- 16 The mobile station shall set this field to ‘1’ if the
- 17 FPC_DCCH_CURR_SETPT field is included; otherwise the
- 18 mobile station shall set this field to ‘0’.
- 19 FPC_DCCH_CURR_SETPT – The outer loop E_b/N_t setpoint of the Forward Dedicated
- 20 Channel.
- 21 If DCCH_INCL is set to ‘1’, the mobile station shall set this
- 22 field to the value of the E_b/N_t setpoint, in units of 0.125 dB,
- 23 currently in use in the Dedicated Channel power control outer
- 24 loop estimation; otherwise, the mobile station shall omit this
- 25 field.
- 26 NUM_SUP – The number of Supplemental Channels.
- 27 The mobile station shall set this field to the total number of
- 28 the Supplemental Channels reported by this message.

1 The mobile station shall in NUM_SUP occurrences of the following two fields:

2 SCH_ID – The Supplemental Channel index.

3 The mobile station shall set this field to the Supplemental
4 Channel index to indicate the Forward Supplemental Channel
5 that to be reported

6 FPC_SCH_CURR_SETPT – The supplemental outer loop E_b/N_t setpoint.

7 The mobile station shall set this field to the value of the power
8 control outer loop E_b/N_t setpoint, in units of 0.125 dB,
9 currently in use in the Channel specified by SCH_ID.

10

11

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

2.7.2.3.2.25 Extended Release Response Message

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 of
7 the traffic channel; otherwise, the mobile station shall set this
8 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 field
19 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 this
24 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: PSMMM

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 nth 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.
- 40 ADD_CON_REF - Additional connection reference.

1 The mobile station shall set this field to the connection
2 reference corresponding to a service option connection that is
3 requested to be released.

4 **ADD_PURGE_SERVICE** - Additional purge service instance indicator.

5 If the packet data service instance identified by the
6 **ADD_CON_REF** field has been inactivated, the mobile station
7 shall set this field to '1'; otherwise, the mobile station shall set
8 this field to '0'.

9 **BCMC_INFO_INCL** - BCMC information includes indicator.

10 If the mobile station includes BCMC related fields in this
11 message, the mobile station shall set this field to '1';
12 otherwise, the mobile station shall set this field to '0'.

13 **NUM_BCMC_PROGRAMS**- Number of BCMC Programs

14 If the **BCMC_INFO_INCL** field is set to '0', the mobile station
15 shall omit this field; otherwise, the mobile station shall
16 include this field and set it as follows:

17 If the mobile station is requesting the release of all the BCMC
18 programs being monitored, the mobile station shall set this
19 field to '000000'; otherwise, the mobile station shall set this
20 field to the number of BCMC programs included in this
21 message.

22 The mobile station shall include **NUM_BCMC_PROGRAMS** occurrences of the following
23 variable length record:

24 **BCMC_PROGRAM_ID_LEN** - Length of **BCMC_PROGRAM_ID** field

25 The mobile station shall set this field to one less than the
26 length, in bits, of the **BCMC_PROGRAM_ID** of this program.

27 **BCMC_PROGRAM_ID** - BCMC program Identifier

28 The length of this field shall be one more than the value of
29 **BCMC_PROGRAM_ID_LEN** bits.

30 The mobile station shall set this field to the identifier of the
31 BCMC program corresponding to one or more flows that the
32 mobile station is requesting to release.

33 **BCMC_FLOW_DISCRIMINATOR_LEN** - Length of **BCMC_FLOW_DISCRIMINATOR** field

34 The mobile station shall set this field to the length, in bits, of
35 the **BCMC_FLOW_DISCRIMINATOR** of this program. To
36 request release of all flows associated with this
37 **BCMC_PROGRAM_ID**, the mobile station may set this field to
38 '000'.

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_S.

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 $2^{(1+SO_BITMAP_IND)}$
DRS	1
PREV_SID_INCL	1
PREV_SID	0 or 15
PREV_NID_INCL	1
PREV_NID	0 or 16

(continues on next page)

Field	Length (bits)
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)

CHARi	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 × RECORD_LEN

} (NUM_RECS)

SYNC_ID_INCL	1
SYNC_ID_LEN	0 or 4
SYNC_ID	0 or (8 × 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 × 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)

Field	Length (bits)
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)

- 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

CH_IND (binary)	Channel(s) Requested
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

5

6

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.

- 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 service
- 8 reference identifier, the mobile station shall set this field
- 9 to the smallest unused service reference identifier value
- 10 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 field
- 19 to the service reference identifier corresponding to one of
- 20 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_s 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 channel
9 indicator.
- 10 If NEW_SINFO_INCL is set to '1', the mobile station shall
11 include this field; otherwise, the mobile station shall omit this
12 field. If this field is included, the mobile station shall set this
13 field to '1' to request user information encryption, and to '0' to
14 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 this
18 field. If this field is included, the mobile station shall set this
19 field to indicate the supported user information encryption
20 algorithms.
- 21 This field consists of the subfields shown in Table 2.7.1.3.2.4-
22 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 station
26 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_S 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 set
39 this field to '0'. In other words, MORE_SO_INFO_INCL is set to
40 '1', if NUM_ALT_SO is included and not set to '000' or/and
41 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 field
 3 to the number of supported alternative service options which
 4 either have no service option group number assigned or do
 5 not belong to the same service option group whose bitmap is
 6 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 supported
 11 by the mobile station. These alternate service options are
 12 either have not service option group number assigned or do
 13 not belong to the same service option group whose bitmap is
 14 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 this
 18 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', the
 21 mobile station shall include this field and set this field to the
 22 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', the
 26 mobile station shall include the bitmap of size $2^{(1+SO_BITMAP_IND)}$
 27 bits of the service option group number
 28 (SO_GROUP_NUM); otherwise, the mobile station shall omit
 29 this field;

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 $(2^{(1+SO_BITMAP_IND)})$
 34 of the service option group.

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_s < 9 and DIGIT_MODE is set to '0', the mobile
18 station shall omit this field; otherwise, the mobile station
19 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.
- 37 If the DIALED_DIGS_INCL field is set to '0', the mobile station
38 shall omit this field; otherwise, the mobile station shall
39 include this field and shall set it as follows:

1 The mobile station shall set this field to the number of dialed
2 digits included in this message.

3 The mobile station shall include NUM_FIELDS occurrences of the following field:

4 CHARi – A dialed digit or character.

5 If the DIGIT_MODE field is set to '0', the mobile station shall
6 set each occurrence of this field to the code value shown in
7 Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the
8 DIGIT_MODE field is set to '1', the mobile station shall set
9 each occurrence of this field to the ASCII representation
10 corresponding to the dialed digit, as specified in [9], with the
11 most significant bit set to '0'.

12 NUM_RECS – Number of records.

13 The mobile station shall set this field to the number of
14 information records included with this message.

15 The mobile station shall include NUM_RECS occurrences of the following three-field record.

16 RECORD_TYPE – Information record type.

17 The mobile station shall set this field to the record type value
18 shown in Table 2.7.4-1.

19 The mobile station shall not include the record type for QoS
20 Parameters information record if MOB_QOS_s is equal to '0'.

21 RECORD_LEN – Information record length.

22 The mobile station shall set this field to the number of octets
23 in the type-specific fields included in this record.

24 Type-specific fields – Type-specific fields.

25 The mobile station shall include type-specific fields as
26 specified in 2.7.4.

27 SYNC_ID_INCL – Service Configuration synchronization identifier included
28 indicator.

29 The mobile station shall set this field to '1' if the SYNC_ID
30 field is included in this message; otherwise, the mobile station
31 shall set this field to '0'.

32 If SYNC_ID_SUPPORTED_s is equal to '0', the mobile station
33 shall set this field to '0'.

- 1 ADD_SR_ID – Additional service reference identifier.
- 2 If SYNC_ID_INCL is set to ‘0’, the mobile station shall set this
- 3 field as follows:
- 4 • 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 service
- 8 reference identifier, the mobile station shall set this field
- 9 to the smallest unused service reference identifier value
- 10 between 1 and 6 (inclusive).
- 11 Otherwise, the mobile station shall set this field to the service
- 12 reference identifier corresponding to the service option
- 13 connection that the mobile station requests to be restored
- 14 from the stored service configuration.
- 15 ADD_DRS – Additional Data Ready to Send indicator.
- 16 If the service instance corresponding to the ADD_SR_ID field
- 17 of this record has data to send, the mobile station shall set
- 18 this field to ‘1’; otherwise, the mobile station shall set this
- 19 field to ‘0’.
- 20 ADD_TAG – Additional call initiation transaction identifier.
- 21 The mobile station shall set this field to the identifier for the
- 22 transaction corresponding to the ADD_SR_ID field of this
- 23 record.
- 24 ADD_SERVICE_OPTION_INCL - Additional service option included indicator.
- 25 If SYNC_ID_INCL is set to ‘1’, the mobile station shall omit
- 26 this field; otherwise, the mobile station shall include this field
- 27 and set it as follows:
- 28 The mobile station shall set this field to ‘0’ if the requested
- 29 service option number of the service instance corresponding
- 30 to the ADD_SR_ID field of this record is the same as
- 31 SERVICE_OPTION; otherwise, the mobile station shall set this
- 32 field to ‘1’.
- 33 ADD_SERVICE_OPTION – Additional service option number.
- 34 If the ADD_SERVICE_OPTION_INCL field of this record is not
- 35 included or is included and is set to ‘0’, the mobile station
- 36 shall omit this field; otherwise, the mobile station shall
- 37 include this field and set it to the value specified in [30],
- 38 corresponding to the requested service option number of the
- 39 service instance corresponding to the ADD_SR_ID field of this
- 40 record.
- 41 ADD_NUM_RECS – Additional number of records.
- 42 The mobile station shall set this field to the number of
- 43 information records included in this record for the service
- 44 instance corresponding to the ADD_SR_ID field in this record.

- 1 The mobile station shall include ADD_NUM_RECS occurrences of the following three-field
 2 record.
- 3 ADD_RECORD_TYPE - Additional information record type.
- 4 The mobile station shall set this field to the record type value
 5 shown in Table 2.7.4-1.
- 6 The mobile station shall not include the record type for QoS
 7 Parameters information record if MOB_QOS_s is equal to '0'.
- 8 ADD_RECORD_LEN - Additional information record length.
- 9 The mobile station shall set this field to the number of octets
 10 in the type-specific fields included in this record.
- 11 Type-specific fields - Type-specific fields.
- 12 The mobile station shall include type-specific fields as
 13 specified in 2.7.4.
- 14
- 15 BCMC_INCL - BCMC information included indicator
- 16 If the P_REV_IN_USE_s is less than 11, the mobile station shall
 17 omit this field; otherwise, the mobile station shall include this
 18 field and set it as follows:
- 19 The mobile station shall set this field to '1' if one or more
 20 BCMC_PROGRAM_IDs are included in the message;
 21 otherwise, the mobile station shall set this field to '0'.
- 22 BCMC_ORIG_ONLY_IND - BCMC origination only indicator
- 23 If the BCMC_INCL field is not included or is included and is
 24 set to '0', the mobile station shall omit this field; otherwise,
 25 the mobile station shall include this field and set it as follows:
- 26 The mobile station shall set this field to '1' to indicate that
 27 this origination is only for BCMC and no point to point call is
 28 requested in this message; otherwise the mobile station shall
 29 set this field to '0'.
- 30 AUTH_SIGNATURE_INCL - Authorization signature included indication.
- 31 If the BCMC_INCL field is not included or is included and is
 32 set to '0', the mobile station shall omit this field; otherwise,
 33 the mobile station shall include this field and set it as follows:
- 34 The mobile station shall set this field to '1' to indicate that the
 35 authorization signature is included in this message for some
 36 of the BCMC flows included in this message; otherwise, the
 37 mobile station shall set this field to '0'.
- 38 TIME_STAMP_SHORT_LENGTH - Length of time stamp included in this message.

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 length of the time
 6 stamp, in units of bits, included in this message.

7 TIME_STAMP_SHORT - Time stamp short.

8 If the AUTH_SIGNATURE_INCL field is not included or is
 9 included and 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 follows:

12 The mobile station shall set this field to the
 13 TIME_STAMP_SHORT_LENGTH least significant bits of the
 14 time stamp parameter used to generate the Authorization
 15 signature included in this message.

16 NUM_BCMC_PROGRAMS- Number of BCMC Programs

17 If the BCMC_INCL field is not included or is included and is
 18 set to '0', the mobile station shall omit this field; otherwise,
 19 the mobile station shall include this field and set it as follows:

20 The mobile station shall set this field to the number of BCMC
 21 programs included in this message minus 1.

22 The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following
 23 variable length record:

24 BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

25 The mobile station shall set this field to one less than the
 26 length, in bits, of the BCMC_PROGRAM_ID of this program.

27 BCMC_PROGRAM_ID - BCMC program Identifier

28 The length of this field shall be one more than the value of
 29 BCMC_PROGRAM_ID_LEN bits.

30 The mobile station shall set this field to the identifier of the
 31 BCMC program corresponding to one or more flows that the
 32 mobile station will continue to monitor or start to monitor
 33 upon receiving confirmation of delivery of this message or is
 34 requesting transmission.

35 BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

36 The mobile station shall set this field to the length, in bits, of
 37 the BCMC_FLOW_DISCRIMINATOR of this program. To
 38 request all flows associated with this BCMC_PROGRAM_ID,
 39 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 BCMC flow
- 20 discriminator requested.
- 21 AUTH_SIGNATURE_IND - Authorization signature indicator.
- 22 If the AUTH_SIGNATURE_INCL field is not included or is
- 23 included and is set to '0', the mobile station shall omit this
- 24 field; otherwise, the mobile station shall include this field and
- 25 set it as follows:
- 26 The mobile station shall set this field to '1' to indicate that the
- 27 authorization signature is included in this message for this
- 28 BCMC flow; otherwise, the mobile station shall set this field to
- 29 '0'.
- 30 AUTH_SIGNATURE_SAME_IND - Authorization signature same as previous BCMC
- 31 flow indicator.
- 32 If the AUTH_SIGNATURE_IND field is not included or is
- 33 included and is set to '0', the mobile station shall omit this
- 34 field; otherwise, the mobile station shall include this field and
- 35 set it as follows:
- 36 The mobile station shall set this field to '1' to indicate that the
- 37 authorization signature generated for this BCMC flow is the
- 38 same as the one generated for the BCMC flow listed prior to
- 39 this BCMC flow in this message; otherwise, the mobile station
- 40 shall set this field to '0'.
- 41 For the first BCMC flow listed in this message, the mobile
- 42 station shall set this field to '0'.
- 43 BAK_ID - BAK identifier.

1 If the AUTH_SIGNATURE_SAME_IND field is not included or
2 is included and is set to '1', 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 BAK identifier used to
6 generate the Authorization signature included in this
7 message.

8 AUTH_SIGNATURE - Authorization signature.

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 the Authorization
14 signature computed for this BCMC flow as specified in
15 2.6.13.9.

16

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:

20 RECORD_TYPE – Information record type.
 21 The mobile station shall set this field to the record type code
 22 shown in Table 2.7.4-1 corresponding to the type of this
 23 information record.

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 × 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 × 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

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.

6

7

8

9

PILOT_STRENGTH – Pilot strength in dB.

10

The mobile station shall set this field to

1 $\lfloor -2 \times 10 \log_{10} PS \rfloor$,
 2 where PS is the strength of the pilot used by the mobile
 3 station to derive its time reference (see [2]), measured as
 4 specified in 2.6.6.2.2. If this value ($\lfloor -2 \times 10 \log_{10} PS \rfloor$) is less
 5 than 0, the mobile station shall set this field to '000000'. If
 6 this value is greater than '111111', the mobile station shall
 7 set this field to '111111'.

8 **KEEP** - Keep pilot indicator.
 9 If the handoff drop timer (see 2.6.6.2.3) corresponding to the
 10 pilot used by the mobile station to derive its time reference
 11 (see [2]) has expired, the mobile station shall set this field to
 12 '0'; otherwise, the mobile station shall set this field to '1'.

13 **REF_PILOT_REC_INCL** - Reference pilot information included indicator.
 14 The mobile station shall set this field to '1' if additional
 15 reference pilot information listed in the
 16 **REF_PILOT_REC_TYPE** and **REF_RECORD_LEN** fields are
 17 included. The mobile station shall set this field to '0' if the
 18 corresponding pilot is the common pilot and there is no
 19 additional pilot information included.

20 **REF_PILOT_REC_TYPE** - Reference pilot record type.
 21 If **REF_PILOT_REC_INCL** is set to '1', the mobile station shall
 22 set this field to the **REF_PILOT_REC_TYPE** value shown in
 23 Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record
 24 specified by this record.

25

26

Table 2.7.2.3.2.34-1. Pilot Record Types

Description	REF_PILOT_REC_TYPE PILOT_REC_TYPE (binary)
Auxiliary Pilot	000
All other REF_PILOT_REC_TYPE or PILOT_REC_TYPE values are reserved	

27

28 If **REF_PILOT_REC_INCL** is set to '0', the mobile station shall
 29 omit this field.

30 **REF_RECORD_LEN** - Reference pilot record length.

31 If **REF_PILOT_REC_INCL** is set to '1', the mobile station shall
 32 set this field to the number of octets in the type-specific fields
 33 of this pilot record.

34 If **REF_PILOT_REC_INCL** is set to '0', the mobile station shall
 35 omit this field.

36 **Type-specific fields** - Pilot record type-specific fields.

1 If REF_PILOT_REC_INCL is set to '1', the mobile station shall
 2 include type-specific fields based on the
 3 REF_PILOT_REC_TYPE of this pilot record.

4 If REF_PILOT_REC_INCL is set to '0', the mobile station shall
 5 omit this field.

6

7 If REF_PILOT_REC_TYPE is equal to '000', the mobile station shall include the following
 8 fields:

9

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
PILOT_WALSH	(WALSH_LENGTH + 6)
RESERVED	0 to 7 (as needed)

10

11 QOF - Quasi-orthogonal function index.
 12 The mobile station shall set this field to the index of the
 13 Quasi-orthogonal function of the corresponding Auxiliary
 14 Pilot.

15 WALSH_LENGTH - Length of the Walsh code for the reference pilot.
 16 The mobile station shall set this field to the WALSH_LENGTH
 17 value shown in Table 2.7.2.3.2.34-2 corresponding to the
 18 length of the Walsh code for the pilot that is used as the
 19 Auxiliary Pilot.

20

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

21

22 PILOT_WALSH - Walsh code for the Auxiliary Pilot used by the mobile station
 23 to derive its time reference.

24 The mobile station shall set this field to the Walsh code
 25 corresponding to the Auxiliary Pilot.

26 RESERVED - Reserved bits.

1 The mobile station shall set all the bits of this field to '0' to
2 make the entire record octet-aligned.

3

4 SF_RX_PWR – The received power spectral density of the Serving Frequency.

5 The mobile station shall set this field to

$$6 \quad \lceil (10 \times \log_{10}(\text{spec_density}) + 120) / 2 \rceil$$

7 where *spec_density* is the mobile station received power
8 spectral density of the Serving Frequency, in mW/1.23MHz,
9 averaged over the last N_{12m} frames (see 2.6.6.2.5.1).

10 If this value is less than 0, the mobile station shall set this
11 field to '00000'.

12 NUM_PILOTS – Number of pilots reported.

13 The mobile station shall set this field to the number of pilots
14 being reported other than the reference pilot.

15 The mobile station shall include NUM_PILOTS occurrences of the following record: one
16 occurrence for each pilot in the Active Set, for each pilot in the Candidate Set whose
17 strength exceeds T_ADD, and for each pilot in the Candidate Set whose strength satisfies
18 the following inequality:

$$19 \quad 10 \times \log_{10} PS > \frac{\text{SOFT_SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD_INTERCEPT}_s}{2}$$

20 where the summation is performed over all pilots currently in the Active Set. The mobile
21 station shall not include these fields for the pilot identified by the REF_PN field.

22 The mobile station shall order any occurrences of the following record which correspond to
23 pilots in the Active Set such that they occur before any occurrences of the following record
24 which correspond to pilots in the Candidate Set.

25 PILOT_PN_PHASE – Pilot measured phase.

26 The mobile station shall set this field to the phase of the pilot
27 PN sequence relative to the zero offset pilot PN sequence of
28 this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

29 PILOT_STRENGTH – Pilot strength in dB.

30 The mobile station shall set this field to

$$31 \quad \lfloor -2 \times 10 \log_{10} PS \rfloor,$$

32 where PS is the strength of this pilot, measured as specified
33 in 2.6.6.2.2. If this value ($\lfloor -2 \times 10 \log_{10} PS \rfloor$) is less than 0,
34 the mobile station shall set this field to '000000'. If this value
35 is greater than '111111', the mobile station shall set this field
36 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 RECORD_LEN
- 8 fields are included. The mobile station shall set this field to
- 9 '0' if the corresponding pilot is the common pilot and there is
- 10 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 *Extended Handoff Direction Message*, *General Handoff*
- 34 *Direction Message*, or *Universal Handoff Direction Message* was
- 35 received; otherwise, the mobile station shall set this field to
- 36 '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.

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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 × 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 Message,*
 10 *General Handoff Direction Message, or the Universal Handoff*
 11 *Direction Message* that determined the current Active Set.

12 NUM_PILOTS – Number of pilots reported.

13 The mobile station shall set this field to the number of pilots
 14 in the current Active Set.

15 The mobile station shall include NUM_PILOTS occurrences of the following record: one
 16 occurrence for each pilot in the Active Set. If the Active Set contains more than one pilot,
 17 the mobile station shall include the pilot information in the same order as in the *Extended*
 18 *Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff*
 19 *Direction Message* that determined the current Active Set.

20 PILOT_PN – Pilot PN sequence offset.

21 The mobile station shall set this field to the pilot PN sequence
 22 offset, relative to the zero offset pilot PN sequence in units of
 23 64 PN chips, for this pilot.

24 PILOT_REC_INCL – Additional pilot information included indicator.

25 The mobile station shall set this field to ‘1’ if additional pilot
 26 information listed in the PILOT_REC_TYPE and RECORD_LEN
 27 fields are included. The mobile station shall set this field to
 28 ‘0’ if the corresponding pilot is the common pilot and there is
 29 no additional pilot information included.

- 1 PILOT_REC_TYPE - Reference pilot record type.
- 2 If PILOT_REC_INCL is set to '0', the mobile station shall omit
3 this field; otherwise, the mobile station shall set this field to
4 the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1
5 corresponding to the type of Pilot Record specified by this
6 record.
- 7 RECORD_LEN - Pilot record length.
- 8 If PILOT_REC_INCL is set to '0', the mobile station shall omit
9 this field; otherwise, the mobile station shall set this field to
10 the number of octets in the type-specific fields of this pilot
11 record.
- 12 Type-specific fields - Pilot record type-specific fields.
- 13 If PILOT_REC_INCL is set to '0', the mobile station shall omit
14 this field; otherwise, the mobile station shall include type-
15 specific fields based on the PILOT_REC_TYPE of this pilot
16 record as described in 2.7.2.3.2.34.
- 17
- 18
- 19

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 this
 13 field. If this field is included, the mobile station shall set this
 14 field to indicate the supported user information encryption
 15 algorithms.

- 1 This field consists of the subfields shown in Table 2.7.1.3.2.4-
2 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 station
6 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 this
12 field. If this field is included, the mobile station shall set this
13 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 record
- 16 CON_REF – Connection reference corresponding to the service instance
17 requesting for encryption.
- 18 If UI_ENC_INCL is equal to '1', the mobile station shall
19 include this field; otherwise, the mobile station shall omit this
20 field. If this field is included, the mobile station shall set this
21 field to the connection reference of the service option
22 connection corresponding to this user information encryption
23 request record.
- 24 UI_ENCRYPT_REQ – Request for user information encryption on the traffic channel
25 indicator.
- 26 The mobile station shall set this field to '1' to request user
27 information encryption for the user information corresponding
28 to the service option connection identified by CON_REF;
29 otherwise, the mobile station shall set this field to '0'.
- 30 SIG_ENC_INCL – Signaling encryption fields included.
- 31 The mobile station shall set this field to '1' if the following two
32 fields related to signaling encryption fields are included in this
33 message. Otherwise, the mobile station shall set this field to
34 '0'.
- 35 SIG_ENCRYPT_SUP – Signaling encryption supported indicator.
- 36 If SIG_ENC_INCL is equal to '1', the mobile station shall
37 include this field; otherwise, the mobile station shall omit this
38 field. If this field is included, the mobile shall set this field to
39 indicate the supported signaling encryption algorithms
40 supported by the mobile station.

- 1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
2 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
14 If SIG_ENC_INCL is equal to '1', the mobile station shall
15 include this field; otherwise, the mobile station shall omit this
16 field. If included the mobile station shall set this field to '1' to
17 request signaling encryption to be turned on for signaling
18 messages sent on f-dsch and r-dsch, and to '0' to request
19 signaling encryption to be turned off for signaling messages
sent on f-dsch and r-dsch.
- 20 **NEW_SSEQ_H_INCL** – The NEW_SSEQ included indicator.
21
22 The mobile station shall set this field to '1' if NEW_SSEQ_H is
23 included in this message; otherwise, the mobile station shall
set this field to '0'.
- 24 If MSG_INTEGRITY_SUP_s 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_s 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
31 If NEW_SSEQ_H_INCL is set to '1', the mobile station shall
32 include this field; otherwise, the mobile station shall omit this
33 field. If this field is included, the mobile station shall set this
34 field to a 24-bit value that will be used as the initial value of
35 the 24 MSB of the crypto-sync for both forward and reverse
link message integrity.
- 36 **NEW_SSEQ_H_SIG** – The signature of NEW_SSEQ_H
37
38 If NEW_SSEQ_H is included, the mobile station shall include
39 this field; otherwise, the mobile station shall omit this field. If
40 this field is included, the mobile station shall set this field to
41 the digital signature of the NEW_SSEQ_H computed as
described in 2.3.12.4.5.

- 1 MSG_INT_INFO_INCL – Signaling message integrity information included indicator.
2 If MSG_INTEGRITY_SUP_s is equal to ‘0’, the mobile station
3 shall set this field to ‘0’; otherwise, the mobile station shall set
4 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 this
9 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 set
13 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 2.7.1.3.2.1-
22 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 occurrences
 21 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 × 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

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If QUAL_INFO_TYPE is equal to '00000010', the mobile 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

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BAND_CLASS - Band class.
The mobile station shall set this field to the CDMA band class, as specified in [30].

OP_MODE - Operating mode.
The mobile station shall set this field as shown in Table 3.7.2.3.2.15-3 to specify the operating mode qualification information.

RESERVED - Reserved bits.
The mobile station shall set this field to '000'.

NUM_RECORD - Number of requested record fields in this message.
The mobile station shall set this field to the number of occurrences of RECORD_TYPE field in this message.

The mobile station shall include NUM_RECORD occurrences of the following variable-length record, one for each information record that is requested:

RECORD_TYPE - Information record type.
The mobile station shall set this field to the record type value shown in Table 2.7.2.3.2.39-1 corresponding to the 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

RECORD_LENGTH - Information record length.
The mobile 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 mobile 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 mobile 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-field
- 11 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'.
- 25
- 26

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

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Table 2.7.2.3.2.40-1. CDMA Off Time Unit

CDMA_OFF_TIME_UNIT (binary)	Time Unit (decimal)
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**.

2.7.2.3.2.41 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'.

SIG_INTEGRITY_SUP – Signaling integrity algorithm supported by the mobile station.

If SIG_INTEGRITY_SUP_INCL 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 set this field to indicate the supported message integrity algorithms in addition to the 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'.

The mobile station shall set the RESERVED subfield to '00000000'.

- 1 SIG_INTEGRITY_REQ – Signaling message integrity algorithm requested by the mobile
2 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 authentication code for resynchronization.
 10 The mobile station shall set this field to the output, MAC_S, of
 11 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_L EN + 1)
BCMC_FLOW_DISCRIMINATOR_LEN	3
NUM_FLOW_DISCRIMINATOR	BCMC_FLOW_DISCRIM INATOR_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_DISCRIM INATOR_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

Value (binary)	BCMC Request
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 BMC flow discriminators

2 The length of this field shall be determined by the value of the
3 BMC_FLOW_DISCRIMINATOR_LEN as follows: if
4 BMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
5 is omitted; otherwise, the length of this field shall be
6 BMC_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 BMC_FLOW_DISCRIMINATOR – BMC Flow Discriminator.

14 The length of this field shall be determined by the value of the
15 BMC_FLOW_DISCRIMINATOR_LEN as follows: if
16 BMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
17 is omitted; otherwise, the length of this field shall be
18 BMC_FLOW_DISCRIMINATOR_LEN bits.

19 The mobile station shall set this field to the discriminator of
20 the BMC 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

21 If HO_SUP_REC_TYPE field is set to '000', the base station shall include the following sub-
 22 fields in HO_SUP_REC field:

1	PILOT_PN	-	Pilot PN sequence offset index.
2			The mobile station shall set this field to the pilot PN sequence
3			offset of a base station, in units of 64 PN chips.
4	AP_ID_LEN	-	Access Point identification length.
5			The base station shall set this field to the length of the access
6			point identification in units of 16 bits.
7	AP_ID	-	AP_ID of a base station.
8			The mobile station shall set this field to AP_ID value
9			(see 2.6.2.2.19) corresponding to the PILOT_PN reported in
10			this record.
11	IOS_MSC_ID	-	MSC_ID of a base station.
12			The mobile station shall set this field to MSC_ID value
13			(see 2.6.2.2.19) corresponding to the PILOT_PN reported in
14			this record.
15	IOS_CELL_ID	-	CELL_ID of a base station.
16			The mobile station shall set this field to CELL_ID value (see
17			2.6.2.2.19) corresponding to the PILOT_PN reported in this
18			record.
19	RESERVED	-	Reserved bits.
20			The mobile station shall set all the bits of this field to '0' to
21			make entire record octet aligned.
22			

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

1 2.7.3 Orders

2 *Order Messages* are sent by the mobile station on the r-csch and on the r-dsch. The
3 general PDU format used on the r-csch is defined in 2.7.1.3.2.2, and the general PDU
4 format used on the r-dsch is defined in 2.7.2.3.2.1. There are many specific types of *Order*
5 *Messages*, as shown in Table 2.7.3-1.

6 The mobile station may send on the r-csch any type of order shown in Table 2.7.3-1 with a
7 'Y' in the first column, but shall not send on the r-csch any type of order with an 'N' in the
8 first column. The mobile station may send on the r-dsch any type of order shown in
9 Table 2.7.3-1 with a 'Y' in the second column, but shall not send on the r-dsch any type of
10 order with an 'N' in the second column. The mobile station shall be capable of sending all
11 types of orders shown in Table 2.7.3-1 with a 'Y' in the sixth column.

12 An order consists of a 6-bit order code and zero or more order-specific fields. The mobile
13 station shall set the ORDER field in the *Order Message* to the order code shown in Table
14 2.7.3-1 corresponding to the type of order being sent.

15 If the order qualification code in the fourth column of Table 2.7.3-1 is '00000000' and there
16 are no other additional fields as shown by an 'N' in the fifth column, the mobile station
17 shall include no order qualification code or other order-specific fields in the *Order Message*.
18 The order qualification code of such a message is implicitly '00000000'.

19 If the order qualification code is not '00000000' and there are no other additional fields as
20 shown in Table 2.7.3-1 by an 'N' in the fifth column, the mobile station shall include the
21 order qualification code as the only order-specific field in the *Order Message*.

22 If there are other additional fields as shown in Table 2.7.3-1 by a 'Y' in the fifth column, the
23 mobile station shall include order-specific fields as specified in the corresponding
24 subsection of this section.

25

1 **Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch**

r-csch Order	r-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	More Fields other than ORDQ	Support Req'd	P_REV_IN_USE⁸⁴	Name/Function
Y	Y	000010	00000000	Y	Y	All	<i>Base Station Challenge Order (see 2.7.3.1)</i>
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 (where 'nnnn' is the Request Number)</i>
-	-	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 (see [4])</i>
N	Y	010011	00000000	Y	N	< 7	<i>Service Option Request Order (Band Class 0 only; see 2.7.3.2)</i>
N	Y	010100	00000000	Y	Y	< 7	<i>Service Option Response Order (Band Class 0 only; see 2.7.3.3)</i>
Y	Y	010101	00000000	N	Y	All	<i>Release Order (normal release)</i>
Y	Y	010101	00000001	N	Y	All	<i>Release Order (with power-down indication)</i>
N	Y	010101	00000010	N	Y	≥ 6	<i>Release Order (with service inactive indication)</i>

⁸⁴ P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

r-csch Order	r-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	More Fields other than ORDQ	Support Req'd	P_REV_I N_USE⁸⁴	Name/Function
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	0000nnnn	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	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	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)
Y	Y	011111	00000011	Y	Y	All	<i>Mobile Station Reject Order</i> (message structure not acceptable; see 2.7.3.4)

r-csch Order	r-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	More Fields other than ORDQ	Support Req'd	P_REV_I N_USE⁸⁴	Name/Function
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)
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)

r-csch Order	r-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	More Fields other than ORDQ	Support Req'd	P_REV_I N_USE⁸⁴	Name/Function
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)
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)

r-csch Order	r-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	More Fields other than ORDQ	Support Req'd	P_REV_I N_USE⁸⁴	Name/Function
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	≥ 12	<i>Mobile Station Reject Order</i> (General Extension Record contains a field value that is not supported)
Y	Y	011111	00100000	Y	Y	≥ 12	<i>Mobile Station Reject Order</i> (General Extension Record not acceptable, unspecified reason)
N	Y	100000	00000000	N	Y	≥ 8	<i>Call Rescue Cancel Order</i>
Y	Y	100001	00000000	N	Y	≥ 10	<i>Security Mode Completion Order</i>
Y	N	100010	00000000	Y	N	≥ 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	≥ 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	≥ 11	<i>Shared Channel Configuration Order</i> (requests R-FCH assignment)
N	Y	100011	00000001	N	Y	≥ 11	<i>Shared Channel Configuration Order</i> (requests R-FCH release)
All other codes are reserved.							

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 2.3.12.1.5.

8

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

1 2.7.3.3 Service Option Response 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 accepted service
 9 option, or to ‘0000000000000000’ to reject the proposed
 10 service option. See 2.6.4.1.2.2.1.

11

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

4

ORDQ – Order qualification code.

- 1 The mobile station shall set this field to the ORDQ value
2 shown in Table 2.7.3-1 corresponding to the reason for
3 rejecting the message.
- 4 REJECTED_TYPE – Message type of rejected message.
- 5 The mobile station shall set this field to the value of the
6 MSG_TYPE or the MSG_ID (see [4]) field of the message being
7 rejected.
- 8 If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits,
9 the mobile station shall set the least significant bits of this
10 field to the value of the MSG_TYPE field and set all the
11 remaining bits to ‘0’.
- 12 RESERVED_1 – Reserved bits.
- 13 The mobile station shall set this field to ‘00’.
- 14 REJECTED_ORDER – Order type of rejected message.
- 15 If the rejected message was an *Order Message*, the mobile
16 station shall set this field to the value of the ORDER field in
17 the rejected message.
- 18 Otherwise, the mobile station shall omit this field.
- 19 REJECTED_ORDQ – Order qualification code of rejected message.
- 20 If the rejected message was an *Order Message* including an
21 ORDQ field, the mobile station shall set this field to the value
22 of the ORDQ field in the rejected message. If the rejected
23 message was an *Order Message* not including an ORDQ field,
24 the mobile station shall set this field to ‘00000000’.
- 25 Otherwise, the mobile station shall omit this field.
- 26 REJECTED_PARAM_ID – Parameter identification of the rejected parameter.
- 27 If the rejected message was a *Set Parameters Message*, the
28 mobile station shall set this field to the PARAMETER_ID of the
29 first parameter for which the requested operation could not be
30 completed.
- 31 Otherwise, the mobile station shall omit this field.
- 32 REJECTED_RECORD – Record type of the rejected information record.
- 33 If the rejected message was a *Feature Notification Message*, an
34 *Alert With Information Message*, *Extended Alert With*
35 *Information Message*, *Extended Flash With Information*
36 *Message*, or a *Flash With Information Message*, the mobile
37 station shall set this field to the RECORD_TYPE field of the
38 first information record that could not be accepted.
- 39 Otherwise, the mobile station shall omit this field.
- 40 CON_REF – Connection reference.
- 41 The mobile station shall set this field to the value of the
42 connection reference of the service option connection
43 corresponding to the call.

- 1 TAG – Transaction identifier.
 2 The mobile station shall set this field to the transaction
 3 identifier (received from the base station) of the call
 4 assignment being rejected.
- 5 REJECTED_PDU_TYPE – PDU type of the rejected message.
 6 If P_REV_IN_USE_s is less than six, the mobile station shall
 7 omit this field; otherwise, the mobile station shall set this field
 8 to the REJECTED_PDU_TYPE code shown in Table 2.7.3.4-1
 9 corresponding to the PDU type of the message being rejected.

10

11

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

12

- RESERVED_2 – Reserved bits.

13

14

15

16

17

The mobile station shall add reserved bits as needed in order to make the total length of this record containing order-specific fields equal to an integer number of octets. The mobile station shall set these bits to '0'.

1 2.7.3.5 Release Order

2

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

3

ORDQ – Order qualification code.

4

The mobile station shall set this field to the order qualification code, in accordance with Table 2.7.3-1.

5

6

RSC_MODE_IND – Reduced slot cycle mode indicator.

7

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.

8

9

10

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'.

11

12

13

14

RSCI – Reduced slot cycle index.

15

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.

16

17

18

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 field
6 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 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

9 RSC_END_TIME_VALUE – Reduced slot cycle mode end time value.

10 If RSC_MODE_IND is equal 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 system time, in
14 units of time specified by RSC_END_TIME_UNIT(modulo 16),
15 at which the mobile station is to exit the reduced slot cycle
16 mode.

17

18

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

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

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.

1 2.7.4 Information Records

2 On the r-csch, information records may be included in the *Status Response Message*, the
3 *Extended Status Response Message*, and the *Device Information Message*. On the r-dsch,
4 information records may be included in the *Origination Continuation Message*, the *Enhanced*
5 *Origination Message*, the *Flash With Information Message*, the *Extended Flash With*
6 *Information Message*, the *Service Request Message*, the *Service Response Message*, the
7 *Status Message*, and the *Status Response Message*. Table 2.7.4-1 lists the information
8 record type values that may be used with each message type. The following sections
9 describe the contents of each of the record types in detail.

10

1

Table 2.7.4-1. Information Record Types

Information Record	Record Type (binary)	QUAL_INFO_TYPE (binary)	Message Type	r-csc h	r-dsch	P_REV_I N_USE⁸⁵
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	
Called Party Subaddress	00010100	-	Flash	N	Y	≥ 4
		-	Origination Continuation	N	Y	

⁸⁵ P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

Information Record	Record Type (binary)	QUAL_INFO_TYPE (binary)	Message Type	r-csch	r-dsch	P_REV_I N_USE ⁸⁵
		-	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
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

Information Record	Record Type (binary)	QUAL_INFO_TYPE (binary)	Message Type	r-csch	r-dsch	P_REV_I N_USE⁸⁵
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*.

1 2.7.4.1 Reserved

2

1 2.7.4.2 Keypad Facility

2 This information record can be included in a *Flash With Information Message* and allows the
 3 user to send characters entered via a keyboard or other such terminal.

4

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following field:

{

CHAR _i	8
-------------------	---

}

5

6 CHAR_i – Character.

7 The mobile station shall include one occurrence of this field
 8 for each character entered. The mobile station shall set each
 9 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

1 2.7.4.3 Called Party Number

2 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

1 2.7.4.4 Calling Party Number

2 This information record can be included in a *Flash With Information Message* and identifies
 3 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
----------	---

4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

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.

Table 2.7.4.4-1. Presentation Indicators

Description	PI (binary)
Presentation allowed	00
Presentation restricted	01
Number not available	10
Reserved	11

SI – Screening indicator.

This field indicates how the calling number was screened.

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.

Table 2.7.4.4-2. Screening Indicators

Description	SI (binary)
User-provided, not screened	00
User-provided, verified and passed	01
User-provided, verified and failed	10
Network-provided	11

CHARi – Character.

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'.

RESERVED – Reserved bits.

The mobile station shall set this field to '00000'.

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 Message*
 3 to return the mobile station's preferred call mode and call-related information.

4 If P_REV_IN_USE_s 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 mobile-
 11 terminated call, the mobile station shall set this field to '1'.

12 PRI_SERVICE – Primary service option.
 13 The mobile station shall set this field to the value specified in
 14 [30], corresponding to the current primary service option. If
 15 no primary service option is active, the mobile station shall
 16 set this field to '0000000000000000'.

17 SEC_SERVICE – Secondary service option.
 18 The mobile station shall set this field to the value specified in
 19 [30], corresponding to the current secondary service option. If
 20 no secondary service option is active, the mobile station shall
 21 set this field to '0000000000000000'.

22 RESERVED – Reserved bits.
 23 The mobile station shall set this field to '0000000'.

24

1 2.7.4.7 Terminal Information

2 This information record can be included in a *Status Message*, a *Status Response Message*,
 3 or an *Extended Status Response Message* to return configuration information about the
 4 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)

5

6 MOB_P_REV – Protocol revision of the mobile station.

7 If the status request does not specify a band class, the mobile
 8 station shall set this field to '00001100'; otherwise, the
 9 mobile station shall set this field to the MOB_P_REV
 10 associated with the requested band class and operating mode.

11 MOB_MFG_CODE⁸⁶ – Manufacturer code.

12 This field identifies the manufacturer of the mobile station.

13 The mobile station shall set this field to the manufacturer
 14 code assigned to its manufacturer.

15 MOB_MODEL – Model number.

16 This number is assigned by the manufacturer for a particular
 17 model.

18 The mobile station shall set this field to the model number
 19 assigned by the manufacturer for this mobile station.

⁸⁶ This information will not be accurate if the ME uses an ESN with a 14-bit manufacturer code or includes a pseudo-ESN based on MEID.

1 RESERVED – Reserved bits.
2 The mobile station shall add reserved bits as needed in order
3 to make the length of the entire information record equal to
4 an integer number of octets. The mobile station shall set
5 these bits to '0'.
6

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 class assigned to the mobile station.

8

9

MOB_TERM_HOME – Home (non-roaming) registration enable indicator.

10

If the mobile station is configured to receive mobile station terminated calls when not roaming, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'. See 2.6.5.3.

11

12

13

14

MOB_TERM_FOR_SID – Foreign SID roaming registration enable indicator.

15

If the mobile station is configured to receive mobile station terminated calls when it is a foreign SID roamer, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'. See 2.6.5.3.

16

17

18

19

MOB_TERM_FOR_NID – Foreign NID roaming registration enable indicator.

20

If the mobile station is configured to receive mobile station terminated calls when it is a foreign NID roamer, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'. See 2.6.5.3.

21

22

23

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

1 2.7.4.9 Security Status

2 This information record can be included in a *Status Message* or a *Status Response Message*
 3 to return the authentication, encryption, and voice privacy modes of the mobile station.

4

Type-Specific Field	Length (bits)
AUTH_MODE	2
ENCRYPT_MODE	2
PRIVATE_LCM	1
RESERVED	3

5

6 AUTH_MODE – Authentication mode.

7 If the mobile station provided standard authentication
 8 information at the initiation of this call, the mobile station
 9 shall set this field to '01'; otherwise, the mobile station shall
 10 set this field to '00'. All other values are reserved.

11 ENCRYPT_MODE – Message encryption mode.

12 The mobile station shall set this field to the value shown in
 13 Table 3.7.2.3.2.8-2 corresponding to the message encryption
 14 mode currently in use for this call.

15 PRIVATE_LCM – Private long code mask indicator.

16 If the mobile station is using the private long code mask for
 17 this call, the mobile station shall set this field to '1'. If the
 18 mobile station is using the public long code mask for this call,
 19 the mobile station shall set this field to '0'.

20 RESERVED – Reserved bits.

21 The mobile station shall set this field to '000'.

22

1 2.7.4.10 Connected Number

2 This information record can be included in a *Flash With Information Message* to identify the
 3 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
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

- IMSI_CLASS – If IMSI_O is a class 0 IMSI, the mobile station shall set this field to '0'; otherwise, the mobile station shall set this field to '1'.
- IMSI_ADDR_NUM – Number of IMSI_O address digits.
If IMSI_O is a class 1 IMSI, the mobile station shall set this field to four less than the number of digits in the NMSI; otherwise, the mobile station shall set this field to '000'.
- MCC_O – Mobile Country Code of the operational IMSI.
The mobile station shall set this field to MCC_O_s. (see 2.3.1).
- IMSI_O_11_12 – The 11th and 12th digits of the operational IMSI.
The mobile station shall set this field to IMSI_O_11_12_s. (see 2.3.1).
- IMSI_O_S – Last ten digits of the operational IMSI.
The mobile station shall set this field to IMSI_O_S. (see 2.3.1.)
- RESERVED – Reserved bit.
The mobile station shall set this field to '0'.

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

7

8

9

If the mobile station has a R-UIM which indicates that UIM ID is to be used, the mobile station shall set this field to UIM ID (see [40]); otherwise, the mobile station shall set this field to its ESN_p (see 2.3.2).

10

1 2.7.4.13 Band Class Information

2 This information record can be included in a *Status Response Message*, or an *Extended*
 3 *Status Response Message* to return band class information about the mobile station.

Type-Specific Field	Length (bits)
BAND_CLASS_INFO	8 × RECORD_LEN

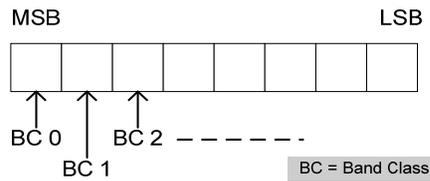
4

5 BAND_CLASS_INFO – Band class information.

6 This field indicates which band classes are supported by the
 7 mobile station.

8 The mobile station shall set the Nth most significant bit of
 9 this field to ‘1’ if the Nth band class defined in [45] is
 10 supported by the mobile station; otherwise, the mobile station
 11 shall set the Nth most significant bit of this field to ‘0’.

12 Example of this field coding is shown in Figure 2.7.4.13-1.



13

14 **Figure 2.7.4.13-1. BAND_CLASS_INFO field coding**

15 The mobile station shall add reserved bits as needed in order
 16 to make the length of the entire information record equal to
 17 an integer number of octets. The mobile station shall set
 18 these bits to ‘0’.

19

1 2.7.4.14 Power Class Information

2 This information record can be included in a *Status Response Message*, or an *Extended*
 3 *Status Response Message* to return power class information about the mobile station.

4

Type-Specific Field	Length (bits)
MAX_EIRP	8

5

6 MAX_EIRP – Maximum effective isotropic radiated power (EIRP).

7 The mobile station shall set this field to the minimum EIRP at
 8 maximum output (in dBW) for the mobile station plus 60 (see
 9 [11]). When the mobile station output power is expressed in
 10 ERP, it may be converted to EIRP by adding 2 dB to the ERP
 11 value.⁸⁷

12

⁸⁷ 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.

1 2.7.4.15 Operating Mode Information

2 This information record can be included in a *Status Response Message* or an *Extended*
 3 *Status Response Message* to return operating mode information about the mobile station.

4

5

Type-Specific Field	Length (bits)
OP_MODE_INFO	8 × RECORD_LEN

6

7 OP_MODE_INFO – Operating mode information.

8 This field indicates which operating modes are supported by
 9 the mobile station in the band class for which information is
 10 requested.

11 This field currently consists of the following subfields which
 12 are included in the information record in the order shown in
 13 Table 2.7.4.15-1 for P_REV_IN_USE_S less than or equal to
 14 three and in Table 2.7.4.15-2 for P_REV_IN_USE_S greater
 15 than three.

16

17 **Table 2.7.4.15-1. OP_MODE for P_REV_IN_USE_S 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

18

Table 2.7.4.15-2. OP_MODE for P_REV_IN_USE_s Greater Than Three

Subfield	Length (bits)	Subfield Description	Standards
OP_MODE0	1	CDMA mode	
OP_MODE1	1	CDMA mode ⁸⁸	
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.

⁸⁸ The mobile station shall set OP_MODE1 the same as OP_MODE0.

1 2.7.4.16 Service Option Information

2 This information record can be included in a *Status Response Message*, or an *Extended*
 3 *Status Response Message* to return service option information about the mobile station.

4

Type-Specific Field	Length (bits)
---------------------	---------------

One or more occurrences of the following field:

{

RESERVED	6
FORWARD_SUPPORT	1
REVERSE_SUPPORT	1
SERVICE_OPTION	16

}

5

6 The mobile station shall include one occurrence of the following record for each service
 7 option supported:

- 8 RESERVED – Reserved bits.
 9 The mobile station shall set this field to ‘000000’.
- 10 FORWARD_SUPPORT – Support indicator for Forward Traffic Channel.
 11 The mobile station shall set this field to ‘1’ if the service
 12 option specified in the SERVICE_OPTION field is supported on
 13 the Forward Traffic Channel.
- 14 REVERSE_SUPPORT – Support indicator for Reverse Traffic Channel.
 15 The mobile station shall set this field to ‘1’ if the service
 16 option specified in the SERVICE_OPTION field is supported on
 17 the Reverse Traffic Channel.
- 18 SERVICE_OPTION – Service option.
 19 The mobile station shall set this field to the value specified in
 20 [30] for the service option supported.

21

22

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

}

4

5 The mobile station shall include one occurrence of the following record for each specified
6 multiplex option according to the previously stated rules:

- 7 MULTIPLEX_OPTION – Supported multiplex option.
- 8 The mobile station shall set this field to the number of the
9 supported multiplex option from the set {1, 2, 3, 4, 5, 6, 7, 8,
10 9, 10, 11, 12, 13, 14, 15, 16} (e.g., 1 corresponds to Multiplex
11 Option 1).
- 12 FOR_NUM_BITS – Forward Traffic Channel number of bits per frame.
- 13 If FOR_NUM_BITS = '00000000', then the specified multiplex
14 option in this record shall indicate the supported multiplex
15 option for the Reverse Traffic Channel only. In this case, no
16 further interpretation of the FOR_NUM_BITS field shall be
17 made. The mobile station shall not set both FOR_NUM_BITS
18 and REV_NUM_BITS equal to '00000000' in the same
19 information record.
- 20 If MULTIPLEX_OPTION is equal to 1, 3, 5, 7, 9, 11, 13, or 15,
21 this field consists of the subfields specified in Table 2.7.4.17-
22 1 which are included in the information record in the order
23 shown in the table. The subfields in Table 2.7.4.17-1 refer to
24 the number of bits per frame supported on the Fundamental
25 Channel of the Forward Traffic Channel.

26

Table 2.7.4.17-1. Forward Fundamental Traffic Channel Number of Bits per Frame for Forward Multiplex Option 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
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

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

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

1 2.7.4.19 Called Party Subaddress

2 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
-------	---

}

3

4 EXTENSION_BIT – The extension bit.

5 The mobile station shall set this field to ‘1’.

6 SUBADDRESS_TYPE – Type of subaddress.

7 The mobile station shall set this field to the
 8 SUBADDRESS_TYPE value shown in Table 2.7.4.19-1
 9 corresponding to the type of the subaddress, as defined in [7],
 10 Section 4.5.8.

11

12 **Table 2.7.4.19-1. Subaddress Types**

Description	SUBADDRESS TYPE (binary)
NSAP (see [34])	000
User specified	010
Reserved	others

13

14 ODD/EVEN_INDICATOR – The indicator of odd/even bits.

15 The mobile station shall set this field to the
 16 ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2
 17 corresponding to the indicator of even/odd bits, as defined in
 18 [7], Section 4.5.8. This field is only used when the type of
 19 subaddress is “User specified” and the coding is BCD.

20

1

Table 2.7.4.19-2. Odd/Even Indicator

Description	ODD/EVEN INDICATOR (binary)
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.

12

13

When interworking with CCITT Recommendation X.25 networks, BCD coding should be applied.

14

15

16

1 2.7.4.20 Calling Party Subaddress

2 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 _i	8
-------------------	---

}

3

4 EXTENSION_BIT – The extension bit.

5 The mobile station shall set this field to ‘1’.

6 SUBADDRESS_TYPE – Type of subaddress.

7 The mobile station shall set this field to the
8 SUBADDRESS_TYPE value shown in Table 2.7.4.19-1
9 corresponding to the type of the subaddress, as defined in [7],
10 Section 4.5.10.

11 ODD/EVEN_INDICATOR – The indicator of odd/even bits.

12 The mobile station shall set this field to the
13 ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2
14 corresponding to the indicator of even/odd bits, as defined in
15 [7], Section 4.5.10. It is only used when the type of
16 subaddress is “User specified” and the coding is BCD.

17 RESERVED – Reserved bits.

18 The mobile station shall set this field to ‘000’.

19 CHAR_i – Character.

20 The mobile station shall include one occurrence of this field
21 for each character in the calling party subaddress.

22 When the SUBADDRESS_TYPE field is equal to ‘000’, the
23 NSAP address shall be encoded using the preferred binary
24 encoding specified in [35].

25 When the SUBADDRESS_TYPE field is set to ‘010’, user-
26 specified subaddress field is encoded according to the user
27 specification, subject to a maximum length of 20 octets.
28 When interworking with [36] networks, BCD coding should be
29 applied.

30

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 _i	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_i – 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 2.7.4.22 Power Control Information

2 This information record can be included in a *Status Response Message*, or an *Extended*
 3 *Status Response Message* to return the minimum power control step size supported by the
 4 mobile station (see 2.1.2.3.2).

Type-Specific Field	Length (bits)
MIN_PWR_CNTL_STEP	3
RESERVED	5

5

6 MIN_PWR_CNTL_STEP – Minimum power control step size
 7 The mobile station shall set this field to the PWR_CNTL_STEP
 8 value associated with the minimum closed loop power control
 9 step size shown in Table 3.7.3.3.2.25-1 that the mobile
 10 station supports.

11 RESERVED – Reserved bits.
 12 The mobile station shall set this field to ‘00000’.

13

1 2.7.4.23 IMSI_M

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_M_p.

Type-Specific Field	Length (bits)
IMSI_M_CLASS	1
IMSI_M_ADDR_NUM	3
MCC_M	10
IMSI_M_11_12	7
IMSI_M_S	34
RESERVED	1

4

5 IMSI_M_CLASS – IMSI_M Class assignment of the mobile station.

6 The mobile station shall set this field to '0'.

7 IMSI_M_ADDR_NUM – Number of IMSI_M_p address digits.

8 The mobile station shall set this field to '000'.

9 MCC_M – Mobile Country Code of the MIN based IMSI.

10 The mobile station shall set this field the MCC_M_p. See 2.3.1.

11 IMSI_M_11_12 – The 11th and 12th digits of IMSI_M.

12 The mobile station shall set this field to IMSI_M_11_12_p.
 13 See 2.3.1.

14 IMSI_M_S – Last ten digits of the IMSI_M.

15 The mobile station shall set this field to IMSI_M_S_p. See
 16 2.3.1.

17 RESERVED – Reserved bit.

18 The mobile station shall set this field to '0'.

19

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_p 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_p.
 16 See 2.3.1.

17 IMSI_T_11_12 – The 11th and 12th digits of the IMSI_T_p.
 18 The mobile station shall set this field to IMSI_T_11_12_p.
 19 See 2.3.1.

20 IMSI_T_S – Last ten digits of the IMSI_T_p.
 21 The mobile station shall set this field to IMSI_T_S_p. See 2.3.1.

22 RESERVED – Reserved bit.
 23 The mobile station shall set this field to '0'.

24

1 2.7.4.25 Capability Information

2 This information record identifies whether the following optional or MOB_P_REV dependent
 3 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 × 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
RPCPOWER_CONTROL _MODE_01_SUPPORTED	1
F_SCH_DELAYED_ARQ_SUPPORTED	1
R_SCH_DELAYED_ARQ_SUPPORTED	1
SO_73_OP_0_SUPPORTED	1
RESERVED	0 - 7 (as needed)

2

3 ACCESS_ENTRY_HO

– Access Entry Handoff Support.

4

5

6

7

This field identifies the mobile station's support for access entry handoff (see 2.6.2.3). The mobile station shall set this field to '1' if access entry handoff is supported; otherwise, the 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; otherwise,
4			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 pilot
13			beacons. The mobile station shall set this field to '1' if hopping
14			pilot beacons are supported; otherwise, this field shall be set to
15			'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 _p is equal to '0000101', 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	QPCH	-	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.

1 The mobile station shall set this field to '1' to indicate that the
 2 mobile station supports the Control Hold Mode; otherwise, the
 3 mobile station shall set this field to '0'.

4 **GATING_RATE_SET** – Set of supported Reverse Pilot gating rates.
 5
 6 If CHS_SUPPORTED is included and is set to '1', the mobile
 7 station shall set this field to value shown in Table 2.7.4.25-1
 8 corresponding to the set of supported reverse pilot gating
 9 rates; otherwise the mobile station shall omit this field.

10 **Table 2.7.4.25-1. Set of Supported Reverse Pilot Gating Rates**

GATING_RATE SET field (binary)	Gating Rates Capability
00	Gating rates 1
01	Gating rates 1 and ½
10	Gating rates 1, ½ and ¼
11	Reserved

11
 12 **EXT_CAP_INCLUDED** – Extended Capabilities Included indicator.
 13 The mobile station shall set this field to '1' to indicate that
 14 extended capability indicators are included in this record;
 15 otherwise, the mobile station shall set this field to '0'.
 16 **MABO** – Mobile Assisted Burst Operation capability indicator.
 17 If EXT_CAP_INCLUDED is set to '0', the mobile station shall omit
 18 this field; otherwise, the mobile station shall include this field
 19 and set it as follows:
 20 The mobile station shall set this field to '1' if it supports the
 21 Mobile Assisted Burst Operation capability; otherwise, the
 22 mobile station shall set this field to '0'.
 23 **SDB** – Short Data Burst supported indicator.
 24 If EXT_CAP_INCLUDED is set to '0', the mobile station shall
 25 omit this field; otherwise, the mobile station shall include this
 26 field and set it as follows:
 27 If MOB_P_REV_p is greater or equal to 11 and if the mobile
 28 station supports packet data service as specified in [42], the
 29 mobile station shall set this field to '1'⁸⁹.

⁸⁹ Short Data Burst Capability support is mandatory for the mobile station with MOB_P_REV_p greater than or equal to 11 that supports packet data service as specified in [42]

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 feature
21 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 feature
29 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 number 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~~RPC_MODE_01_SUPPORTED – Reverse Power Control Mode 01
 20 supported indicator.
 21 The mobile station shall set this field to '1' if the mobile
 22 station supports reverse power control mode '01' for ~~RC11~~
 23 and RC12 reverse link RC08; otherwise, the mobile station
 24 shall set this field to '0'.
- 25 F_SCH_DELAYED_ARQ_SUPPORTED – Forward Supplemental Channel Delayed ARQ
 26 Support indicator.
 27 The mobile station shall set this field to '1' if the mobile
 28 station supports the use of delayed ARQ for forward link RC
 29 11 or 12.
- 30 R_SCH_DELAYED_ARQ_SUPPORTED – Reverse Supplemental Channel Delayed ARQ
 31 Support indicator.
 32 The mobile station shall set this field to '1' if the mobile
 33 station supports the use of delayed ARQ for reverse link RC 8.
- 34 SO_73_OP_0_SUPPORTED – Service Option 73 Operating Point '0' support indicator
 35 The mobile station shall set this field to '1' if the mobile
 36 station supports encoding and decoding at the operating point
 37 '0' for service option 73.
- 38 RESERVED – Reserved bits.
 39 The mobile station shall add reserved bits as needed in order
 40 to make the length of the entire information record equal to
 41 an integer number of octets. The mobile station shall set
 42 these bits to '0'.

43

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

1 2.7.4.27 Channel Configuration Capability Information

2 This information record can be included in a *Status Response Message* or an *Extended*
 3 *Status Response Message* to return channel configuration capability information about the
 4 mobile station.

5

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)

6

7 OTD_SUPPORTED – OTD supported indicator.

8

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'.

9

10

- 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 information.
 14 If the DCCH_SUPPORTED field is set to '1', the mobile station
 15 shall include this field and set it as described in 2.7.4.27.2;
 16 otherwise the mobile station shall omit this field.
- 17 FOR_SCH_SUPPORTED – Forward Supplemental Channel supported indicator.
 18 The mobile station shall set this field to '1' if the mobile
 19 station supports the Forward Supplemental Channel;
 20 otherwise, the mobile station shall set this field to '0'.
- 21 FOR_SCH Type-
 22 specific fields – Forward Supplemental Channel Configuration Capability
 23 Information.
 24 If the FOR_SCH_SUPPORTED field is set to '1', the mobile
 25 station shall include this field and set it as described in
 26 2.7.4.27.3; otherwise the mobile station shall omit this field.
- 27 REV_SCH_SUPPORTED – Reverse Supplemental Channel supported indicator.
 28 The mobile station shall set this field to '1' if the mobile
 29 station supports the Reverse Supplemental Channel;
 30 otherwise, the mobile station shall set this field to '0'.
- 31 REV_SCH Type-
 32 specific fields – Reverse Supplemental Channel Configuration capability
 33 information.
 34 If the REV_SCH_SUPPORTED field is set to '1', the mobile
 35 station shall include this field and set it as described in
 36 2.7.4.27.4; otherwise the mobile station shall omit this field.
- 37 RESERVED_1 – Reserved bits.
 38 If both the FOR_SCH_SUPPORTED and
 39 REV_SCH_SUPPORTED fields are set to '0', the mobile station
 40 shall omit this field. Otherwise, the mobile station shall
 41 include this field and set this field to '00'.
- 42 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 '1';
39 otherwise, the mobile station shall set this field to '0'.
- 40 **REV_PDCH Capability**
- 41 **Type-specific fields** – Forward Packet Data Channel capability information.

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 × FOR_FCH_LEN
REV_FCH_LEN	3
REV_FCH_RC_MAP	3 × 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. [If RC_BITMAP_CAPABILITY_EXT_ALLOWED_s is '0', then the mobile station shall not set this field to a value greater than 3.](#)

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'.

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

REV_FCH_LEN – Reverse 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 REV_FCH_RC_MAP field. [If RC_BITMAP_CAPABILITY_EXT_ALLOWED_s is '0', then the mobile station shall not set this field to a value greater than 2.](#)

REV_FCH_RC_MAP – Reverse Fundamental Radio Configuration information.

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 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 2.7.4.27.1-2.

The mobile station shall set each indicator to '1' if the corresponding Radio Configuration on the Reverse 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 2.7.4.27.1-2. Reverse 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
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 × FOR_DCCH_LEN
REV_DCCH_LEN	3
REV_DCCH_RC_MAP	3 × 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

DCCH_FRAME_SIZE (binary)	Description
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. [If RC_BITMAP_CAPABILITY_EXT_ALLOWEDs is '0', then the mobile station shall not set this field to a value greater than 3.](#)
- 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'. The
5			mobile station shall set any unused bits in the field to '0'.
6	REV_DCCH_LEN	–	Reverse Dedicated Control Channel Configuration information
7			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. If
11			RC_BITMAP_CAPABILITY_EXT_ALLOWEDs is '0', then the
12			mobile station shall not set this field to a value greater than 2.
13	REV_DCCH_RC_MAP	–	Reverse Dedicated Control Channel Radio Configuration
14			information.
15			The mobile station shall set this field as described below to
16			indicate which Radio Configurations (see [2]) are supported by
17			the mobile station on the Reverse Dedicated Control Channel.
18			This field consists of the sequence of 1-bit indicators, each
19			indicating the mobile station support for specific Radio
20			Configuration. Bit positions of these indicators in the field
21			and corresponding Radio Configurations are specified in Table
22			2.7.4.27.1-2.
23			The mobile station shall set each indicator to '1' if the
24			corresponding Radio Configuration on the Reverse Dedicated
25			Control Channel is supported by the mobile station;
26			otherwise, the mobile station shall set the indicator to '0'. The
27			mobile station shall set any unused bits in the field to '0'.
28			

2.7.4.27.3FOR_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 × 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. [If RC_BITMAP_CAPABILITY_EXT_ALLOWED_s is '0', then the mobile station shall not set this field to a value greater than 3.](#)

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

FOR_MAX_TURBO_BLOCK_SIZE REV_MAX_TURBO_BLOCK_SIZE FOR_MAX_CONV_BLOCK_SIZE REV_MAX_CONV_BLOCK_SIZE (binary)	Block Size	
	R-SCH RC 3, and 5, and 8 F-SCH RC 3, 4, 6, and 7, 11, and 12	R-SCH RC 4 and 6 F-SCH RC 5, 8 and 9
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	

- 21
 22 FOR_CONV_SUPPORTED– Forward Convolutional Coding supported indicator.

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, 8	R-SCH RC 4, 6
	F-SCH RC 3, 4, 6, 7, 11, 12	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

1 2.7.4.27.4 REV_SCH Type-Specific Fields

2 The Reverse Supplemental Channel configuration capability information included in the
 3 REV_SCH Type-specific fields contains the following subfields:

4

REV_SCH_LEN	3
REV_SCH_RC_MAP	3 × 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)

5

6 REV_SCH_LEN – Reverse Supplemental Channel information length in units of
 7 3 bits.

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_SCH_RC_MAP field. [If](#)
 11 [RC_BITMAP_CAPABILITY_EXT_ALLOWED_s is '0', then the](#)
 12 [mobile station shall not set this field to a value greater than 2.](#)

13 REV_SCH_RC_MAP – Reverse Supplemental Channel Radio Configuration
 14 capability.

15 The mobile station shall set this field as described below to
 16 indicate which Radio Configurations (See [2] Table 2.1.3.1-1)
 17 are supported by the mobile station on the Reverse
 18 Supplemental Channel.

19 This field consists of the sequence of 1-bit indicators, each
 20 indicating the mobile station support for specific Radio
 21 Configuration. Bit positions of these indicators in the field
 22 and corresponding Radio Configurations are specified in Table
 23 2.7.4.27.1-2.

1 The mobile station shall set each indicator to '1' if the
2 corresponding Radio Configuration on the Reverse
3 Supplemental Channel is supported by the mobile station;
4 otherwise, the mobile station shall set the indicator to '0'. The
5 mobile station shall set any unused bits in the field to '0'.

6 REV_SCH_NUM – Number of Reverse Supplemental Channels

7 The mobile station shall set this field to the number of
8 Reverse Supplemental Channels supported by the mobile
9 station.

10 If the REV_SCH_NUM field is greater than zero, the mobile
11 station shall include one occurrence of the following 8 fields
12 for each Reverse Supplemental Channel supported by the
13 mobile station. The first occurrence is SCH0 related
14 information. The second occurrence (if any) is SCH1 related
15 information.

16 REV_TURBO_SUPPORTED – Reverse Turbo Coding supported indicator.

17 If the mobile station supports Turbo Coding on this Reverse
18 Supplemental Channel, it shall set this field to '1'; otherwise,
19 the mobile station shall set this field to '0'.

20 REV_MAX_TURBO_BLOCK_SIZE– Reverse maximum Turbo Coding block size.

21 If the field REV_TURBO_SUPPORTED is set to '0', the mobile
22 station shall omit this field; otherwise the mobile station shall
23 include this field and set it to the maximum block size
24 allowed for Turbo coding (see Table 2.7.4.27.3-1).

25 REV_CONV_SUPPORTED– Reverse Convolutional Coding supported indicator.

26 If the mobile station supports Convolutional Coding on this
27 Reverse Supplemental Channel, it shall set this field to '1';
28 otherwise, the mobile station shall set this field to '0'.

29 REV_MAX_CONV_BLOCK_SIZE – Reverse maximum Convolutional Coding block size.

30 If the field REV_CONV_SUPPORTED is set to '0', the mobile
31 station shall omit this field; otherwise the mobile station shall
32 include this field and set it to the maximum block size
33 allowed for Convolutional coding (see Table 2.7.4.27.3-1).

34 REV_FRAME_40_SUPPORTED – Reverse 40ms frame indicator.

35 If the mobile station supports 40 ms frames on this Reverse
36 Supplemental Channel, it shall set this field to '1'; otherwise,
37 the mobile station shall set this field to '0'.

38 REV_FRAME_80_SUPPORTED – Reverse 80ms frame indicator.

39 If the mobile station supports 80 ms frames on this Reverse
40 Supplemental Channel, it shall set this field to '1'; otherwise,
41 the mobile station shall set this field to '0'.

42 REV_MAX_RATE – Maximum reverse supplemental channels rate

43 The mobile station shall set this field according to Table
44 2.7.4.27.3-2 to indicate the maximum reverse supplemental
45 channel frame rate supported.

1

2

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.

1 The mobile station shall set each indicator to '1' if the
 2 corresponding Radio Configuration on the Forward Packet
 3 Data Channel is supported by the mobile station; otherwise,
 4 the mobile station shall set the indicator to '0'. The mobile
 5 station shall set any unused bits in the subfield to '0'.
 6

7 **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

8
 9 **CH_CONFIG_SUP_MAP_LEN** – Channel Configuration Supported Bitmap length.
 10 The mobile station shall set this field to one less than the
 11 number of 3 bit units required to specify the length, in bits, of
 12 the CH_CONFIG_SUP_MAP field.

13 **CH_CONFIG_SUP_MAP** – Channel Configuration Supported Bitmap.
 14 The mobile station shall set this subfield as described below
 15 to indicate which physical channel configurations are
 16 supported by the mobile station.

17 This subfield consists of the sequence of 1-bit indicators, each
 18 indicating the mobile station support for a specific channel
 19 configuration. Bit positions of these indicators in the subfield
 20 and corresponding channel configurations are specified in
 21 Table 2.7.4.27.5-2.

22 The mobile station shall set each indicator to '1' if the
 23 corresponding channel configuration is supported by the
 24 mobile station; otherwise, the mobile station shall set the
 25 indicator to '0'. The mobile station shall set any unused bits
 26 in the field to '0'.

27 The mobile station shall set the subfield F-PDCH_1 to '1', or
 28 the subfield F-PDCH_2 to '1', or the subfields F-PDCH_1 and
 29 F-PDCH_2 to '1'.

30 The mobile station shall set the subfields F-PDCH_1 and F-
 31 PDCH_3 to the same value.

32 The mobile station shall set the subfields F-PDCH_2 and F-
 33 PDCH_4 to the same value.

1

Table 2.7.4.27.5-2. F-PDCH Channel Configurations Supported

Subfield	Length (bits)	Subfield Description
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

REV_PDCH_CH_CONFIG_SUP_MAP_LEN – Reverse Packet Data Channel Channel Configuration Supported Bitmap length.

1 The mobile station shall set this field to one less than the
2 number of 3 bit units required to specify the length, in bits, of
3 the REV_PDCH_CH_CONFIG_SUP_MAP field.

4 REV_PDCH_CH_CONFIG_SUP_MAP – Reverse Packet Data Channel Channel
5 Configuration Supported Bitmap.

6 The mobile station shall set this subfield as described below
7 to indicate which physical channel configurations are
8 supported by the mobile station.

9 This subfield consists of the sequence of 1-bit indicators, each
10 indicating the mobile station support for a specific channel
11 configuration. Bit positions of these indicators in the subfield
12 and corresponding channel configurations are specified in
13 Table 2.7.4.27.6-2.

14 The mobile station shall set each indicator to '1' if the
15 corresponding channel configuration is supported by the
16 mobile station; otherwise, the mobile station shall set the
17 indicator to '0'. The mobile station shall set any unused bits
18 in the field to '0'. The mobile station shall set the
19 indicator corresponding to the channel configuration F/R-
20 PDCH_0 to '1'.

21 The mobile station shall set the subfield F/R-PDCH_1 to '1',
22 or the subfield F/R-PDCH_2 to '1', or the subfields F/R-
23 PDCH_1 and F/R-PDCH_2 to '1'.

24 The mobile station shall set the subfields F/R-PDCH_1 and
25 F/R-PDCH_3 to the same value.

26 The mobile station shall set the subfields F/R-PDCH_2 and
27 F/R-PDCH_4 to the same value.

1

Table 2.7.4.27.6-2. F/R-PDCH Channel Configurations Supported

Subfield of F/R-PDCH Channel Configurations	Length (bits)	Subfield Description
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

6

7

The mobile station shall set this field to the maximum size encoder packet it supports as specified in Table 2.7.4.27.6-3. (see [2] and [3]).

8

Table 2.7.4.27.6-3. Maximum supported encoder packet size.

REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET (binary)	Maximum supported encoder packet size. (bits)
00	12312
01	15384
10	18456
11	Reserved

9

10

1 2.7.4.27.7 FUNDICATED_BCMC Type-specific Fields

2 The Fundicated Channel BCMC capability information included in the
3 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)

5
6 FUNDICATED_BCMC_CH_SUP_MAP_LEN – Fundicated Channel BCMC channel
7 configurations supported bitmap length.

8 The mobile station shall set this field to one less than the
9 number of 3 bit units required to specify the length, in bits, of
10 the FUNDICATED_BCMC_CH_SUP_MAP field.

11 FUNDICATED_BCMC_CH_SUP_MAP – Fundicated Channel BCMC channel configurations
12 supported bitmap.

13 The mobile station shall set this subfield as described below
14 to indicate which physical channel configurations are
15 supported by the mobile station.

16 This subfield consists of the sequence of 1-bit indicators, each
17 indicating the mobile station support for a specific channel
18 configuration. Bit positions of these indicators in the subfield
19 and corresponding channel configurations are specified in
20 Table 2.7.4.27.7-1.

21 The mobile station shall set each indicator to '1' if the
22 corresponding channel configuration is supported by the
23 mobile station; otherwise, the mobile station shall set the
24 indicator to '0'. The mobile station shall set any unused bits
25 in the field to '0'.

26 The mobile station shall not set all the indicators in this
27 subfield to '0'.

28

1

Table 2.7.4.27.7-1. Fundicated BCMC Channel Configurations Supported

Subfield	Length (bits)	Subfield Description
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)

5

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
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- NUM_MO_FOR_FCH – Number of Forward Fundamental Channel Multiplex Options.
The mobile station shall set this field to the number of the Forward Fundamental Channel Multiplex Options supported by the mobile station.
If NUM_MO_FOR_FCH is not equal to '0000', the mobile station shall include NUM_MO_FOR_FCH occurrences of the following two fields for each supported Forward Fundamental Channel multiplex option:
- MO_FOR_FCH – Forward Fundamental Channel multiplex option.
The mobile station shall set this field to the Forward Fundamental Channel multiplex option.
- FOR_NUM_BITS_FCH – Forward 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 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

1
2

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 _S [FFCH_NBIT_TABLE_ID][0000])
R2	1	Second highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0001])
R3	1	Third highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0010])
R4	1	Forth highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0011])
R5	1	Fifth Second highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0100])
R6	1	Sixth highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0101])
R7	1	Seventh highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0110])
R8	1	Eighth highest possible number of bits on F-FCH (specified by NUM_BITS _S [FFCH_NBIT_TABLE_ID][0111])

3

4 NUM_MO_REV_FCH – Number of Reverse Fundamental Channel Multiplex Options.
 5 The mobile station shall set this field to the number of the
 6 Reverse Fundamental Channel Multiplex Options supported
 7 by the mobile station.

8

9

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11

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:

12

MO_REV_FCH – Reverse Fundamental Channel multiplex option.

13

14

The mobile station shall set this field to the Reverse Fundamental Channel multiplex option.

15

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

1
2

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 _S [RFCH_NBIT_TABLE_ID][0000])
R2	1	Second highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0001])
R3	1	Third highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0010])
R4	1	Forth highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0011])
R5	1	Fifth Second highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0100])
R6	1	Sixth highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0101])
R7	1	Seventh highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0110])
R8	1	Eighth highest possible number of bits on R-FCH (specified by NUM_BITS _S [RFCH_NBIT_TABLE_ID][0111])

3

4
5

NUM_MO_FOR_DCCH – Number of Forward Dedicated Control Channel Multiplex Options.

6
7
8

The mobile station shall set this field to the number of the Forward Dedicated Control Channel Multiplex Options supported by the mobile station.

9
10
11
12

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:

13
14
15

MO_FOR_DCCH – Forward Dedicated Control Channel multiplex option.
The mobile station shall set this field to the Forward Dedicated Control Channel multiplex option.

16
17

NUM_MO_REV_DCCH – Number of Reverse Dedicated Control Channel Multiplex Options.

- 1 The mobile station shall set this field to the number of the
 2 Reverse Dedicated Control Channel Multiplex Options
 3 supported by the mobile station.
- 4 If NUM_MO_REV_DCCH is not equal to '0000', the mobile
 5 station shall include NUM_MO_REV_DCCH occurrence of the
 6 following one field for each supported Reverse Dedicated
 7 Control Channel multiplex option:
- 8 MO_REV_DCCH – Reverse Dedicated Control Channel multiplex option.
- 9 The mobile station shall set this field to the Reverse Dedicated
 10 Control Channel multiplex option.
- 11 NUM_MO_FOR_SCH – Number of Forward Supplemental Channel Multiplex Options.
- 12 The mobile station shall set this field to the number of
 13 Forward Supplemental Channel Multiplex Options supported
 14 by the mobile station included in this message. The mobile
 15 station shall include the multiplex option associated with the
 16 highest data rate it supports for each combination of MuxPDU
 17 type, rate set, and block size⁹¹.
- 18 If NUM_MO_FOR_SCH is not equal to '0000', the mobile
 19 station shall include NUM_MO_FOR_SCH occurrence of the
 20 following two fields:
- 21 FOR_SCH_ID – Forward Supplemental Channel identifier.
- 22 The mobile station shall set this field to specify the Forward
 23 Supplemental Channel to which the Forward Supplemental
 24 multiplex option supported by the mobile station
 25 corresponds.
- 26 MO_FOR_SCH – Forward Supplemental Channel multiplex option.
- 27 The mobile station shall set this field to the Forward
 28 Supplemental Channel multiplex option associated with the
 29 maximum data rate (see [3]) that the mobile station
 30 supports⁹².
- 31 NUM_MO_REV_SCH – Number of Reverse Supplemental Channel Multiplex Options.

⁹¹ 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]).

⁹² 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 size⁹³.

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 supports⁹⁴.

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:

⁹³ 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]).

⁹⁴ 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

1 2.7.4.29 Geo-Location Capability

2 This information record identifies the geo-location capabilities of the mobile station. The
 3 mobile station shall use the following fixed-length format for the type-specific fields:

4

Type-Specific Field	Length (bits)
GEO_LOC	3
RESERVED	5

5

6

GEO_LOC – Geo-location.

7

The mobile station shall set this field to the value shown in Table 2.7.4. 29-1.

8

9

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.	

10

RESERVED – Reserved bit.

11

The mobile station shall set this field to ‘00000’.

12

13

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 × 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.

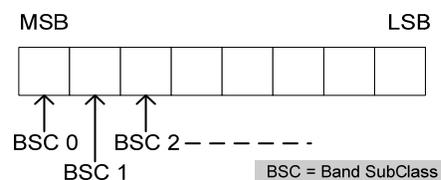


Figure 2.7.4.30-1. BAND_SUBCLASS_INFO field coding

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'.

1 2.7.4.31 Global Emergency Call

2 This information record identifies that an emergency call is being originated. This record
 3 may be included in a *Flash With Information Message* or an *Extended Flash With Information*
 4 *Message* and allows the user to originate an emergency call.

5

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 _i	4 or 8
-------------------	--------

} (NUM_CHAR)

MS_ORIG_POS_LOC_IND	1
RESERVED	0 to 7 (as needed)

6

7 NUM_INCL – Dialed number included indicator.
 8 The mobile station shall set this field to ‘1’ to indicate that the
 9 dialed digits are included in this information record;
 10 otherwise, the mobile station shall set this field to ‘0’.

11 DIGIT_MODE – Digit mode indicator.
 12 If NUM_INCL is set to ‘1’, the mobile station shall set this field
 13 to indicate whether the dialed digits are 4-bit DTMF codes or
 14 8-bit ASCII codes using a specified numbering plan;
 15 otherwise, the mobile station shall omit this field.
 16 To originate the call using the binary representation of DTMF
 17 digits, the mobile station shall set this field to ‘0’. To originate
 18 the call using ASCII characters, the mobile station shall set
 19 this field to ‘1’.

20 NUMBER_TYPE – Type of number.
 21 If NUM_INCL is set to ‘1’ and the DIGIT_MODE field is set to
 22 ‘1’, the mobile station shall set this field to the
 23 NUMBER_TYPE value shown in Table 2.7.1.3.2.4-2
 24 corresponding to the type of the called number, as defined in
 25 [7], Section 4.5.9; otherwise, the mobile station shall omit this
 26 field.

27 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 mobile
6			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 _s 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 type-
 4 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 service
 3 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. The
 9 details of the QoS parameters may be found in documents
 10 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

1 2.7.4.34 Encryption Capability

2 This information record identifies the encryption capability of the mobile station.

3

Type-Specific Field	Length (bits)
SIG_ENCRYPT_SUP	8
UI_ENCRYPT_SUP	8

4

5 SIG_ENCRYPT_SUP – Signaling Encryption supported indicator.

6 The mobile station shall set this field to indicate which
7 signaling encryption algorithms are supported by the mobile
8 station, as shown in Table 2.7.1.3.2.1-5.

9 The mobile station shall set the subfields as follows:

10 The mobile station shall set the CMEA subfield to ‘1’.

11 The mobile station shall set each subfield to ‘1’ if the
12 corresponding signaling encryption 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 ‘00000’.

17 UI_ENCRYPT_SUP – User information encryption supported indicator.

18 The mobile station shall set this field to indicate the
19 supported user information encryption algorithms, as shown
20 in Table 2.7.1.3.2.4-9.

21 The mobile station shall set each subfield to ‘1’ if the
22 corresponding user information encryption algorithm is
23 supported by the mobile station; otherwise, the mobile station
24 shall set the subfield to ‘0’.

25 The mobile station shall set the RESERVED subfield to
26 ‘000000’.

27

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 2.7.1.3.2.1-
11 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 × 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 × 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_ME⁹⁵ – Mobile equipment electronic serial number.
 10 The mobile station shall set this field to ESN_p (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

⁹⁵ The ESN_ME field is always set to ESN_p 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 × 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_p (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:

{	
CHARi	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 CHARi fields in this message.

CHARi – Character.

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_s and NID_s, included in this message. If the mobile station does not have any stored service configuration associated with SID_s and NID_s, 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_s.
- 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_s.

The mobile station shall include NUM_SYNC_ID occurrences of the following variable length record:

- SYNC_ID_LEN - Service Configuration synchronization identifier length.

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
<i>{(NUM_SO + 1)}</i>	
SERVICE_OPTION	16
<i>}{(NUM_SO+ 1)}</i>	
SO_GROUP_INCL	1
NUM_SO_GROUP	0 or 5
<i>{ (NUM_SO_GROUP + 1)}</i>	
SO_BITMAP_IND	2
SO_GROUP_NUM	0 or 5
SO_BITMAP	0 or 2 ⁽¹⁺ SO_BITMAP_IND)
<i>} (NUM_SO_GROUP + 1)</i>	
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 mode.

1 The mobile station shall set this field as specified in Table
 2 2.7.1.3.2.1-8 to the sign of the registered slot cycle index,
 3 SLOT_CYCLE_INDEX_REG (see 2.6.2.1.1). The absolute value of
 4 the registered slot cycle index, SLOT_CYCLE_INDEX_REG,
 5 is specified in the SLOT_CYCLE_INDEX field of this message.

6 SO_INCL - Service option inclusion indicator.

7 If there is a service option supported by the mobile station
 8 which does not belong to any service option group assigned
 9 (see [30]), the mobile station shall set this field '1'; otherwise,
 10 the mobile station shall set this field to '0'.

11 NUM_SO - Number of service option included indicator.

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 to the
 14 number of service option to be included minus one.

15 If SO_INCL is set to '1', the mobile station shall include NUM_SO + 1 occurrences of the
 16 following variable-field record:

17 SERVICE_OPTION - Supported service option.

18 If the SO_INCL is set to '0', the mobile station shall omit this
 19 field; otherwise, the mobile station shall set this field as
 20 follow:

21 If the requested operating mode is CDMA, the mobile station
 22 shall include one occurrence of this field for each service
 23 option supported by the mobile station (see [30]) which has no
 24 service option group number assigned.

25 SO_GROUP_INCL - Service option group inclusion indicator.

26 If the requested operating mode is CDMA, the mobile station
 27 shall set this field to '1' if any of the supported service option
 28 belongs to a service option group; otherwise, the mobile
 29 station shall set this field to '0'.

30 NUM_SO_GROUP - Number of service option group included indicator.

31 If the SO_GROUP_INCL is set to '0', the mobile station shall
 32 omit this field; otherwise, the mobile station shall set this field
 33 to the number of service option groups to be included minus
 34 one.

35 If SO_GROUP_INCL is set to '1', the mobile station shall include NUM_SO_GROUP + 1
 36 occurrences of the following variable-field record:

37 SO_BITMAP_IND - Service option bitmap indicator.

38 The mobile station shall set this field as defined in Table
 39 2.7.1.3.2.4-10.

40 SO_GROUP_NUM - Service option group number.

41 If SO_BITMAP_IND is included and not set to '00', the mobile
 42 station shall include this field and set this field to service
 43 option group number defined in [30], of the bitmap to be
 44 included in this message; otherwise, the mobile station shall
 45 omit this field.

- 1 SO_BITMAP – Service option bitmap.
- 2 If SO_BITMAP_IND is included and is not set to '00', the
3 mobile station shall include the bitmap of the service option
4 group (SO_GROUP_NUM); otherwise, the mobile station shall
5 omit this field.
- 6 When the service option bitmap is included, if there are more
7 than $(2^{(1+SO_BITMAP_IND)})$ service options defined in [30]
8 for the service option group [SO_GROUP_NUM], the mobile
9 station shall include the bitmap containing the least
10 significant bits $(2^{(1+SO_BITMAP_IND)})$ for the service option
11 group.
- 12 RESERVED – Reserved bits.
- 13 The mobile station shall set this field to '0' to make the entire
14 record octet-aligned.
- 15

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)

SO_GROUP_INCL - Service option group inclusion indicator.

If the requested operating mode is CDMA, the mobile station shall set this field to '1' if any of the supported service option belongs to a service option group; otherwise, the mobile station shall set this field to '0'.

NUM_SO_GROUP - Number of service option group included indicator.

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:

42 The mobile station shall set this field to '1' if the service
 43 option specified in the SERVICE_OPTION field is supported on
 44 the Reverse Traffic Channel.

- 1 SERVICE_OPTION – Service option.
- 2 If the requested operating mode is CDMA, the mobile station
- 3 shall includes one occurrence of this field for each service
- 4 option supported by the mobile station (see [30]) which has no
- 5 service option group number assigned.
- 6 RESERVED – Reserved bits.
- 7 The mobile station shall set all the bits of this field to '0' to
- 8 make the entire record octet-aligned.
- 9

1 2.7.4.43 Band Class and Band Subclass Information

2 When this information record is included in a *Status Response Message* or an *Extended*
 3 *Status Response Message*, the mobile station shall include all the band classes and band
 4 subclasses that it supports.

5

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)
----------	-------------------

6 NUM_BAND_CLASS – Number of band classes.

7 The mobile station shall set this field to the number of band
 8 classes included in the record minus one.

9 The mobile station shall include NUM_BAND_CLASS + 1 occurrences of the following
 10 record:

11 BAND_CLASS_REC_LEN – Band class information record length.

12 The mobile station shall set this field to the number of octets
 13 included in this record starting from this field and ending
 14 with BAND_CLASS_RESERVED.

15 BAND_CLASS – Band class

16 This field specifies a band class supported by the mobile
 17 station. The mobile station shall set this field according to the
 18 values defined in [45].

19 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 set
4 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 field
8 to the number of band subclass supported indicator fields
9 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 Nth 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

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 × 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 × 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_ME⁹⁷ – Mobile equipment MEID.
 12 The mobile station shall set this field to MEID_p (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

⁹⁷ The MEID_ME field is always set to MEID_p and never carries EUIM ID value.

1 2.7.4.46 Additional Geo-Location Capability

2 This information record identifies the additional geo-location capabilities of the mobile
 3 station. The mobile station shall use the following fixed-length format for the type-specific
 4 fields:

5

Type-Specific Field	Length (bits)
ADD_GEO_LOC_LEN	4
ADD_GEO_LOC	8 × ADD_GEO_LOC_LEN
RESERVED	4

- 6
- 7 ADD_GEO_LOC_LEN – The length of Additional Geo-location.
 8 The mobile station shall set this field to the length, in units of
 9 octets, of the ADD_GEO_LOC field.
- 10 ADD_GEO_LOC – Additional Geo-location.
 11 The mobile station shall set this field to indicate which geo-
 12 location capabilities are supported by the mobile station.
 13 This field consists of the subfields shown in 2.7.4.46-1.
 14 The mobile station shall set each subfield to ‘1’ if the
 15 corresponding capability is supported by the mobile station;
 16 otherwise, the mobile station shall set the subfield to ‘0’.
- 17

1

Table 2.7.4.46-1. Encoding Additional Geo-location Codes⁹⁸

Subfield	Length (bits)	Subfield Description
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
Modernized GPS	1	Support of Modernized GPS
RESERVED	6	Reserved bits

2

RESERVED - Reserved bits for octet alignment.

3

The mobile station shall set these bits to '0'.

4

5

⁹⁸ Additional values for this field can be defined in [30].

3 REQUIREMENTS FOR BASE STATION CDMA OPERATION

This section defines requirements that are specific to CDMA base station equipment and operation.

3.1 Reserved

3.2 Reserved

3.3 Security and Identification

3.3.1 Authentication

The base station may be equipped with a database that includes unique mobile station authentication keys, shared secret data, or both for each registered mobile station in the system. This database is used for authentication of mobile stations that are equipped for authentication operation.

If the base station supports mobile station authentication, it shall provide the following capabilities: The base station shall send and receive authentication messages and perform the authentication calculations described in 2.3.12.1.

3.3.2 Encryption

If the base station supports mobile station authentication (see 3.3.1), it may also support message encryption by providing the capability to send encryption control messages and the ability to perform the operations of encryption and decryption as specified in 2.3.12.2.

3.3.3 Voice Privacy

If the base station supports mobile station authentication (see 3.3.1), it may also support voice privacy using the private long code mask, as specified in 2.3.12.3.

3.3.4 Extended-Encryption

If the base station supports mobile station authentication (see 3.3.1), it may also support Extended-Encryption for Signaling Messages and User Information as specified in 2.3.12.4.

3.3.5 Message Integrity

If the base station supports message integrity, it shall provide the message integrity capability as specified in 2.3.12.5.5.

3.4 Supervision

3.4.1 Access Channel or Enhanced Access Channel

The base station shall continually monitor each active Access Channel or Enhanced Access Channel or both. The base station should provide control in cases of overload by 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.

3.6.1.2 Pilot Channel Operation

The Pilot Channel (see [2]) is a reference channel which the mobile station uses for acquisition, timing, and as a phase reference for coherent demodulation.

The base station shall continually transmit a Pilot Channel for every CDMA Channel supported by the base station, unless the base station is classified as a hopping pilot beacon.

1 3.6.1.3 Sync Channel Operation

2 The Sync Channel (see [2]) provides the mobile station with system configuration and
3 timing information.

4 The base station shall transmit at most one Sync Channel for each supported CDMA
5 Channel. The base station shall support a Sync Channel on at least one member of the
6 preferred set of frequency assignments that it supports. The base station should support a
7 Sync Channel on every member of the preferred set of frequency assignments that it
8 supports.

9 If the base station operates in Band Class 0 or Band Class 3, and supports the Primary
10 CDMA Channel, then the base station shall transmit a Sync Channel on the Primary CDMA
11 Channel.

12 The base station shall continually send the *Sync Channel Message* on each Sync Channel
13 that the base station transmits.

14 3.6.2 Common Channel Processing

15 3.6.2.1 Paging Channel and Forward Common Control Channel Procedures

16 During *Common Channel Processing*, the base station transmits the Paging Channel or the
17 Forward Common Control Channel (see [2]) which the mobile station monitors to receive
18 messages while the mobile station is in the *Mobile Station Idle State* and the *System Access*
19 *State*.

20 The base station may transmit up to seven Paging Channels on each supported CDMA
21 Channel. The base station may transmit up to seven Forward Common Control Channels
22 and one Primary Broadcast Control Channel on each supported CDMA Channel.

23 For each Paging Channel that the base station transmits, the base station shall continually
24 send valid Paging Channel messages (see 3.7.2), which may include the *Null Message* (see
25 [4]).

26 The base station shall not send any message which is not completely contained within two
27 consecutive Paging Channel or Forward Common Control Channel slots, unless the
28 processing requirements for the message explicitly specify a different size limitation.⁹⁹

29 3.6.2.1.1 CDMA Channel Determination

30 The base station may send the *CDMA Channel List Message Extended CDMA Channel List*
31 *Message* and the *Flex Duplex CDMA Channel List Message* on the Paging Channel. When
32 the base station supports Broadcast Control Channel, the base station shall send the
33 *Extended CDMA Channel List Message* and may send the *Flex Duplex CDMA Channel List*
34 *Message* on the Primary Broadcast Control Channel.

35 When the base station sends a *CDMA Channel List Message* or an *Extended CDMA Channel*
36 *List Message* or a *Flex Duplex CDMA Channel List Message* on the Paging Channel or on the

⁹⁹See, for example, [14] which specifies processing requirements for the *Data Burst Message*.

1 Primary Broadcast Control Channel, the base station shall determine the assigned band
 2 and CDMA Channel using the mobile station hashing procedures for the corresponding
 3 P_REV_IN_USE.

4 3.6.2.1.2 Common Channel Determination

5 To determine the mobile station's assigned Paging Channel or Forward Common Control
 6 Channel, the base station shall use the hash function specified in 2.6.7.1 with the following
 7 inputs:

- 8 • IMSI_S based on the IMSI with which the mobile station registered (see 2.3.1)
- 9 • Number of Paging Channels or Forward Common Control Channels which the base
 10 station transmits on the mobile station's assigned CDMA Channel.

11 3.6.2.1.3 Paging Slot Determination

12 To determine the assigned Paging Channel or Forward Common Control Channel slots for a
 13 mobile station with a given slot cycle index, the base station shall select a number PGSLOT
 14 using the hash function specified in 2.6.7.1 with the following inputs:

- 15 • IMSI_S based on the IMSI with which the mobile station registered (see 6.3.1)
- 16 • Maximum number of Paging Channel or Forward Common Control Channel slots
 17 (2048).

18 The assigned Paging Channel or Forward Common Control Channel slots for the mobile
 19 station are those slots for which

$$20 \quad (\lfloor t/4 \rfloor - \text{PGSLOT}) \bmod (16 \times T) = 0,$$

21 where t is the System Time in 20ms frames, and T is the slot cycle length in units of 1.28
 22 seconds given by

$$23 \quad T = 2^i,$$

24 where i is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6,
 25 and 7.

26 When the base station is able to determine that the mobile station is operating in the
 27 slotted mode and is able to determine the mobile station's preferred slot cycle index, the
 28 base station determines the slot cycle index to use for the mobile station as follows:

- 29 • If the base station is able to determine that the mobile station is operating in the
 30 reduced slot cycle mode, the base station uses $\min(\text{reduced slot cycle index,}$
 31 $\text{preferred slot cycle index, maximum slot cycle index})$ for the mobile station's slot
 32 cycle index.
- 33 • Otherwise:
 - 34 + If the base station supports negative values of slot cycle index, the base station
 35 uses $\min(\text{preferred slot cycle index, maximum slot cycle index})$ for the mobile
 36 station's slot cycle index.
 - 37 + Otherwise, the base station uses $\max(0, \min(\text{preferred slot cycle index,}$
 38 $\text{maximum slot cycle index}))$ for the mobile station's slot cycle index.

1 When the base station is not able to determine whether the mobile station is operating in
 2 the slotted mode, or the base station is not able to determine the mobile station's preferred
 3 slot cycle index, the base station uses for the mobile station's slot cycle index the smaller of
 4 the maximum slot cycle index and 1.

5 3.6.2.1.4 Message Transmission and Acknowledgment Procedures

6 The Paging Channel or Forward Common Control Channel acknowledgment procedures
 7 facilitate the reliable exchange of messages between the base station and the mobile station
 8 on the f-csch and r-csch. The acknowledgment procedures and requirements are described
 9 in [4].

10 3.6.2.2 Overhead Information

11 The base station sends overhead messages to provide the mobile station with the
 12 information that it needs to operate with the base station. If the base station supports the
 13 Primary Broadcast Control Channel for overhead messages and is not a pilot beacon, it
 14 shall support the Forward Common Control Channel for all other general page information.

15 The base station with a P_REV greater than six that supports Broadcast Control Channel
 16 shall send overhead messages on the Primary Broadcast Control Channel. The base
 17 station with a P_REV greater than six that does not support the Broadcast Control Channel
 18 shall send overhead messages on each Paging Channel. The overhead messages sent on
 19 the Primary Broadcast Control Channel are:

- 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. *Enhanced Access Parameters Message*
- 28 9. *ANSI-41 RAND Message*
- 29 10. *BCMC Service Parameters Message*
- 30 11. *Access Point Identification Message*
- 31 12. *Access Point Identification Text Message*
- 32 13. *Access Point Pilot Information Message*
- 33 14. *General Overhead Information Message*
- 34 15. *Frequent General Overhead Information Message*
- 35 16. *Flex Duplex CDMA Channel List Message*
- 36 17. *Alternative Technologies Information Message*

1 The overhead messages on the Paging Channel are:

- 2 1. *System Parameters Message*
- 3 2. *Neighbor List Message* (Band Class 0 only)
- 4 3. *Access Parameters Message*
- 5 4. *CDMA Channel List Message*
- 6 5. *Extended System Parameters Message*
- 7 6. *Extended Neighbor List Message* (band classes other than Band Class 0)
- 8 7. *General Neighbor List Message*
- 9 8. *Global Service Redirection Message*
- 10 9. *User Zone Identification Message*
- 11 10. *Private Neighbor List Message*
- 12 11. *Extended Global Service Redirection Message*
- 13 12. *Extended CDMA Channel List Message*
- 14 13. *BCMC Service Parameters Message*
- 15 14. *Access Point Identification Message*
- 16 15. *Access Point Identification Text Message*
- 17 16. *Access Point Pilot Information Message*
- 18 17. *General Overhead Information Message*
- 19 18. *Frequent General Overhead Information Message*
- 20 19. *Flex Duplex CDMA Channel List Message*
- 21 20. *Alternative Technologies Information Message*

22 The base station shall maintain a configuration sequence number (CONFIG_SEQ) for
23 configuration messages transmitted on the Paging Channel, and shall increment
24 CONFIG_SEQ modulo 64 whenever the base station modifies the following messages:

- 25 1. *System Parameters Message*
- 26 2. *Neighbor List Message* (Band Class 0 only)
- 27 3. *CDMA Channel List Message*
- 28 4. *Extended System Parameters Message*
- 29 5. *Extended Neighbor List Message* (band classes other than Band Class 0)
- 30 6. *General Neighbor List Message*
- 31 7. *Global Service Redirection Message*
- 32 8. *User Zone Identification Message*
- 33 9. *Private Neighbor List Message*

- 1 10. *Extended Global Service Redirection Message*
- 2 11. *Extended CDMA Channel List Message*
- 3 12. *Access Point Identification Message*
- 4 13. *Access Point Identification Text Message*
- 5 14. *Access Point Pilot Information Message*
- 6 15. *General Overhead Information Message*
- 7 16. *Frequent General Overhead Information Message*
- 8 17. *Flex Duplex CDMA Channel List Message*
- 9 18. *Alternative Technologies Information Message*

10 The base station shall maintain a configuration sequence number (CONFIG_SEQ) for
 11 configuration messages transmitted on the Primary Broadcast Control Channel, and shall
 12 increment CONFIG_SEQ modulo 64 whenever the base station modifies the following
 13 messages:

- 14 1. *ANSI-41 System Parameters Message*
- 15 2. *User Zone Identification Message*
- 16 3. *Private Neighbor List Message*
- 17 4. *Extended Global Service Redirection Message*
- 18 5. *Extended CDMA Channel List Message*
- 19 6. *MC-RR Parameters Message*
- 20 7. *Universal Neighbor List Message*
- 21 8. *Access Point Identification Message*
- 22 9. *Access Point Identification Text Message*
- 23 10. *Access Point Pilot Information Message*
- 24 11. *General Overhead Information Message*
- 25 12. *Frequent General Overhead Information Message*
- 26 13. *Flex Duplex CDMA Channel List Message*
- 27 14. *Alternative Technologies Information Message*

28 The base station shall maintain an access configuration sequence number
 29 (ACC_CONFIG_SEQ) for the Access Channel, and shall increment ACC_CONFIG_SEQ
 30 modulo 64 whenever the base station modifies the *Access Parameters Message*.

31 The base station shall maintain an access configuration sequence number
 32 (ACC_CONFIG_SEQ) for the Enhanced Access Channel, and shall increment
 33 ACC_CONFIG_SEQ modulo 64 whenever the base station modifies the *Enhanced Access*
 34 *Parameters Message*.

1 On each Primary Broadcast Control Channel which the base station transmits, the base
 2 station shall send each of the following system overhead messages at least once per T_{1b}
 3 seconds:

- 4 1. *Extended CDMA Channel List Message*
- 5 2. *ANSI-41 System Parameters Message*
- 6 3. *MC-RR Parameters Message*
- 7 4. *Enhanced Access Parameters Message*
- 8 5. *Universal Neighbor List Message*

9 If the base station supports Primary Broadcast Control Channels, and the base station is
 10 sending the *ANSI-41 RAND Message*, it shall send it at least once per T_{1b} seconds.

11 If the base station supports Primary Broadcast Control Channels, and the base station is
 12 sending the *Access Point Pilot Information Message*, it shall send it completely at
 13 least once during every 16 paging slot interval that satisfies the following:

14 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{APPIM_PERIOD_INDEX}} = 0$, where SYS_TIME_s is the system time in units of
 15 80 ms.

16 If the base station supports Primary Broadcast Control Channels, and the base station is
 17 sending the *Access Point Identification Message*, it shall send it at least once per T_{1b}
 18 seconds.

19 If the base station supports Primary Broadcast Control Channels, and the base station is
 20 sending the *Access Point Identification Text Message*, it shall send it at least once per
 21 T_{1b} seconds.

22 If the base station supports Primary Broadcast Control Channels, and the base station is
 23 sending the *General Overhead Information Message*, it shall send it completely at
 24 least once during every 16 paging slot interval that satisfies the following:

25 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{GEN_OVHD_CYCLE_INDEX}} = 0$, where SYS_TIME_s is the system time in units
 26 of 80 ms.

27 If the base station supports Primary Broadcast Control Channels, and the base station is
 28 sending the *Alternative Technologies Information Message*, it shall send it completely
 29 at least once during every 16 paging slot interval that satisfies the following:

30 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{ATIM_CYCLE_INDEX}} = 0$, where SYS_TIME_s is the system time in units of
 31 80 ms.

32 If the base station supports Primary Broadcast Control Channels, and the base station is
 33 sending the *Frequent General Overhead Information Message*, it shall send it at least
 34 once per T_{1b} seconds.

35 If the base station supports Primary Broadcast Control Channels, and the base station is
 36 sending the *Flex Duplex CDMA Channel List Message*, it shall send it at least once
 37 per T_{1b} seconds.

38 On each of the Paging Channels the base station transmits, the base station shall send
 39 each of the following system overhead messages at least once per T_{1b} seconds:

- 1 1. *Access Parameters Message*
- 2 2. *CDMA Channel List Message*
- 3 3. *Extended System Parameters Message*
- 4 4. *System Parameters Message*

5 For the messages sent on the Paging Channel, if the base station is operating in Band
 6 Class 1, Band Class 3, or Band Class 4 and MIN_P_REV is less than seven, the base
 7 station shall send the *Extended Neighbor List Message*, and may also send the
 8 *General Neighbor List Message*. If the base station is operating in Band Class 0 and
 9 MIN_P_REV is less than seven, the base station shall send the *Neighbor List*
 10 *Message*, and may also send the *General Neighbor List Message*. If the base station
 11 is sending the *Neighbor List Message*, it shall send it at least once per T_{1b} seconds.
 12 If the base station is sending the *Extended Neighbor List Message*, it shall send it at
 13 least once per T_{1b} seconds. If the base station is sending the *General Neighbor List*
 14 *Message*, it shall send it at least once per T_{1b} seconds. If the base station is sending
 15 the *Frequent General Overhead Information Message*, it shall send it at least once per
 16 T_{1b} seconds. If the base station is sending *Access Point Pilot Information Message*, it
 17 shall send it completely at least once during every 16 paging slot interval that
 18 satisfies the following:

19 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{APPIM_PERIOD_INDEX}} = 0$, where SYS_TIME_s is the system time in units
 20 of 80 ms. If the base station is sending *Access Point Identification Message and*
 21 *Access Point Identification Text Message*, it shall send these messages at least once
 22 per T_{1b} seconds. If the base station is sending the *General Overhead Information*
 23 *Message*, it shall send it completely at least once during every 16 paging slot
 24 interval that satisfies the following:

25 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{GEN_OVHD_CYCLE_INDEX}} = 0$, where SYS_TIME_s is the system time in
 26 units of 80 ms. If the base station is sending the *Alternative Technologies Information*
 27 *Message*, it shall it shall send it completely at least once during every 16 paging slot
 28 interval that satisfies the following:

29 $\lfloor \text{SYS_TIME}_s / 16 \rfloor \bmod 2^{\text{ATIM_CYCLE_INDEX}} = 0$, where SYS_TIME_s is the system time in units of
 30 80 ms.

31 Overhead Messages sent on the Primary Broadcast Control Channel shall be transmitted
 32 on a continuous basis, consecutively.

33 If the base station uses addressing modes requiring use of only the IMSI_M_S, independent
 34 of values of the IMSI_M_11_12 and MCC_M, the base station shall set IMSI_T_SUPPORTED
 35 to '0', MCC to '1111111111', and IMSI_11_12 to '1111111' in the *Extended System*
 36 *Parameters Message*, *MC-RR Parameters Message*, and *ANSI-41 System Parameters*
 37 *Message*.

38 If the base station sets IMSI_T_SUPPORTED to '1', the base station shall not set
 39 PREF_MSID_TYPE to '00' in the *Extended System Parameters Message* and *ANSI-41 System*
 40 *Parameters Message*.

1 The base station may send a *Global Service Redirection Message* on any given Paging
2 Channel. If the message is sent, the base station shall send it at least once per T_{1b}
3 seconds.

4 If P_REV is greater than or equal to six, the base station may send an *Extended Global*
5 *Service Redirection Message*. If the message is sent, the base station shall send it at least
6 once per T_{1b} seconds. The base station may send this message to redirect only those
7 mobile stations with MOB_P_REV equal to or greater than six.

8 When both the *Global Service Redirection Message* and the *Extended Global Service*
9 *Redirection Message* are sent, the base station shall use the *Global Service Redirection*
10 *Message* for mobile stations with MOB_P_REV less than six, and shall use the *Extended*
11 *Global Service Redirection Message* for mobile stations with MOB_P_REV equal to or greater
12 than six. When only the *Global Service Redirection Message* is sent and this message is for
13 mobile station with MOB_P_REV less than six, the base station shall set EXCL_P_REV_MS
14 to '1'.

15 If only the *Global Service Redirection Message* is sent and this message is for redirecting all
16 mobile stations, the base station shall set EXCL_P_REV_MS to '0'.

17 The base station may send a *User Zone Identification Message*. If the message is sent, the
18 base station shall send it at least once per T_{1b} seconds.

19 The base station may send a *Private Neighbor List Message*. If the message is sent, the base
20 station shall send it at least once per T_{1b} seconds.

21 The base station may send an *Extended CDMA Channel List Message*. If the message is
22 sent, the base station shall send it at least once per T_{1b} seconds.

23 The base station may send a *Flex Duplex CDMA Channel List Message*. If the message is
24 sent, the base station shall send it at least once per T_{1b} seconds.

25 3.6.2.3 Mobile Station Directed Messages

26 The base station may send the following messages directed to a mobile station on the f-
27 csch. If the base station sends a message, the base station shall comply with the specified
28 requirements for sending the message, if any:

- 29 1. *Abbreviated Alert Order*
- 30 2. *Audit Order*
- 31 3. *Authentication Challenge Message*
- 32 4. *Base Station Challenge Confirmation Order*
- 33 5. *Channel Assignment Message* (if P_REV_IN_USE < eight)
- 34 6. *Data Burst Message*
- 35 7. *Extended Channel Assignment Message*
- 36 8. *Fast Call Setup Order*
- 37 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 Message*
29 in each Forward Common Control Channel slot. The base station shall not omit both a
30 *General Page Message* and a *Universal Page Message* in two adjacent slots.

31 The base station shall not send an *Extended Channel Assignment Message* that is
32 addressed to multiple mobile stations using the *General Extension Message*.

33 3.6.2.3.1 Processing when the General Page Message is Used

34 The base station shall use the following rules for selecting the Paging Channel or Forward
35 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 station
39 may send the message to the mobile station in any Forward Common Control
40 Channel slot with the position within the slot subject to the following 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' in
29 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 slot,
33 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:

- 40 • If the base station is able to determine that the mobile station is operating in the
41 non-slotted mode, the base station may send the message to the mobile station in
42 any Forward Common Control Channel slot.

- 1 • If the base station is able to determine that the mobile station is capable of
2 operating in the slotted mode and that the mobile station is waiting for a priority
3 access channel assignment, or that the slotted timer in the mobile station is active,
4 the base station may send the message to the mobile station in any Forward
5 Common Control Channel slot with the position within the slot subject to the
6 following limitation:
- 7 – The base station shall not send the message later in the slot than a *Universal*
8 *Page Message* which lacks a mobile station-directed message announcement
9 and which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that
10 mobile station.
- 11 • If the base station is able to determine that the mobile station is operating in the
12 slotted mode and that the mobile station is not waiting for a priority access channel
13 assignment and that the slotted timer in the mobile station is not active and the
14 base station is able to determine the mobile station's slot cycle index (see
15 2.6.2.1.1.3.3), the base station shall send the message at least once in an assigned
16 Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3) or in
17 the following slot, with the position within these two slots subject to the following
18 limitation:
- 19 – The base station shall not send the message later in the slot than a *Universal*
20 *Page Message* that lacks a mobile station-directed message announcement and
21 which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile
22 station.
- 23 • If the base station is not able to determine whether the mobile station is operating
24 in the non-slotted mode, or the base station is not able to determine the mobile
25 station's slot cycle index, the base station shall assume that the mobile station is
26 operating in the slotted mode with a slot cycle index which is the smaller of
27 MAX_SLOT_CYCLE_INDEX and 1. The base station shall send the message at least
28 once in an assigned Forward Common Control Channel slot for the mobile station
29 (see 3.6.2.1.3), or in the following slot, with the position within these two slots
30 subject to the following limitation:
- 31 – The base station shall not send the message later in the slot than a *Universal*
32 *Page Message* that lacks a mobile station-directed message announcement and
33 which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile
34 station.

35 The base station should send messages directed to both mobile stations operating in the
36 slotted mode and mobile stations operating in the non-slotted mode later in the slot than
37 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 operating
5 in the slotted mode, the base station may use broadcast page records (see 3.7.2.3.2.17) in
6 accordance with the broadcast procedures specified in 3.6.2.4.1 to announce the presence
7 of broadcast *Data Burst Messages* on the Paging Channel. The base station should use the
8 rules specified in 3.6.2.4.1.1 for selecting the Paging Channel slot in which to send a
9 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. Since
16 mobile stations operating in slotted mode do not constantly monitor a Paging Channel, it is
17 necessary to use special procedures to ensure that mobile stations operating in the slotted
18 mode are able to receive the message. The base station may either send a broadcast
19 message in many slots, or may send a broadcast message in a predetermined paging slot.
20 This single transmission of the pending broadcast message may be announced by a
21 preceding "broadcast page". A broadcast page is a *General Page Message* record with the
22 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 record
25 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.

1 3.6.2.4.1.1.2 Requirements for Sending Broadcast Messages

2 3.6.2.4.1.1.2.1 Broadcast Delivery Options

3 When transmitting broadcast messages that are to be received by mobile stations operating
4 in the slotted mode and monitoring the Paging Channel, the base station shall use one of
5 the two following procedures to transmit a broadcast message.

6 3.6.2.4.1.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

7 The base station may send a broadcast message using this method without regard to
8 whether periodic broadcast paging is enabled or disabled (see 3.6.2.4.1.1.2.3).

9 When using this method, the base station shall send the broadcast message in a sufficient
10 number of paging slots such that it may be received by any mobile station that is operating
11 in the slotted mode. For example, the base station may send the broadcast message in M
12 successive paging slots where M is the number of slots in a maximum paging cycle as
13 defined in 2.6.2.1.1.3.3.

14 3.6.2.4.1.1.2.1.2 Method 2: Periodic Broadcast Paging

15 If the base station sends a broadcast message using this method, then the base station
16 shall enable periodic broadcast paging (see 3.6.2.4.1.1.2.3).

17 To deliver a broadcast message using this method, the base station should perform the
18 following:

- 19 • If the number and size of the broadcast messages waiting to be sent are such that
20 the messages can be sent in a single slot, the base station should send the
21 broadcast messages in the first slot of the next broadcast paging cycle (see
22 2.6.2.1.1.3.3).
- 23 • If there is a single broadcast message waiting to be sent, the base station should
24 send the broadcast message beginning in the first slot of the next broadcast paging
25 cycle (see 2.6.2.1.1.3.3).
- 26 • Otherwise, the base station should first include a broadcast page for each broadcast
27 message to be sent, in a *General Page Message* that is sent in the first slot of the
28 next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send
29 the related broadcast messages in the paging slots specified in 3.6.2.4.1.1.2.4.

30 3.6.2.4.1.1.2.2 Duplicate Broadcast Message Transmission

31 If the base station sends a broadcast message or a broadcast page and an associated
32 broadcast message more than once when periodic broadcast paging is enabled (see
33 3.6.2.4.1.1.2.3), then all repetitions of the broadcast message or the broadcast page and
34 the associated broadcast message should be sent within $4 \times (B + 3)$ paging slots of the
35 paging slot in which the broadcast message or broadcast page was first sent. ($B + 3$ is the
36 duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

37 When a base station sends a broadcast message or a broadcast page when periodic
38 broadcast paging is enabled (see 3.6.2.4.1.1.2.3), and the base station has a second,
39 different broadcast message to send which contains identical BURST_TYPE and BC_ADDR
40 fields, then the base station shall wait $4 \times (B + 3)$ paging slots after the first slot of the

1 broadcast paging cycle containing the final sending of the first broadcast message or
 2 broadcast page before sending the second, different broadcast message or related
 3 broadcast page.

4 3.6.2.4.1.1.2.3 Periodic Broadcast Paging

5 The base station uses the BCAST_INDEX field of the *Extended System Parameters Message*
 6 to specify the current state of periodic broadcast paging to all mobile stations.

7 To enable periodic broadcast paging, the base station shall set the BCAST_INDEX field of
 8 the *Extended System Parameters Message* to an unsigned 3-bit number in the range 1-7,
 9 equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3. The value of the
 10 BCAST_INDEX field may exceed the value of the MAX_SLOT_CYCLE_INDEX field sent in
 11 the *System Parameters Message*.

12 To indicate that periodic broadcast paging is either disabled or is not supported by the base
 13 station, the base station shall set the BCAST_INDEX field to '000'.

14 3.6.2.4.1.1.2.4 Broadcast Message Slot Determination

15 When a base station uses broadcast paging, it shall determine the slot in which to send the
 16 corresponding broadcast message using the following procedures:

- 17 • The base station shall consider a broadcast page to have been sent in the paging
 18 slot in which the *General Page Message* containing the broadcast page began.
- 19 • The reference slot is defined as the paging slot in which the broadcast page was
 20 sent.
- 21 • Let n represent the ordinal number of the broadcast page relative to other broadcast
 22 pages that are contained in the same *General Page Message* ($n = 1, 2, 3, \dots$). The
 23 base station shall send the broadcast message announced by broadcast page n in
 24 the paging slot that occurs $n \times 3$ paging slots after the reference slot.

25 3.6.2.4.2 Broadcast Messages Sent on the Broadcast Control Channel

26 The base station may transmit *Data Burst Messages* directed to broadcast addresses when
 27 NUM_BCCH_BCAST_s does not equal '000'. When transmitting broadcast messages that
 28 are to be received by mobile stations operating in the slotted mode, the base station may
 29 use enhanced broadcast pages (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with the
 30 broadcast procedures specified in 3.6.2.4.2 to announce the presence of broadcast *Data*
 31 *Burst Messages* on the Broadcast Control Channel. The base station should use the rules
 32 specified in 3.6.2.4.2.1 for selecting the Broadcast Control Channel slot in which to send a
 33 broadcast *Data Burst Message*.

34 3.6.2.4.2.1 Broadcast Procedures for Slotted Mode

35 The base station may announce the presence of broadcast *Data Burst Messages* on the
 36 Broadcast Control Channel by sending an enhanced broadcast page.

37 3.6.2.4.2.1.1 General Overview

38 The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since
 39 mobile stations operating in slotted mode do not constantly monitor a Broadcast Control

1 Channel, it is necessary to use special procedures to ensure that mobile stations operating
2 in the slotted mode are able to receive the message. The base station may either send an
3 enhanced broadcast page in many Forward Common Control Channel slots, directing the
4 mobile station to the appropriate Broadcast Control Channel slot, or the base station may
5 also send an enhanced broadcast page in a predetermined slot, called a broadcast slot, on
6 the Forward Common Control Channel, directing the mobile station to a specified
7 Broadcast Control Channel slot.

8 If pending transmission of the broadcast message is announced by the enhanced broadcast
9 page, mobile stations use the BC_ADDR and the BURST_TYPE fields of the enhanced
10 broadcast page record to determine whether or not to receive the announced broadcast
11 message. The base station sets the value of the BC_ADDR according to the requirements of
12 the standards related to the BURST_TYPE. The timing relationship between the sending of
13 the enhanced broadcast page and the sending of the related broadcast message is specified
14 in the enhanced broadcast page. This timing relationship allows mobile stations to
15 determine which Broadcast Control Channel slot to monitor in order to receive the
16 broadcast message.

17 To reduce the overhead for sending broadcast pages or broadcast messages, a base station
18 may use Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.1.2). When Periodic
19 Enhanced Broadcast Paging is enabled, enhanced broadcast pages are sent only once
20 during a broadcast paging cycle. Mobile stations that are operating in the slotted mode
21 and are configured to receive broadcast messages monitor the Forward Common Control
22 Channel during the broadcast slot in which the enhanced broadcast pages are sent. For
23 the purpose of Periodic Enhanced Broadcast Paging, system time is divided into broadcast
24 paging cycles, each having a duration of $(B + 7)$ Forward Common Control Channel slots,
25 where B is a power of two. In each broadcast paging cycle, the first Forward Common
26 Control Channel slot may contain enhanced broadcast pages.

27 3.6.2.4.2.1.2 Requirements for Sending Broadcast Messages

28 3.6.2.4.2.1.2.1 Broadcast Delivery Options

29 When transmitting broadcast messages that are to be received by mobile stations operating
30 in the slotted mode and monitoring the Forward Common Control Channel/Broadcast
31 Control Channel, the base station shall use one of the two following procedures to transmit
32 a broadcast message.

33 3.6.2.4.2.1.2.1.1 Method 1: Multi-Slot Enhanced Broadcast Paging

34 The base station may send a broadcast message using this method without regard to
35 whether Periodic Enhanced Broadcast Paging is enabled or disabled (see 3.6.2.4.2.1.2.3).

36 When using this method, the base station shall send the enhanced broadcast page in a
37 sufficient number of Forward Common Control Channel slots such that it may be received
38 by any mobile station that is operating in the slotted mode. The enhanced broadcast page
39 then directs mobile stations to a subsequent Broadcast Control Channel slot.

40 The base station shall not send an enhanced broadcast page that directs a mobile station
41 to receive a broadcast message on the Primary Broadcast Control Channel.

1 The base station shall not send a broadcast message on the Forward Common Control
2 Channel.

3 3.6.2.4.2.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

4 If the base station sends a broadcast message using this method, then the base station
5 shall enable Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.3).

6 To deliver a broadcast message using this method, the base station should perform the
7 following:

- 8 • The base station should first include an enhanced broadcast page for each
9 broadcast message to be sent, in a page that is sent on the Forward Common
10 Control Channel in the first slot of the next broadcast paging cycle (see
11 2.6.2.1.1.3.3). The base station should then send the corresponding broadcast
12 messages in the Broadcast Control Channel slots specified in 3.6.2.4.2.1.2.4.

13 The base station shall not send an enhanced broadcast page that directs a mobile station
14 to receive a broadcast message on the Primary Broadcast Control Channel.

15 The base station shall not send a broadcast message on the Forward Common Control
16 Channel.

17 3.6.2.4.2.1.2.2 Duplicate Broadcast Message Transmission

18 If the base station sends an enhanced broadcast page and an associated broadcast
19 message more than once when Periodic Enhanced Broadcast Paging is enabled (see
20 3.6.2.4.2.1.2.3), then all repetitions of the enhanced broadcast page should be sent within
21 $4 \times (B + 7)$ slots of the slot in which the enhanced broadcast page was first sent. ($B + 7$ is
22 the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

23 When a base station sends an enhanced broadcast page when Periodic Enhanced
24 Broadcast Paging is enabled (see 3.6.2.4.2.1.2.3), and the base station has a second,
25 different broadcast message to send which contains identical BURST_TYPE and BC_ADDR
26 fields, then the base station shall wait $4 \times (B + 7)$ paging slots after the first slot of the
27 broadcast paging cycle containing the final sending of the first broadcast message or
28 enhanced broadcast page before sending the second, different enhanced broadcast page.

29 3.6.2.4.2.1.2.3 Periodic Enhanced Broadcast Paging

30 The base station uses the BCAST_INDEX fields of the *MC-RR Parameters Message* to specify
31 the current state of Periodic Enhanced Broadcast Paging to all mobile stations.

32 To enable Periodic Enhanced Broadcast Paging, the base station shall set the
33 BCAST_INDEX field to a non-zero unsigned 3-bit number equal to the broadcast slot cycle
34 index as defined in 2.6.2.1.1.3.3.

35 To indicate that Periodic Enhanced Broadcast Paging is either disabled or is not supported
36 by the base station, the base station shall set the BCAST_INDEX field to '000'.

37 3.6.2.4.2.1.2.4 Broadcast Message Slot Determination

38 When a base station uses broadcast message announcement, it shall determine the slot in
39 which to send the corresponding broadcast message using the following procedures:

- 1 • The base station shall consider an enhanced broadcast page to have been sent in
2 the Forward Common Control Channel slot in which the page message containing
3 the enhanced broadcast page began.
- 4 • The reference slot is defined as the Forward Common Control Channel slot in which
5 the enhanced broadcast page was sent.
- 6 • The base station shall send a first transmission of the broadcast message
7 announced by the enhanced broadcast page in the Broadcast Control Channel slot
8 which begins $40 \text{ ms} \times (1 + \text{TIME_OFFSET})$ later than the beginning of the slot in
9 which the page message containing the enhanced broadcast page began. The base
10 station may send a repetition of the broadcast message announced by the enhanced
11 broadcast page in the Broadcast Control Channel slot which begins $40 \text{ ms} \times (1 +$
12 $\text{REPEAT_TIME_OFFSET})$ later than the Broadcast Control Channel slot in which the
13 first transmission began.

14 3.6.2.4.3 Broadcast Messages Sent on the Forward Common Control Channel

15 The Forward Common Control Channel is used for transmission of broadcast messages
16 only when there is not a secondary Broadcast Control Channel allocated, i.e.,
17 NUM_BCCH_BCAST equals '000'. The base station may transmit *Data Burst Messages*
18 directed to broadcast addresses. When transmitting broadcast messages that are to be
19 received by mobile stations operating in the slotted mode, the base station may use
20 enhanced broadcast page records (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with
21 the broadcast procedures specified in 3.6.2.4.3 to announce the presence of broadcast
22 *Data Burst Messages* on the Forward Common Control Channel. The base station shall
23 send the broadcast messages on the Forward Common Control Channel where the
24 enhanced broadcast page is sent. The base station should use the rules specified in
25 3.6.2.4.3.1 for selecting the Forward Common Control Channel slot in which to send a
26 broadcast *Data Burst Message*.

27 3.6.2.4.3.1 Broadcast Procedures for Slotted Mode

28 The base station may announce the presence of broadcast *Data Burst Messages* on the
29 Forward Common Control Channel by sending an enhanced broadcast page.

30 3.6.2.4.3.1.1 General Overview

31 The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since
32 mobile stations operating in slotted mode do not constantly monitor a Forward Common
33 Control Channel, it is necessary to use special procedures to ensure that mobile stations
34 operating in the slotted mode are able to receive the message. The base station may either
35 send a broadcast message in many Forward Common Control Channel slots, or may send a
36 broadcast message in a predetermined Forward Common Control slot. This single
37 transmission of the pending broadcast message may be announced by a preceding
38 “enhanced broadcast page”.

39 If pending transmission of the broadcast message is announced by the enhanced broadcast
40 page, mobile stations use the BC_ADDR and the BURST_TYPE fields of the enhanced
41 broadcast page record to determine whether or not to receive the announced broadcast

1 message. The base station sets the value of the BC_ADDR according to the requirements of
2 the standards related to the BURST_TYPE. There is a predetermined timing relationship
3 between the sending of the enhanced broadcast page and the sending of the related
4 broadcast message. This timing relationship allows mobile stations to determine which
5 Forward Common Control Channel slot to monitor in order to receive the broadcast
6 message.

7 To reduce the overhead for sending enhanced broadcast pages or broadcast messages, a
8 base station may use periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.1.2). When
9 periodic enhanced broadcast paging is enabled, enhanced broadcast pages or broadcast
10 messages are sent only once during a broadcast paging cycle. Mobile stations that are
11 operating in the slotted mode and are configured to receive broadcast messages monitor
12 the Forward Common Control Channel during the Forward Common Control Channel slot
13 in which the enhanced broadcast pages or broadcast messages are sent. For the purpose
14 of periodic enhanced broadcast paging, system time is divided into broadcast paging cycles,
15 each having a duration of $(B + 7)$ Forward Common Control Channel slots, where B is a
16 power of two. In each broadcast paging cycle, the first Forward Common Control Channel
17 slot may contain enhanced broadcast pages or broadcast messages.

18 3.6.2.4.3.1.2 Requirements for Sending Broadcast Messages

19 3.6.2.4.3.1.2.1 Broadcast Delivery Options

20 When transmitting broadcast messages that are to be received by mobile stations operating
21 in the slotted mode and monitoring the Forward Common Control Channel, the base
22 station shall use one of the two following procedures to transmit a broadcast message.

23 3.6.2.4.3.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

24 The base station may send a broadcast message using this method without regard to
25 whether periodic enhanced broadcast paging is enabled or disabled (see 3.6.2.4.3.1.2.3).

26 When using this method, the base station shall send the broadcast message in a sufficient
27 number of Forward Common Control Channel slots such that it may be received by any
28 mobile station that is operating in the slotted mode. For example, the base station may
29 send the broadcast message in M successive paging slots where M is the number of slots in
30 a maximum paging cycle as defined in 2.6.2.1.1.3.3.

31 3.6.2.4.3.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

32 If the base station sends a broadcast message using this method, then the base station
33 shall enable periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.3).

34 To deliver a broadcast message using this method, the base station should perform the
35 following:

- 36 • If the number and size of the broadcast messages waiting to be sent are such that
37 the messages can be sent in a single slot, the base station should send the
38 broadcast messages in the first slot of the next broadcast paging cycle (see
39 2.6.2.1.1.3.3).

- 1 • If there is a single broadcast message waiting to be sent, the base station should
2 send the broadcast message beginning in the first slot of the next broadcast paging
3 cycle (see 2.6.2.1.1.3.3).
- 4 • Otherwise, the base station should first include an enhanced broadcast page for
5 each broadcast message to be sent, in a *General Page Message* or a *Universal Page*
6 *Message* that is sent in the first slot of the next broadcast paging cycle (see
7 2.6.2.1.1.3.3). The base station should then send the related broadcast messages
8 in the Forward Common Control Channel slots specified in 3.6.2.4.3.1.2.4.

9 3.6.2.4.3.1.2.2 Duplicate Broadcast Message Transmission

10 If the base station sends a broadcast message or an enhanced broadcast page and an
11 associated broadcast message more than once when periodic enhanced broadcast paging is
12 enabled (see 3.6.2.4.3.1.2.3), then all repetitions of the broadcast message or the enhanced
13 broadcast page and the associated broadcast message should be sent within $4 \times (B + 7)$
14 slots of the Forward Common Control Channel slot in which the broadcast message or
15 enhanced broadcast page was first sent. $(B + 7)$ is the duration of the broadcast paging
16 cycle as defined in 2.6.2.1.1.3.3).

17 When a base station sends a broadcast message or an enhanced broadcast page when
18 periodic enhanced broadcast paging is enabled (see 3.6.2.4.3.1.2.3), and the base station
19 has a second, different broadcast message to send which contains identical BURST_TYPE
20 and BC_ADDR fields, then the base station shall wait $4 \times (B + 7)$ Forward Common Control
21 Channel slots after the first slot of the enhanced broadcast paging cycle containing the final
22 sending of the first broadcast message or enhanced broadcast page before sending the
23 second, different broadcast message or related enhanced broadcast page.

24 3.6.2.4.3.1.2.3 Periodic Enhanced Broadcast Paging

25 The base station uses the BCAST_INDEX field of the *MC-RR Parameters Message* to specify
26 the current state of periodic enhanced broadcast paging to all mobile stations.

27 To enable periodic enhanced broadcast paging, the base station shall set the
28 BCAST_INDEX field of the *MC-RR Parameters Message* to an unsigned 3-bit number in the
29 range 1-7, equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3. The value of
30 the BCAST_INDEX field may exceed the value of the MAX_SLOT_CYCLE_INDEX field sent
31 in the *System Parameters Message*.

32 To indicate that periodic enhanced broadcast paging is either disabled or is not supported
33 by the base station, the base station shall set the BCAST_INDEX field to '000'.

34 3.6.2.4.3.1.2.4 Broadcast Message Slot Determination

35 When a base station uses enhanced broadcast paging, it shall determine the slot in which
36 to send the corresponding broadcast message using the following procedures:

- 37 • The base station shall consider an enhanced broadcast page to have been sent in
38 the Forward Common Control Channel slot in which the *General Page Message* or
39 the *Universal Page Message* containing the enhanced broadcast page began.
- 40 • The reference slot is defined as the Forward Common Control Channel slot in
41 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.

When a Quick Paging Channel is supported, the base station shall transmit paging indicators to the mobile station in the assigned positions in the assigned Quick Paging Channel slot. The base station shall set the paging indicators to “ON” if the mobile station is operating in the slotted mode and is to receive the Paging Channel or Forward Common Control Channel in the assigned Paging Channel or Forward Common Control Channel slot following its assigned Quick Paging Channel slot.

When the base station changes CONFIG_MSG_SEQ, the base station should set the paging indicators for all mobile stations to “ON” for each Quick Paging Channel slot for a time interval T (in units of 1.28 seconds), such that

$$T = N \times 2^{\text{MAX_SLOT_CYCLE_INDEX}},$$

where N is an integer greater than or equal to one.

If the base station supports configuration change indicators on the Quick Paging Channel, when the base station changes CONFIG_MSG_SEQ, the base station shall set all configuration change indicators to “ON” for each Quick Paging Channel slot for a time interval of T_{31m} seconds. At all other times, the base station shall set all configuration change indicators to “OFF”.

If the base station does not support configuration change indicators on the Quick Paging Channel, then the base station shall set all configuration change indicators to “OFF”.

When the base station sends a broadcast message using Multi-Slot Broadcast Message Transmission (see 3.6.2.4.1.1.2.1.1), the base station should set all paging indicators to “ON” for the Quick Paging Channel slot which begins 100 ms prior to the beginning of the Paging Channel slot in which the broadcast message begins.

When the base station sends an enhanced broadcast page using Multi-Slot Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.1.1), the base station should set all paging indicators to “ON” for the Quick Paging Channel slot which begins 100 ms prior to the beginning of the Forward Common Control Channel slot in which the message containing the enhanced broadcast page begins.

When the base station sends an enhanced broadcast page using Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.1.2), the base station should set all broadcast indicators to “ON” for the Quick Paging Channel broadcast slot which begins 100 ms prior

1 to the beginning of the Forward Common Control Channel slot in which the message
 2 containing the enhanced broadcast page begins. At all other times, the base station shall
 3 set all broadcast indicators for a Quick Paging Channel broadcast slot to “OFF”.

4 When the base station sends a broadcast page using Periodic Broadcast Paging (see
 5 3.6.2.4.1.1.2.1.2), the base station should set all broadcast indicators to “ON” for the Quick
 6 Paging Channel broadcast slot which begins 100 ms prior to the beginning of the Paging
 7 Channel slot in which the message containing the broadcast page begins. At all other
 8 times, the base station shall set all broadcast indicators for a Quick Paging Channel
 9 broadcast slot to “OFF”.

10 The base station shall set all reserved indicators to “OFF”.

11 3.6.2.5.1 Quick Paging Channel Determination

12 To determine the mobile station’s assigned Quick Paging Channel, the base station shall
 13 use the hash function specified in 2.6.7.1 with the following inputs:

- 14 • IMSI_S based on the IMSI with which the mobile station registered (see 2.3.1)
- 15 • Number of Quick Paging Channels which the base station transmits on the mobile
 16 station’s assigned CDMA Channel.

17 3.6.2.5.2 Quick Paging Channel Slot Determination

18 The mobile station’s assigned Quick Paging Channel slots are those slots for which

$$19 \lfloor (t+5)/4 \rfloor - \text{PGSLOT} \bmod (16 \times T) = 0,$$

20 where t is the System Time in 20ms frames, PGSLOT is selected in the range 0 to 2047 by
 21 using the hash function specified in 2.6.7.1, and T is the slot cycle length in units of 1.28
 22 seconds such that

$$23 T = 2^i,$$

24 and i is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and
 25 7.

26 3.6.2.5.3 Paging Indicator Position Determination

27 To determine the mobile station’s assigned paging indicators, the base station shall use the
 28 same formula as used by the mobile station (see 2.6.2.1.2.2).

29 3.6.2.5.4 Configuration Change Indicator Position Determination

30 Configuration change indicators are transmitted on the first Quick Paging Channel.

31 If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit
 32 positions of the first pair of configuration change indicators in a Quick Paging Channel slot
 33 shall be the last two bits in the first 40 ms half of the Quick Paging Channel slot. The bit
 34 positions of the second pair of configuration change indicators in a Quick Paging Channel
 35 slot shall be the last two bits in the Quick Paging Channel slot.

36 If the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the bit
 37 positions of the first four configuration change indicators in a Quick Paging Channel slot
 38 shall be the last four bits in the first 40 ms half of the Quick Paging Channel slot. The bit

1 position of the second four configuration change indicators in a Quick Paging Channel slot
2 shall be the last four bits in the Quick Paging Channel slot.

3 3.6.2.5.5 Broadcast Indicator Position Determination

4 Broadcast indicators are transmitted on the first Quick Paging Channel.

5 On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps
6 (indicator rate is 4800 bps), the broadcast indicator positions are described as follows:

- 7 • The two Quick Paging Channel bit positions prior to the last two bits in the first 40
8 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The two
9 Quick Paging Channel bit positions prior to the last two bits in a Quick Paging
10 Channel broadcast slot are also broadcast indicators.

11 On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps
12 (indicator rate is 9600 bps), the broadcast indicator positions are described as follows:

- 13 • The four Quick Paging Channel bit positions prior to the last four bits in the first 40
14 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The
15 four Quick Paging Channel bit positions prior to the last four bits in a Quick Paging
16 Channel broadcast slot are also broadcast indicators.

17 3.6.2.5.6 Reserved Indicator Positions

18 On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps
19 (indicator rate is 4800 bps), the reserved indicator positions are described as follows:

- 20 • The two Quick Paging Channel bit positions prior to the last two bits in the first 40
21 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel
22 Broadcast slot are reserved. The two Quick Paging Channel bit positions prior to
23 the last two bits in a Quick Paging Channel slot that is not a Quick Paging Channel
24 Broadcast slot are also reserved.

25 On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps
26 (indicator rate is 9600 bps), the reserved indicator positions are described as follows:

- 27 • The four Quick Paging Channel bit positions prior to the last four bits in the first 40
28 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel
29 Broadcast slot are reserved. The four Quick Paging Channel bit positions prior to
30 the last four bits in a Quick Paging Channel slot that is not a Quick Paging Channel
31 Broadcast slot are also reserved.

32 On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging
33 Channel data rate is 2400 bps (indicator rate is 4800 bps), the reserved indicator positions
34 are described as follows:

- 35 • The last four Quick Paging Channel bit positions in the first 40 ms half of a Quick
36 Paging Channel slot are reserved. The last four Quick Paging Channel bit positions
37 in a Quick Paging Channel slot are also reserved.

38 On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging
39 Channel data rate is 4800 bps (indicator rate is 9600 bps), the reserved indicator positions
40 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.

- 1 • If the reverse channel corresponding to forward channel included in this message is
2 separated by flexible channel spacing, the base station shall extend this message
3 using the General Extension Message and include a Reverse Channel Information
4 Record that specifies the reverse frequency to be used by the mobile station for the
5 traffic channel.
- 6 • Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2
7 (see [4]).

8 The base station may instruct the mobile station to use the stored service configuration
9 (that is, both the Service Configuration information record and the Non-negotiable Service
10 Configuration information record) by setting the GRANTED_MODE field of the *Extended*
11 *Channel Assignment Message* to '11'.

12 3.6.3.4 Response to Orders

13 No requirements.

14 3.6.3.5 Response to Origination Message and Reconnect Message

15 If the base station receives an *Origination Message*, *Call Recovery Request Message* or a
16 *Reconnect Message* with the ORIG_IND field set to '1', the base station should send a
17 *Channel Assignment Message* (if in response to an *Origination Message*), an *Extended*
18 *Channel Assignment Message*, an *Intercept Order*, a *Reorder Order*, a *Release Order*, a *Retry*
19 *Order*, a *PACA Message*, a *Service Redirection Message* or a *Service Status Order*. The base
20 station may also commence authentication procedures (see 2.3.12) or TMSI assignment
21 procedures (see 2.3.15). The base station may also request status information records with
22 the *Status Request Message*.

23 If the base station sends the *Extended Channel Assignment Message*, the base station may
24 include more than one pilot to be in the Active Set.

25 If the base station sends a *Channel Assignment Message* or an *Extended Channel*
26 *Assignment Message*, the base station shall perform the following:

- 27 • If the message directs the mobile station to a CDMA Traffic Channel, the base
28 station shall begin *Traffic Channel Processing* (see 3.6.4) for the mobile station.
- 29 • If the reverse channel corresponding to forward channel included in this message is
30 separated by flexible channel spacing, the base station shall extend this message
31 using the General Extension Message and include a Reverse Channel Information
32 Record that specifies the reverse frequency to be used by the mobile station for the
33 traffic channel.
- 34 • The base station shall raise a *mobile station inactive on common channel* indication
35 for the mobile station.

36 If the base station sends a *Channel Assignment Message*, the base station shall not set
37 RESPOND equal to '0' when ASSIGN_MODE = '001', ASSIGN_MODE = '010', or
38 ASSIGN_MODE = '101'. If the base station sends an *Extended Channel Assignment*
39 *Message*, the base station shall not set RESPOND equal to '0' when ASSIGN_MODE = '001'
40 or ASSIGN_MODE = '010'.

1 The base station may instruct the mobile station to use the stored service configuration
2 (that is, both the Service Configuration information record and the Non-negotiable Service
3 Configuration information record) by setting the GRANTED_MODE field of the *Extended*
4 *Channel Assignment Message* to '11'.

5 If the base station receives an *Origination Message* and the GLOBAL_EMERGENCY_CALL
6 indicator is set to '1' and the service associated with this origination is a voice service, the
7 base station shall recognize this as an emergency call and should process the message
8 using an implementation-dependent procedure which may include ignoring the dialed
9 digits. If the base station receives an *Origination Message* and the
10 GLOBAL_EMERGENCY_CALL indicator is set to '1' and the service associated with this
11 origination is not a voice service, the base station may recognize this as an emergency call
12 and should process the message using an implementation-dependent procedure which may
13 include ignoring the dialed digits.

14 3.6.3.6 Response to Registration Message

15 If the base station receives a *Registration Message*, the base station may send a *Registration*
16 *Accepted Order*, a *Registration Rejected Order*, or a *Service Redirection Message*. The base
17 station may also start authentication procedures (see 2.3.12), may start TMSI assignment
18 procedures (see 2.3.15), or may request status information records with the *Status Request*
19 *Message*.

20 If the *Registration Message* specifies a power-down registration, Layer 3 shall send a *mobile*
21 *station inactive on common channel* indication to Layer 2 (see [4]).

22 When responding to a *Registration Message* that requests extended encryption, if the base
23 station decides to turn on extended encryption and the CMEAKEY is available at the base
24 station, the base station shall send a *Registration Accepted Order* with encryption
25 information. Before the CMEAKEY is available, the base station may send a *Registration*
26 *Accepted Order* without any encryption information. When the CMEAKEY becomes
27 available, if the base station decides to turn on extended encryption, the base station shall
28 send a *Registration Accepted Order* with encryption information.

29 3.6.3.7 Response to Data Burst Message

30 If the base station receives a *Data Burst Message* with BURST_TYPE indicating Short Data
31 Burst (see [30]), the base station may send a *Retry Order*.

32 3.6.3.8 Reserved

33 3.6.3.9 Reserved

34 3.6.3.10 Service Redirection

35 If the base station sends a *Service Redirection Message* to the mobile station, Layer 3 shall
36 send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

37 3.6.3.11 Response to General Extension Message

38 If the base station receives a message that is extended through *General Extension Message*
39 the base station shall store the records and process the message as specified in section
40 3.6.3.1-3.6.3.8.

1 3.6.4 Traffic Channel Processing

2 During *Traffic Channel Processing*, the base station uses the Forward and Reverse Traffic
3 Channels to communicate with the mobile station while the mobile station is in the *Mobile*
4 *Station Control on the Traffic Channel State*.

5 Traffic Channel processing consists of the following substates:

- 6 • *Traffic Channel Initialization Substate* - In this substate, the base station begins
7 transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic
8 Channel.
- 9 • *Traffic Channel Substate* - In this substate, the base station exchanges Traffic
10 Channel frames with the mobile station in accordance with the current service
11 configuration. While in this substate, one or more Call Control instances can be
12 activated (see 3.6.8).
- 13 • *Release Substate* - In this substate, the base station disconnects the calls and the
14 physical channels.

15 3.6.4.1 Special Functions and Actions

16 The base station performs the following special functions and actions in one or more of the
17 Traffic Channel processing substates:

18 3.6.4.1.1 Forward Traffic Channel Power Control

19 Forward Traffic Channel Power Control procedures do not apply to Forward Packet Data
20 Channel.

21 When the base station enables Forward Traffic Channel power control, the mobile station
22 reports frame error rate statistics to the base station using the *Power Measurement Report*
23 *Message*.

24 The base station may enable Forward Traffic Channel power control using the *System*
25 *Parameters Message* sent on the Paging Channel and the *Power Control Parameters Message*
26 sent on the Forward Traffic Channel. The base station may enable Forward Traffic Channel
27 power control using the *MC-RR Parameters Message* sent on the Primary Broadcast Control
28 Channel and the *Power Control Parameters Message* sent on the Forward Traffic Channel.
29 The base station may enable periodic reporting which causes the mobile station to report
30 frame error rate statistics at specified intervals. The base station may also enable
31 threshold reporting which causes the mobile station to report frame error rate statistics
32 when the frame error rate reaches a specified threshold.¹⁰⁰

33 The base station may use the reported frame error rate statistics to adjust the transmit
34 power of the Forward Traffic Channel.

¹⁰⁰In this section the term base station may imply multiple cells or sectors.

1 3.6.4.1.2 Service Configuration and Negotiation

2 During Traffic Channel operation, the mobile station and base station communicate
3 through the exchange of Forward and Reverse Traffic Channel Configurations. The mobile
4 station and base station use a common set of attributes for building and interpreting
5 Traffic Channel frames. This set of attributes, referred to as a service configuration,
6 consists of both negotiable and non-negotiable parameters.

7 The set of negotiable service configuration parameters consists of the following:

- 8 1. Forward and Reverse Multiplex Options: These control the way in which the
9 information bits of the Forward and Reverse Traffic Channel frames, respectively,
10 are divided into various types of traffic, such as signaling traffic, primary traffic
11 and secondary traffic. A multiplex option together with a radio configuration
12 specifies the frame structures and transmission rates (see [3]). The Multiplex
13 Options which support Supplemental Code Channel transmission and
14 Supplemental Channel transmission on the Forward and Reverse Traffic
15 Channels are included in [3]. Invocation of Supplemental Code Channel
16 operation on the Forward or Reverse Traffic Channels occurs by transmission of
17 the *Supplemental Channel Request Message*, the *Supplemental Channel*
18 *Assignment Message*, and the *General Handoff Direction Message*. The Multiplex
19 Options which support Supplemental Code Channel transmission and
20 Supplemental Channel transmission on the Forward and Reverse Traffic
21 Channels are included in [3]. The multiplex option used for the Forward Traffic
22 Channel can be the same as that used for the Reverse Traffic Channel, or it can
23 be different.
- 24 2. *Forward and Reverse Traffic Channel Configurations*: These include the radio
25 configurations and other necessary attributes for the Forward and Reverse Traffic
26 Channels. The Traffic Channel Configuration used can be different for the
27 Forward and Reverse Traffic Channels or it can be the same.
- 28 3. Forward and Reverse Traffic Channel Transmission Rates: These are the
29 transmission rates actually used for the Forward and Reverse Traffic Channels,
30 respectively. The transmission rates for the Forward Traffic Channel can include
31 all of the transmission rates supported by the radio configuration associated with
32 the Forward Traffic Channel multiplex option, or a subset of the supported rates.
33 Similarly, the transmission rates used for the Reverse Traffic Channel can include
34 all rates supported by the radio configuration associated with the Reverse Traffic
35 Channel multiplex option, or a subset of the supported rates. The transmission
36 rates used for the Forward Traffic Channel can be the same as those used for the
37 Reverse Traffic Channel, or they can be different.
- 38 4. Service Option Connections: These are the services in use on the Traffic Channel.
39 There can be multiple service option connections. It is also possible that there is
40 no service option connection, in which case the base station uses the Forward
41 Traffic Channel as follows:
 - 42 • Sends signaling traffic and null traffic on the Forward Fundamental
43 Channel.

- 1 • Sends signaling traffic on the Forward Dedicated Control Channel.
- 2 • If F-CPCCH is assigned, sends power control bits on the F-CPCCH;
- 3 otherwise, sends power control bits on the Forward Fundamental Channel
- 4 if FPC_PRI_CHAN is set to '0'; sends power control bits on the Forward
- 5 Dedicated Control Channel if FPC_PRI_CHAN is set to '1'.

6 Associated with each service option connection are a service option, a Forward
7 Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service
8 option connection reference. The associated service option formally defines the
9 way in which traffic bits are processed by the mobile station and base station. The
10 associated Forward and Reverse Traffic Channel traffic types specify the types of
11 traffic used to support the service option. A service option can require the use of a
12 particular type of traffic, such as primary or secondary, or it can accept more than
13 one traffic type. A service option can be one-way, in which case it can be
14 supported on the Forward Traffic Channel only or the Reverse Traffic Channel
15 only. Alternatively, a service option can be two-way, in which case it can be
16 supported on the Forward and Reverse Traffic Channels simultaneously.
17 Connected service options can also invoke operation on Supplemental Code
18 Channels in either one or both of the Forward and Reverse Traffic Channels by
19 negotiating a multiplex option that supports operation on Supplemental Code
20 Channels (see [3] for Multiplex Options applicable to Supplemental Code
21 Channels), and by using the appropriate Supplemental Code Channel related
22 messages (i.e., the *Supplemental Channel Request Message*, the *Supplemental*
23 *Channel Assignment Message*, and the *General Handoff Direction Message*). After
24 Supplemental Code Channels have been assigned by the base station, the
25 connected service option can transmit primary and/or secondary traffic on
26 Supplemental Code Channels. Connected service options can also invoke
27 operation on Supplemental Channels in either one or both of the Forward and
28 Reverse Traffic Channels by negotiating a multiplex option that supports operation
29 on Supplemental Channels (see [3] for Multiplex Options applicable to
30 Supplemental Channels) and by using the appropriate Supplemental Channel
31 related messages (i.e., the *Supplemental Channel Request Message*, the *Universal*
32 *Handoff Direction Message*, the *Supplemental Channel Request Mini Message*, the
33 *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental*
34 *Channel Assignment Mini Message*, and the *Reverse Supplemental Channel*
35 *Assignment Mini Message*). After Supplemental Channels have been assigned by
36 the base station, the connected service option can transmit primary and/or
37 secondary traffic on Supplemental Channels. The associated service option
38 connection reference provides a means for uniquely identifying the service option
39 connection. The reference serves to resolve ambiguity when there are multiple
40 service option connections in use.

41 The non-negotiable service configuration parameters are sent from the base station to the
42 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 Control
11 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, forward
14 flag, reverse flag, and priority.
- 15 4. *Partition Table*: The base station may include this table to specify the number of bits
16 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.

1 It is also possible for the base station to request a default service configuration, associated
2 with a service option, when paging the mobile station and to request new service
3 configurations during Traffic Channel operation. The service negotiation proceeds as
4 described above, but with the roles of the mobile station and base station reversed.

5 For CDMA mode operation in Band Class 0, the mobile station and base station can also
6 use an alternative method for negotiating a service configuration known as service option
7 negotiation. Service option negotiation is similar to service negotiation, but offers less
8 flexibility for specifying the attributes of the service configuration. During service option
9 negotiation, the base station or mobile station specifies only which service option is to be
10 used. There is no facility for explicitly specifying the multiplex options, traffic types or
11 transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction
12 with the service option. Instead, implicit service configuration attributes are assumed. In
13 particular, the Forward and Reverse Multiplex Options and transmission rates are
14 assumed to be the default multiplex options and transmission rates associated with the
15 requested service option, and the traffic type for both the Forward and Reverse Traffic
16 Channels is assumed to be primary traffic. Furthermore, a service configuration
17 established using service option negotiation is restricted to having only a single service
18 option connection.

19 At mobile station origination and termination, the type of negotiation to use, either service
20 negotiation or service option negotiation, is indicated in the *Channel Assignment Message*.
21 Service negotiation is always used with the *Extended Channel Assignment Message*. If a
22 CDMA-to-CDMA hard handoff occurs during the call, the type of negotiation to use
23 following the handoff is indicated in the *Extended Handoff Direction Message*, *General*
24 *Handoff Direction Message*, or *Universal Handoff Direction Message*.

25 For CDMA mode operation in band classes other than Band Class 0, only service
26 negotiation is to be used.

27 The following messages are used to support service negotiation:

- 28 1. *Service Request Message*: The mobile station can use this message to propose a
29 service configuration, or to accept or reject a service configuration proposed in a
30 *Service Response Message*. The base station can use this message to propose a
31 service configuration, or to reject a service configuration proposed in a *Service*
32 *Response Message*.
- 33 2. *Service Response Message*: The mobile station can use this message to accept or
34 reject a service configuration proposed in a *Service Request Message*, or to propose
35 an alternative service configuration. The base station can use this message to
36 reject a service configuration proposed in a *Service Request Message*, or to propose
37 an alternative service configuration.
- 38 3. *Service Connect Message*: The base station can use this message to accept a
39 service configuration proposed in a *Service Request Message* or *Service Response*
40 *Message*, and instruct the mobile station to begin using the service configuration.
41 The base station may use this message to instruct the mobile station to use the
42 stored service configuration (that is, both the Service Configuration information
43 record and the Non-negotiable Service Configuration information record) based on

- 1 the value of the SYNC_ID that the mobile station has reported in the *Origination*
 2 *Message* or *Page Response Message*. If P_REV_IN_USE is greater than or equal to
 3 11, the base station can use this message to instruct the mobile station to use the
 4 stored service configuration (that is, both the Service Configuration information
 5 record and the Non-negotiable Service Configuration information record) based on
 6 the value of the SYNC_ID that the base station has included in this message.
- 7 4. *Service Connect Completion Message*: The mobile station can use this message to
 8 acknowledge the transition to a new service configuration.
 - 9 5. *Service Option Control Message*: The mobile station and base station can use this
 10 message to invoke service option specific functions.
 - 11 6. *Extended Channel Assignment Message*: The base station can use this message to
 12 accept or reject the initial service configuration proposed by the mobile station in
 13 an *Origination Message* or a *Page Response Message*.

14 The following messages are used to support service option negotiation:

- 15 1. *Service Option Request Order*: The mobile station and base station can use this
 16 message either to request a service option or suggest an alternative service option.
- 17 2. *Service Option Response Order*: The mobile station and base station can use this
 18 message to accept or reject a service option request.
- 19 3. *Service Option Control Order*: The mobile station and base station can use this
 20 message to invoke service option specific functions.

21 The following messages are used to support both service negotiation and service option
 22 negotiation:

- 23 1. *Origination Message*: The mobile station can use this message to propose an initial
 24 service configuration.
- 25 2. *Channel Assignment Message*: The base station can use this message to accept or
 26 reject the initial service configuration proposed by the mobile station in an
 27 *Origination Message* or a *Page Response Message*, and to indicate which type of
 28 negotiation, either service negotiation or service option negotiation, is to be used
 29 during the call.
- 30 3. *Extended Handoff Direction Message*: The base station can use this message to
 31 indicate which type of negotiation, either service negotiation or service option
 32 negotiation, is to be used following a CDMA-to-CDMA hard handoff.
- 33 4. *General Handoff Direction Message*: The base station can use this message to
 34 indicate which type of negotiation, either service negotiation or service option
 35 negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base
 36 station can use this message to accept a service configuration proposed in a *Service*
 37 *Request Message* or *Service Response Message*. The base station can also use this
 38 message to instruct the mobile station to begin using the service configuration.

- 1 5. *General Page Message* or *Universal Page Message*: The base station can use a
2 mobile-station-addressed page in a *General Page Message* or *Universal Page*
3 *Message* to propose an initial service configuration.
- 4 6. *Page Response Message*: The mobile station can use this message to accept or
5 reject the initial service configuration proposed by the base station in a mobile-
6 station-addressed page, or to propose an alternative initial service configuration.
- 7 7. *Status Request Message*: The base station can use this message to request service
8 capability information from the mobile station.
- 9 8. *Status Response Message*: The mobile station can use this message to return the
10 service capability information requested by the base station in a *Status Request*
11 *Message*.
- 12 9. *Extended Status Response Message*: The mobile station can use this message to
13 return the service capability information requested by the base station in a *Status*
14 *Request Message*.
- 15 10. *Universal 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 *Service*
19 *Request Message* or *Service Response Message*. The base station can also use this
20 message to instruct the mobile station to begin using the service configuration.

21 3.6.4.1.2.1 Use of Variables

22 3.6.4.1.2.1.1 Maintaining the Service Request Sequence Number

23 The base station shall maintain a service request sequence number variable,
24 SERV_REQ_NUM, for use with service negotiation. Upon beginning Traffic Channel
25 processing, the base station shall set SERV_REQ_NUM to 0. Each time the base station
26 sends a new *Service Request Message*, it shall set the SERV_REQ_SEQ field of the message
27 to the current value of SERV_REQ_NUM and shall then set SERV_REQ_NUM equal to
28 (SERV_REQ_NUM + 1) modulo 8.

29 3.6.4.1.2.1.2 Maintaining the Service Connect Sequence Number

30 The base station shall maintain a service connect sequence number variable,
31 SERV_CON_NUM, for use with service negotiation. Upon beginning Traffic Channel
32 processing, the base station shall set SERV_CON_NUM to 0. Each time the base station
33 sends a new *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal*
34 *Handoff Direction Message* containing a service configuration record, it shall set the
35 SERV_CON_SEQ field of the message to the current value of SERV_CON_NUM and shall
36 then set SERV_CON_NUM equal to (SERV_CON_NUM + 1) modulo 8.

37 3.6.4.1.2.1.3 Assigning Service Option Connection References

38 When the base station assigns a service option connection reference for use in identifying a
39 new service option connection during service negotiation, the base station shall use the
40 following criteria:

- 1 1. The base station shall not assign a reference equal to '00000000'; and
- 2 2. The base station shall not assign a reference that is associated with a service
- 3 option connection of the current service configuration; and
- 4 3. If there was a previous service configuration, the base station shall not assign a
- 5 reference that was associated with a service option connection of the previous
- 6 service configuration.

7 3.6.4.1.2.1.4 Maintaining the Service Negotiation Indicator Variable

8 The base station shall maintain a service negotiation indicator variable, SERV_NEG, to
9 indicate which type of negotiation to use, either service negotiation or service option
10 negotiation. The base station shall set SERV_NEG to enabled whenever service negotiation
11 is to be used, and shall set SERV_NEG to disabled whenever service option negotiation is to
12 be used. The precise rules for setting SERV_NEG are specified in 3.6.4.2 and 3.6.6.2.2.2.

13 For CDMA operation in band classes other than Band Class 0, the base station shall set
14 SERV_NEG to enabled.

15 3.6.4.1.2.1.5 Maintaining the Service Option Request Number

16 The base station shall maintain a service option request number variable, SO_REQ, for use
17 with service option negotiation. The base station shall set SO_REQ to a special value,
18 NULL, if the base station does not have an outstanding service option request. If the base
19 station has an outstanding service option request, the base station shall set SO_REQ to the
20 number of the service option associated with the outstanding request.

21 3.6.4.1.2.2 Service Subfunctions

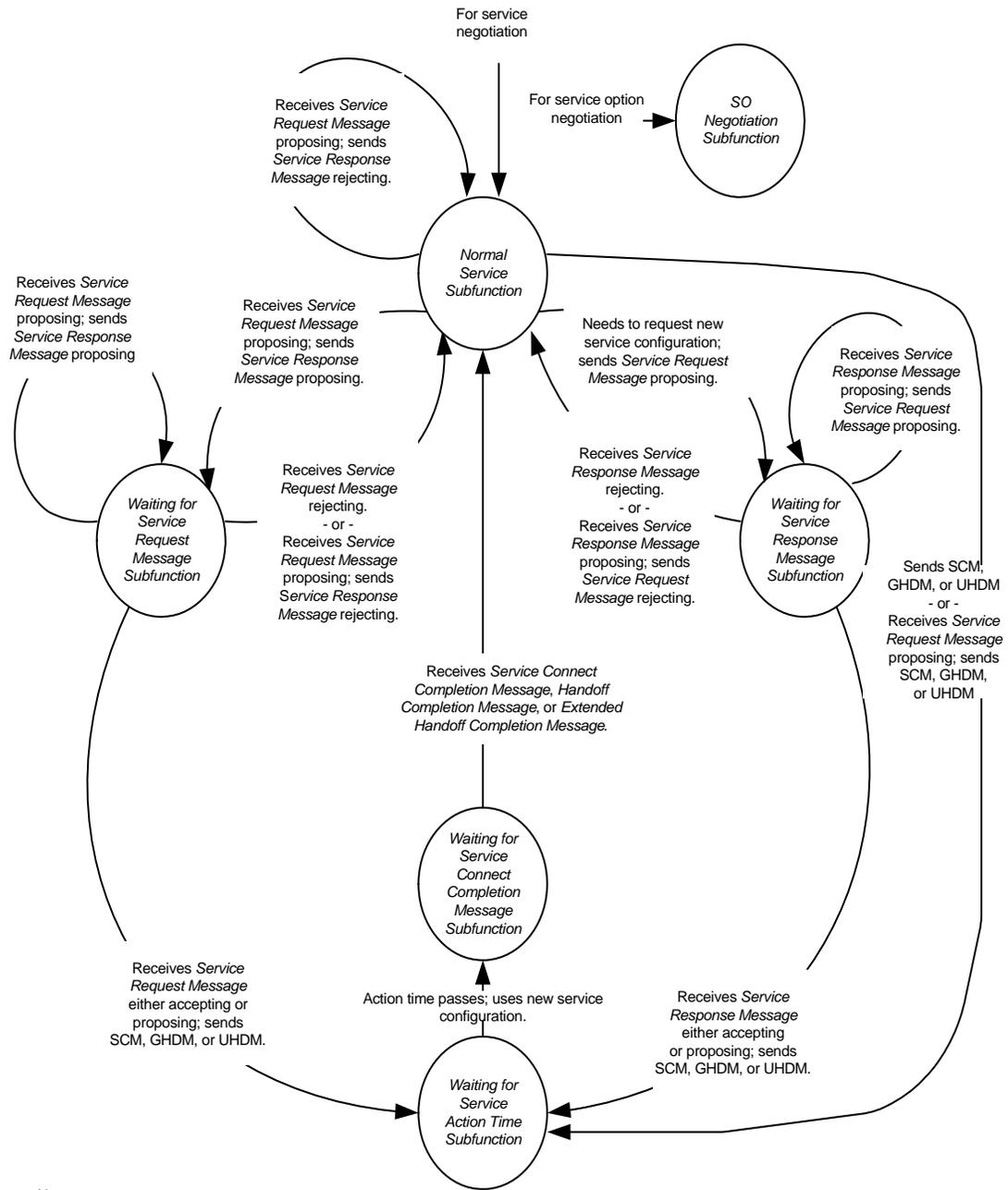
22 As illustrated in Figure 3.6.4.1.2.2-1, the base station supports service configuration and
23 negotiation by performing the following set of service subfunctions.

- 24 • *Normal Service Subfunction* - While this subfunction is active, the base station
25 processes service configuration requests from the mobile station and sends service
26 configuration requests to the mobile station.
- 27 • *Waiting for Service Request Message Subfunction* - While this subfunction is active,
28 the base station waits to receive a *Service Request Message*.
- 29 • *Waiting for Service Response Message Subfunction* - While this subfunction is active,
30 the base station waits to receive a *Service Response Message*.
- 31 • *Waiting for Service Action Time Subfunction* - While this subfunction is active, the
32 base station waits for the action time associated with a new service configuration.
- 33 • *Waiting for Service Connect Completion Message Subfunction* - While this subfunction
34 is active, the base station waits to receive a *Service Connect Completion Message*, a
35 *Handoff Completion Message*, or an *Extended Handoff Completion Message*.
- 36 • *SO Negotiation Subfunction* - While this subfunction is active and the base station is
37 operating in Band Class 0, the base station supports service option negotiation with
38 the mobile station.

1 The *SO Negotiation Subfunction* supports service option negotiation. All of the other service
2 subfunctions support service negotiation.

3 At any given time during Traffic Channel processing, only one of the service subfunctions is
4 active. For example, when the base station first begins Traffic Channel processing, either
5 the *Normal Service Subfunction* or the *SO Negotiation Subfunction* is active. Each of the
6 other service subfunctions may become active in response to various events which occur
7 during the Traffic Channel substates. Typically, the base station processes events
8 pertaining to service configuration and negotiation in accordance with the requirements for
9 the active service subfunction. However, some Traffic Channel substates do not allow for
10 the processing of certain events pertaining to service configuration and negotiation, or
11 specify requirements for processing such events which supersede the requirements of the
12 active service subfunction.

13



- 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.

1
2
3

Figure 3.6.4.1.2.2-1. Base Station Service Subfunctions

1 3.6.4.1.2.2.1 Normal Service Subfunction

2 While this subfunction is active, the base station processes service configuration requests
3 from the mobile station and sends service configuration requests to the mobile station.

4 While the *Normal Service Subfunction* is active, the base station shall perform the following:

- 5 • The base station shall process Forward and Reverse Traffic Channel frames in
6 accordance with the current service configuration. The base station shall discard
7 any Reverse Traffic Channel frame which has a format that is not supported by the
8 base station. The base station may discard any type of Reverse Traffic Channel
9 traffic that is not signaling traffic and is not part of the current service
10 configuration.
- 11 • To initiate service negotiation for a new service configuration, the base station shall
12 send a *Service Request Message* to propose the new service configuration and shall
13 activate the *Waiting for Service Response Message Subfunction*.
- 14 • For any service option connection that is part of the current service configuration,
15 the base station may send a *Service Option Control Message* to invoke a service
16 option specific function in accordance with the requirements for the associated
17 service option.
- 18 • The base station may send a *Service Connect Message*, a *General Handoff Direction*
19 *Message*, or a *Universal Handoff Direction Message* containing a service
20 configuration record. If the base station sends this message, the base station shall
21 activate the *Waiting for Service Action Time Subfunction*.
- 22 • If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
23 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 24 • If the base station receives one of the following service negotiation messages, the
25 base station shall process the message according to the specified requirements, if
26 any:
 - 27 1. *Service Connect Completion Message*
 - 28 2. *Service Option Control Message*: If the service option connection specified by the
29 message is part of the current service configuration, and the service option
30 specified by the message is the same as the service option associated with the
31 service option connection, the base station shall process the message in
32 accordance with the requirements for the service option.
 - 33 3. *Service Request Message*: The base station shall process the message as follows:
 - 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 Direction*
38 *Message*, or a *Universal Handoff Direction Message* containing a service
39 configuration record and shall activate the *Waiting for Service Action Time*
40 *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.
- 5 – If the base station does not accept the proposed service configuration
6 and has an alternative service configuration to propose, the base station
7 shall perform one of the following actions:
- 8
- 9 o Send a *Service Response Message* to propose the alternative
10 service configuration and shall activate the *Waiting for Service*
11 *Request Message Subfunction*, or
- 12 o Send a *Service Connect Message*, a *General Handoff Direction*
13 *Message*, or a *Universal Handoff Direction Message* containing a
14 service configuration record and shall activate the *Waiting for*
15 *Service Action Time Subfunction*

16 4. *Service Response Message*

- 17 • If the base station receives one of the following service option negotiation messages,
18 the base station shall process the message according to the specified requirements,
19 if any:

- 20 1. *Service Option Request Order*
- 21 2. *Service Option Response Order*
- 22 3. *Service Option Control Order*

23 3.6.4.1.2.2.2 *Waiting for Service Request Message Subfunction*

24 While this subfunction is active, the base station waits to receive a *Service Request*
25 *Message*.

26 While the *Waiting for Service Request Message Subfunction* is active, the base station shall
27 perform the following:

- 28 • If the base station does not receive a *Service Request Message*, the base station shall
29 activate the *Normal Service Subfunction*.
- 30 • The base station shall process Forward and Reverse Traffic Channel frames in
31 accordance with the current service configuration. The base station shall discard
32 any Reverse Traffic Channel frame which has a format that is not supported by the
33 base station. The base station may discard any type of Reverse Traffic Channel
34 traffic that is not signaling traffic and is not part of the current service
35 configuration.
- 36 • For any service option connection that is part of the current service configuration,
37 the base station may send a *Service Option Control Message* to invoke a service
38 option specific function in accordance with the requirements for the associated
39 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 the
8 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 shall process the message as follows:
- 13 • If the purpose of the message is to accept a proposed service configuration,
14 the base station shall perform one of the following actions:
- 15 – The base station shall send a *Service Connect Message*, *General Handoff*
16 *Direction Message*, or *Universal Handoff Direction Message* and shall
17 activate the *Waiting for Service Action Time Subfunction*.
- 18 – The base station shall send a *Service Request Message* to propose an
19 alternative service configuration and shall activate the *Waiting for Service*
20 *Response Message Subfunction*.
- 21 • If the purpose of the message is to reject a proposed service configuration,
22 the base station shall activate the *Normal Service Subfunction*.
- 23 • If the purpose of the message is to propose a service configuration, the base
24 station shall process the message as follows:
- 25 – If the base station accepts the proposed service configuration, the base
26 station shall send a *Service Connect Message*, a *General Handoff Direction*
27 *Message*, or a *Universal Handoff Direction Message* containing a service
28 configuration record and shall activate the *Waiting for Service Action Time*
29 *Subfunction*.
- 30 – If the base station does not accept the proposed service configuration
31 and does not have an alternative service configuration to propose, the
32 base station shall send a *Service Response Message* to reject the
33 proposed service configuration. The base station shall activate the
34 *Normal Service Subfunction*.
- 35 – If the base station does not accept the proposed service configuration
36 and has an alternative service configuration to propose, the base station
37 shall perform one of the following actions:
- 38 o Send a *Service Response Message* to propose the alternative service
39 configuration, or

- 1 o Send a *Service Connect Message*, a *General Handoff Direction*
 2 *Message*, or a *Universal Handoff Direction Message* containing a
 3 service configuration record and shall activate the *Waiting for Service*
 4 *Action Time Subfunction*

5 4. *Service Response Message*

- 6 • If the base station receives one of the following service option negotiation messages,
 7 the base station shall process the message according to the specified requirements,
 8 if any:

- 9 1. *Service Option Request Order*
 10 2. *Service Option Response Order*
 11 3. *Service Option Control Order*

12 3.6.4.1.2.2.3 *Waiting for Service Response Message Subfunction*

13 While this subfunction is active, the base station waits to receive a *Service Response*
 14 *Message*.

15 While the *Waiting for Service Response Message Subfunction* is active, the base station shall
 16 perform the following:

- 17 • If the base station does not receive a *Service Response Message*, the base station
 18 shall activate the *Normal Service Subfunction*.
- 19 • The base station shall process Forward and Reverse Traffic Channel frames in
 20 accordance with the current service configuration. The base station shall discard
 21 any Reverse Traffic Channel frame which has a format that is not supported by the
 22 base station. The base station may discard any type of Reverse Traffic Channel
 23 traffic that is not signaling traffic and is not part of the current service
 24 configuration.
- 25 • For any service option connection that is part of the current service configuration,
 26 the base station may send a *Service Option Control Message* to invoke a service
 27 option specific function in accordance with the requirements for the associated
 28 service option.
- 29 • If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
 30 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 31 • If the base station receives one of the following service negotiation messages, the
 32 base station shall process the message according to the specified requirements, if
 33 any:
- 34 1. *Service Connect Completion Message*
- 35 2. *Service Option Control Message*: If the service option connection specified by the
 36 message is part of the current service configuration, and the service option
 37 specified by the message is the same as the service option associated with the
 38 service option connection, the base station shall process the message in
 39 accordance with the requirements for the service option.

- 1 3. *Service Request Message*: The base station should not process the Layer 3 fields
2 of the message.
- 3 4. *Service Response Message*: The base station shall process the message as
4 follows:
- 5 • If the service request sequence number (SERV_REQ_SEQ) from the message
6 does not match the sequence number of the *Service Request Message* for
7 which the base station is expecting a response, the base station shall not
8 process the Layer 3 fields of the message.
 - 9 • If the purpose of the message is to accept a proposed service configuration,
10 the base station shall perform one of the following actions:
 - 11 – The base station shall send a *Service Connect Message*, a *General*
12 *Handoff Direction Message*, or a *Universal Handoff Direction Message*
13 containing a service configuration record and shall activate the *Waiting*
14 *for Service Action Time Subfunction*. Or
 - 15 – The base station shall send a *Service Request Message* to propose an
16 alternative service configuration.
 - 17 • If the purpose of the message is to reject a proposed service configuration,
18 the base station shall activate the *Normal Service Subfunction*.
 - 19 • If the purpose of the message is to propose a service configuration, the base
20 station shall process the message as follows:
 - 21 – If the base station accepts the proposed service configuration, the base
22 station shall send a *Service Connect Message*, a *General Handoff Direction*
23 *Message*, or a *Universal Handoff Direction Message* containing a service
24 configuration record and shall activate the *Waiting for Service Action Time*
25 *Subfunction*.
 - 26 – If the base station does not accept the proposed service configuration
27 and does not have an alternative service configuration to propose, the
28 base station shall send a *Service Request Message* to reject the proposed
29 service configuration. The base station shall activate the *Normal Service*
30 *Subfunction*.
 - 31 – If the base station does not accept the proposed service configuration
32 and has an alternative service configuration to propose, the base station
33 shall perform one of the following actions:
 - 34 o Send a *Service Request Message* to propose the alternative service
35 configuration, or
 - 36 o Send a *Service Connect Message*, a *General Handoff Direction*
37 *Message*, or a *Universal Handoff Direction Message* containing a
38 service configuration record and shall activate the *Waiting for Service*
39 *Action Time Subfunction*

- 1 • If the base station receives one of the following service option negotiation messages,
2 the base station shall process the message according to the specified requirements,
3 if any:

- 4 1. *Service Option Request Order*
5 2. *Service Option Response Order*
6 3. *Service Option Control Order*

7 3.6.4.1.2.2.4 *Waiting for Service Action Time Subfunction*

8 While this subfunction is active, the base station waits for the action time associated with a
9 new service configuration.

10 While the *Waiting for Service Action Time Subfunction* is active, the base station shall
11 perform the following:

- 12 • Prior to the action time associated with the *Service Connect Message*, a *General*
13 *Handoff Direction Message*, or *Universal Handoff Direction Message* containing a
14 service configuration record, the base station shall process Forward and Reverse
15 Traffic Channel frames in accordance with the current service configuration. The
16 base station shall discard any Reverse Traffic Channel frame which has a format
17 that is not supported by the base station. The base station may discard any type of
18 Reverse Traffic Channel traffic that is not signaling traffic and is not part of the
19 current service configuration.
- 20 • At the action time associated with the *Service Connect Message*, *General Handoff*
21 *Direction Message*, or *Universal Handoff Direction Message* containing a service
22 configuration record, the base station shall begin to use the service configuration
23 specified by the *Service Connect Message*, the *General Handoff Direction Message*, or
24 the *Universal Handoff Direction Message* containing a service configuration record,
25 as the current service configuration and shall begin to process Forward and Reverse
26 Traffic Channel frames accordingly. The base station shall activate the *Waiting for*
27 *Service Connect Completion Message Subfunction*.
- 28 • If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
29 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 30 • If the base station receives one of the following service negotiation messages, the
31 base station shall process the message according to the specified requirements, if
32 any:
- 33 1. *Service Connect Completion Message*
- 34 2. *Service Option Control Message*: If the service option connection specified by the
35 message is part of the current or pending service configuration, and the service
36 option specified by the message is the same as the service option associated
37 with the service option connection, the base station shall process the message
38 in accordance with the requirements for the service option.
- 39 3. *Service Request Message*

- 1 4. *Service Response Message*
- 2 • If the base station receives one of the following service option negotiation messages,
- 3 the base station shall process the message according to the specified requirements,
- 4 if any:
- 5 1. *Service Option Request Order*
- 6 2. *Service Option Response Order*
- 7 3. *Service Option Control Order*

8 3.6.4.1.2.2.5 *Waiting for Service Connect Completion Message Subfunction*

9 While this subfunction is active, the base station waits to receive a *Service Connect*

10 *Completion Message*, a *Handoff Completion Message*, or an *Extended Handoff Completion*

11 *Message*.

12 While the *Waiting for Service Connect Completion Message Subfunction* is active, the base

13 station shall perform the following:

- 14 • If the base station has sent a *Service Connect Message* and does not receive a
- 15 *Service Connect Completion Message*, or if the base station has sent a *General*
- 16 *Handoff Direction Message* or a *Universal Handoff Direction Message* containing a
- 17 Service Configuration record and does not receive a *Handoff Completion Message*, or
- 18 an *Extended Handoff Completion Message*, the base station shall activate the *Normal*
- 19 *Service Subfunction*.
- 20 • The base station shall process Forward and Reverse Traffic Channel frames in
- 21 accordance with the current service configuration. The base station shall discard
- 22 any Reverse Traffic Channel frame which has a format that is not supported by the
- 23 base station. The base station may discard any type of Reverse Traffic Channel
- 24 traffic that is not signaling traffic and is not part of the current service
- 25 configuration.
- 26 • The base station shall not initiate service negotiation for a new service
- 27 configuration.
- 28 • If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
- 29 3.6.6.2.2.11), the base station shall activate the *SO Negotiation Subfunction*.
- 30 • If the base station receives one of the following service negotiation messages, the
- 31 base station shall process the message according to the specified requirements, if
- 32 any:
- 33 1. *Service Connect Completion Message, Handoff Completion Message, or Extended*
- 34 *Handoff Completion Message*: The base station shall activate the *Normal Service*
- 35 *Subfunction*.
- 36 2. *Service Option Control Message*: If the service option connection specified by the
- 37 message is part of the current service configuration, and the service option
- 38 specified by the message is the same as the service option associated with the
- 39 service option connection, the base station shall process the message in
- 40 accordance with the requirements for the service option.

1 3. *Service Request Message*

2 4. *Service Response Message*

3 • If the base station receives one of the following service option negotiation messages,
4 the base station shall process the message according to the specified requirements,
5 if any:

6 1. *Service Option Request Order*

7 2. *Service Option Response Order*

8 3. *Service Option Control Order*

9 3.6.4.1.2.2.6 SO Negotiation Subfunction

10 While this subfunction is active, the base station supports service option negotiation with
11 the mobile station.

12 Upon activating the *SO Negotiation Subfunction*, the base station shall set SO_REQ to NULL.
13 The base station shall delete from the current service configuration any service option
14 connection which does not use primary traffic on both the Forward and Reverse Traffic
15 Channels.

16 While the *SO Negotiation Subfunction* is active, the base station shall perform the following:

- 17 • If the current service configuration includes a service option connection, the base
18 station shall process the received primary traffic bits in accordance with the
19 requirements for the service option associated with the service option connection;
20 otherwise, the base station shall discard the received primary traffic bits.
- 21 • If the current service configuration includes a service option connection, the base
22 station shall transmit primary traffic bits in accordance with the requirements for
23 the service option associated with the service option connection; otherwise, the base
24 station shall transmit null traffic and power control bits on the Forward
25 Fundamental Channel, if the Fundamental channel is present to transmit power
26 control bits on the Forward Dedicated Control Channel, if only the Dedicated
27 Control Channel is present.
- 28 • If the current service configuration includes a service option connection, the base
29 station may send a *Service Option Control Order* to invoke a service option specific
30 function in accordance with the requirements for the service option associated with
31 the service option connection.
- 32 • To initiate service option negotiation, the base station shall set SO_REQ to the
33 number of the requested service option and shall send a *Service Option Request*
34 *Order* containing the requested service option number.
- 35 • If SERV_NEG changes from disabled to enabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
36 3.6.6.2.2.11), the base station shall activate the *Normal Service Subfunction*.
- 37 • The base station shall process a service option request received in an *Origination*
38 *Message*, a *Page Response Message*, or a *Service Option Request Order* as follows:

- 1 – If the base station accepts the requested service option, the base station shall
2 set SO_REQ to NULL and shall send a *Service Option Response Order* accepting
3 the requested service option within T_{4b} seconds. The base station shall begin
4 using the service configuration implied by the requested service option in
5 accordance with the requirements for the requested service option. The implied
6 service configuration shall include the default Forward and Reverse Multiplex
7 Options and transmission radio configurations associated with the requested
8 service option. This implied service configuration shall include one service
9 option connection for which the service option connection reference is 1, for
10 which the service option is the requested service option, and for which the
11 Forward and Reverse Traffic Channel types are both primary traffic.
- 12 – If the base station does not accept the requested service option and has an
13 alternative service option to request, the base station shall set SO_REQ to the
14 alternative service option number and shall send a *Service Option Request Order*
15 requesting the alternative service option within T_{4b} seconds.
- 16 – If the base station does not accept the requested service option and does not
17 have an alternative service option to request, the base station shall set SO_REQ
18 to NULL and shall send a *Service Option Response Order* to reject the request
19 within T_{4b} seconds. The base station shall continue to use the current service
20 configuration.
- 21 • If the base station receives a *Service Option Response Order*, it shall process the
22 order as follows:
- 23 – If the service option number specified in the order is equal to SO_REQ, the base
24 station shall set SO_REQ to NULL and shall begin using the service
25 configuration implied by the specified service option in accordance with the
26 requirements for the service option. The implied service configuration shall
27 include the default Forward and Reverse Multiplex Options and radio
28 configurations associated with the requested service option. This implied
29 service configuration shall include one service option connection for which the
30 service option connection reference is 1, for which the service option is the
31 requested service option, and for which the Forward and Reverse Traffic
32 Channel types are both primary traffic.
- 33 – If the order indicates a service option rejection, the base station shall set
34 SO_REQ to NULL. The base station shall continue to use the current service
35 configuration.
- 36 – If the order does not indicate a service option rejection and the service option
37 specified in the order is not equal to SO_REQ, the base station shall set
38 SO_REQ to NULL, should send a *Release Order* (ORDQ = '00000010'), and
39 should enter the *Release Substate*.
- 40 • If the base station receives a *Service Option Control Order*, the base station shall
41 process the order as follows:

- 1 – If the current service configuration includes a service option connection, the
2 base station shall process the received *Service Option Control Order* in
3 accordance with the requirements for the service option associated with the
4 service option connection.
- 5 • If the base station receives one of the following service negotiation messages, the
6 base station shall process the message according to the specified requirements, if
7 any:
- 8 1. *Service Connect Completion Message*
- 9 2. *Service Option Control Message*
- 10 3. *Service Request Message*
- 11 4. *Service Response Message*

12 3.6.4.1.3 Ordering of Messages

13 The Layer 2 protocol does not guarantee delivery of messages in any order. If the base
14 station requires that the mobile station receive a set of messages in a certain order, the
15 base station shall send each message in assured mode requiring confirmation of delivery
16 and shall wait for the confirmation of delivery of each message before transmitting the next
17 message in the set.

18 3.6.4.1.4 Message Action Times

19 A Forward Traffic Channel message without a *USE_TIME* field or with a *USE_TIME* field set
20 to '0' has an implicit action time. A message that has its *USE_TIME* field set to '1' has an
21 explicit action time that is specified in the *ACTION_TIME* field of the message.

22 A message with an explicit action time is called a pending message.

23 Unless otherwise specified, a message having an implicit action time shall take effect no
24 later than the first 80 ms boundary (relative to System Time plus $\text{FRAME_OFFSET}_s \times 1.25$
25 ms) occurring at least 80 ms after the end of the frame containing the last bit of the
26 message. A message with an explicit action time, except for a *Power Up Function Message*,
27 shall take effect when System Time minus $\text{FRAME_OFFSET}_s \times 1.25$ ms (in 80 ms units)
28 modulo 64 becomes equal to the message's *ACTION_TIME* field. A *Power Up Function*
29 *Message* shall take effect *ACTION_TIME_FRAME* frames after the time when System Time
30 minus $\text{FRAME_OFFSET}_s \times 1.25$ ms (in 80 ms units) modulo 64 becomes equal to the
31 message's *ACTION_TIME* field. The difference in time between *ACTION_TIME* and the end
32 of the frame containing the last bit of the message shall be at least 80 ms.

33 The base station shall support two pending messages at any given time, not including
34 pending *Service Option Control Orders*, *Service Option Control Messages*, or *Power Up*
35 *Function Messages*. The number of pending *Service Option Control Orders* or *Service Option*
36 *Control Messages* that the base station is required to support is specific to the service
37 option (see the relevant service option descriptions). In addition, the base station shall
38 support one pending *Power Up Function Message*.

1 3.6.4.1.5 Long Code Transition Request Processing

2 If a request for voice privacy is specified in the *Origination Message* or *Page Response*
 3 *Message*, the base station may send a *Long Code Transition Request Order* (ORDQ =
 4 '00000001') requesting a transition to the private long code.

5 The base station shall process the *Long Code Transition Request Order* as follows:

- 6 • If the *Long Code Transition Request Order* requests a transition to the private long
 7 code and the base station accepts the request, the base station shall send a *Long*
 8 *Code Transition Request Order* (ORDQ = '00000001'). If the base station does not
 9 accept the private long code transition request, the base station shall send a *Long*
 10 *Code Transition Request Order* (ORDQ = '00000000').
- 11 • If the *Long Code Transition Request Order* requests a transition to the public long
 12 code and the base station accepts the request, the base station shall send a *Long*
 13 *Code Transition Request Order* (ORDQ = '00000000'). If the base station does not
 14 accept the public long code transition request, the base station shall send a *Long*
 15 *Code Transition Request Order* (ORDQ = '00000001').

16 The base station shall process the *Long Code Transition Response Order* as follows:

- 17 • If the *Long Code Transition Response Order* indicates that the mobile station accepts
 18 the long code transition requested in the *Long Code Transition Request Order* sent
 19 by the base station, the base station shall use the requested long code mask on
 20 both the Forward Traffic Channel and the Reverse Traffic Channel. The base
 21 station shall specify an explicit action time in the *Long Code Transition Request*
 22 *Order*. The base station shall begin using the requested long code mask using the
 23 explicit action time (see 3.6.4.1.4).

24 3.6.4.1.6 Processing Resource Request Messages

25 The base station shall process *Resource Request Message* and *Resource Request Mini*
 26 *Message*, as follows:

- 27 • The base station may send one of the messages that assign appropriate resources
 28 (e.g. *Extended Supplemental Channel Assignment Message*, *Resource Allocation*
 29 *Message*, *Resource Allocation Mini Message*, *Universal Handoff Direction Message*,
 30 *Retry Order*, etc) to the mobile station. If the base station sends one of these
 31 messages and a Forward Packet Data Channel is not assigned, the base station
 32 shall set PILOT_GATING_USE_RATE to '0' and start transmitting the Forward Power
 33 Control Subchannel with the maximum rate at the action time of the message.
- 34 • The base station may send a *Retry Order* to the mobile station.

35 3.6.4.1.7 Response to Enhanced Origination Message

36 If the base station receives an *Enhanced Origination Message*, the base station should
 37 perform the following:

- 38 • If the base station does not accept this call request from the mobile station, the
 39 base station should send one of the following messages:

- 1 + A *Call Assignment Message* to the mobile station, with the RESPONSE_IND field
2 set to '1', the ACCEPT_IND field set to '0', and the TAG field set to the value of
3 the TAG or ADD_TAG field of the *Enhanced Origination Message*.
- 4 + A *Retry Order* if the *Enhanced Origination Message* is for a packet data service
5 option.
- 6 • If the base station accepts this call request from the mobile station, the base station
7 should send a *Call Assignment Message*, *Service Connect Message*, or *Universal*
8 *Handoff Direction Message* (with the Service Configuration information record
9 included) to assign the call:
- 10 – If the GLOBAL_EMERGENCY_CALL indicator is set to '1' and the service
11 associated with this origination is a voice service, the base station shall
12 recognize this as an emergency call and should process the message using an
13 implementation-dependent procedure which may include ignoring the dialed
14 digits. If the base station receives an *Origination Message* and the
15 GLOBAL_EMERGENCY_CALL indicator is set to '1' and the service associated
16 with this origination is not a voice service, the base station may recognize this
17 as an emergency call and should process the message using an implementation-
18 dependent procedure which may include ignoring the dialed digits.
- 19 – If the *Enhanced Origination Message* includes a SYNC_ID field, then based on
20 the value of the SYNC_ID received, the base station may instruct the mobile
21 station to restore one or more of the service option connections from the stored
22 service configuration, and if so, the base station shall send a *Call Assignment*
23 *Message*, *Universal Handoff Direction Message*, or *Service Connect Message* to
24 the mobile station as follows:
- 25 + If the base station sends a *Call Assignment Message*, the base station shall
26 perform the following:
- 27 o The base station shall set the RESPONSE_IND field to '1', the
28 ACCEPT_IND field to '1', and the TAG field to the value of the TAG or
29 ADD_TAG field of the *Enhanced Origination Message*.
- 30 o The base station shall set the USE_OLD_SERV_CONFIG field to '1'.
- 31 + If the base station sends a *Service Connect Message*, the base station shall
32 perform the following:
- 33 o The base station shall set the USE_OLD_SERV_CONFIG field to '11'.
- 34 + If the mobile station is to restore all remaining service option connections
35 from the stored service configuration, the base station shall set the SR_ID
36 field to '111'; if the mobile station is to restore more than one but not all
37 remaining service option connections from the stored service configuration,
38 the base station shall set the SR_ID field to '000' and the
39 SR_ID_RESTORE_BITMAP field to the bitmap of service reference identifiers
40 corresponding to the service option connections to be restored; otherwise,
41 the base station shall set the SR_ID field to the service reference identifier
42 corresponding to the service option connection to be restored.

- 1 + At the action time corresponding to this message, the base station shall
2 restore the indicated service option connection(s) from the stored service
3 configuration; Layer 3 shall instantiate a Call Control instance (as specified
4 in 3.6.8) for each of the restored service option connections with a 'restore
5 indication' and Layer 3 shall identify each of these Call Control instances by
6 the value of the CON_REF field corresponding to the restored service option
7 connection.
- 8 – If the base station sends a *Call Assignment Message* to assign the call, the base
9 station shall perform the following:
- 10 + The base station shall set the RESPONSE_IND field to '1', the ACCEPT_IND
11 field to '1', and the TAG field to the value of the TAG or ADD_TAG field of the
12 *Enhanced Origination Message*. The base station shall set the
13 CON_REF_INCL field of the message to '1' and the CON_REF field of the
14 message to the value of the connection reference of the service option
15 connection corresponding to this call.
- 16 + A service option connection corresponding to this call (if not already
17 established) shall be established by performing service negotiation; the base
18 station should initiate service negotiation to establish the service option
19 connection, if permitted by the current service negotiation subfunction.
- 20 + At the action time corresponding to this message, the Layer 3 shall
21 instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall
22 identify this Call Control instance by the value of the CON_REF field
23 included in the *Call Assignment Message*.
- 24 – If the base station sends a *Service Connect Message* or a *Universal Handoff*
25 *Direction Message* (with the Service Configuration information record included),
26 to assign the call, the base station shall perform the following:
- 27 + The base station shall set the call control parameters corresponding to this
28 call included in the message as follows: The base station shall set the
29 RESPONSE_IND field to '1', and the TAG field to the value of the TAG or
30 ADD_TAG field of the *Enhanced Origination Message*.
- 31 + At the action time corresponding to this message, the Layer 3 shall
32 instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall
33 identify this Call Control instance by the value of the CON_REF assigned to
34 the service option connection corresponding to this call.

35 3.6.4.1.8 Processing Resource Release Request Message and Resource Release Request 36 Mini Message

37 The base station may perform the following in response to receiving a *Resource Release*
38 *Request Message* or a *Resource Release Request Mini Message* from the mobile station:

- 1 • If the mobile station requests to release a service option connection, the base
2 station may send a *Service Connect Message*, *General Handoff Direction Message*, or
3 a *Universal Handoff Direction Message* to release the service option connection.
- 4 • If the mobile station requests to commence reverse pilot gating operation, the base
5 station may send a *Extended Release Message*, *Extended Release Mini Message*, or a
6 *Universal Handoff Direction Message* to instruct the mobile station to commence the
7 reverse pilot gating operation.

8 3.6.4.1.9 Processing Base Station Status Request Message

9 If the requested RECORD_TYPE equals '00000000' (Pilot Information), the base station
10 should send a *Base Station Status Response Message* with a RECORD_TYPE of '00000000'
11 (Pilot Information) to the mobile station:

- 12 • For each pilot being requested by the mobile station, the base station shall include
13 the corresponding Base Station Identification number.
- 14 • If SID and NID information is being requested by the mobile station, the base
15 station shall include the SID and NID information corresponding to these pilots.
- 16 • If LAT and LONG information is being requested by the mobile station, the base
17 station should include the LAT and LONG information corresponding to these pilots.

18 3.6.4.1.10 Base Station assigned PLCM

19 If PLCM_TYPE field is included in *Extended Channel Assignment Message* or *Universal*
20 *Handoff Direction Message* and is set to '0001', the base station shall include PLCM_39 field
21 in the message and shall set it as follows:

22 P₃₈ P₃₇ are set as specified in the Table 3.6.4.1.10-1:

23 **Table 3.6.4.1.10-1. The Base Station Assigned Public Long Code Mask Type**

P₃₈ P₃₇ (binary)	Descriptions
00	Proprietary Approach
01	Latitude-Longitude Approach
10	Reserved
11	Reserved

24

25 If P₃₈ P₃₇ is equal to '01'; the base station shall set the fields as follows:

26 $P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, P_{27}, P_{26} = ((\text{BASE_LONG} \gg 5) \times$
27 $\cos |\text{BASE_LAT}|) \bmod (2^{11}),$

28 $P_{25}, P_{24}, P_{23}, P_{22}, P_{21}, P_{20}, P_{19}, P_{18}, P_{17}, P_{16}, P_{15} = (\text{BASE_LAT} \gg 5) \bmod (2^{11}),$

29 $P_{14}, P_{13}, \dots, P_2, P_1, P_0 = \text{identifiers assigned by the base station},$

30 where:

1 BASE_LONG is the longitude of the base station in units of 0.25 seconds, expressed
2 as a two's complement signed number with positive numbers signifying East
3 longitude, and,

4 BASE_LAT is the latitude of the base station in units of 0.25 seconds, expressed as
5 a two's complement signed number with positive numbers signifying North
6 latitudes.

7

1 3.6.4.2 Traffic Channel Initialization Substate

2 In this substate, the base station begins transmitting on the Forward Traffic Channel and
3 acquires the Reverse Traffic Channel.

4 Upon entering the *Traffic Channel Initialization Substate*, the base station shall perform the
5 following:

- 6 • Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the
7 message acknowledgment procedures as specified in [4].
- 8 • The base station shall set its Forward and Reverse Traffic Channel long code masks
9 to the public long code mask (see [2]).
- 10 • The base station shall set its Forward and Reverse Traffic Channel frame offsets (see
11 [2]) to the frame offset assigned to the mobile station.
- 12 • If the base station set the ASSIGN_MODE field of the *Channel Assignment Message*
13 to '000', the base station shall set SERV_NEG to disabled. If the base station set
14 the ASSIGN_MODE field of the *Channel Assignment Message* to '100', the base
15 station shall set SERV_NEG to enabled. For operation in band classes other than
16 Band Class 0, SERV_NEG is always equal to enabled.
- 17 • If the base station uses the *Extended Channel Assignment Message*, the base station
18 shall set the SERV_NEG to enabled.
- 19 • The base station shall determine the initial service configuration as follows:
 - 20 – If SERV_NEG is equal to disabled, the initial service configuration shall include
21 Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse
22 Traffic Channels, and shall include no service option connections.
 - 23 – If SERV_NEG is equal to enabled and the base station sets the
24 GRANTED_MODE field of the *Channel Assignment Message* or the *Extended*
25 *Channel Assignment Message* to '00', the initial service configuration shall
26 include the multiplex option and radio configuration for the Forward and
27 Reverse Traffic Channels as specified by the DEFAULT_CONFIG field, and shall
28 include no service option connections.
 - 29 – If SERV_NEG is equal to enabled and the base station sets the
30 GRANTED_MODE field of the *Extended Channel Assignment Message* to '01' or
31 '10', the initial service configuration shall include the default Forward and
32 Reverse Traffic Channel multiplex options that are derived from the radio
33 configurations corresponding to Table 3.7.2.3.2.21-3 and shall include no
34 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 the
6 case of a mobile station originated call, or the *Page Response Message*, in the
7 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’, the
11 base station shall begin to use the stored service configuration corresponding to
12 the SYNC_ID conveyed to the mobile station as the current service configuration
13 and shall begin to process Forward and Reverse Traffic Channel frames
14 accordingly. The set of service option connections to be restored are determined
15 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. The base station shall not use 0 bps frames.
- 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’, the
6 base station shall perform the following:
- 7 + For each service option connection (with corresponding connection reference
8 CON_REF_i) in the stored service configuration record, Layer 3 shall
9 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_i. Furthermore, the base station
12 shall also identify the Call Control instance corresponding to the first service
13 option connection listed in this restored Service Configuration information
14 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 *Traffic*
27 *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:
- 37 – If SERV_NEG is equal to disabled, the base station shall process the service
38 option request specified in the *Page Response Message* in accordance with the
39 requirements for the active service subfunction (see 3.6.4.1.2.2).

- 1 – If SERV_NEG is equal to enabled and the base station sets the
2 GRANTED_MODE field of the *Channel Assignment Message* or the *Extended*
3 *Channel Assignment Message* to ‘00’ or ‘01’, the base station should initiate
4 service negotiation to request a service configuration in accordance with the
5 requirements for the active service subfunction (see 3.6.4.1.2.2).
- 6 – If SERV_NEG is equal to enabled and the base station sets the
7 GRANTED_MODE field of the *Channel Assignment Message* or the *Extended*
8 *Channel Assignment Message* to ‘10’, the base station should send a *Service*
9 *Connect Message* in accordance with the requirements for the active service
10 subfunction (see 3.6.4.1.2.2).
- 11 • Otherwise, the base station shall perform the following:
- 12 – If SERV_NEG equals enabled, the call is mobile-station-originated and the base
13 station sets the GRANTED_MODE field of the *Channel Assignment Message* or
14 the *Extended Channel Assignment Message* to ‘10’, the base station should send
15 a *Service Connect Message* in accordance with the requirements for the active
16 service subfunction (see 3.6.4.1.2.2).
- 17 – If SERV_NEG equals disabled and the call is mobile-station-originated, the base
18 station shall process the service option request specified in the *Origination*
19 *Message* in accordance with the requirements for the active service subfunction
20 (see 3.6.4.1.2.2).

21 While in the *Traffic Channel Substate*, the base station shall perform the following:

- 22 • The base station shall transmit the power control subchannel as specified in [2].
- 23 • The base station shall process Forward and Reverse Traffic Channel frames in
24 accordance with the requirements for the active service subfunction (see
25 3.6.4.1.2.2).
- 26 • When PILOT_GATING_USE_RATE is equal to ‘0’ and the base station is to establish
27 a Forward or Reverse Fundamental Channel or a Forward or Reverse Dedicated
28 Control Channel, or a Forward Packet Data Channel, the base station shall send a
29 *Universal Handoff Direction Message* to the mobile station.
- 30 • When a Forward Packet Data Channel is not assigned, PILOT_GATING_USE_RATE
31 is equal to ‘1’ and the base station has data to send, the base station may send a
32 *Resource Allocation Message*, *Resource Allocation Mini Message*, *Extended*
33 *Supplemental Channel Assignment Message*, *Forward Supplemental Channel*
34 *Assignment Mini Message*, *Reverse Supplemental Channel Assignment Mini Message*,
35 or *Universal Handoff Direction Message* and set PILOT_GATING_USE_RATE to ‘0’ to
36 start transmitting the Forward Power Control Subchannel with the maximum rate
37 at the action time of the message and start the exchange of user information.
- 38 • When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is
39 equal to ‘1’, and the base station has data or signaling messages to send, the base
40 station may transition to the Active Mode. If the base station determines to
41 transition to the Active Mode, the base station shall perform the following:

- 1 – If a Forward Dedicated Control Channel is assigned, the base station shall
2 perform one of the following:
- 3 + The base station shall send a *Resource Allocation Message, Resource*
4 *Allocation Mini Message, Extended Supplemental Channel Assignment*
5 *Message, Forward Supplemental Channel Assignment Mini Message, Reverse*
6 *Supplemental Channel Assignment Mini Message, or Universal Handoff*
7 *Direction Message* and set PILOT_GATING_USE_RATE to ‘0’ at the action
8 time of the message, or
- 9 + The base station shall set PILOT_GATING_USE_RATE to ‘0’ (see [3]).
- 10 – Otherwise (i.e., Forward Dedicated Control Channel is not assigned), the base
11 station shall set PILOT_GATING_USE_RATE to ‘0’.
- 12 • When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is
13 equal to ‘1’, and the base station has detected continuous reverse pilot channel or a
14 valid Reverse Fundicated Channel frame is received, the base station shall set
15 PILOT_GATING_USE_RATE to ‘0’.
- 16 • If the base station is to release any but not all traffic channels, the base station
17 shall send a *Universal Handoff Direction Message, Extended Release Message, or an*
18 *Extended Release Mini Message* to the mobile station.
- 19 • If the base station is to assign R-FCH, the base station may send a *Universal*
20 *Handoff Direction Message or Shared Channel Configuration Order* (ORDQ =
21 00000000) to the mobile station. If the base station is to release R-FCH, the base
22 station may send a *Universal Handoff Direction Message, Extended Release Message,*
23 *Extended Release Mini Message, or Shared Channel Configuration Order* (ORDQ =
24 00000001) to the mobile station.
- 25 • When PILOT_GATING_USE_RATE is equal to ‘0’, the base station does not have any
26 data to send, and the base station has determined that the mobile station does not
27 have any data to send, then the base station may send an *Extended Release*
28 *Message, Extended Release Mini Message or Universal Handoff Direction Message.* At
29 the action time of the message, the base station may perform the following:
- 30 Set PILOT_GATING_USE_RATE to ‘1’.
- 31 If the channel configuration in the message does not include a Forward Packet Data
32 Channel, start transmitting the Forward Power Control Subchannel with the
33 specified rate and stop the exchange of user information.
- 34 If the channel configuration in the message includes a Forward Packet Data
35 Channel, stop the exchange of user information and signaling messages.
- 36 • If the base station declares a loss of Reverse Traffic Channel continuity (see 3.4), the
37 base station should send a *Release Order* to the mobile station. If the base station
38 sends a *Release Order*, the Layer 3 shall send a “release indication” to all Call
39 Control instances, and shall enter the *Release Substate*.
- 40 • The base station may perform Forward Traffic Channel power control as specified in
41 3.6.4.1.1.

- 1 • The base station may request a new service configuration by initiating service
2 negotiation or service option negotiation in accordance with the requirements for
3 the active service subfunction (see 3.6.4.1.2.2).
- 4 • The base station may send a *Service Option Control Message* or *Service Option*
5 *Control Order* to invoke a service option specific function in accordance with the
6 requirements for the active service subfunction (see 3.6.4.1.2.2).
- 7 • The base station may request a long code transition, as specified in 3.6.4.1.5, either
8 autonomously or in response to a request for voice privacy specified in the
9 *Origination Message* or *Page Response Message*.
- 10 • The base station may perform authentication procedures as specified in 3.3.1.
- 11 • The base station may perform TMSI assignment procedures (see 2.3.15).
- 12 • For the first call, if the call is mobile-station-originated and the PACA_REORIG field
13 of the *Origination Message* is equal to '1', the Layer 3 shall send a "paca reorig
14 indication" to the Call Control instance.
- 15 • The base station may control operation of the Forward or Reverse Supplemental
16 Code Channels by including Supplemental Code Channel assignment information
17 in the *Supplemental Channel Assignment Message*, or the *General Handoff Direction*
18 *Message*.
- 19 • If neither a Forward Fundamental Channel, nor a Forward Dedicated Control
20 Channel is assigned, the base station shall not assign a Forward Supplemental
21 Channels to the mobile station.
- 22 • If a Reverse Packet Data Channel is assigned, the base station shall not assign a
23 Reverse Supplemental Channel to the mobile station.
- 24 • The base station may control operation of the Forward or Reverse Supplemental
25 Channels by including Supplemental Channel assignment information in the
26 *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental*
27 *Channel Assignment Mini Message*, or the *Reverse Supplemental Channel Assignment*
28 *Mini Message*.
- 29 • The base station may assign a new call by sending a *Call Assignment Message*,
30 *Service Connect Message*, or *Universal Handoff Direction Message* (with the Service
31 Configuration information record included) to assign the call:
 - 32 – If the base station sends a *Call Assignment Message* to assign the call, the base
33 station shall perform the following:
 - 34 + The base station shall set the RESPONSE_IND field to '0'.
 - 35 + The base station shall set the CON_REF_INCL field of the message to '1' and
36 the CON_REF field of the message to the value of the connection reference of
37 the service option connection corresponding to this call.
 - 38 + A service option connection corresponding to this call (if not already
39 established) shall be established by performing service negotiation; the base

- 1 station should initiate service negotiation to establish the service option
2 connection, if permitted by the current service negotiation subfunction.
- 3 + At the action time corresponding to this message, the Layer 3 shall
4 instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall
5 identify this Call Control instance by the value of the CON_REF field
6 included in the *Call Assignment Message*.
- 7 – If the base station sends a *Service Connect Message* or *Universal Handoff*
8 *Direction Message* (with the Service Configuration information record included)
9 to assign the call, the base station shall perform the following:
- 10 + The base station shall set the call control parameters corresponding to this
11 call included in the message as follows: The base station shall set the
12 RESPONSE_IND field to ‘0’, and the BYPASS_ALERT_ANSWER field as
13 required.
- 14 + At the action time corresponding to this message, the Layer 3 shall
15 instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall
16 identify this Call Control instance by the value of the CON_REF assigned to
17 the service option connection corresponding to this call.
- 18 • The base station may instruct the mobile station to restore one or more of the
19 service option connection records from the stored service configuration by sending a
20 *Call Assignment Message* or *Service Connect Message* as follows:
- 21 – If the base station sends a *Call Assignment Message*, the base station shall
22 perform the following:
- 23 + The base station shall set the RESPONSE_IND field to ‘1’, the ACCEPT_IND
24 field to ‘1’, and the TAG field to the value of the TAG field of the *Enhanced*
25 *Origination Message*.
- 26 + The base station shall set the USE_OLD_SERV_CONFIG field to ‘1’.
- 27 – If the base station sends a *Service Connect Message*, the base station shall
28 perform the following:
- 29 + The base station shall set the USE_OLD_SERV_CONFIG field to ‘11’.
- 30 – If the mobile station is to restore all remaining service option connection records
31 from the stored service configuration, the base station shall set the SR_ID field
32 to ‘111’; otherwise, the base station shall set the SR_ID field to the service
33 reference identifier corresponding to the service option connection record to be
34 restored.

- 1 – At the action time corresponding to this message, the base station shall restore
2 the indicated service option connection record(s) from the stored service
3 configuration; Layer 3 shall instantiate a Call Control instance (as specified in
4 3.6.8) for each of the restored service option connections with a ‘restore
5 indication’ and Layer 3 shall identify each of these Call Control instances by the
6 value of the CON_REF field corresponding to the restored service option
7 connection.
- 8 • If the Layer 3 receives a ‘call release request’ from a Call Control instance, the Layer
9 3 shall perform the following:
- 10 – If the service option connection corresponding to this call is the only one
11 connected, the base station should send the mobile station a *Release Order* and
12 enter the *Release Substate*.
- 13 – If the service option connection corresponding to this call is not the only one
14 connected, the base station should release this service option connection. At the
15 action time of the message, the Layer 3 shall terminate this Call Control
16 instance.
- 17 • The base station may send the following messages. Some of these messages are
18 generated by the Call Control Instance. If the base station sends a message, the
19 base station shall comply with the specified requirements for sending the message,
20 if any:
- 21 1. *Alert With Information Message*;
- 22 2. *Reserved*
- 23 3. *Audit Order*
- 24 4. *Authentication Challenge Message*
- 25 5. *Base Station Challenge Confirmation Order*
- 26 6. *Base Station Status Response Message*
- 27 7. *Call Assignment Message*
- 28 8. *Candidate Frequency Search Request Message*
- 29 9. *Candidate Frequency Search Control Message*
- 30 10. *Continuous DTMF Tone Order*
- 31 11. *Data Burst Message*
- 32 12. *Extended Alert With Information Message*
- 33 13. *Extended Flash With Information Message*
- 34 14. *Extended Handoff Direction Message*
- 35 15. *Extended Neighbor List Update Message*
- 36 16. *Extended Release Message*: If the physical channels indicated in CH_IND field of
37 this message includes all the physical channels currently being processed by

- 1 the mobile station, the Layer 3 shall send a “release indication” to all Call
2 Control instances, and shall enter the *Release Substate*.
- 3 17. *Extended Release Mini Message*: If the physical channels indicated in CH_IND
4 field of this message includes all the physical channels currently being
5 processed by the mobile station, the Layer 3 shall send a “release indication” to
6 all Call Control instances, and shall enter the *Release Substate*.
- 7 18. *Extended Supplemental Channel Assignment Message*
- 8 19. *Forward Supplemental Channel Assignment Mini Message*
- 9 20. *General Handoff Direction Message*
- 10 21. *Flash With Information Message*
- 11 22. *In-Traffic System Parameters Message*¹⁰¹
- 12 23. *Local Control Order*
- 13 24. *Lock Until Power-Cycled Order*: The base station should send this order in
14 unassured mode.
- 15 25. *Long Code Transition Request Order*
- 16 26. *Maintenance Order*
- 17 27. *Maintenance Required Order*
- 18 28. *Message Encryption Mode Order*
- 19 29. *Mobile Assisted Burst Operation Parameters Message*
- 20 30. *Mobile Station Registered Message*
- 21 31. *Neighbor List Update Message*: The base station shall not send this message if
22 P_REV_IN_USE is greater than or equal to eight.
- 23 32. *Parameter Update Order* (see 2.3.12.1.3).
- 24 33. *Periodic Pilot Measurement Request Order*
- 25 34. *Pilot Measurement Request Order*
- 26 35. *Power Control Message*
- 27 36. *Power Control Parameters Message*
- 28 37. *Power Up Function Message*
- 29 38. *Power Up Function Completion Message*
- 30 39. *Resource Allocation Message*

¹⁰¹ 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 40. *Resource Allocation Mini Message*
- 2 41. *Release Order*: The Layer 3 shall send a “release indication” to all Call Control
- 3 instances, and shall enter the *Release Substate*.
- 4 42. *Retrieve Parameters Message*
- 5 43. *Retry Order*
- 6 44. *Reverse Supplemental Channel Assignment Mini Message*
- 7 45. *Security Mode Command Message*
- 8 46. *Send Burst DTMF Message*
- 9 47. *Service Connect Message*: The base station shall send the message in
- 10 accordance with the requirements for the active service subfunction (see
- 11 3.6.4.1.2.2).
- 12 48. *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 49. *Service Option Control Order*
- 16 50. *Service Option Request Order*
- 17 51. *Service Option Response Order*
- 18 52. *Service Redirection Message*: The Layer 3 shall send a “release indication” to all
- 19 Call Control instances, and shall enter the *Release Substate*.
- 20 53. *Service Request Message*: The base station shall send the message in
- 21 accordance with the requirements for the active service subfunction (see
- 22 3.6.4.1.2.2).
- 23 54. *Service Response Message*: The base station shall send the message in
- 24 accordance with the requirements for the active service subfunction (see
- 25 3.6.4.1.2.2).
- 26 55. *Set Parameters Message*
- 27 56. *SSD Update Message*
- 28 57. *Status Request Message*
- 29 58. *Status Request Order*: The base station shall not send this message if
- 30 P_REV_IN_USE is greater than or equal to eight.
- 31 59. *Supplemental Channel Assignment Message*
- 32 60. *TMSI Assignment Message*
- 33 61. *Universal Handoff Direction Message*
- 34 62. *User Zone Reject Message*
- 35 63. *User Zone Update Message*
- 36 64. *Radio Configuration Parameters Message*

- 1 65. *Handoff Supplementary Information Solicit Message*
- 2 66. *General Extension Message* : The base station may send this message in order to
3 extend the above messages with additional records.
- 4 67. *Alternative Technology Information Message*: The base station may send this
5 message to update the Radio Interface records.
- 6 • If the base station receives one of the following messages from the mobile station,
7 the base station shall process the message according to the specified requirements,
8 if any:
- 9 1. *Base Station Challenge Order*: The base station shall process the message as
10 described in 2.3.12.1.5.
- 11 2. *Base Station Status Request Message*: The base station shall process the
12 message as described in 3.6.4.1.9
- 13 3. *Call Cancel Message*
- 14 4. *Candidate Frequency Search Report Message*: The base station shall process the
15 message as described in 3.6.6.2.2.6.
- 16 5. *Candidate Frequency Search Response Message*: The base station shall process
17 the message as described in 3.6.6.2.2.4.
- 18 6. *CDMA Off Time Report Message*
- 19 7. *Connect Order*: If the CON_REF_INCL field is not included in this message or if
20 the CON_REF_INCL field equals '0', the Layer 3 shall deliver this message to the
21 Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver
22 this message to the Call Control instance identified by CON_REF.
- 23 8. *Continuous DTMF Tone Order*: If the CON_REF_INCL field is not included in this
24 message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this
25 message to the Call Control instance identified by NULL; otherwise, the Layer 3
26 shall deliver this message to the Call Control instance identified by CON_REF.
- 27 9. *Data Burst Message*: The base station may respond with a *Retry Order*.
- 28 10. *Enhanced Origination Message*: The base station shall process the message as
29 described in 3.6.4.1.7.
- 30 11. *Extended Flash With Information Message*: If CON_REF_INCL equals '0', the
31 Layer 3 shall deliver this message to the Call Control instance identified by
32 NULL; otherwise, the Layer 3 shall deliver this message to the Call Control
33 instance identified by CON_REF.
- 34 12. *Extended Handoff Completion Message*: The base station shall process the
35 message as described in 3.6.6.2.2.7.
- 36 13. *Extended Pilot Strength Measurement Message*: The base station shall process
37 the message as described in 3.6.6.2.2.1.
- 38 14. *Extended Release Response Message*.

- 1 15. *Extended Release Response Mini Message.*
- 2 16. *Flash With Information Message:* The Layer 3 shall deliver this message to the
3 Call Control instance identified by NULL.
- 4 17. *Handoff Completion Message:* The base station shall process the message as
5 described in 3.6.6.2.2.7.
- 6 18. *Local Control Response Order*
- 7 19. *Long Code Transition Request Order:* The base station shall process the message
8 as described in 3.6.4.1.5.
- 9 20. *Long Code Transition Response Order*
- 10 21. *Mobile Station Reject Order:* If the CON_REF_INCL field is included in this
11 message, Layer 3 shall perform the following: if the CON_REF_INCL field equals
12 '0', Layer 3 shall send a 'messages rejected indication' to the Call Control
13 instance identified by NULL; otherwise, Layer 3 shall send a 'messages rejected
14 indication' to the Call Control instance identified by CON_REF.
- 15 22. *Origination Continuation Message:* The Layer 3 shall deliver this message to the
16 Call Control instance identified by NULL.
- 17 23. *Outer Loop Report Message*
- 18 24. *Parameters Response Message*
- 19 25. *Parameter Update Confirmation Order*
- 20 26. *Periodic Pilot Strength Measurement Message*
- 21 27. *Pilot Strength Measurement Message:* The base station shall process the
22 message as described in 3.6.6.2.2.1.
- 23 28. *Pilot Strength Measurement Mini Message*
- 24 29. *Power Measurement Report Message:* The base station may process the message
25 as described in 3.6.4.1.1.
- 26 30. *Release Order:* The base station shall send the mobile station a *Release Order*
27 within T2b seconds, and the Layer 3 shall send a "release indication" to all Call
28 Control instances, and enter the *Release Substate*; otherwise, the Layer 3 shall
29 send a "send alert with info message indication" to all Call Control instances.
- 30 31. *Resource Release Request Message:* The base station shall process the message
31 as described in 3.6.4.1.8.
- 32 32. *Resource Release Request Mini Message:* The base station shall process the
33 message as described in 3.6.4.1.8.
- 34 33. *Resource Request Message:* The base station shall process the message as
35 described in 3.6.4.1.6.
- 36 34. *Resource Request Mini Message:* The base station shall process the message as
37 described in 3.6.4.1.6.

- 1 35. *Reserved.*
- 2 36. *Reserved.*
- 3 37. *Reserved.*
- 4 38. *Send Burst DTMF Message:* If the CON_REF_INCL field is not included in this
5 message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this
6 message to the Call Control instance identified by NULL; otherwise, the Layer 3
7 shall deliver this message to the Call Control instance identified by CON_REF.
- 8 39. *Service Connect Completion Message:* The base station shall process the
9 message in accordance with the requirements for the active service subfunction
10 (see 3.6.4.1.2.2).
- 11 40. *Service Option Control Message:* The base station shall process the message in
12 accordance with the requirements for the active service subfunction (see
13 3.6.4.1.2.2).
- 14 41. *Service Option Control Order:* The base station shall process the message in
15 accordance with the requirements for the active service subfunction (see
16 3.6.4.1.2.2).
- 17 42. *Service Option Request Order:* The base station shall process the message in
18 accordance with the requirements for the active service subfunction (see
19 3.6.4.1.2.2).
- 20 43. *Service Option Response Order:* The base station shall process the message in
21 accordance with the requirements for the active service subfunction (see
22 3.6.4.1.2.2).
- 23 44. *Service Request Message:* The base station shall process the message in
24 accordance with the requirements for the active service subfunction (see
25 3.6.4.1.2.2).
- 26 45. *Service Response Message:* The base station shall process the message in
27 accordance with the requirements for the active service subfunction (see
28 3.6.4.1.2.2).
- 29 46. *SSD Update Confirmation Order*
- 30 47. *SSD Update Rejection Order*
- 31 48. *Status Response Message*
- 32 49. *Status Message*
- 33 50. *Supplemental Channel Request Message:* The base station may respond with a
34 *Supplemental Channel Assignment Message*, an *Extended Supplemental Channel*
35 *Assignment Message*, or a *Retry Order*.
- 36 51. *Supplemental Channel Request Mini Message:* The base station may respond
37 with a *Forward Supplemental Channel Assignment Mini Message* or a *Reverse*
38 *Supplemental Channel Assignment Mini Message*, or both. The base station may
39 also respond with a *Retry Order*.

1 52. *TMSI Assignment Completion Message*

2 53. *User Zone Update Request Message*: The base station shall process this message
3 as specified in 3.6.7.2.

4 54. *Handoff Supplementary Information Notification Message*: The base station shall
5 process this message as specified in 3.6.6.2.2.16.

6 55. *General Extension Message*: The base station shall store the records and process
7 the message included in the *General Extension Message*.

8 3.6.4.4 Release Substate

9 In this substate, the base station disconnects all calls and physical channels.

10 While in the *Release Substate*, the base station shall perform the following:

- 11 • The base station shall transmit the power control subchannel as specified in [2].
- 12 • The base station shall transmit on the Forward Traffic Channel for at least T_{3b}
13 seconds. The base station shall transmit null traffic and power control bits on the
14 Forward Fundamental Channel, except when transmitting signaling traffic, if the
15 Fundamental Channel is present or transmit power control bits on the Forward
16 Dedicated Control Channel, if only the dedicated Control Channel is present. After
17 T_{3b} seconds, the base station should stop transmitting on the Forward Traffic
18 Channel.
- 19 • When a Forward Packet Data Channel and a Forward Common Power Control
20 Channel subchannel are assigned to this mobile station, the base station shall
21 transmit on the Forward Common Power Control Channel subchannel for at least
22 T_{3b} seconds. After T_{3b} seconds, the base station should stop transmitting on the
23 Forward Common Power Control Channel subchannel. If no response is received to
24 the Layer 3 message sent to the mobile station to release the call, the base station
25 should wait T_{5b} before assigning this Forward Common Power Control Channel
26 subchannel to another mobile station.
- 27 • The base station shall process Reverse Traffic Channel signaling traffic and may
28 discard other types of Reverse Traffic Channel traffic.
- 29 • The base station may perform TMSI assignment procedures (see 2.3.15).
- 30 • The base station may perform Forward Traffic Channel power control as specified in
31 3.6.4.1.1.
- 32 • The base station may send a *Service Option Control Message* to invoke a service
33 option specific function in accordance with the requirements for the active service
34 subfunction (see 3.6.4.1.2.2).
- 35 • The base station may send the following messages. Some of these messages are
36 generated by the Call Control Instance. If the base station sends a message, the
37 base station shall comply with the specified requirements for sending the message,
38 if any.

39 1. *Alert With Information Message*

- 1 2. *Audit Order*
- 2 3. *Candidate Frequency Search Request Message*
- 3 4. *Candidate Frequency Search Control Message*
- 4 5. *Data Burst Message*
- 5 6. *Extended Alert With Information Message*
- 6 7. *Extended Handoff Direction Message*
- 7 8. *Extended Neighbor List Update Message*
- 8 9. *Extended Release Message*
- 9 10. *Extended Supplemental Channel Assignment Message*
- 10 11. *Forward Supplemental Channel Assignment Mini Message*
- 11 12. *General Handoff Direction Message*
- 12 13. *In-Traffic System Parameters Message*¹⁰²
- 13 14. *Local Control Order*
- 14 15. *Lock Until Power-Cycled Order*: The base station should send this order in
15 unassured mode.
- 16 16. *Maintenance Order*
- 17 17. *Maintenance Required Order*
- 18 18. *Mobile Assisted Burst Operation Parameters Message*
- 19 19. *Mobile Station Registered Message*
- 20 20. *Neighbor List Update Message*: The base station shall not send this message if
21 P_REV_IN_USE is greater than or equal to eight.
- 22 21. *Parameter Update Order* (see 2.3.12.1.3 or 3.7.4).
- 23 22. *Power Control Message*
- 24 23. *Power Control Parameters Message*
- 25 24. *Power Up Function Message*
- 26 25. *Power Up Function Completion Message*
- 27 26. *Release Order*
- 28 27. *Resource Allocation Message*
- 29 28. *Resource Allocation Mini Message*

¹⁰² 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 29. *Resource Release Request Message*
- 2 30. *Resource Release Request Mini Message*
- 3 31. *Resource Request Message*
- 4 32. *Resource Request Mini Message*
- 5 33. *Retrieve Parameters Message*
- 6 34. *Reverse Supplemental Channel Assignment Mini Message*
- 7 35. *Service Option Control Message*: The base station shall send the message in
8 accordance with the requirements for the active service subfunction (see
9 3.6.4.1.2.2).
- 10 36. *Service Option Control Order*
- 11 37. *Status Request Message*
- 12 38. *Status Request Order*: The base station shall not send this message if
13 P_REV_IN_USE is greater than or equal to eight.
- 14 39. *Supplemental Channel Assignment Message*
- 15 40. *TMSI Assignment Message*
- 16 41. *Universal Handoff Direction Message*
- 17 42. *User Zone Reject Message*
- 18 43. *User Zone Update Message*
- 19 44. *General Extension Message* : The base station may send this message in order to
20 extend the above messages with additional records.
- 21 45. *Alternative Technology Information Message*: The base station may send this
22 message to update the Radio Interface records.
- 23 • If the base station receives one of the following messages from the mobile station,
24 the base station shall process the message according to the specified requirements,
25 if any:
- 26 1. *Base Station Challenge Order*: The base station shall process the message as
27 described in 2.3.12.1.5.
- 28 2. *Call Cancel Message*
- 29 3. *Candidate Frequency Search Report Message*: The base station shall process the
30 message as described in 3.6.6.2.2.6.
- 31 4. *Candidate Frequency Search Response Message*: The base station shall process
32 the message as described in 3.6.6.2.2.4.
- 33 5. *Connect Order*: If the CON_REF_INCL field is not included in this message or if
34 the CON_REF_INCL field equals '0', the Layer 3 shall deliver this message to the
35 Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver
36 this message to the Call Control instance identified by CON_REF.

- 1 6. *Continuous DTMF Tone Order*: If the CON_REF_INCL field is not included in this
2 message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this
3 message to the Call Control instance identified by NULL; otherwise, the Layer 3
4 shall deliver this message to the Call Control instance identified by CON_REF.
- 5 7. *Data Burst Message*
- 6 8. *Enhanced Origination Message*
- 7 9. *Extended Flash With Information Message*: If CON_REF_INCL equals '0', the
8 Layer 3 shall deliver this message to the Call Control instance identified by
9 NULL; otherwise, the Layer 3 shall deliver this message to the Call Control
10 instance identified by CON_REF.
- 11 10. *Extended Handoff Completion Message*: The base station shall process the
12 message as described in 3.6.6.2.2.7.
- 13 11. *Extended Pilot Strength Measurement Message*: The base station shall process
14 the message as described in 3.6.6.2.2.1.
- 15 12. *Extended Release Response Message*:
- 16 13. *Flash With Information Message*: The Layer 3 shall deliver this message to the
17 Call Control instance identified by NULL.
- 18 14. *Handoff Completion Message*: The base station shall process the message as
19 described in 3.6.6.2.2.7.
- 20 15. *Local Control Response Order*
- 21 16. *Long Code Transition Request Order*
- 22 17. *Long Code Transition Response Order*
- 23 18. *Mobile Station Reject Order*: If the CON_REF_INCL field is included in this
24 message, Layer 3 shall perform the following: if the CON_REF_INCL field equals
25 '0', Layer 3 shall send a 'messages rejected indication' to the Call Control
26 instance identified by NULL; otherwise, Layer 3 shall send a 'messages rejected
27 indication' to the Call Control instance identified by CON_REF.
- 28 19. *Origination Continuation Message*: The Layer 3 shall deliver this message to the
29 Call Control instance identified by NULL.
- 30 20. *Parameter Update Confirmation Order*
- 31 21. *Parameters Response Message*
- 32 22. *Periodic Pilot Strength Measurement Message*
- 33 23. *Pilot Strength Measurement Message*: The base station shall process the
34 message as described in 3.6.6.2.2.1.
- 35 24. *Power Measurement Report Message*
- 36 25. *Release Order*
- 37 26. *Reserved*

- 1 27. *Reserved*
- 2 28. *Reserved*
- 3 29. *Send Burst DTMF Message*: If the CON_REF_INCL field is not included in this
4 message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this
5 message to the Call Control instance identified by NULL; otherwise, the Layer 3
6 shall deliver this message to the Call Control instance identified by CON_REF.
- 7 30. *Service Connect Completion Message*
- 8 31. *Service Option Control Message*: The base station shall process the message in
9 accordance with the requirements for the active service subfunction (see
10 3.6.4.1.2.2).
- 11 32. *Service Option Control Order*
- 12 33. *Service Option Request Order*
- 13 34. *Service Option Response Order*
- 14 35. *Service Request Message*
- 15 36. *Service Response Message*:
- 16 37. *SSD Update Confirmation Order*
- 17 38. *SSD Update Rejection Order*
- 18 39. *Status Response Message*
- 19 40. *Status Message*
- 20 41. *TMSI Assignment Completion Message*
- 21 42. *User Zone Update Request Message*: The base station shall process this message
22 as specified in 3.6.7.2.
- 23 43. *General Extension Message*: The base station shall store the records and
24 process the message included in the *General Extension Message*.

25 3.6.5 Registration

26 Registration is the process by which a mobile station notifies the base station of its
27 location, status, identification, slot cycle, and other characteristics. The base station can
28 make use of location information to efficiently page the mobile station when establishing a
29 mobile station terminated call. Registration also provides the mobile station's
30 SLOT_CYCLE_INDEX parameter so that the base station can determine which Paging
31 Channel or Forward Common Control Channel slots a mobile station operating in the
32 slotted mode is monitoring. Registration also provides the protocol revision number so that
33 the base station knows the capabilities of the mobile station.

34 The CDMA system supports eleven different forms of registration:

- 35 1. Power-up registration. The mobile station registers when it powers on.
- 36 2. Power-down registration. The mobile station registers when it powers off if
37 previously registered in the current serving system.

- 1 3. Timer-based registration. The mobile station registers when a timer expires.
- 2 4. Distance-based registration. The mobile station registers when the distance
3 between the current base station and the base station in which it last registered
4 exceeds a threshold.
- 5 5. Zone-based registration. The mobile station registers when it enters a new zone.
- 6 6. Parameter-change registration. The mobile station registers when certain of its
7 stored parameters change or when it enters a new system.
- 8 7. Ordered registration. The mobile station registers when the base station requests
9 it.
- 10 8. Implicit registration. When a mobile station successfully sends an *Origination*
11 *Message*, *Reconnect Message*, *Call Recovery Request Message*, or *Page Response*
12 *Message*, the base station can infer the mobile station's location. This is
13 considered an implicit registration.
- 14 9. Traffic Channel registration. Whenever the base station has registration
15 information for a mobile station that has been assigned to a Traffic Channel, the
16 base station can notify the mobile station that it is registered.
- 17 10. User Zone Registration. The mobile station registers when it selects an active User
18 Zone (see 2.6.9.1.2).
- 19 11. Encryption/Message Integrity re-sync required registration. The mobile station
20 registers when extended encryption is turned on and the mobile station determines
21 that it can not decrypt any messages from the base station (see 2.3.12.4.1.3) or the
22 mobile station registers when message integrity is supported and the mobile
23 station determines that it can not validate the MACI of any messages from the base
24 station.

25 The first five forms of registration, User Zone Registration, and Encryption/Message
26 Integrity re-sync required registration, as a group, are called autonomous registration and
27 are conditioned, in part, by roaming status and by indicators contained in the *System*
28 *Parameters Message* and *ANSI-41 System Parameters Message* (see 2.6.5.3). The base
29 station may initiate ordered registration through the *Registration Request Order*.

30 The base station can obtain registration information by sending the *Status Request*
31 *Message* to the mobile station on the Paging Channel, the Forward Common Control
32 Channel, or the Forward Traffic Channel. If the base station is operating with the mobile
33 station in Band Class 0, the base station can also obtain registration information by
34 sending the *Status Request Order* to the mobile station on the Forward Traffic Channel.
35 The base station may notify the mobile station that it is registered through the *Mobile*
36 *Station Registered Message*.

37 3.6.5.1 Registration on the Common Channels

38 The base station shall specify the forms of registration that are enabled, the corresponding
39 registration parameters, and the roaming status conditions for which registration is
40 enabled in the *System Parameters Message* and *ANSI-41 System Parameters Message*. If

1 any of the autonomous registration forms are enabled, the base station should also enable
2 parameter-change registration.

3 The base station should process an *Origination Message*, *Reconnect Message*, *Call Recovery*
4 *Request Message*, or *Page Response Message* sent on the r-csch as an implicit registration
5 of the mobile station sending the message. The base station can obtain complete
6 registration information about the mobile station at any time by sending a *Registration*
7 *Request Order* to the mobile station.

8 3.6.5.2 Registration on the Traffic Channels

9 The base station can obtain registration information from a mobile station on the Traffic
10 Channel by means of the *Status Request Message* or the *Status Request Order*. When the
11 base station has registration information for a mobile station, the base station may send a
12 *Mobile Station Registered Message* to the mobile station, specifying the base station's
13 registration system, zone, and location information.

14 3.6.6 Handoff Procedures

15 3.6.6.1 Overview

16 3.6.6.1.1 Types of Handoff

17 The base station supports the following three handoff procedures:

- 18 • *Soft Handoff*: A handoff in which a new base station commences communications
19 with the mobile station without interrupting the communications with the old base
20 station. The base station¹⁰³ can direct the mobile station to perform a soft handoff
21 only when all Forward Traffic Channels assigned to the mobile station have
22 identical band classes, frequency assignments and frame offsets. Soft handoff
23 provides diversity of Forward Traffic Channels and Reverse Traffic Channel paths on
24 the boundaries between base stations.
- 25 • *CDMA-to-CDMA Hard Handoff*: A handoff in which the base station directs the
26 mobile station to transition between disjoint sets of base stations, different band
27 classes, different frequency assignments, or different frame offsets.

28 Base station support of CDMA-to-CDMA hard handoff between different band classes is
29 optional.

30 Section 2.6.6 describes the mobile station requirements during handoff.

31 3.6.6.1.2 Active Set

32 The Active Set contains the pilots (see 2.6.6.1.2) associated with the Forward Traffic
33 Channels assigned to the mobile station. Initially the base station informs the mobile
34 station of the contents of the Active Set using the *Channel Assignment Message* or the
35 *Extended Channel Assignment Message*; subsequent changes to the contents of the Active

¹⁰³In this section the term base station may imply multiple cells or sectors.

1 Set are provided using the *Extended Handoff Direction Message*, *General Handoff Direction*
2 *Message*, or *Universal Handoff Direction Message*.

3 3.6.6.2 Requirements

4 3.6.6.2.1 Overhead Information

5 The base station sends the following messages governing the pilot search procedures
6 performed by the mobile station:

- 7 • *System Parameters Message*
- 8 • *In-Traffic System Parameters Message*
- 9 • *Neighbor List Message*
- 10 • *Extended Neighbor List Message*
- 11 • *Neighbor List Update Message*
- 12 • *Extended Neighbor List Update Message*
- 13 • *General Neighbor List Message*
- 14 • *General Handoff Direction Message*
- 15 • *Extended Handoff Direction Message*
- 16 • *Candidate Frequency Search Request Message*
- 17 • *Candidate Frequency Search Control Message*
- 18 • *Universal Handoff Direction Message*
- 19 • *Universal Neighbor List Message*
- 20 • *MC-RR Parameters Message*

21 3.6.6.2.1.1 System Parameters

22 The base station sends handoff related parameters on the Paging Channel in the *System*
23 *Parameters Message* and the *Extended System Parameters Message*, and on the Primary
24 Broadcast Control Channel in the *MC-RR Parameters Message*.

25 The base station may revise handoff related parameters for a mobile station operating on
26 the Traffic Channel by sending the *In-Traffic System Parameters Message*.

27 The base station may modify the values of the parameters SRCH_WIN_A, T_ADD, T_DROP,
28 T_COMP, and T_TDROP through the *Extended Handoff Direction Message*, the *General*
29 *Handoff Direction Message*, or the *Universal Handoff Direction Message*. In addition, the
30 base station may also modify the values of the parameters SRCH_WIN_N, SRCH_WIN_R,
31 SOFT_SLOPE, ADD_INTERCEPT, DROP_INTERCEPT, and T_TDROP_RANGE through the
32 *General Handoff Direction Message* or the *Universal Handoff Direction Message*.

33 3.6.6.2.1.2 Neighbor List

34 The base station sends a Neighbor List on the Paging Channel in the *Neighbor List Message*,
35 the *Extended Neighbor List Message*, or the *General Neighbor List Message*. The base

1 station should list the pilots in the *Neighbor List Message* in descending priority order (see
2 2.6.6.2.6.3).

3 The base station may revise the Neighbor List for a mobile station operating on the Traffic
4 Channel by sending a *Neighbor List Update Message* or an *Extended Neighbor List Update*
5 *Message*.

6 The base station shall not include a pilot that is a member of the mobile station's Active Set
7 in a *Neighbor List Update Message* or an *Extended Neighbor List Update Message*. The base
8 station shall not specify more than N_{8m} pilots in the *Neighbor List Message*, *Extended*
9 *Neighbor List Message*, *General Neighbor List Message*, or in the *Extended Neighbor List*
10 *Update Message*. The base station shall not specify more than 20 pilots in the *Neighbor List*
11 *Update Message*. The base station should list the pilots in the *Neighbor List Update*
12 *Message* in descending priority order (see 2.6.6.2.6.3).

13 3.6.6.2.1.3 Candidate Frequency Neighbor List

14 The base station sends a Candidate Frequency Neighbor List and inter-frequency hard
15 handoff related parameters in the *Candidate Frequency Search Request Message*. The base
16 station shall not specify more than N_{8m} pilots in the *Candidate Frequency Search Request*
17 *Message*.

18 3.6.6.2.1.4 Candidate Frequency Search List

19 The base station designates a subset of the Candidate Frequency Neighbor List included in
20 the *Candidate Frequency Search Request Message* as the Candidate Frequency Search List.
21 For each pilot belonging to the Candidate Frequency Search List, the base station shall set
22 the corresponding SEARCH_SET field of the *Candidate Frequency Search Request Message*
23 to '1'.

24 3.6.6.2.2 Call Processing During Handoff

25 When a mobile station performs a handoff from a base station with a P_REV lower than the
26 mobile station's MOB_P_REV to a base station with a P_REV greater than the P_REV of the
27 previous base station, the base station should send the service configuration to the mobile
28 station.

29 3.6.6.2.2.1 Processing the Pilot Strength Measurement Message

30 The base station should use the pilot strength measurements in the *Pilot Strength*
31 *Measurement Message* or the *Extended Pilot Strength Measurement Message* to determine a
32 new Active Set.

33 The base station may also use the PN phase measurements in the *Pilot Strength*
34 *Measurement Message* or the *Extended Pilot Strength Measurement Message* to estimate the
35 propagation delay to the mobile station. This estimate can be used to reduce Reverse
36 Traffic Channel acquisition time.

1 If the base station receives a *Pilot Strength Measurement Message* or *Extended Pilot Strength*
2 *Measurement Message* that includes any pilots for which supplementary information is
3 needed for handoff, then the base station may send a *Handoff Supplementary Information*
4 *Solicit Message* to the mobile station¹⁰⁴.

5 The base station may respond to a *Pilot Strength Measurement Message* or an *Extended Pilot*
6 *Strength Measurement Message* received from the mobile station by sending the *Extended*
7 *Handoff Direction Message*, the *General Handoff Direction Message*, or the *Universal Handoff*
8 *Direction Message*.

9 3.6.6.2.2.2 Processing the Extended Handoff Direction Message

10 The base station shall maintain a handoff message sequence number. If the base station
11 specifies that the mobile station is to use service negotiation, the base station shall set the
12 SERV_NEG variable (see 3.6.4.1.2.1.4) to be enabled at the action time of the message.
13 The sequence number shall be initialized to zero prior to the transmission of the first
14 *Extended Handoff Direction Message*, *General Handoff Direction Message* (see 3.6.6.2.2.10),
15 or the *Universal Handoff Direction Message* to the mobile station. The base station shall
16 increment the sequence number modulo 4 each time the base station modifies the pilot list
17 (including the order in which pilots are specified within the list) or the code channels
18 (including a change in the ordering such that the first code channel occurrence for any
19 pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*, a
20 *General Handoff Direction Message*, or a *Universal Handoff Direction Message*.

21 Following a hard handoff, the base station should set the handoff message sequence
22 number to the value of the LAST_HDM_SEQ field of the *Handoff Completion Message* or
23 *Extended Handoff Completion Message* and should use the pilot order contained in the
24 *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the
25 contents of subsequent *Power Measurement Report Messages*.

26 The base station shall set the contents of an *Extended Handoff Direction Message* according
27 to the following rules:

- 28 • An *Extended Handoff Direction Message* shall list no more than N_{6m} pilots in the
29 new Active Set.
- 30 • An *Extended Handoff Direction Message* shall identify the identical power control
31 subchannels (i.e., those carrying identical power control bits).
- 32 • An *Extended Handoff Direction Message* may change the code channel associated
33 with an Active Set pilot that remains in the new Active Set.

¹⁰⁴ 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 • The base station specifies the long code mask to be used on the new Forward Traffic
2 Channel by using the PRIVATE_LCM field of the *Extended Handoff Direction*
3 *Message*. The base station may change the long code mask to be used on the new
4 Forward Traffic Channel via the PRIVATE_LCM field of the *Extended Handoff*
5 *Direction Message* only for CDMA-to-CDMA hard handoffs. If a change of long code
6 mask is specified and the base station does not specify an explicit action time in the
7 *Extended Handoff Direction Message*, the base station shall begin using the new
8 long code mask on the first 80 ms boundary (relative to System Time) occurring at
9 least 80 ms after the end of the frame containing the last bit of the message.
- 10 • For CDMA-to-CDMA handoffs, the base station may require the mobile station to
11 perform a reset of the acknowledgment procedures by using the RESET_L2 field of
12 the *Extended Handoff Direction Message*. If the base station requires the mobile
13 station to reset the acknowledgment procedures, Layer 3 shall send an indication to
14 Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment
15 procedures shall be reset immediately after the action time of the *Extended Handoff*
16 *Direction Message*.
- 17 • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by
18 setting the FRAME_OFFSET field to a new value. If the base station specifies a new
19 frame offset and does not specify an explicit action time, the base station shall
20 change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms
21 boundary (relative to System Time) after the end of transmission of the *Extended*
22 *Handoff Direction Message*, unless the end of transmission of the message coincides
23 with an 80 ms boundary, in which case the change in frame offsets shall occur 80
24 ms after the end of transmission.
- 25 • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base
26 station may alter the nominal transmit power offset after handoff by setting the
27 NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA
28 hard handoffs to band classes other than Band Class 0 and Band Class 3, the base
29 station may alter the nominal transmit power offset after handoff by setting both the
30 NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.
- 31 • The base station may specify a different band class by setting the BAND_CLASS and
32 CDMA_FREQ fields to the band class and CDMA frequency assignment respectively.
33 The base station shall not specify a band class not supported by the mobile station.
34 If the reverse channel corresponding to forward channel included in this message is
35 separated by flexible channel spacing, the base station shall extend this message
36 using the General Extension Message and include a Reverse Channel Information
37 Record that specifies the reverse frequency to be used by the mobile station after
38 handoff.
- 39 • If the base station sends the *Extended Handoff Direction Message* in assured mode,
40 the base station should set the action time of the message such that there is
41 sufficient time for the mobile station to transmit a message containing the
42 acknowledgment prior to the action time.

- 1 • For CDMA-to-CDMA hard handoffs, the base station may specify whether the
2 mobile station is to use service negotiation or service option negotiation by setting
3 the SERV_NEG_TYPE field of the *Extended Handoff Direction Message*. If the base
4 station specifies that the mobile station is to use service negotiation, the base
5 station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action
6 time of message. If the base station specifies that the mobile station is to use
7 service option negotiation, the base station shall set SERV_NEG to disabled at the
8 action time of the message.

9 3.6.6.2.2.3 Processing the Candidate Frequency Search Request Message

10 The base station may send a *Candidate Frequency Search Request Message* to direct the
11 mobile station to perform a single or periodic search on the Candidate Frequency.

12 The base station may request the mobile station to perform an aligned search of the
13 Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile
14 station to perform an aligned search, the base station shall specify an explicit action time
15 for the *Candidate Frequency Search Request Message*.

16 The base station shall maintain a search message sequence number. The sequence
17 number shall be initialized to zero prior to the transmission of the first *Candidate*
18 *Frequency Search Request Message* to the mobile station. Each time the base station sends
19 a new *Candidate Frequency Search Request Message* to the mobile station, it shall set the
20 CFSRM_SEQ field to the current value of the sequence number, and increment the
21 sequence number modulo 4.

22 3.6.6.2.2.4 Processing the Candidate Frequency Search Response Message

23 The base station should use the mobile station's search capabilities as reported in the
24 *Candidate Frequency Search Response Message* to determine an appropriate period for the
25 mobile station's periodic search on the Candidate Frequency.

26 3.6.6.2.2.5 Processing the Candidate Frequency Search Control Message

27 The base station may send a *Candidate Frequency Search Control Message* to direct the
28 mobile station to perform a single search, or to start or stop a periodic search on the
29 Candidate Frequency.

30 The base station may request the mobile station to perform an aligned search of the
31 Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile
32 station to perform an aligned search, the base station shall specify an explicit action time
33 for the *Candidate Frequency Search Control Message*.

34 Each time the base station sends a new *Candidate Frequency Search Control Message* to the
35 mobile station, it shall set the CFSCM_SEQ field to the current value of the sequence
36 number, and increment the sequence number modulo 4.

1 3.6.6.2.2.6 Processing the Candidate Frequency Search Report Message

2 The base station should use the value of the LAST_SRCH_MSG field and of the
3 LAST_SRCH_MSG_SEQ field of the *Candidate Frequency Search Report Message* to interpret
4 the contents of the message.

5 If the SEARCH_MODE field of the *Candidate Frequency Search Report Message* is equal to
6 '0000', the base station should use the pilot strength measurements in the message to
7 determine whether to direct the mobile station to perform a CDMA-to-CDMA inter-
8 frequency handoff, and to determine the new Active Set.

9 3.6.6.2.2.7 Transmitting During Handoff

10 The base station shall continue transmission to the mobile station on the Fundamental
11 Channel or the Dedicated Control Channel of a Forward Traffic Channel removed from the
12 Active Set until it receives the *Handoff Completion Message* or *Extended Handoff Completion*
13 *Message* from the mobile station or determines that the call has been released.

14 The base station should discontinue transmission to the mobile station on the
15 Fundamental Channel or the Dedicated Control Channel of a Forward Traffic Channel
16 removed from the Active Set after it receives the *Handoff Completion Message* or *Extended*
17 *Handoff Completion Message*.

18 For Forward Multiplex Options 3 through 16, the base station should discontinue
19 transmission of Forward Supplemental Code Channels removed from the Code Channel
20 List according to the following rules:

- 21 • If a *General Handoff Direction Message* is used to remove one or more Forward
22 Supplemental Code Channels, the base station should discontinue transmission on
23 those code channels no later than the action time of the *General Handoff Direction*
24 *Message*.
- 25 • If a *Supplemental Channel Assignment Message* is used to remove one or more
26 Forward Supplemental Code Channels, the base station should discontinue
27 transmission on those Forward Supplemental Code Channels no later than the
28 implicit action time of the *Supplemental Channel Assignment Message*.

29 3.6.6.2.2.8 Ordering Pilot Measurements From the Mobile Station

30 The base station may direct the mobile station to send a *Pilot Strength Measurement*
31 *Message* by sending a *Pilot Measurement Request Order*.

32 The base station may send a *Periodic Pilot Measurement Request Order* to direct the mobile
33 station to send pilot strength measurements one time or periodically. In response to the
34 order, the mobile station reports the pilot strength measurements using the *Periodic Pilot*
35 *Strength Measurement Message*.

36 3.6.6.2.2.9 Processing the Supplemental Channel Assignment Message

37 The base station may use this message to specify Supplemental Code Channel assignment
38 parameters for the mobile station's Forward Traffic Channel, Reverse Traffic Channel, or
39 both. This information includes the parameters that control the timing of the
40 Supplemental Code Channel assignment (e.g., starting time and duration), and parameters

1 that control the number of Supplemental Code Channels which will be used during the
2 assignment (e.g., the number of Reverse Supplemental Code Channels on which the mobile
3 station may transmit and the set of Walsh codes on which the mobile station receives
4 Forward Supplemental Code Channels for each pilot in the mobile station's Active Set).
5 The *Supplemental Channel Assignment Message* shall be used only with Multiplex Options 3
6 through 16.

7 The base station shall set the content of a *Supplemental Channel Assignment Message*
8 according to the following rules:

- 9 • The base station may set USE_RETRY_DELAY to '1' and RETRY_DELAY to a delay in
10 320 ms units starting at the next 80 ms system time boundary during which the
11 mobile station is to refrain from sending subsequent *Supplemental Channel Request*
12 *Messages*. The base station may set RETRY_DELAY to '11111111' to indicate that
13 the mobile station is to refrain from transmitting *Supplemental Channel Request*
14 *Messages* indefinitely. Otherwise, the base station shall set USE_RETRY_DELAY to
15 '0' and omit RETRY_DELAY in which case the mobile station is to reset any
16 previously set RETRY_DELAY indication.
- 17 • The base station shall set REV_DTX_DURATION to the maximum duration of time
18 in units of 20 ms that the mobile station is allowed to stop transmission on a
19 Reverse Supplemental Code Channel before resuming transmission on the Reverse
20 Supplemental Code Channel within the reverse assignment duration. The base
21 station shall set this field to '0000' if the mobile station is to stop using a Reverse
22 Supplemental Code Channel once it has stopped transmitting on that Reverse
23 Supplemental Code Channel. The base station shall set this field to '1111' if the
24 mobile station is allowed to resume transmission on a Reverse Supplemental Code
25 Channel at any time within the reverse assignment duration.
- 26 • A *Supplemental Channel Assignment Message* may specify Reverse Supplemental
27 Code Channel assignments. If Reverse Supplemental Code Channel assignment
28 information is included, the base station shall set REV_INCLUDED to '1' and
29 include the appropriate Reverse Supplemental Code Channel assignment
30 information. Otherwise, the base station shall set REV_INCLUDED to '0'.
- 31 • The base station shall indicate the implicit, explicit, or linked start time for a
32 Reverse Supplemental Code Channel assignment as follows:
 - 33 – The base station may set EXPL_REV_START_TIME to '1' and set
34 REV_START_TIME to the System Time, in units of 80 ms (modulo 64), at which
35 the mobile station is to start transmitting on the Reverse Supplemental Code
36 Channels.
 - 37 – The base station may set USE_REV_HDM_SEQ to '1' and set
38 REV_LINKED_HDM_SEQ to the sequence number of the *General Handoff*
39 *Direction Message* (HDM_SEQ) with which this message is linked to indicate that
40 the mobile station is to start processing the Reverse Supplemental Code
41 Channels at the action time of the linked *General Handoff Direction Message*.

- 1 – The base station may set EXPL_REV_START_TIME to ‘0’ and
2 USE_REV_HDM_SEQ to ‘0’ to indicate that the mobile station is to start
3 processing Reverse Supplemental Code Channels at the implicit action time of
4 this message.
- 5 – The base station shall not set both EXPL_REV_START_TIME and
6 USE_REV_HDM_SEQ to ‘1’.
- 7 • The base station may set USE_REV_DURATION to ‘1’ and REV_DURATION to the
8 time interval, in units of 80 ms, after the implicit, explicit, or linked action time for
9 the message (as specified in 2.6.6.2.5.1), during which the mobile station is to
10 transmit on the specified Reverse Supplemental Code Channels. The base station
11 may set USE_REV_DURATION to ‘0’ to indicate an infinite duration for the
12 assignment of Reverse Supplemental Code Channels. If NUM_REV_CODES is ‘000’,
13 then the base station shall set USE_REV_DURATION to ‘0’.
- 14 • If Reverse Supplemental Code Channel assignment information is included, the
15 base station shall set NUM_REV_CODES to the number of Reverse Supplemental
16 Code Channels to be used in this Reverse Supplemental Code Channel assignment.
17 The base station shall not set NUM_REV_CODES to be greater than the number of
18 codes supported by the currently negotiated multiplex option.
- 19 • The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Code
20 Channel assignment T_ADD abort indicator, to ‘1’ to indicate that the mobile station
21 is to abort Reverse Supplemental Code Channel assignments implicitly when a
22 T_ADD trigger occurs. Otherwise, the base station shall set USE_T_ADD_ABORT to
23 ‘0’. If NUM_REV_CODES is set to ‘000’, the base station shall set
24 USE_T_ADD_ABORT to ‘0’.
- 25 • If the base station is sending this message in response to a *Supplemental Channel*
26 *Request Message* which includes a *Supplemental Channel Request Message*
27 sequence number and the mobile station is to clear the IGNORE_SCAM field, the
28 base station shall set USE_SCRM_SEQ_NUM to ‘1’ and set SCRM_SEQ_NUM to the
29 sequence number corresponding to the SCRM_SEQ_NUM field in a *Supplemental*
30 *Channel Request Message* to which the mobile station is to match this message.
31 Otherwise, the base station shall set USE_SCRM_SEQ_NUM to ‘0’ and omit
32 SCRM_SEQ_NUM.
- 33 • A *Supplemental Channel Assignment Message* may specify Forward Supplemental
34 Code Channel assignments. If Forward Supplemental Code Channel assignment
35 information is included, the base station shall set FOR_INCLUDED to ‘1’ and
36 include the appropriate Forward Supplemental Code Channel assignment
37 information. Otherwise, the base station shall set FOR_INCLUDED to ‘0’.
- 38 • The base station shall set FOR_SUP_CONFIG to ‘00’ if the mobile station is to stop
39 processing the forward supplemental code after the action time of the *Supplemental*
40 *Channel Assignment Message*. The base station should not transmit to the mobile
41 station on the Forward Supplemental Code Channels after the message 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 implicit, explicit, or linked action time for the message as specified in
4 2.6.6.2.5.1.
- 5 • The base station shall set FOR_SUP_CONFIG to '10' if the Forward Supplemental
6 Code Channels associated with the pilots in the Active set are specified in the
7 *Supplemental Channel Assignment Message* and is to stop processing Forward
8 Supplemental Code Channels at the implicit action time of the message. The base
9 station should not transmit to the mobile station on the Forward Supplemental
10 Code Channels after the message takes effect.
- 11 • The base station shall set FOR_SUP_CONFIG to '11' if the Forward Supplemental
12 Code Channels associated with the pilots in the Active set are specified in the
13 *Supplemental Channel Assignment Message* and the mobile station is to start
14 processing the Forward Supplemental Code Channels at the implicit, explicit, or
15 linked action time for the message as specified in 2.6.6.2.5.1.
- 16 • The base station shall set FOR_DURATION to the time interval, in units of 80 ms,
17 after the implicit, explicit, or linked action time for the message (as specified in
18 2.6.6.2.5.1), during which the mobile station is to process the specified Forward
19 Supplemental Code Channels. The base station may set USE_FOR_DURATION to
20 '0' to indicate an infinite duration for the allocation of Forward Supplemental Code
21 Channels. The base station should not transmit to the mobile station on the
22 Forward Supplemental Code Channels outside the time interval specified by
23 FOR_DURATION.
- 24 • The base station may set EXPL_FOR_START_TIME to '1' and set FOR_START_TIME
25 to the System Time, in units of 80 ms (modulo 64), at which the mobile station is to
26 start processing the Forward Supplemental Code Channels.
- 27 • The base station may set USE_FOR_HDM_SEQ to '1' and set
28 FOR_LINKED_HDM_SEQ to the sequence number of the *General Handoff Direction*
29 *Message* (HDM_SEQ) with which this message is linked to indicate that the mobile
30 station is to start processing the Forward Supplemental Code Channels at the
31 action time of the linked *General Handoff Direction Message*.
- 32 • The base station shall not set both USE_FOR_HDM_SEQ and
33 EXPL_FOR_START_TIME within a *Supplemental Channel Assignment Message* to '1'.
- 34 • The number of Supplemental Code Channels assigned by *Supplemental Channel*
35 *Assignment Message* shall not exceed the maximum number of Supplemental Code
36 Channels for the negotiated Forward Multiplex Option.
- 37 • The base station may set EXPL_FOR_START_TIME to '0' and USE_FOR_HDM_SEQ
38 to '0' to indicate that the mobile station is to start processing Forward Supplemental
39 Code Channels at the implicit action time of this message.

1 3.6.6.2.2.10 Processing the General Handoff Direction Message

2 The base station shall maintain a handoff message sequence number. The sequence
3 number shall be initialized to zero prior to the transmission of the first *Extended Handoff*
4 *Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction*
5 *Message* (see 3.6.6.2.2.11) to the mobile station (see 2.6.6.2.2.2). The base station shall
6 increment the sequence number modulo 4 each time the base station modifies the pilot list
7 (including the order in which pilots are specified within the list) or the code channels
8 (including a change in the ordering such that the first code channel occurrence for any
9 pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*,
10 *General Handoff Direction Message*, or *Universal Handoff Direction Message*.

11 Following a hard handoff, the base station should set the handoff message sequence
12 number to the value of the LAST_HDM_SEQ field of the *Handoff Completion Message* or
13 *Extended Handoff Completion Message* and should use the pilot order contained in the
14 *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the
15 contents of subsequent *Power Measurement Report Messages*.

16 The base station shall set the contents of a *General Handoff Direction Message* according to
17 the following rules:

- 18 • A *General Handoff Direction Message* shall list no more than N_{6m} pilots in the new
19 Active Set.
- 20 • The base station may include a Service Configuration Information Record in the
21 *General Handoff Direction Message* to accept a service configuration proposed in a
22 *Service Request Message* or *Service Response Message*, and instruct the mobile
23 station to begin using the service configuration.
- 24 • A *General Handoff Direction Message* shall identify the identical power control
25 subchannels (i.e., those carrying identical power control bits).
- 26 • A *General Handoff Direction Message* shall identify the transmit power level of the
27 power control subchannels to the transmit power level of 20 ms frames at a 9600
28 bps or 14400 bps rate on their respective associated channels (Forward
29 Fundamental Channel or Forward Dedicated Control Channel).
- 30 • For CDMA-to-CDMA handoffs, the base station may specify Power Control
31 Subchannel Gain action time (PC_ACTION_TIME]. If PC_ACTION_TIME is included
32 in this message, the base station shall apply the new FPC_SUBCHAN_GAIN at the
33 time specified by PC_ACTION_TIME. If the PC_ACTION_TIME is not included in this
34 message but the explicit action time is included, the base station shall apply the
35 new FPC_SUBCHAN_GAIN at the action time of the *General Handoff Direction*
36 *Message*. If the implicit action time is used, the base station should gradually apply
37 any change in FPC_SUBCHAN_GAIN.
- 38 • A *General Handoff Direction Message* may change the code channel associated with
39 an Active Set pilot that remains in the new Active Set.

- 1 • The base station specifies the long code mask to be used on the new Forward Traffic
2 Channel by using the PRIVATE_LCM field of the *General Handoff Direction Message*.
3 The base station may change the long code mask to be used on the new Forward
4 Traffic Channel via the PRIVATE_LCM field of the *General Handoff Direction Message*
5 only for CDMA-to-CDMA hard handoffs. If a change of long code mask is specified
6 and the base station does not specify an explicit action time in the *General Handoff*
7 *Direction Message*, the base station shall begin using the new long code mask on the
8 first 80 ms boundary (relative to System Time) occurring at least 80 ms after the
9 end of the frame containing the last bit of the message.
- 10 • For CDMA-to-CDMA handoffs, the base station may require the mobile station to
11 perform a reset of the acknowledgment procedures by using the RESET_L2 field of
12 the *General Handoff Direction Message*. If the base station requires the mobile
13 station to reset the acknowledgment procedures, Layer 3 shall send an indication to
14 Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment
15 procedures of the base station that the mobile station is to handoff to shall be reset
16 immediately after the action time of the *General Handoff Direction Message*.
- 17 • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by
18 setting the FRAME_OFFSET field to a new value. If the base station specifies a new
19 frame offset and does not specify an explicit action time, the base station shall
20 change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms
21 boundary (relative to System Time) after the end of transmission of the *General*
22 *Handoff Direction Message*, unless the end of transmission of the message coincides
23 with an 80 ms boundary, in which case the change in frame offsets shall occur 80
24 ms after the end of transmission.
- 25 • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base
26 station may alter the nominal transmit power offset after handoff by setting the
27 NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA
28 hard handoffs to band classes other than Band Class 0 and Band Class 3, the base
29 station may alter the nominal transmit power offset after handoff by setting both the
30 NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.
- 31 • The base station may specify a different band class by setting the BAND_CLASS and
32 CDMA_FREQ fields to the band class and CDMA frequency assignment respectively.
33 The base station shall not specify a band class not supported by the mobile station.
34 If the reverse channel corresponding to forward channel included in this message is
35 separated by flexible channel spacing, the base station shall extend this message
36 using the General Extension Message and include a Reverse Channel Information
37 Record that specifies the reverse frequency to be used by the mobile station after
38 handoff.
- 39 • If the base station sends the *General Handoff Direction Message* in assured mode,
40 the base station should set the action time of the message such that there is
41 sufficient time for the mobile station to transmit a message containing the
42 acknowledgment prior to the action time.

- 1 • For CDMA-to-CDMA hard handoffs, the base station may specify whether the
2 mobile station is to use service negotiation or service option negotiation by setting
3 the SERV_NEG_TYPE field of the *General Handoff Direction Message*. If the base
4 station specifies that the mobile station is to use service negotiation, the base
5 station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action
6 time of message. If the base station specifies that the mobile station is to use
7 service option negotiation, the base station shall set SERV_NEG to disabled at the
8 action time of the message.
- 9 • The base station may specify whether the mobile station is to restore its
10 configuration to what it was before the handoff attempt, if it fails in the handoff
11 attempt using criteria specified in the *Candidate Frequency Search Request*
12 *Message*, by using the RETURN_IF_HANDOFF_FAIL field of the *General Handoff*
13 *Direction Message*. The base station may specify whether the mobile station is to
14 periodically search a CDMA Candidate Frequency for useable pilots, using criteria
15 specified in the *Candidate Frequency Search Request Message*, by using the
16 PERIODIC_SEARCH field of the *General Handoff Direction Message*.
- 17 • The base station may include Forward Supplemental Code Channel assignment
18 information in the *General Handoff Direction Message* if the Forward Multiplex
19 Option for the currently connected service option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
20 13, 14, 15, or 16. If Forward Supplemental Code Channel assignment information
21 is included, the base station shall include FOR_INCLUDED, set FOR_INCLUDED to
22 '1', and include the appropriate Forward Supplemental Code Channel assignment
23 information.
- 24 • The number of Forward Supplemental Code Channels assigned by the *General*
25 *Handoff Direction Message* shall not exceed the maximum number of Forward
26 Supplemental Code Channels for the negotiated Forward Multiplex Option.
- 27 • The base station shall set FOR_SUP_CONFIG to '00' if the mobile station is to stop
28 processing the Forward Supplemental Code Channel after the action time of *General*
29 *Handoff Direction Message*. The base station should not transmit to the mobile
30 station on the Forward Supplemental Code Channels after the message takes effect.
- 31 • The base station shall set FOR_SUP_CONFIG to '01' if the mobile station is to start
32 processing the Forward Supplemental Code Channels in the Code Channel List at
33 the action time of the message.
- 34 • The base station shall set FOR_SUP_CONFIG to '10' if the Forward Supplemental
35 Code Channels associated with the pilots in the Active set are specified in the
36 *General Handoff Direction Message* and the mobile station is to stop processing
37 Forward Supplemental Code Channels at the implicit action time of the message.
38 The base station should not transmit to the mobile station on the Forward
39 Supplemental Code Channels after the message takes effect.
- 40 • The base station shall set FOR_SUP_CONFIG to '11' if the Forward Supplemental
41 Code Channels associated with the pilots in the Active set are specified in the
42 *General Handoff Direction Message* and the mobile station is to start processing the
43 Forward Supplemental Code Channels at the action time of the message.

- 1 • The base station shall set FOR_DURATION to the time interval after the action time
2 of the message, in units of 80 ms, during which the mobile station is to process the
3 specified Forward Supplemental Code Channels. The base station may set
4 USE_FOR_DURATION to '0' to indicate an infinite duration for the allocation of
5 Forward Supplemental Code Channels. The base station should not transmit to the
6 mobile station on the Forward Supplemental Code Channels outside the time
7 interval specified by FOR_DURATION.
- 8 • If FOR_INCLUDED is included in the message, the base station shall include
9 EXPL_CODE_CHAN for each pilot included in the message. If EXPL_CODE_CHAN
10 is included and set to '1' for a pilot, the code channels associated with the pilot in
11 the *General Handoff Direction Message* shall be ordered such that the first code
12 channel occurrence is associated with the Forward Fundamental Channel and the
13 successive occurrences are associated with Forward Supplemental Code Channels.
14 If EXPL_CODE_CHAN is included and is set to '0', for each pilot in the new Active
15 Set, the base station shall include BASE_CODE_CHAN and set it to the base code
16 channel index in the range of 1 to (63 - NUM_FOR_SUP + 1), inclusive, that the
17 mobile station is to use as the first Forward Supplemental Code Channel associated
18 with this pilot. The mobile station is to use NUM_FOR_SUP adjacent code channels
19 beginning with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN through
20 BASE_CODE_CHAN + NUM_FOR_SUP - 1) for the Forward Supplemental Code
21 Channels associated with this pilot.
- 22 • The base station may include Reverse Supplemental Code Channel assignment
23 information in the *General Handoff Direction Message* if the Reverse Multiplex
24 Option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, or 16. If Reverse Supplemental
25 Code Channel assignment information is included, the base station shall include
26 REV_INCLUDED, set REV_INCLUDED to '1', and include the appropriate Reverse
27 Supplemental Code Channel assignment information in the additional fields.
- 28 • If Reverse Supplemental Code Channel assignment information is included, the
29 base station shall set NUM_REV_CODES to the number of Reverse Supplemental
30 Code Channels to be used by the mobile station. The base station shall not set
31 NUM_REV_CODES to be greater than the number of codes supported by the
32 currently negotiated multiplex option.
- 33 • The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Code
34 Channel assignment T_ADD abort indicator, to '1' to indicate that the mobile station
35 is to abort Reverse Supplemental Code Channel assignments implicitly when a
36 T_ADD trigger occurs. Otherwise, the base station shall set USE_T_ADD_ABORT to
37 '0'. If NUM_REV_CODES is set to '000', the base station shall set
38 USE_T_ADD_ABORT to '0'.

- 1 • The base station shall set REV_DTX_DURATION to the maximum duration of time
2 in units of 20 ms that the mobile station is allowed to stop transmission on a
3 Reverse Supplemental Code Channel before resuming transmission on the Reverse
4 Supplemental Code Channel. The base station shall set this field to '0000' if the
5 mobile station is to stop using a Reverse Supplemental Code Channel once it has
6 stopped transmitting on that Reverse Supplemental Code Channel. The base
7 station shall set this field to '1111' if the mobile station is allowed to resume
8 transmission on a Reverse Supplemental Code Channel at any time within the
9 reverse assignment duration.
- 10 • The base station may set CLEAR_RETRY_DELAY to '1' to indicate that the mobile
11 station is to cancel any previously stored retry delay. Otherwise, the base station
12 shall set CLEAR_RETRY_DELAY to '0' to indicate that the mobile station is to
13 continue to honor any previously stored retry delay (see 2.6.6.2.5.1).
- 14 • The base station may indicate a duration for the Reverse Supplemental Code
15 Channel assignment (in 80 ms superframes) by setting USE_REV_DURATION to '1'
16 and indicating the desired duration in the REV_DURATION field. If
17 USE_REV_DURATION is set to '0', a duration of infinity is indicated, and the base
18 station shall set the REV_DURATION to '00000000'. If NUM_REV_CODES is '000',
19 then the base station shall set USE_REV_DURATION to '0' and shall set
20 REV_DURATION to '00000000'.
- 21 • The base station may set USE_REV_DURATION to '1' and REV_DURATION to the
22 time interval after the action time of the message, in units of 80 ms, during which
23 the mobile station may transmit on the assigned Reverse Supplemental Code
24 Channels. The base station may set USE_REV_DURATION to '0' to indicate an
25 infinite duration for the allocation of Forward Supplemental Code Channels.
- 26 • The base station may specify a closed loop power control step size by setting
27 USE_PWR_CNTL_STEP to '1' and indicating the desired power control step size in
28 the PWR_CNTL_STEP field (see 2.1.2.3.2). Otherwise, the base station shall set
29 USE_PWR_CNTL_STEP to '0'. The base station shall not specify a power control
30 step size not supported by the mobile station.

31 3.6.6.2.2.11 Processing the Universal Handoff Direction Message

32 The base station shall maintain a handoff message sequence number. The sequence
33 number shall be initialized to zero prior to the transmission of the first *Extended Handoff*
34 *Direction Message* (see 3.6.6.2.2.2), *General Handoff Direction Message* (see 3.6.6.2.2.10), or
35 *Universal Handoff Direction Message* to the mobile station. The base station shall
36 increment the sequence number modulo 4 each time the base station modifies the pilot list
37 (including the order in which pilots are specified within the list) or the code channels
38 (including a change in the ordering such that the first code channel occurrence for any
39 pilot is changed) sent to the mobile station in an *Extended Handoff Direction Message*, a
40 *General Handoff Direction Message*, or an *Universal Direction Message*.

41 Following a hard handoff, the base station should set the handoff message sequence
42 number to the value of the LAST_HDM_SEQ field of the *Handoff Completion Message* or
43 *Extended Handoff Completion Message* and should use the pilot order contained in the

1 *Handoff Completion Message* or *Extended Handoff Completion Message* to interpret the
2 contents of subsequent *Power Measurement Report Messages*.

3 The base station shall set the contents of a *Universal Handoff Direction Message* according
4 to the following rules:

- 5 • A *Universal Handoff Direction Message* shall list no more than N_{6m} pilots in the new
6 Active Set.
- 7 • The base station may include a Service Configuration Information Record in the
8 *Universal Handoff Direction Message* to accept a service configuration proposed in a
9 *Service Request Message* or *Service Response Message*, and instruct the mobile
10 station to begin using the service configuration.
- 11 • A *Universal Handoff Direction Message* shall identify the identical power control
12 subchannels (i.e., those carrying identical power control bits).
- 13 • A *Universal Handoff Direction Message* shall identify the transmit power level of the
14 power control subchannels to the transmit power level of 20 ms frames at a 9600
15 bps or 14400 bps rate on their respective associated channels (Forward
16 Fundamental Channel or Forward Dedicated Control Channel).
- 17 • For CDMA-to-CDMA handoffs, the base station may specify Power Control
18 Subchannel Gain action time (PC_ACTION_TIME]. If PC_ACTION_TIME is included
19 in this message, the base station shall apply the new FPC_SUBCHAN_GAIN at the
20 time specified by PC_ACTION_TIME. If the PC_ACTION_TIME is not included in this
21 message but the explicit action time is included, the base station shall apply the
22 new FPC_SUBCHAN_GAIN at the action time of the *Universal Handoff Direction*
23 *Message*. If the implicit action time is used, the base station should gradually apply
24 any change in FPC_SUBCHAN_GAIN.
- 25 • A *Universal Handoff Direction Message* may change the code channel associated
26 with an Active Set pilot that remains in the new Active Set.
- 27 • A *Universal Handoff Direction Message* may delete the code channel associated with
28 an Active Set pilot that remains in the new Active Set.
- 29 • A *Universal Handoff Direction Message* may add the code channel associated with an
30 Active Set pilot that remains in the new Active Set.
- 31 • The base station specifies the long code mask to be used on the new Forward Traffic
32 Channel by using the PRIVATE_LCM and PLCM_TYPE fields of the *Universal*
33 *Handoff Direction Message*. The base station may change the contents of the
34 PRIVATE_LCM field only for CDMA-to-CDMA hard handoffs. If a change of long
35 code mask is specified and the base station does not specify an explicit action time
36 in the *Universal Handoff Direction Message*, the base station shall begin using the
37 new long code mask on the first 80 ms boundary (relative to System Time) occurring
38 at least 80 ms after the end of the frame containing the last bit of the message.

- 1 • For CDMA-to-CDMA handoffs, the base station may require the mobile station to
2 perform a reset of the acknowledgment procedures by using the RESET_L2 field of
3 the *Universal Handoff Direction Message*. If the base station requires the mobile
4 station to reset the acknowledgment procedures, Layer 3 shall send an indication to
5 Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment
6 procedures of the base station that the mobile station is to handoff to shall be reset
7 immediately after the action time of the *General Handoff Direction Message*.
- 8 • For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by
9 setting the FRAME_OFFSET field to a new value. If the base station specifies a new
10 frame offset and does not specify an explicit action time, the base station shall
11 change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms
12 boundary (relative to System Time) after the end of transmission of the *Universal*
13 *Handoff Direction Message*, unless the end of transmission of the message coincides
14 with an 80 ms boundary, in which case the change in frame offsets shall occur 80
15 ms after the end of transmission.
- 16 • For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base
17 station may alter the nominal transmit power offset after handoff by setting the
18 NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA
19 hard handoffs to band classes other than Band Class 0 and Band Class 3, the base
20 station may alter the nominal transmit power offset after handoff by setting both the
21 NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.
- 22 • The base station may specify a different band class by setting the BAND_CLASS and
23 CDMA_FREQ fields to the band class and CDMA frequency assignment respectively.
24 The base station shall not specify a band class not supported by the mobile station.
25 If the reverse channel corresponding to forward channel included in this message is
26 separated by flexible channel spacing, the base station shall extend this message
27 using the General Extension Message and include a Reverse Channel Information
28 Record that specifies the reverse frequency to be used by the mobile station after
29 handoff¹⁰⁵.
- 30 • If the base station sends the *Universal Handoff Direction Message* in assured mode,
31 the base station should set the action time of the message such that there is
32 sufficient time for the mobile station to transmit a message containing the
33 acknowledgment prior to the action time.

¹⁰⁵ Similarly, *MEID Universal Handoff Direction Message* may be extended through General Extension Message.

- 1 • For CDMA-to-CDMA handoffs, the base station may specify whether the mobile
2 station is to use service negotiation or service option negotiation by setting the
3 SERV_NEG_TYPE field of the *Universal Handoff Direction Message*. If the base
4 station specifies that the mobile station is to use service negotiation, the base
5 station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action
6 time of message. If the base station specifies that the mobile station is to use
7 service option negotiation, the base station shall set SERV_NEG to disabled at the
8 action time of the message.
- 9 • The base station may specify whether the mobile station is to restore its
10 configuration to what it was before the handoff attempt, if it fails in the handoff
11 attempt using criteria specified in the *Candidate Frequency Search Request*
12 *Message*, by using the RETURN_IF_HANDOFF_FAIL field of the *Universal Handoff*
13 *Direction Message*. The base station may specify whether the mobile station is to
14 periodically search a CDMA Candidate Frequency for useable pilots, using criteria
15 specified in the *Candidate Frequency Search Request Message*, by using the
16 PERIODIC_SEARCH field of the *Universal Handoff Direction Message*.
- 17 • The base station specifies Active Set for the Fundamental Channel only, the
18 Dedicated Control Channel only, or both. The Active Set of the Dedicated Control
19 Channel shall be the same as the Active Set of the Fundamental Channel when
20 both the Fundamental Channel and Dedicated Control Channel are assigned.
- 21 • The base station may specify the Active Set of the Supplemental Channels. The
22 Active Set of the Supplemental Channels shall be a subset of the Active Set of the
23 Fundamental Channel or the Dedicated Control Channel.
- 24 • If a Reverse Packet Data Channel assignment is not included, a *Universal Handoff*
25 *Direction Message* may specify a Reverse Supplemental Channel assignment. If
26 Reverse Supplemental Channel assignment information is included, this message
27 contains information that specifies the start time, duration, and the data transfer
28 rate associated with this Reverse Supplemental Channel assignment.
- 29 • If a Reverse Packet Data Channel assignment is included, a *Universal Handoff*
30 *Direction Message* shall not specify a Reverse Supplemental Channel assignment.
- 31 • A *Universal Handoff Direction Message* may specify a Forward Supplemental
32 Channel assignment. If Forward Supplemental Channel assignment information is
33 included, this message contains the start time, duration, and SCCL_INDEX
34 associated with this Forward Supplemental Channel assignment.
- 35 • A *Universal Handoff Direction Message* may update the mapping between a
36 particular SCCL_INDEX and a set of fields that specifies the data transfer rate, QOF
37 index, Forward Supplemental Channel Walsh code for each PILOT_PN, and the
38 active set for the Forward Supplemental Channel associated with FOR_SCH_ID.
- 39 • A *Universal Handoff Direction Message* may update REV_WALSH_ID field which
40 specifies the Reverse Supplemental Walsh cover.
- 41 • The base station may set CLEAR_RETRY_DELAY to '1' to indicate that the mobile
42 station is to cancel any previously stored retry delay. Otherwise, the base station

1 shall set CLEAR_RETRY_DELAY to '0' to indicate that the mobile station is to
2 continue to honor any previously stored retry delay (see 2.6.6.2.5.1).

3 3.6.6.2.2.12 Processing of Extended Supplemental Channel Assignment Message

4 If the Reverse Packet Data Channel is not assigned, the base station may use this message
5 to carry Forward Supplemental Channel assignment information or Reverse Supplemental
6 Channel assignment information.

7 If the Reverse Packet Data Channel is assigned, the base station may use this message to
8 carry Forward Supplemental Channel assignment information, and the base station shall
9 not use this message to carry Reverse Supplemental Channel assignment information.

10 If Forward Supplemental Channel assignment information is included, this message
11 contains the start time, duration, and SCCL_INDEX associated with this Forward
12 Supplemental Channel assignment. If Reverse Supplemental Channel assignment
13 information is included, this message contains information that specifies the start time,
14 duration, and the number of information bits per frame (or set of number of bits per frame
15 if RSCH_VAR_TABLE_IDS[REV_SCH_ID_r] is not equal to '000') associated with this Reverse
16 Supplemental Channel assignment.

17 This message may specify the mapping between a particular SCCL_INDEX and a set of
18 fields that specifies the number of information bits per frame (or set of number of bits per
19 frame if FSCH_VAR_TABLE_IDS[FOR_SCH_ID_r] is not equal to '000'), QOF index, Forward
20 Supplemental Channel Walsh code for each PILOT_PN, and the active set for the Forward
21 Supplemental Channel associated with FOR_SCH_ID.

22 This message may also include REV_WALSH_ID field which specifies the Reverse
23 Supplemental Walsh cover.

24 The base station shall set the contents of an *Extended Supplemental Channel Assignment*
25 *Message* according to the following rules:

- 26 • An *Extended Supplemental Channel Assignment Message* may specify a Reverse
27 Supplemental Channel assignment. The base station shall set NUM_REV_SCH to
28 the number of Reverse Supplemental Channels to be assigned. If the Reverse Packet
29 Data Channel is assigned, the base station shall set NUM_REV_SCH to 0.
- 30 • An *Extended Supplemental Channel Assignment Message* may specify a Forward
31 Supplemental Channel assignment. The base station shall set NUM_FOR_SCH to
32 the number of Forward Supplemental Channels to be assigned.
- 33 • The base station shall set the START_TIME_UNIT field to indicate the unit of the
34 FOR_SCH_START_TIME included in this message, the *Forward Supplemental*
35 *Channel Assignment Mini Messages* and the *Universal Handoff Direction Message*
36 and REV_SCH_START_TIME included in this message, the *Reverse Supplemental*
37 *Channel Assignment Mini Messages* and the *Universal Handoff Direction Message*.
38 The base station shall set this field to one less than the number of 20 ms intervals
39 that is to be used by the mobile station for calculating the start time included in
40 Forward Supplemental Channel assignments or Reverse Supplemental Channel
41 assignments.

- 1 • An *Extended Supplemental Channel Assignment Message* may specify Forward
2 Supplemental Channel configuration information. The base station shall set
3 NUM_FOR_SCH_CFG to the number of Forward Supplemental Channel to be
4 configured.
- 5 • The base station shall set the NUM_REC field to the number of instances of the
6 following record minus one included in this message. The base station shall set the
7 fields within each record as follows:
- 8 – The base station shall set the SCCL_INDEX field to the index of the
9 Supplemental Channel Code Information Record in the Supplemental Channel
10 Code List Table.
- 11 – The base station shall set the FOR_SCH_NUM_BITS_IDX field to the Forward
12 Supplemental Channel number of information bits index associated with
13 SCCL_INDEX.
- 14 – The base station shall set the NUM_SUP_SHO field to the number of Forward
15 Supplemental Channels minus one, corresponding to the FOR_SCH_ID and the
16 SCCL_INDEX, for which the frames are to be soft-combined by the mobile
17 station. The base station shall set the fields within each record as follows:
- 18 + The base station shall set the PILOT_PN field to the pilot PN sequence offset
19 for this pilot in units of 64 PN chips.
- 20 + The base station shall set the QOF_MASK_ID_SCH field to the ID of the
21 Quasi Orthogonal Function mask ID corresponding to the Forward
22 Supplemental Channel Code index.
- 23 + The base station shall set the CODE_CHAN_SCH field to the code channel
24 on the Supplemental Channel corresponding to the PILOT_PN.
- 25 • REV_SCH_DTX_DURATION: The base station shall set REV_SCH_DTX_DURATION
26 to the maximum duration of time in units of 20 ms that the mobile station is
27 allowed to stop transmission on a Reverse Supplemental Channel before resuming
28 transmission on the Reverse Supplemental Channel within the reverse assignment
29 duration. The base station shall set this field to '0000' if the mobile station is to
30 stop using a Reverse Supplemental Channel once it has stopped transmitting on
31 that Reverse Supplemental Channel. The base station shall set this field to '1111' if
32 the mobile station is allowed to resume transmission on a Reverse Supplemental
33 Channel at any time within the reverse assignment duration.
- 34 • The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Channel
35 assignment T_ADD abort indicator, to '1' to indicate that the mobile station is to
36 abort Reverse Supplemental Channel assignments when a T_ADD trigger occurs.
37 Otherwise, the base station shall set USE_T_ADD_ABORT to '0'.

- 1 • If the base station is sending this message in response to a *Supplemental Channel Request Message* which includes a *Supplemental Channel Request Message*
2 sequence number and the mobile station is to clear the IGNORE_ESCAM field, the
3 base station shall set USE_SCRM_SEQ_NUM to '1' and set SCRM_SEQ_NUM to the
4 sequence number corresponding to the SCRM_SEQ_NUM field in a *Supplemental*
5 *Channel Request Message* to which the mobile station is to match this message.
6 Otherwise, the base station shall set USE_SCRM_SEQ_NUM to '0' and omit
7 SCRM_SEQ_NUM.
8
- 9 • If Forward Supplemental Channel burst assignment is included, the base station
10 may include additional Forward Supplemental Channel configuration information
11 including radio configuration, multiplex option, coding type, frame length, and
12 maximum supplemental channel rate; if so, the base station shall set
13 FOR_SCH_CC_INCL to '1'.
- 14 • If Reverse Supplemental Channel burst assignment is included, the base station
15 may include additional Reverse Supplemental Channel configuration information
16 including radio configuration, multiplex option, coding type, frame length, and
17 maximum supplemental channel rate; if so, the base station shall set
18 REV_SCH_CC_INCL to '1'.

19 3.6.6.2.2.13 Processing of Forward Supplemental Channel Assignment Mini Message
20 The base station may use this message to specify Forward Supplemental Channel
21 assignment parameters for the mobile station's Forward Supplemental Channel. This
22 information includes the FOR_SCH_ID, duration, start time, and the index to the
23 previously specified Forward Supplemental Channel Code List, which determines number
24 of information bits per frame (or set of number of bits per frame if
25 FSCH_VAR_TABLE_ID_S[FOR_SCH_ID_r] is not equal to '000'), code channel index, and the
26 identifier of the Quasi Orthogonal Function corresponding to the assignment.

27 The base station shall set the content of a *Forward Supplemental Channel Assignment Mini*
28 *Message* according to the following rules:

- 29 • The base station shall set the FOR_SCH_ID to Forward Supplemental Channel
30 identifier of the burst assignment that this message carries.
- 31 • The base station shall set the FOR_SCH_DURATION field to '0000' to indicate that
32 the mobile station should stop processing the Forward Supplemental Channel
33 starting at the explicit start time of the message specified by
34 FOR_SCH_START_TIME. The base station shall set the FOR_SCH_DURATION field
35 to '1111' to indicate that the mobile station should process the Forward
36 Supplemental Channel, starting at the explicit start time of the message specified
37 by FOR_SCH_START_TIME, until a subsequent *Forward Supplemental Channel*
38 *Assignment Mini Message* or an *Extended Supplemental Channel Assignment*
39 *Message* with the same FOR_SCH_ID field is received. The base station shall set
40 the FOR_SCH_DURATION field to the duration in units of 20 ms (see Table
41 3.7.3.3.2.37-3), starting at the explicit start time of the message specified by
42 FOR_SCH_START_TIME, during which the mobile station is to process the Forward
43 Supplemental Channel.

- The base station shall set the FOR_SCH_START_TIME field to the System Time, in units of time specified by START_TIME_UNIT, (modulo 32) at which the mobile station is to start processing the Forward Supplemental Channel specified in this message. The explicit start time for processing Forward Supplemental Channels is the time for which:

$$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{FOR_SCH_START_TIME} \bmod 32 = 0,$$

where t is the System Time in units of 20 ms.

- The base station shall set the SCCL_INDEX field to the index of the record in the Forward Supplemental Channel Code list corresponding to the FOR_SCH_ID.
- If the PILOT_GATING_USE_RATE to equal to '1', 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.

3.6.6.2.2.14 Processing of Reverse Supplemental Channel Assignment Mini Message

If the Reverse Packet Data Channel is assigned, the base station shall not send this message.

If the Reverse Packet Data Channel is not assigned, the base station may use this message to specify Reverse Supplemental Channel assignment parameters for the mobile station Reverse Supplemental Channel. This information includes the reverse supplemental channel identifier (REV_SCH_ID), the duration of transmission on the Reverse Supplemental Channel, the start time for the burst assignment, and the number of information bits per frame that the mobile station may transmit.

The base station shall set the content of the *Reverse Supplemental Channel Assignment Mini Message* according to the following rules:

- The base station shall set the REV_SCH_DURATION field to '0000' to indicate that the mobile station should stop transmitting on the Reverse Supplemental Channel specified by REV_SCH_ID at the start time specified by REV_SCH_START_TIME. The base station shall set this field to '1111' to indicate that the mobile station may transmit on the Reverse Supplemental Channel specified by REV_SCH_ID, starting at the start time specified by REV_SCH_START_TIME. The base station shall set the REV_SCH_DURATION field to the allocated duration (see Table 3.7.3.3.2.37-3), starting at the start time specified by REV_SCH_START_TIME, during which the mobile station may transmit on the Reverse Supplemental Channel specified by REV_SCH_ID.
- The base station shall set the REV_SCH_START_TIME field to the System Time, in units of time specified by START_TIME_UNIT, (modulo 32) at which the mobile station may start transmitting on the Reverse Supplemental Channel specified in this message. The explicit start time for transmitting on the Reverse Supplemental Channel is the time for which:

$$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{REV_SCH_START_TIME} \bmod 32 = 0,$$

where t is the System Time in units of 20 ms.

- 1 • The base station shall set the REV_SCH_BITS_IDX (see Table 3.7.3.3.2.37-2) to
2 indicate the Reverse Supplemental Channel number of information bits per frame
3 index.
- 4 • If the PILOT_GATING_USE_RATE to equal to '1', the base station shall set
5 PILOT_GATING_USE_RATE to '0' and start transmitting the Forward Power Control
6 Subchannel with the maximum rate at the action time of the message.

7 3.6.6.2.2.15 Processing of the Mobile Assisted Burst Operation Parameters Message
8 The base station may use this message to specify the operating parameters in the mobile
9 station for Mobile Assisted Burst Operation procedures.

- 10 • A *Mobile Assisted Burst Operation Parameters Message* may specify pilot strength
11 order change reporting information. If order change reporting information is
12 included, the base station shall set ORDER_FLAG to '1' and include the appropriate
13 order change reporting fields. Otherwise, the base station shall set ORDER_FLAG
14 to '0'. If ORDER_FLAG is set to '1', the base station shall perform the following
15 procedures:
 - 16 – The base station shall set PS_MIN_DELTA to one less than the minimum pilot
17 strength measurement difference between any two pilots in the Active Set (in
18 units of 0.5 dB) that must be measured in order for the mobile station to send a
19 *Pilot Strength Measurement Mini Message*.
 - 20 – The base station shall set ORDER_INTERVAL to the minimum interval (in 20 ms
21 units) during which the indicated pilot strength measurement difference (greater
22 than or equal to PS_MIN_DELTA + 1, in units of 0.5 dB) must be measured by
23 the mobile station in order for the mobile station to send a *Pilot Strength*
24 *Measurement Mini Message*.
- 25 • A *Mobile Assisted Burst Operation Parameters Message* may specify periodic pilot
26 strength reporting. If periodic reporting information is included, the base station
27 shall set PERIODIC_FLAG to '1' and include the appropriate periodic reporting
28 fields. Otherwise, the base station shall set PERIODIC_FLAG to '0'. If
29 PERIODIC_FLAG is set to '1', the base station shall perform the following
30 procedures:
 - 31 – The base station shall set NUM_PILOTS to the number of pilots for which the
32 mobile station is to send *Pilot Strength Measurement Mini Messages*.
 - 33 – The base station shall set PERIODIC_INTERVAL to the interval (in 20 ms units)
34 between *Pilot Strength Measurement Mini Messages*.
- 35 • A *Mobile Assisted Burst Operation Parameters Message* may specify threshold based
36 pilot strength reporting. If threshold based reporting information is included, the
37 base station shall set THRESHOLD_FLAG to '1' and include the appropriate
38 threshold based reporting fields. Otherwise, the base station shall set
39 THRESHOLD_FLAG to '0'. If THRESHOLD_FLAG is set to '1', the base station shall
40 perform the following procedures:

- 1 – The base station shall set PS_FLOOR_HIGH to the high water mark for lower
2 limit threshold for which the mobile station is to send *Pilot Strength*
3 *Measurement Mini Messages*.
- 4 – The base station shall set PS_FLOOR_LOW to the low water mark for lower limit
5 threshold for which the mobile station is to send *Pilot Strength Measurement Mini*
6 *Messages*.
- 7 – The base station shall set PS_CEILING_HIGH to the high water mark for upper
8 limit threshold for which the mobile station is to send *Pilot Strength*
9 *Measurement Mini Messages*.
- 10 – The base station shall set PS_CEILING_LOW to the low water mark for upper
11 limit threshold for which the mobile station is to send *Pilot Strength*
12 *Measurement Mini Messages*.
- 13 – The base station shall set THRESHOLD_INTERVAL to the interval (in 20 ms
14 units) between *Pilot Strength Measurement Mini Messages*.

15 3.6.6.2.2.16 Processing of the Handoff Supplementary Information Notification Message
16 If the message contains any records with HO_SUP_REC_TYPE field set to '000', then the
17 base station should use the AP_ID, IOS_MSC_ID and IOS_CELL_ID corresponding to the
18 PN for this mobile¹⁰⁶.

19 3.6.6.2.3 Active Set Maintenance

20 The base station shall maintain an Active Set for each mobile station under its control as
21 follows:

- 22 • When the base station sends the *Channel Assignment Message*, it shall initialize the
23 Active Set to contain only the pilot associated with the assigned Forward Traffic
24 Channel.
- 25 • When the base station sends the *Extended Channel Assignment Message*, it shall
26 initialize the Active Set to contain all pilots included in the message.
- 27 • When the base station sends an *Extended Handoff Direction Message*, *General*
28 *Handoff Direction Message*, or *Universal Handoff Direction Message*, it shall add to
29 the Active Set, before the action time of the message, all pilots included in the
30 message, if they are not already in the Active Set.
- 31 • The base station shall delete the pilots that were not included in the most recent
32 *Extended Handoff Direction Message*, *General Handoff Direction Message*, or
33 *Universal Handoff Direction Message*, from the Active Set upon receipt of the
34 *Handoff Completion Message* or *Extended Handoff Completion Message*.

¹⁰⁶ The base station may use these for handoff related signaling as specified in [48].

1 3.6.6.2.4 Soft Handoff

2 The base station should use soft handoff when directing a mobile station from one Forward
3 Traffic Channel to another Forward Traffic Channel having the same frequency assignment.

4 3.6.6.2.4.1 Receiving During Soft Handoff

5 Each base station in the Active Set shall demodulate the Reverse Traffic Channel. The base
6 station should provide diversity combining of the demodulated signals obtained by each
7 base station in the Active Set.

8 3.6.6.2.4.2 Transmitting During Soft Handoff

9 The base station shall begin transmitting identical modulation symbols on all Forward
10 Traffic Channels specified in an *Extended Handoff Direction Message* or *General Handoff*
11 *Direction Message*, or *Universal Handoff Direction Message* (with the possible exception of
12 the power control subchannel) by the action time of the message.

13 The base station shall transmit identical power control bits on all identical power control
14 subchannels that were identified as such in the last *Extended Handoff Direction Message*,
15 or *General Handoff Direction Message*, or *Universal Handoff Direction Message*.

16 The base station shall use the same long code mask on all Forward Traffic Channels whose
17 associated pilots are in the Active Set.

18 3.6.6.2.4.3 Call Rescue Soft Handoff

19 The base station shall support the call rescue feature.

20 The call rescue feature can be enabled or disabled by the base station. If the call rescue
21 feature is enabled and the base station detects that a mobile station having MOB_P_REV
22 greater than seven has disabled its transmitters, then the base station shall initiate call
23 rescue procedures.

24 A base station that is configured with a Rescue Channel shall allocate a Walsh Code for the
25 Rescue Channel. If the base station is designated as a rescue cell candidate, then the base
26 station shall monitor the Reverse Traffic Channel in order to acquire a mobile station
27 attempting call rescue soft handoff. If the base station acquires the mobile station, then it
28 should begin immediately transmitting to the mobile station using the Rescue Channel
29 Walsh Code.

30 3.6.6.2.5 Reserved

31 3.6.6.2.6 Hard Handoff

32 When the base station performs a hard handoff by sending an *Extended Handoff Direction*
33 *Message*, or the *General Handoff Direction Message*, or the *Universal Handoff Direction*
34 *Message* and assigns RC11 or RC12 for the forward fundamental channel the base station
35 should perform the following:

- 1 - If the base station has set RETURN_IF_HANDOFF_FAIL to 0 then the base station
 2 should not transmit 0 bps frames on the forward fundamental channel unless the
 3 handoff is successful¹⁰⁷.
- 4 - If the base station has set RETURN_IF_HANDOFF_FAIL to 1 then the base station
 5 should not transmit 0 bps frames on the forward fundamental channel unless the
 6 handoff is successful or handoff is unsuccessful and the mobile station return to
 7 the base station¹⁰⁸.

8 3.6.7 CDMA Tiered Services

9 3.6.7.1 Overview

10 3.6.7.1.1 Definition

11 The base station may support Tiered Services to provide individual users or groups of users
 12 with custom services and special features based upon their location. The base station may
 13 also support Tiered Services to provide private network support. Important to the
 14 operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones by
 15 which the base station offers custom services based upon the mobile station location.

16 User Zones are associated with a set of features and services, plus a geographic area in
 17 which the User Zone features/services are made available to the customers that have
 18 subscribed to that User Zone. The boundary of the User Zone Geographic area may be
 19 established based on the coverage area of a public or private base station, or it may be
 20 established independent of RF topology.

21 User Zones may be supported by the public system on the same frequency as the serving
 22 base station, or they may be supported on a private system operating on a different
 23 frequency.

24 3.6.7.1.2 Types of User Zones

25 User Zones may be of two basic types:

- 26 • *Broadcast User Zones*: Broadcast User Zones are identified to the mobile station
 27 using the Paging Channel or the Primary Broadcast Control Channel. In this case,
 28 the base station broadcasts messages on the Paging Channel or the Primary
 29 Broadcast Control Channel identifying the User Zones that fall within the coverage
 30 area of the particular cell/sector. A mobile station, as part of its monitoring of the
 31 Paging Channel or the Primary Broadcast Control Channel, will identify the
 32 presence of a particular User Zone.
- 33 • *Mobile Specific User Zones*: Mobile Specific User Zones are not broadcast by the base
 34 station. A mobile station may use other overhead message parameters and
 35 compare them with internally stored User Zone parameters to identify the presence
 36 of a particular User Zone. These parameters may include: SID, NID, BASE_ID,
 37 BASE_LAT, and BASE_LONG.

107 The base station receives *Handoff Completion Message*.

108 The base station receives a *Candidate Frequency Search Report Message*.

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_{8m} 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 rejected User Zone.

3.6.7.2.4 User Zone Reject Message on f-csch

The base station may send the *User Zone Reject Message* on the Paging Channel or the Forward Common Control Channel to reject the User Zone requested by the mobile station in the *Registration Message*, *Origination Message*, or *Page Response Message*. The base station may include the ASSIGN_UZID field in the *User Zone Reject Message* record to assign a User Zone to the mobile station to replace the rejected User Zone.

3.6.8 Call Control Processing

The Call Control consists of the following states:

- *Waiting for Order Substate* - In this substate, the Call Control instance sends the *Alert With Information Message* or the *Extended Alert With Information Message* to the mobile station.

- 1 • *Waiting for Answer Substate* - In this substate, the Call Control instance waits for
2 the *Connect Order* from the mobile station.
- 3 • *Conversation Substate* - In this substate, the parties involved in this call exchanges
4 Traffic Channel frames in accordance with the current service configuration.
- 5 • *Call Release Substate* - In this substate, the Call Control instance waits for the call
6 to be disconnected.

7 The following messages are processed by the Call Control:

- 8 • *Alert With Information Message*
- 9 • *Extended Alert with Information Message:*
- 10 • *Flash With Information Message*
- 11 • *Extended Flash With Information Message*
- 12 • *Send Burst DTMF Message*
- 13 • *Origination Continuation Message*

14 The following orders are processed by the Call Control:

- 15 • *Continuous DTMF Tone Order*
- 16 • *Maintenance Order*
- 17 • *Connect Order*

18 Upon instantiation, the Call Control instance shall perform the following:

- 19 • If the call is a mobile station terminated call and the base station set
20 BYPASS_ALERT_ANSWER to '1', the Call Control instance shall enter the
21 *Conversation Substate* (see 3.6.8.2). If the call is a mobile station terminated call
22 and the base station set BYPASS_ALERT_ANSWER to '0', the Call Control instance
23 shall enter the *Waiting for Order Substate* (see 3.6.8.1.1).
- 24 • If the call is a mobile-station-originated call, the Call Control instance shall enter
25 the *Conversation Substate* (see 3.6.8.2).

26 3.6.8.1 Alerting

27 3.6.8.1.1 Waiting for Order Substate

28 In this substate, the Call Control instance sends an *Alert With Information Message* or an
29 *Extended Alert With Information Message* to the mobile station.

30 While in the *Waiting for Order Substate*, the Call Control instance shall perform the
31 following:

- 32 • If the Call Control instance receives a "release indication" from the Layer 3, the Call
33 Control instance shall enter the *Call Release Substate*.

- 1 • If the Call Control instance receives a “send alert with info message indication” from
2 the Layer 3, the Call Control instance shall send an *Alert with Information Message*
3 or an *Extended Alert With Information Message* to the mobile station within T2b
4 seconds, and enter the *Waiting for Answer Substate*.
- 5 • The Call Control instance may send the following messages:
 - 6 1. *Alert With Information Message*: The Call Control instance shall enter the
7 *Waiting for Answer Substate*.
 - 8 2. *Extended Alert With Information Message*: The Call Control instance shall enter
9 the *Waiting for Answer Substate*.
 - 10 3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Answer*
11 *Substate*.

12 3.6.8.1.2 Waiting for Answer Substate

13 In this substate, the Call Control instance waits for a *Connect Order* from the mobile
14 station.

15 While in the *Waiting for Answer Substate*, the Call Control instance shall perform the
16 following:

- 17 • If the Call Control instance receives a “release indication” from the Layer 3, the Call
18 Control instance shall enter the *Call Release Substate*.
- 19 • If the Call Control instance receives a “send alert with info message indication” from
20 the Layer 3, the Call Control instance shall send an *Alert with Information Message*
21 or an *Extended Alert with Information Message* to the mobile station, within T2b
22 seconds, and enter the *Waiting for Answer Substate*.
- 23 • The Call Control instance may send the following messages:
 - 24 1. *Alert With Information Message*
 - 25 2. *Extended Alert With Information Message*
 - 26 3. *Maintenance Order*
- 27 • If the Call Control instance receives one of the following messages from the Layer 3,
28 the Call Control instance shall process the message according to the specified
29 requirements, if any:
 - 30 1. *Connect Order*: The Call Control instance shall enter the *Conversation Substate*.
 - 31 2. *Flash With Information Message*: If the message contains a Keypad Facility
32 record with feature codes indicating User Selective Call Forwarding with a pre-
33 registered number, a stored number, or voice mail, the Call Control instance
34 may send a ‘call release request’ to the Layer 3. If this message contains the
35 Global Emergency Call information record and the call associated with this Call
36 Control instance is a voice call, the base station shall recognize this as an

1 emergency call and should process the message using an implementation-
2 dependent procedure which may include ignoring the dialed digits. If this
3 message contains the Global Emergency Call information record and the call
4 associated with this Call Control instance is not a voice call, the base station
5 may recognize this as an emergency call and should process the message using
6 an implementation-dependent procedure which may include ignoring the dialed
7 digits.

- 8 3. *Extended Flash With Information Message*: If the message contains a Keypad
9 Facility record with feature codes indicating User Selective Call Forwarding with
10 a pre-registered number, a stored number, or voice mail, the Call Control
11 instance may send a 'call release request' to the Layer 3. If this message
12 contains the Global Emergency Call information record and the call associated
13 with this Call Control instance is a voice call, the base station shall recognize
14 this as an emergency call and should process the message using an
15 implementation-dependent procedure which may include ignoring the dialed
16 digits. If this message contains the Global Emergency Call information record
17 and the call associated with this Call Control instance is not a voice call, the
18 base station may recognize this as an emergency call and should process the
19 message using an implementation-dependent procedure which may include
20 ignoring the dialed digits.

21 4. *Origination Continuation Message*

22 3.6.8.2 Conversation Substate

23 While in the *Conversation Substate*, the Call Control instance shall perform the following:

- 24 • If the Call Control instance receives a "release indication" from the Layer 3, the Call
25 Control instance shall enter the *Call Release Substate*.
- 26 • If the Call Control instance receives a "paca reorig indication" from the Layer 3, the
27 Call Control instance should send either an *Alert With Information*
28 *Message/Extended Alert With Information Message* which contains a signal
29 information record with the SIGNAL_TYPE field set to '01' or '10', or an *Alert With*
30 *Information Message/Extended Alert With Information Message* which does not
31 contain a signal information record.
- 32 • If the Call Control instance receives a "send alert with info message indication" from
33 Layer 3, the Call Control instance shall send an *Alert with Information Message* or an
34 *Extended Alert With Information Message* to the mobile station within T2b seconds,
35 and enter the *Waiting for Answer Substate*.
- 36 • The Call Control instance may send the following messages:
 - 37 1. *Alert With Information Message*: If the message contains a signal information
38 record with the SIGNAL_TYPE field set to '01' or '10', or if the message does not
39 contain a signal information record, the Call Control instance shall enter the
40 *Waiting for Answer Substate*.

- 1 2. *Extended Alert With Information Message*: If the message contains a signal
2 information record with the SIGNAL_TYPE field set to '01' or '10', or if the
3 message does not contain a signal information record, the Call Control instance
4 shall enter the *Waiting for Answer Substate*.
- 5 3. *Continuous DTMF Tone Order*
- 6 4. *Flash With Information Message*
- 7 5. *Extended Flash With Information Message*
- 8 6. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Answer*
9 *Substate*.
- 10 7. *Send Burst DTMF Message*
- 11 • If the Call Control instance receives one of the following messages from Layer 3, the
12 Call Control instance shall process the message according to the specified
13 requirements, if any:
- 14 1. *Continuous DTMF Tone Order*
- 15 2. *Flash With Information Message*: If this message contains the Global Emergency
16 Call information record and the call associated with this Call Control instance is
17 a voice call, the base station shall recognize this as an emergency call and
18 should process the message using an implementation-dependent procedure
19 which may include ignoring the dialed digits. If this message contains the Global
20 Emergency Call information record and the call associated with this Call Control
21 instance is not a voice call, the base station may recognize this as an emergency
22 call and should process the message using an implementation-dependent
23 procedure which may include ignoring the dialed digits.
- 24 3. *Extended Flash With Information Message*: If this message contains the Global
25 Emergency Call information record and the call associated with this Call Control
26 instance is a voice call, the base station shall recognize this as an emergency
27 call and should process the message using an implementation-dependent
28 procedure which may include ignoring the dialed digits. If this message contains
29 the Global Emergency Call information record and the call associated with this
30 Call Control instance is not a voice call, the base station may recognize this as
31 an emergency call and should process the message using an implementation-
32 dependent procedure which may include ignoring the dialed digits.
- 33 4. *Origination Continuation Message*
- 34 5. *Send Burst DTMF Message*

3.6.8.3 Call Release Substate

- 36 • The Call Control instance may send the following messages:

- 1 1. *Alert With Information Message*: If the message contains a signal information
2 record with the SIGNAL_TYPE field set to '01' or '10', or if the message does not
3 contain a signal information record, the base station shall enter the *Waiting for*
4 *Answer Substate*.

- 5 2. *Extended Alert With Information Message*: If the message contains a signal
6 information record with the SIGNAL_TYPE field set to '01' or '10', or if the
7 message does not contain a signal information record, the base station shall
8 enter the *Waiting for Answer Substate*.

- 9 3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Answer*
10 *Substate*.

- 11 • If the Call Control instance receives one of the following messages from Layer 3, the
12 Call Control instance shall process the message according to the specified
13 requirements, if any:
 - 14 1. *Connect Order*

 - 15 2. *Continuous DTMF Tone Order*

 - 16 3. *Flash With Information Message*: If this message contains the Global Emergency
17 Call information record and the call associated with this Call Control instance is
18 a voice call, the base station shall recognize this as an emergency call and
19 should process the message using an implementation-dependent procedure
20 which may include ignoring the dialed digits. If this message contains the Global
21 Emergency Call information record and the call associated with this Call Control
22 instance is not a voice call, the base station may recognize this as an emergency
23 call and should process the message using an implementation-dependent
24 procedure which may include ignoring the dialed digits.

 - 25 4. *Extended Flash With Information Message*: If this message contains the Global
26 Emergency Call information record and the call associated with this Call Control
27 instance is a voice call, the base station shall recognize this as an emergency
28 call and should process the message using an implementation-dependent
29 procedure which may include ignoring the dialed digits. If this message contains
30 the Global Emergency Call information record and the call associated with this
31 Call Control instance is not a voice call, the base station may recognize this as
32 an emergency call and should process the message using an implementation-
33 dependent procedure which may include ignoring the dialed digits.

 - 34 5. *Origination Continuation Message*

 - 35 6. *Send Burst DTMF Message*

1 3.6.9 MEID procedures when communicating with MOB_P_REV 6, 7, 8, 9, 10 Mobile
2 Stations

3 The base station shall conform to the requirements in [47] when communicating with a
4 MOB_P_REV 6, 7, 8, 9, or 10 mobile station equipped with an MEID.

5 3.6.10 Reverse Link RC8 and Forward Link RC11/RC12 Assignment

6 If the base station includes RC8 in the reverse fundamental channel assignment to a user
7 then it shall include either RC11 for all the forward channel assignments to this user or
8 RC12 for all the forward channels assignments to this user.

9 If the base station assigns RC8 in the reverse fundamental channel to a user then it shall
10 include RC8 for any reverse channel assignment.

11 If the base station includes RC11 or RC12 in the forward fundamental channel assignment
12 to a user then it shall include RC8 for all reverse channel assignments to this user.

13 If the base station assigns RC11 or RC12 in the forward fundamental channel to a user
14 then it shall include the same RC for any forward channel assignment.

15

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

Message Name	MSG_TAG	Section Number	Primary BCCH	F-CCCH	PCH	P_REV_IN_USE 109
<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</i> (Band Class 0 only)	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</i> ¹¹⁰	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</i> (band classes other than Band Class 0)	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

¹⁰⁹ 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.

¹¹⁰ 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_s equals 0 (see 2.6.2.1.1.3).

1

Table 3.7.2.3-1. f-csch Messages

Message Name	MSG_TAG	Section Number	Primary BCCH	F-CCCH	PCH	P_REV_IN_USE
<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, ≥ 4
<i>PACA Message</i>	PACAM	3.7.2.3.2.20	N	Y	Y	≥ 4
<i>Extended Channel Assignment Message</i>	ECAM	3.7.2.3.2.21	N	Y	Y	≥ 4
<i>General Neighbor List Message</i>	GNLM	3.7.2.3.2.22	N	N	Y	≥ 4
<i>User Zone Identification Message</i>	UZIM	3.7.2.3.2.23	Y	N	Y	≥ 6
<i>Private Neighbor List Message</i>	PNLM	3.7.2.3.2.24	Y	N	Y	≥ 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	≥ 6
<i>Extended CDMA Channel List Message</i>	ECCLM	3.7.2.3.2.28	Y	N	Y	≥ 6
<i>User Zone Reject Message</i>	UZRM	3.7.2.3.2.29	N	Y	Y	≥ 6
<i>ANSI-41 System Parameters Message</i>	A41SPM	3.7.2.3.2.30	Y	N	N	≥ 7
<i>MC-RR Parameters Message</i>	MCRRPM	3.7.2.3.2.31	Y	N	N	≥ 7
<i>ANSI-41 RAND Message</i>	A41RANDM	3.7.2.3.2.32	Y	N	N	≥ 7
<i>Enhanced Access Parameters Message</i>	EAPM	3.7.2.3.2.33	Y	N	N	≥ 7
<i>Universal Neighbor List Message</i>	UNLM	3.7.2.3.2.34	Y	N	N	≥ 7
<i>Security Mode Command Message</i>	SMCM	3.7.2.3.2.35	N	Y	Y	≥ 7
<i>Universal Page Message</i>	UPM	3.7.2.3.2.36	N	Y	N	≥ 7
<i>Authentication Request Message</i>	AUREQM	3.7.2.3.2.37	N	Y	Y	≥ 10
<i>BCMC Service Parameters Message</i>	BSPM	3.7.2.3.2.38	Y	N	Y	≥ 11

Message Name	MSG_TAG	Section Number	Primary BCCH	F-CCCH	PCH	P_REV_IN_USE
<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
<i>Frequent General Overhead Information Message</i>	FGOIM	3.7.2.3.2.46	Y	N	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)

3

4

Field	Length (bits)
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_NGHBR_LST	1
GEN_NGHBR_LST	1
GLOBAL_REDIRECT	1
PRI_NGHBR_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
RC_BITMAP_CAPABILITY_EXT_ALLOWED	0 or 1
CRRM_MSG_IND	0 or 1
NUM_OPT_MSG_BITS	0 or 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
FREQ_GEN_OVHD_INF_IND	0 or 1
RESERVED	0 or (NUM_OPT_MSG_BIT S – 7)
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
ADD_LOC_GEM_ALLOWED	0 or 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

5

CONFIG_MSG_SEQ - Configuration message sequence number.

6

The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).

7

8

SID - System identification.

9

The base station shall set this field to the system identification number for this system (see 2.6.5.2).

10

11

NID - Network identification.

12

This field serves as a sub-identifier of a system as defined by the owner of the SID.

13

14

The base station shall set this field to the network identification number for this network (see 2.6.5.2).

15

16

REG_ZONE - Registration zone.

17

The base station shall set this field to its registration zone number (see 2.6.5.1.5).

18

19

TOTAL_ZONES - Number of registration zones to be retained.

20

The base station shall set this field to the number of registration zones the mobile station is to retain for purposes of zone-based registration (see 2.6.5.1.5).

22

23

If zone-based registration is to be disabled, the base station shall set this field to '000'.

24

1 ZONE_TIMER - Zone timer length.
 2 The base station shall set this field to the ZONE_TIMER value
 3 shown in Table 3.7.2.3.2.1-1 corresponding to the length of
 4 the zone registration timer to be used by mobile stations.

5
 6

Table 3.7.2.3.2.1-1. Value of Zone Timer

ZONE_TIMER Value (binary)	Timer Length (Minutes)
000	1
001	2
010	5
011	10
100	20
101	30
110	45
111	60

7

8 MULT_SIDS - Multiple SID storage indicator.
 9 If mobile stations may store entries of SID_NID_LIST
 10 containing different SIDs, the base station shall set this field
 11 to '1'; otherwise the base station shall set this field to '0'.

12 MULT_NIDS - Multiple NID storage indicator.
 13 If mobile stations may store multiple entries of SID_NID_LIST
 14 having the same SID (with different NIDs), the base station
 15 shall set this field to '1'; otherwise the base station shall set
 16 this field to '0'.

17 BASE_ID - Base station identification.
 18 The base station shall set this field to its identification
 19 number.

20 BASE_CLASS - Base station class.
 21 The base station shall set this field as follows:
 22 For Band Class 1 and 4, the base station shall set this field to
 23 '0001'; otherwise, the base station shall set this field to '0000'.

24 PAGE_CHAN - Number of Paging Channels.
 25 The base station shall set this field to the number of Paging
 26 Channels on this CDMA Channel. The base station shall not
 27 set this field to '000'.

1	MAX_SLOT_CYCLE_INDEX-	Maximum slot cycle index.
2		The base station shall set this field to the
3		SLOT_CYCLE_INDEX value corresponding to the maximum
4		slot cycle length permitted (see 2.6.2.1.1).
5	HOME_REG	- Home registration indicator.
6		If mobile stations that are not roaming (see 2.6.5.3) and have
7		MOB_TERM_HOME equal to '1' are to be enabled for
8		autonomous registrations, the base station shall set this field
9		to '1'. If such mobile stations are not to be enabled for
10		autonomous registration, the base station shall set this field
11		to '0'.
12	FOR_SID_REG	- SID roamer registration indicator.
13		If mobile stations that are foreign SID roamers (see 2.6.5.3)
14		and have MOB_TERM_FOR_SID equal to '1' are to be enabled for
15		autonomous registration, the base station shall set this
16		field to '1'. If such mobile stations are not to be enabled for
17		autonomous registration, the base station shall set this field
18		to '0'.
19	FOR_NID_REG	- NID roamer registration indicator.
20		If mobile stations that are foreign NID roamers (see 2.6.5.3)
21		and have MOB_TERM_FOR_NID equal to '1' are to be enabled for
22		autonomous registration, the base station shall set this
23		field to '1'. If such mobile stations are not to be enabled for
24		autonomous registration, the base station shall set this field
25		to '0'.
26	POWER_UP_REG	- Power-up registration indicator.
27		If mobile stations enabled for autonomous registration are to
28		register immediately after powering on and receiving the
29		system overhead messages, the base station shall set this
30		field to '1'; otherwise, the base station shall set this field to '0'.
31	POWER_DOWN_REG	- Power-down registration indicator.
32		If mobile stations enabled for autonomous registration are to
33		register immediately before powering down, the base station
34		shall set this field to '1'; otherwise, the base station shall set
35		this field to '0'.
36	PARAMETER_REG	- Parameter-change registration indicator.
37		If mobile stations are to register on parameter change events
38		as specified in 2.6.5.1.6, the base station shall set this field to
39		'1'. If not, the base station shall set this field to '0'.

- 1 NGHBR_MAX_AGE - Neighbor Set maximum AGE.
2 The base station shall set this field to the maximum AGE
3 value beyond which mobile stations are to drop members
4 from the Neighbor Set (see 2.6.6.2.6.3).
- 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 mobile stations are 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
16
$$\lfloor 2(PWR_REP_FRAMES/2) \times 5 \rfloor$$
17 is the number of frames over which mobile stations are to
18 count frame errors.
- 19 PWR_THRESH_ENABLE - Threshold report mode indicator.
20 If mobile stations are to generate threshold *Power*
21 *Measurement Report Messages*, the base station shall set this
22 field to '1'. If mobile stations are 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 mobile stations are to generate periodic *Power Measurement*
27 *Report Messages*, the base station shall set this field to '1'. If
28 mobile stations are not to generate periodic *Power*
29 *Measurement Report Messages*, the base station shall set this
30 field to '0'.
- 31 PWR_REP_DELAY - Power report delay.
32 The period that mobile stations wait following a *Power*
33 *Measurement Report Message* before restarting frame counting
34 for power control purposes.
35 The base station shall set this field to the power report delay
36 value, in units of 4 frames (see 2.6.4.1.1).
- 37 RESCAN - Rescan indicator.
38 If mobile stations are to re-initialize and re-acquire the system
39 upon receiving this message, the base station shall set this
40 field to '1'; otherwise, the base station shall set this field to '0'.
- 41 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
5 *Measurement Message* initiating the handoff process (see
6 2.6.6.2.5.2).
- 7 The base station shall set this field to the pilot detection
8 threshold, expressed as an unsigned binary number equal to
9 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
- 10 T_DROP - Pilot drop threshold.
- 11 This value is used by mobile stations to start a handoff drop
12 timer for pilots in the Active Set and the Candidate Set (see
13 2.6.6.2.3).
- 14 The base station shall set this field to the pilot drop threshold,
15 expressed as an unsigned binary number equal to
16 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
- 17 T_COMP - Active Set versus Candidate Set comparison threshold.
- 18 Mobile stations transmit a *Pilot Strength Measurement*
19 *Message* or an *Extended Pilot Strength Measurement Message*
20 when the strength of a pilot in the Candidate Set exceeds that
21 of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
- 22 The base station shall set this field to the threshold Candidate
23 Set pilot to Active Set pilot ratio, in units of 0.5 dB.
- 24 T_TDROP - Drop timer value.
- 25 Timer value after which an action is taken by mobile stations
26 for a pilot that is a member of the Active Set or Candidate Set,
27 and whose strength has not become greater than T_DROP. If
28 the pilot is a member of the Active Set, a *Pilot Strength*
29 *Measurement Message* or an *Extended Pilot Strength*
30 *Measurement Message* is issued. If the pilot is a member of
31 the Candidate Set, it will be moved to the Neighbor Set.
- 32 The base station shall set this field to the T_TDROP value
33 shown in Table 2.6.6.2.3-1 corresponding to the drop timer
34 value to be used by mobile stations.
- 35 EXT_SYS_PARAMETER - *Extended System Parameters Message* indicator.
36 The base station shall set this field to '1'.
- 37 EXT_NGHBR_LST - *Extended Neighbor List Message* indicator.
- 38 The base station sets this field to '1' when it sends the
39 *Extended Neighbor List Message* on the Paging Channel;
40 otherwise the base station sets this field to '0'.
- 41 If the base station is operating in Band Class 1, Band Class 3,
42 or Band Class 4 with MIN_P_REV less than seven, it shall set
43 this field to '1'. If the base station is operating in Band Class
44 0, it shall set this field to '0'.
- 45 GEN_NGHBR_LST - *General Neighbor List Message* indicator.

- 1 If the base station is sending the *General Neighbor List*
 2 *Message* on the Paging Channel, it shall set this field to '1';
 3 otherwise, it shall set this field to '0'.
- 4 If the base station is operating in Band Class 1, Band Class 3,
 5 or Band Class 4 with MIN_P_REV greater than or equal to
 6 seven, and if EXT_NGHRBR_LST is set to '0', the base station
 7 shall set this field to '1'.
- 8 If the base station is operating in Band Class 0 with
 9 MIN_P_REV greater than or equal to seven and if the *Neighbor*
 10 *List Message* is not sent, the base station shall set this field to
 11 '1'.
- 12 If the base station is operating in a band class other than
 13 Band Class 1, Band Class 3, or Band Class 4, and if
 14 EXT_NGHRBR_LST is set to '0', the base station shall set this
 15 field to '1'.
- 16 GLOBAL_REDIRECT - *Global Service Redirection Message* indicator.
 17 If the base station is sending the *Global Service Redirection*
 18 *Message* on the Paging Channel, it shall set this field to '1';
 19 otherwise, it shall set this field to '0'.
- 20 PRI_NGHRBR_LST - *Private Neighbor List Message* indicator.
 21 If the base station is sending the *Private Neighbor List*
 22 *Message* on the Paging Channel, it shall set this field to '1';
 23 otherwise, it shall set this field to '0'.
- 24 USER_ZONE_ID - *User Zone Identification Message* indicator.
 25 If the base station is sending the *User Zone Identification*
 26 *Message* on the Paging Channel, it shall set this field to '1';
 27 otherwise, it shall set this field to '0'.
- 28 EXT_GLOBAL_REDIRECT - *Extended Global Service Redirection Message* indicator.
 29 If the base station is sending the *Extended Global Service*
 30 *Redirection Message* on the Paging Channel, it shall set this
 31 field to '1'; otherwise, the base station shall set this field to '0'.
- 32 EXT_CHAN_LST - *Extended CDMA Channel List Message* indicator.
 33 The base station shall set this field to '1', if the *Extended*
 34 *Channel List Message* is sent on the Paging Channel,
 35 otherwise, it shall set this field to '0'.
- 36 T_TDROP_RANGE_INCL - Drop timer range value included indicator.
 37 The base station shall set this field to '1' if the
 38 T_TDROP_RANGE field is included in this message; otherwise,
 39 the base station shall set this field to '0'.
- 40 T_TDROP_RANGE - Drop timer range value.
 41 Timer range value to use in association with the T_TDROP
 42 parameter when determining the drop timer expiration.

1 If T_TDROP_RANGE_INCL is set to '0', the base station shall
 2 omit this field; otherwise, the base station shall set this field
 3 to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2
 4 corresponding to the timer expiration range value to be used
 5 by the mobile station.

6 NEG_SLOT_CYCLE_INDEX_SUP - Negative slot cycle index supported indicator.
 7 The base station shall set this field to '1' if it supports
 8 negative values of the preferred slot cycle index
 9 (SLOT_CYCLE_INDEX_p); otherwise, the base station shall set
 10 this field to '0'.

11 RC BITMAP CAPABILITY EXT ALLOWED

12 - RC bitmap and Capability Record Extension Indicator.

13 This bit indicates that the base station supports the following:

14 - Processing of Origination Message or Page Response
 15 Message or Status Response Message or Extended
 16 Status Response Message that contain FCH Type-
 17 specific Fields record, or DCCH Type-specific Fields
 18 record, or FOR SCH Type-Specific Fields record, or
 19 REV SCH Type-Specific Fields record with a value for
 20 FOR FCH LEN or FOR DCCH LEN or FOR SCH LEN
 21 greater than 3 and REV FCH LEN or REV DCCH LEN
 22 or REV SCH LEN greater than 2.

23 - Processing of any additional fields starting with the
 24 F SCH EARLY TERM SUPPORTED field in the
 25 Capability Information Record.

26 The base station shall include this field if any fields following
 27 this field are included. If included, the base station shall set
 28 this field to '1'.

29 CRRM_MSG_IND - *Call Recovery Request Message* supported indicator.

30 The base station shall omit this field if the base station does
 31 not need to include any fields following this field and does not
 32 support *Call Recovery Request Message*. Otherwise the base
 33 station shall include this field and set this field as follows:

34 The base station shall set this field to '0' if the mobile station
 35 is not allowed to send a *Call Recovery Request Message*;
 36 otherwise, the base station shall set this field to '1'.

37 NUM_OPT_MSG_BITS - Number of optional overhead messages transmission
 38 information bits.

39 The base station shall omit this field if the base station does
 40 not need to include any fields following this field. Otherwise
 41 the base station shall include this field and set this field as
 42 follows:

- 1 The base station shall set this field to the number of optional
2 overhead messages for which transmission information is
3 included in this message.
- 4 AP_PILOT_INFO - *Access Point Pilot Information Message* indicator.
5 If NUM_OPT_MSG_BITS is included and equal to or greater
6 than 1, the base station shall include the field
7 AP_PILOT_INFO and shall set this field as shown below;
8 otherwise, the base station shall omit this field.
9 If the base station is sending the *Access Point Pilot Information*
10 *Message* on the Paging Channel, it shall set this field to '1';
11 otherwise, the base station shall set this field to '0'.
- 12 AP_IDT - *Access Point Identification Message* indicator.
13 If NUM_OPT_MSG_BITS is included and equal to or greater
14 than 2, the base station shall include the field AP_IDT and
15 shall set this field as shown below; otherwise, the base station
16 shall omit this field.
17 If the base station is sending the *Access Point Identification*
18 *Message* on the Paging Channel, it shall set this field to '1';
19 otherwise, the base station shall set this field to '0'.
- 20 AP_ID_TEXT - *Access Point Identification Text Message* indicator.
21 If NUM_OPT_MSG_BITS is included and equal to or greater
22 than 3, the base station shall include the field AP_ID_TEXT
23 and shall set this field as shown below; otherwise, the base
24 station shall omit this field.
25 If the base station is sending the *Access Point Identification*
26 *Text Message* on the Paging Channel, it shall set this field to
27 '1'; otherwise, the base station shall set this field to '0'.
- 28 GEN_OVHD_INF_IND - *General Overhead Information Message* indicator.
29 If NUM_OPT_MSG_BITS is included and equal to or greater
30 than 4, the base station shall include the field
31 GEN_OVHD_INF_IND and shall set this field as shown below;
32 otherwise, the base station shall omit this field.
33 If the base station is sending the *General Overhead*
34 *Information Message* on the Paging Channel, it shall set this
35 field to '1'; otherwise, the base station shall set this field to '0'.
- 36 FD_CHAN_LST_IND - *Flex Duplex CDMA Channel List Message* indicator.
37 If NUM_OPT_MSG is included and equal to or greater than 5,
38 the base station shall include the field FD_CHAN_LST_IND
39 and shall set this field as shown below; otherwise, the base
40 station shall omit this field.
41 If the base station is sending the *Flex Duplex CDMA Channel*
42 *List Message* on the Paging Channel, it shall set this field to
43 '1'; otherwise, the base station shall set this field to '0'.
- 44 ATIM_IND - *Alternative Technologies Information Message* indicator.

1			If NUM_OPT_MSG_BITS is included and equal to or greater
2			than 6, the base station shall include the field ATIM_IND and
3			shall set this field as shown below; otherwise, the base station
4			shall omit this field.
5			If the base station is sending the <i>Alternative Technologies</i>
6			<i>Information Message</i> on the Paging Channel, it shall set this
7			field to '1'; otherwise, the base station shall set this field to '0'.
8	FREQ_GEN_OVHD_INF_IND	-	<i>Frequent General Overhead Information Message</i> indicator.
9			If NUM_OPT_MSG_BITS is included and equal to or greater
10			than 7, the base station shall include the field
11			FREQ_GEN_OVHD_INF_IND and shall set this field as shown
12			below; otherwise, the base station shall omit this field.
13			If the base station is sending the <i>Frequent General Overhead</i>
14			<i>Information Message</i> on the Paging Channel, it shall set this
15			field to '1'; otherwise, the base station shall set this field to '0'.
16	RESERVED	-	Reserved bits.
17			If NUM_OPT_MSG_BITS is included and greater than 7, the
18			base station shall include the field RESERVED and shall set
19			this field as shown below; otherwise, the base station shall
20			omit this field.
21			The base station shall add (NUM_OPT_MSG_BITS – 7)
22			reserved bits. The base station shall set these bits to '0'.
23	APPIM_PERIOD_INDEX	-	<i>Access Point Pilot Information Message</i> transmission frequency.
24			If the AP_PILOT_INFO is not included or is included and set to
25			0, the base station shall omit this field. Otherwise, the base
26			station shall include this field if there are any fields following
27			this field or if the base station needs to set this field to a value
28			other than '000'.
29			The base station shall set this field to the period index value
30			of <i>Access Point Pilot Information Message</i> . The base station
31			shall set this field value in the range '000' – '101', both
32			inclusive.
33	GEN_OVHD_CYCLE_INDEX	-	<i>General Overhead Information Message</i> transmission
34			frequency.
35			If the GEN_OVHD_INF_IND is not included or is included and
36			set to 0, the base station shall omit this field. Otherwise, the
37			base station shall include this field if there are any fields
38			following this field or if the base station needs to set this field
39			to a value other than '000'.
40			The base station shall set this field to the cycle index value of
41			<i>General Overhead Message</i> . The base station shall set this
42			field value in the range '000' – '101', both inclusive.
43	ATIM_CYCLE_INDEX	-	<i>Alternative Technologies Information Message</i> transmission
44			frequency.

- 1 If the ATIM_IND is not included or is included and set to 0,
 2 the base station shall omit this field. Otherwise, the base
 3 station shall include this field if there are any fields following
 4 this field or if the base station needs to set this field to a value
 5 other than '000'.
- 6 The base station shall set this field to the cycle index value of
 7 *Alternative Technologies Information Message*. The base station
 8 shall set this field vale in the range '000' – '101', both
 9 inclusive.
- 10 ADD_LOC_INFO_INCL – Location information included.
- 11 The base station shall omit this field if the base station does
 12 not need to include any fields following this field. Otherwise
 13 the base station shall include this field and set this field as
 14 follows:
- 15 The base station shall set this field to '1' to indicate that the
 16 LOC_UNC_H, HEIGHT, and LOC_UNC_V fields are included
 17 in this message, otherwise, the base station shall set this field
 18 to '0'.
- 19 LOC_UNC_H – Horizontal location uncertainty.
- 20 If ADD_LOC_INFO_INCL is included and set to '1', the base
 21 station shall include this field and set it as shown below;
 22 otherwise, the base station shall omit this field.
- 23 The base station shall set this field to the circular horizontal
 24 location uncertainty, as specified in Table 3.7.2.3.2.1-2. The
 25 value of this field indicates the radius of a circular 95%
 26 confidence coverage area.

27 **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'	$20,000 \text{ m} \leq \text{LOC_UNC_H} < 40,000 \text{ m}$
'1110'	$40,000 \text{ m} \leq \text{LOC_UNC_H} < 70,000 \text{ m}$
'1111'	$70,000 \text{ m} \leq \text{LOC_UNC_H}$

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HEIGHT

– Height.

If ADD_LOC_INFO_INCL is included and 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 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.

If ADD_LOC_INFO_INCL is included and 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 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.

The base station shall set this field to all ones if its height is not known.

Table 3.7.2.3.2.1-3. Vertical Position Uncertainty

'0000'	$0 < \text{LOC_UNC_V} < 1 \text{ m}$
'0001'	$1 \text{ m} \leq \text{LOC_UNC_V} < 2 \text{ m}$
'0010'	$2 \text{ m} \leq \text{LOC_UNC_V} < 4 \text{ m}$
'0011'	$4 \text{ m} \leq \text{LOC_UNC_V} < 7 \text{ m}$
'0100'	$7 \text{ m} \leq \text{LOC_UNC_V} < 10 \text{ m}$
'0101'	$10 \text{ m} \leq \text{LOC_UNC_V} < 20 \text{ m}$
'0110'	$20 \text{ m} \leq \text{LOC_UNC_V} < 40 \text{ m}$
'0111'	$40 \text{ m} \leq \text{LOC_UNC_V} < 70 \text{ m}$
'1000'	$70 \text{ m} \leq \text{LOC_UNC_V} < 100 \text{ m}$
'1001'	$100 \text{ m} \leq \text{LOC_UNC_V} < 200 \text{ m}$
'1010'	$200 \text{ m} \leq \text{LOC_UNC_V} < 400 \text{ m}$

'1011'	$400 \text{ m} \leq \text{LOC_UNC_V} < 700 \text{ m}$
'1100'	$700 \text{ m} \leq \text{LOC_UNC_V} < 1,000 \text{ m}$
'1101'	$1,000 \text{ m} \leq \text{LOC_UNC_V} < 2,000 \text{ m}$
'1110'	$2,000 \text{ m} \leq \text{LOC_UNC_V} < 4,000 \text{ m}$
'1111'	$4,000 \text{ m} \leq \text{LOC_UNC_V}$

- 1 ADD_LOC_GEM_ALLOWED – Additional Geo Location Info Record allowed in GEM.
- 2 The base station shall omit this field if the base station does
- 3 not support inclusion of Additional Geo Location Type
- 4 Information record in a *General Extension Message* with
- 5 *Origination* and *Registration* messages and the base station
- 6 does not need to include any field following 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 '1' to indicate that the
- 10 Additional Geo Location Type Information records may be
- 11 included in a General Extension Message with Origination
- 12 and Registration messages. Otherwise, the base station shall
- 13 set this field to '0'.
- 14

1 3.7.2.3.2.2 Access Parameters Message

2 MSG_TAG: APM

3

Field	Length (bits)
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

4

(continues on next page)

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 offset for this base station, in units of 64 PN chips.

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6

ACC_MSG_SEQ - Access parameters message sequence number.

7

The base station shall set this field to ACC_CONFIG_SEQ (see 3.6.2.2).

8

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 modifier
37 for Access Channel attempts for message transmissions.
- 38 REG_PSIST - Persistence modifier for Access Channel attempts for
39 registrations which are not responses to the *Registration*
40 *Request Order*.
- 41 A mobile station multiplies its transmission probability by
42 $2^{-\text{REG_PSIST}}$ for such attempts.
- 43 The base station shall set this field to the persistence modifier
44 for Access Channel attempts for registrations which are not
45 responses to the *Registration Request Order*.

- 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 emergency
- 37 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.

1 If ACCT_INCL is set to '0', the base station shall omit this
 2 field; otherwise, the base station shall include this field and
 3 set it as follows:

4 The base station shall set this field to '0' if all mobile stations
 5 are to apply ACCT regardless of their access overload classes;
 6 otherwise, the base station shall set this field to '1' to indicate
 7 that the mobile station is to apply ACCT according to its
 8 access overload class.

9 ACCT_SO_INCL - Access Control based on Call Type (ACCT) service option
 10 included indicator.

11 If ACCT_INCL is set to '0', the base station shall omit this
 12 field; otherwise, the base station shall include this field and
 13 set it as follows:

14 The base station shall set this field to '1' if at least one
 15 occurrence of the ACCT_SO field is included in this message;
 16 otherwise, the base station shall set this field to '0'.

17 NUM_ACCT_SO - Number of service options for Access Control based on Call
 18 Type (ACCT).

19 If ACCT_SO_INCL is not included, or is included and set to '0',
 20 then the base station shall omit this field; otherwise, the base
 21 station shall include this field and set it to one less than the
 22 number of occurrences of the ACCT_SO field included in this
 23 message.

24 If ACCT_SO_INCL is included and set to '1', then the base station shall include
 25 NUM_ACCT_SO + 1 occurrences of the following variable-field record:

26 ACCT_AOC_BITMAP1 - Access Control based on Call Type (ACCT) access overload
 27 class bitmap.

28 If ACCT_AOC_BITMAP_INCL is set to '0', then the base station
 29 shall omit this field; otherwise, the base station shall include
 30 this field and set it as follows:

31 This field consists of the subfields defined in Table
 32 3.7.2.3.2.2-1.

33 **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

34

- 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 should
16 set this field to the largest increment such that the pilot PN
17 sequence offsets of all its neighbor base stations are integer
18 multiples of that increment.

19 The base station shall set this field to a value in the range 1 to
20 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

Value (binary)	Neighbor Configuration
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>

Value (binary)	Neighbor Configuration
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 gives
 12 the designations of the supported CDMA Channels as CDMA
 13 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
- 3

1 3.7.2.3.2.6 Reserved

2

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
 5
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 13

- ORDER - Order code.
 The base station shall set this field to the ORDER code (see 3.7.4) for this type of order.
- ADD_RECORD_LEN - Additional record length.
 The base station shall set this field to the number of octets in the order-specific fields included in this order record.
- Order-specific fields - Order-specific fields.
 The base station shall include order-specific fields as specified in 3.7.4 for this type of order.

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

9

10

11

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.

Table 3.7.2.3.2.8-1. Assignment Mode

Value (binary)	Assignment Mode
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.	

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- ADD_RECORD_LEN** - Additional record length.
- The base station shall set this field to the number of octets in the additional record fields included in this assignment record.
- Additional record fields** - Additional record fields.
- The additional record fields are determined by the value of ASSIGN_MODE, as described below.
- If the ASSIGN_MODE field is set to '000', the base station shall include the following fields:
- FREQ_INCL** - Frequency included indicator.
- If the CDMA_FREQ field is included in this assignment record, the base station shall set this bit to '1'. If the CDMA_FREQ field is not included in this assignment record, the base station shall set this bit to '0'.
- CODE_CHAN** - Code channel.
- The base station shall set this field to the code channel index (see [2]) in the range 1 to 63 inclusive that the mobile station is to use on the Fundamental Channel of the Forward Traffic Channel.
- 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.

- 1 FRAME_OFFSET - Frame offset.
 2 The Forward and Reverse Traffic Channel frames are delayed
 3 FRAME_OFFSET × 1.25 ms relative to system timing (see [2]).
 4 The base station shall set this field to the Forward and
 5 Reverse Traffic Channel frame offset.
- 6 ENCRYPT_MODE - Message encryption mode.
 7 The base station shall set this field to the ENCRYPT_MODE
 8 value shown in Table 3.7.2.3.2.8-2 corresponding to the
 9 encrypting mode that is to be used for signaling messages, as
 10 specified in 2.3.12.2.

11
 12 **Table 3.7.2.3.2.8-2. Message Encryption Modes**

ENCRYPT_MODE Field (binary)	Encryption Mode Used
00	Encryption disabled
01	Basic encryption of call control messages
10	Enhanced encryption of call control messages
11	Extended encryption of call control messages

- 13
- 14 D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.
 15 If ENCRYPT_MODE is set to ‘11’, the base station shall include
 16 this field and shall set it to the dedicated channel signaling
 17 encryption mode, as shown in Table 3.7.4.5-1; otherwise the base
 18 station shall omit this field.
- 19 ENC_KEY_SIZE - Encryption key size indication.
 20 If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall
 21 include this field and shall set it to the encryption key size, as
 22 shown in Table 3.7.4.5-2; otherwise, the base station shall omit
 23 this field.
- 24 C_SIG_ENCRYPT_MODE_INCL - Common channel signaling encryption mode included
 25 indicator.
 26 If common channel signaling encryption information is
 27 included in this message, the base station shall set this field
 28 to ‘1’; otherwise, the base station shall set this field to ‘0’.
- 29 C_SIG_ENCRYPT_MODE - Common channel signaling encryption mode indicator.

1 If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
 2 shall include this field and shall set it to the common channel
 3 signaling encryption mode, as shown in Table 3.7.4.5-1;
 4 otherwise, the base station shall omit this field.

5 RESERVED - Reserved bits.

6 The base station shall add reserved bits as needed in order to
 7 make the total length of the fields after the preceding
 8 ADD_RECORD_LEN field through this RESERVED field equal
 9 to an integer number of octets. The base station shall set
 10 these bits to '0'.

11 If the ASSIGN_MODE field is set to '001', the base station shall include the following fields:

12 RESPOND - Respond on new Access Channel indicator.

13 If the mobile station is to retransmit an *Origination Message*
 14 or *Page Response Message* after processing this channel
 15 assignment, the base station shall set this field to '1'. The
 16 base station may set this field to '0' only in response to a *Page*
 17 *Response Message*.

18 FREQ_INCL - Frequency included indicator.

19 If the CDMA_FREQ field is included in this assignment
 20 record, the base station shall set this bit to '1'. If the
 21 CDMA_FREQ field is not included in this assignment record,
 22 the base station shall set this bit to '0'.

23 CDMA_FREQ - Frequency assignment.

24 If the FREQ_INCL bit is set to '1', the base station shall set
 25 this field to the CDMA Channel number corresponding to the
 26 CDMA frequency assignment for the CDMA Channel
 27 containing the Paging Channel the mobile station is to use. If
 28 the FREQ_INCL bit is set to '0', the base station shall omit
 29 this field.

30 PILOT_PN - Pilot PN sequence offset index.

31 The base station shall include one occurrence of this field for
 32 each base station whose Paging Channel may be monitored
 33 by the mobile station. For each occurrence, the base station
 34 shall set this field to the pilot PN sequence offset for a base
 35 station, in units of 64 PN chips. The base station having this
 36 pilot PN sequence offset should support a Primary Paging
 37 Channel with the same Paging Channel rate as the current
 38 base station.

39 RESERVED - Reserved bits.

40 The base station shall add reserved bits as needed in order to
 41 make the total length of the fields, after the preceding
 42 ADD_RECORD_LEN field through this RESERVED field, equal
 43 to an integer number of octets. The base station shall set
 44 these bits to '0'.

45 If the ASSIGN_MODE field is set to '100', the base station shall include the following fields:

1	FREQ_INCL	-	Frequency included indicator.
2			If the BAND_CLASS and CDMA_FREQ fields are included in
3			this assignment record, the base station shall set this bit to
4			'1'. If the BAND_CLASS and CDMA_FREQ fields are not
5			included in this assignment record, the base station shall set
6			this bit to '0'.
7	RESERVED	-	Reserved bits.
8			The base station shall set this field to '000'.
9	BYPASS_ALERT_ANSWER	-	Bypass alert indicator.
10			If the MOB_P_REV of the current band class of the mobile
11			station is less than or equal to three, the base station shall
12			set this field to '0'; otherwise, the base station shall set this
13			field as follows.
14			If the mobile station is to bypass the <i>Waiting for Order</i>
15			<i>Substate</i> and the <i>Waiting for Mobile Station Answer Substate</i> ,
16			the base station shall set this field to '1'; otherwise, the base
17			station shall set this field to '0'.
18	DEFAULT_CONFIG	-	Default Configuration.
19			If the GRANTED_MODE field is set to '00', the base station
20			shall set this field as specified in Table 3.7.2.3.2.8-3 to
21			indicate an initial multiplex option and radio configuration for
22			the Forward and Reverse Traffic Channels.

1

Table 3.7.2.3.2.8-3. Default Configuration

Value (binary)	Default Configuration
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

5

6

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10

The base station shall set this field to '00' to indicate that the mobile station is to use an initial service configuration consisting of the multiplex option and radio configuration defined by the DEFAULT_CONFIG field for the Forward and Reverse Traffic Channels, and to indicate that service negotiation is to take place before the base station sends the first *Service Connect Message*.

11

12

13

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18

The base station shall set this field to '01' to indicate that the mobile station is to use an initial service configuration consisting of the default multiplex option and transmission rates corresponding to the service option requested by the mobile station either in the *Origination Message*, or *Page Response Message*, and to indicate that service negotiation is to take place before the base station sends the first *Service 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 × 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 base
43			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 channel
 13 signaling encryption mode, as shown in Table 3.7.4.5-1;
 14 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 *Origination Message*
 24 or *Page Response Message* 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 *Page*
 27 *Response Message*.

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)

CHARi	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 CHARi
 11 fields of this message equal to
 12 EXTENDED_BURST_TYPE_INTERNATIONAL as described in
 13 the definition of CHARi below. If the base station sets this
 14 field equal to '111111', it shall set the first two CHARi fields of
 15 this message equal to the EXTENDED_BURST_TYPE as
 16 described in the definition of CHARi 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 CHARi field included in this message.

23 CHARi - 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.

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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 × (NUM_FIELDS - 2)

16
17
18
19
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22

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 × (NUM_FIELDS - 2)

23

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 in
 11 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 × 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_IO_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

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Field	Length (bits)
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_PARAMS_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
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Field	Length (bits)
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTEN_SWITCHING_SLOTS	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTEN_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_PARAMS_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_PARAMS_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_PARAMS_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

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- PILOT_PN** - Pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.
- CONFIG_MSG_SEQ** - Configuration message sequence number.

The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).
- DELETE_FOR_TMSI** - Delete foreign TMSI.

The base station shall set this field to '1' to cause the mobile station to delete its TMSI if the TMSI was assigned in a different TMSI zone from that specified by the TMSI_ZONE field of this message; otherwise, the base station shall set this field to '0'.
- USE_TMSI** - Use TMSI indicator.

The base station shall set this field to the value shown in Table 3.7.2.3.2.13-1 corresponding to the type of MSID that the mobile station is to use on the Access Channel.
- PREF_MSID_TYPE** - Preferred Access Channel Mobile Station Identifier Type.

The base station shall set this field to the value shown in Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding to the type of MSID that the mobile station is to use on the Access Channel.

Table 3.7.2.3.2.13-1. Preferred MSID Types for 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)

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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
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
0	10	01	IMSI and MEID	IMSI

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
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	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

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
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
0	10	11	IMSI and MEID	IMSI
0	11	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
1	10	11	TMSI (valid TMSI is assigned); IMSI and MEID (TMSI not assigned)	TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)

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	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.				

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- MCC - Mobile Country Code.
The base station shall set this field to the MCC (see 2.3.1)
- IMSI_11_12 - 11th and 12th digits of the IMSI.
The base station shall set this field to the IMSI_11_12 (see 2.3.1).
- TMSI_ZONE_LEN - TMSI zone length.
The base station shall set this field to the number of octets included in the TMSI_ZONE. The base station shall set this field to a value in the range 1 to 8 inclusive.
- TMSI_ZONE - TMSI zone.

1			The base station shall set this field to the TMSI zone number
2			as specified in [27].
3	BCAST_INDEX	-	Broadcast slot cycle index.
4			To enable periodic broadcast paging, the base station shall set
5			this field to an unsigned 3-bit number in the range 1-7, equal
6			to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3.
7			To disable periodic broadcast paging, the base station shall
8			set this field to '000'.
9	IMSI_T_SUPPORTED	-	IMSI_T support indicator.
10			The base station shall set this field to '1' to indicate support
11			for a 15-digit IMSI_T addressing according to [18].
12	P_REV	-	Protocol revision level.
13			The base station shall set this field to '00001100'.
14	MIN_P_REV	-	Minimum protocol revision level.
15			The base station sets this field to prevent mobile stations
16			which cannot be supported by the base station from
17			accessing the system.
18			The base station shall set this field to the minimum protocol
19			revision level that it supports.
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.

- 1 If the base station does not support a packet data service
 2 zone, the base station shall set this field to '00000000'.
- 3 **MAX_NUM_ALT_SO** - Maximum number of alternative service options.
- 4 The base station shall set this field to the maximum number
 5 of alternative service option numbers that the mobile station
 6 is allowed to include in the *Origination Message* or the *Page*
 7 *Response Message*.
- 8 For mobile stations with MOB_P_REV_s less than seven, the
 9 alternative service options are those service options defined in
 10 [30] and related to SERVICE_OPTION in *Origination Message*
 11 and the *Page Response Message*.
- 12 For mobile stations with MOB_P_REV_s equal to or greater
 13 than seven, the alternative service options are those service
 14 options defined in [30] without service option group number
 15 assigned and related to SERVICE_OPTION in *Origination*
 16 *Message* and the *Page Response Message*.
- 17 If the base station sets this field to a value greater than zero,
 18 in addition, the base station shall allow the mobile station
 19 with MOB_P_REV equal to or greater than seven to include
- 20 • a 4 or 8-bit service option bitmap in the *Origination*
 21 *Message* and the *Page Response Message*;
 - 22 • alternate service option numbers, not limited to
 23 MAX_ALT_SO_NUM, in the *Enhanced Origination Message*.
- 24 **RESELECT_INCLUDED** - System reselection parameters included.
- 25 If the base station is including system reselection parameters,
 26 the base station shall set this field to '1'; otherwise, the base
 27 station shall set this field to '0'.
- 28 **EC_THRESH** - Pilot power threshold.
- 29 If RESELECT_INCLUDED is set to '1', the base station shall
 30 include the field EC_THRESH and set this field to:
- 31
$$\lceil (pilot_power_threshold + 115) \rceil$$
- 32 where *pilot_power_threshold* is the pilot power, E_C, in
 33 dBm/1.23 MHz, below which the mobile station is to perform
 34 system reselection; otherwise, the base station shall omit this
 35 field.
- 36 **EC_IO_THRESH** - Pilot E_C/ I₀ threshold.
- 37 If RESELECT_INCLUDED is set to '1', the base station shall
 38 include the field EC_IO_THRESH and set this field to:

- 1 $\lfloor -20 \times \log_{10} (pilot_threshold) \rfloor$
- 2 where *pilot_threshold* is the pilot E_c/I_0 below which the mobile
3 station is to perform system reselection; otherwise, the base
4 station shall omit this field.
- 5 **PILOT_REPORT** - Pilot reporting indicator.
- 6 The base station shall set this field to '1' if the mobile station
7 is to report the additional pilots which have pilot strengths
8 exceeding T_ADD in all Access Channel messages. The base
9 station shall set this field to '0' if the mobile station is to
10 report the additional pilots which have pilot strengths
11 exceeding T_ADD only in the *Origination Message*, the
12 *Reconnect Message*, and the *Page Response Message*.
- 13 **NGHBR_SET_ENTRY_INFO** - Neighbor Set access entry handoff information included
14 indicator.
- 15 If the base station is including information on the Neighbor
16 Set access entry handoff, the base station shall set this field
17 to '1'; otherwise, the base station shall set this field to '0'.
- 18 **ACC_ENT_HO_ORDER** - Access entry handoff permitted indicator.
- 19 If **NGHBR_SET_ENTRY_INFO** is set to '1', the base station
20 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 '1' if the mobile station
23 is permitted to perform an access entry handoff after receiving
24 a message while performing the *Mobile Station Order and*
25 *Message Processing Operation* in the *Mobile Station Idle State*
26 (see 2.6.2.4); otherwise, the base station shall set this field to
27 '0'.
- 28 **NGHBR_SET_ACCESS_INFO** - Neighbor Set access handoff included indicator.
- 29 If the base station is including information on the Neighbor
30 Set access handoff or access probe handoff, the base station
31 shall set this field to '1', otherwise, the base station shall set
32 this field to '0'.
- 33 **ACCESS_HO** - Access handoff permitted indicator.
- 34 If **NGHBR_SET_ACCESS_INFO** is set to '1', the base station
35 shall include this field and set it as described below;
36 otherwise, the base station shall omit this field.
- 37 The base station shall set this field to '1' if the mobile station
38 is permitted to perform an access handoff (see 2.6.3.1.3.2);
39 otherwise, the base station shall set this field to '0'.
- 40 **ACCESS_HO_MSG_RSP** - Access handoff permitted for message response indicator.

1 If ACCESS_HO is set to '1', the base station shall include this
 2 field and set it as described below; otherwise, the base station
 3 shall omit this field.

4 The base station shall set this field to '1' if the mobile station
 5 is permitted to perform an access handoff after receiving a
 6 message and before responding to that message in the *System*
 7 *Access State*; otherwise, the base station shall set this field to
 8 '0'.

9 ACCESS_PROBE_HO - Access probe handoff permitted indicator.

10 If NGHBR_SET_ACCESS_INFO is set to '1', the base station
 11 shall include this field and set it as described below;
 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 permitted to perform an access probe handoff (see
 15 2.6.3.1.3.3); otherwise, the base station shall set this field to
 16 '0'.

17 ACC_HO_LIST_UPD - Access handoff list update permitted indicator.

18 If ACCESS_PROBE_HO is included and is set to '1', the base
 19 station shall include this field and set it as described below;
 20 otherwise, the base station shall omit this field.

21 The base station shall set this field to '1' if the mobile station
 22 is permitted to update the access handoff list during an
 23 access attempt (see 2.6.3.1.7.2); otherwise, the base station
 24 shall set this field to '0'.

25 ACC_PROBE_HO_OTHER_MSG - Access probe handoff permitted for messages other
 26 than the *Origination Message*, the *Reconnect Message*, and the
 27 *Page Response Message*.

28 If ACCESS_PROBE_HO is set to '1', the base station shall
 29 include this field and set it as described below; otherwise, the
 30 base station shall omit this field.

31 The base station shall set this field to '1' if the mobile station
 32 is permitted to perform an access probe handoff for messages
 33 other than the *Origination Message*, the *Reconnect Message*,
 34 and the *Page Response Message*. The base station shall set
 35 this field to '0' if the mobile station is permitted to perform an
 36 access probe handoff only for the *Origination Message*, the
 37 *Reconnect Message*, and the *Page Response Message*. See
 38 2.6.3.1.3.3.

39 MAX_NUM_PROBE_HO - Maximum number of times that the mobile station is
 40 permitted to perform an access probe handoff.

41 If ACCESS_PROBE_HO is set to '1', the base station shall
 42 include this field and set it as described below; otherwise, the
 43 base station shall omit this field.

1 The base station shall set this field to the maximum number
 2 of times the mobile station is allowed to perform an access
 3 probe handoff within an access attempt minus one.

4 NGHBR_SET_SIZE - Size of the Neighbor Set.

5 If NGHBR_SET_ENTRY_INFO or NGHBR_SET_ACCESS_INFO
 6 is equal to '1', the base station shall set this field to the
 7 number of pilots included in the *Neighbor List Message*,
 8 *Extended Neighbor List Message*, or *General Neighbor List*
 9 *Message*; otherwise, the base station shall omit this field.

10 If NGHBR_SET_ENTRY_INFO is equal to '1', the base station shall include
 11 NGHBR_SET_SIZE occurrences of the following field:

12 ACCESS_ENTRY_HO - Access entry handoff permitted when entering the System
 13 Access State.

14 The base station shall set this field to '1' if the mobile station
 15 is permitted to perform an access entry handoff to the base
 16 station associated with the corresponding pilot between the
 17 time it receives a message on the Paging Channel when in the
 18 *Mobile Station Idle State* and it enters the *System Access State*
 19 to respond to the message; otherwise, the base station shall
 20 set this field to '0'. The base station shall use the same order
 21 for the ACCESS_ENTRY_HO fields in this message as is used
 22 for pilots which are listed in the *Neighbor List Message*,
 23 *Extended Neighbor List Message*, or *General Neighbor List*
 24 *Message*. Specifically, the i^{th} occurrence of the
 25 ACCESS_ENTRY_HO field shall correspond the i^{th} pilot in the
 26 *Neighbor List Message*, *Extended Neighbor List Message*, or
 27 *General Neighbor List Message*.

28 If NGHBR_SET_ACCESS_INFO is equal to '1', the base station shall include
 29 NGHBR_SET_SIZE occurrences of the following field:

30 ACCESS_HO_ALLOWED - Access handoff and access probe handoff permitted for the
 31 corresponding pilot while in the *System Access State*.

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 *System Access State*
 36 (see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall
 37 set this field to '0'. The base station shall use the same order
 38 for the ACCESS_HO_ALLOWED fields in this message as is
 39 used for pilots which are listed in the *Neighbor List Message*,
 40 *Extended Neighbor List Message*, or *General Neighbor List*
 41 *Message*. Specifically, the i^{th} occurrence of the
 42 ACCESS_HO_ALLOWED field shall correspond the i^{th} pilot in
 43 the *Neighbor List Message*, *Extended Neighbor List Message*, or
 44 *General Neighbor List Message*.

- 1 The base station shall set this field to '0' if this pilot does not
 2 support a Reverse Access Channel (R-ACH).
- 3 BROADCAST_GPS_ASST - Broadcast GPS Assist Indicator.
 4 The base station shall set this field to '1' if it supports
 5 Broadcast GPS Assist capability; otherwise, the base station
 6 shall set this field to '0'.
- 7 QPCH_SUPPORTED - Quick Paging Channel Supported Indication.
 8 If the base station supports Quick Paging Channel operation,
 9 the base station shall set this field to '1'; otherwise the base
 10 station shall set this field to '0'.
- 11 NUM_QPCH - Number of Quick Paging Channels.
 12 If the base station sets QPCH_SUPPORTED to '1', the base
 13 station shall include this field and set it as described below;
 14 otherwise, the base station shall omit this field.
 15 The base station shall set this field to the number of Quick
 16 Paging Channels on this CDMA Channel. The base station
 17 shall not set this field to '00'.
- 18 QPCH_RATE - Quick Paging Channel indicator rate.
 19 If the base station sets QPCH_SUPPORTED 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 QPCH_RATE field
 23 value shown in Table 3.7.2.3.2.13-2 corresponding to the
 24 indicator rate used by the Quick Paging Channel in the
 25 system.

26 **Table 3.7.2.3.2.13-2. QPCH Indicator Data Rate**

QPCH_RATE Field (binary)	QPCH indicator data rate
0	4800 bps
1	9600 bps

- 27 QPCH_POWER_LEVEL_PAGE - Quick Paging Channel paging indicator transmit power
 28 level.
 29 If the base station sets QPCH_SUPPORTED to '1', the base
 30 station 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 the Quick Paging
 33 Channel paging indicator transmit power level relative to that
 34 of the Pilot Channel as specified in Table 3.7.2.3.2.13-3.

1 **Table 3.7.2.3.2.13-3 Quick Paging Channel Transmit Power Level**

2

QPCH_POWER_LEVEL_P AGE QPCH_POWER_LEVEL_C ONFIG (binary)	Transmit Power Level
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.

1 If the base station allows the autonomous delivery of the
 2 *Device Information Message* on the r-csch, the base station
 3 shall set this field to '1'; otherwise, the base station shall set
 4 this field to '0'.

5 **AUTO_MSG_INTERVAL** - Autonomous message interval.

6 If **AUTO_MSG_SUPPORTED** is set to '0', the base station shall
 7 omit this field; otherwise, the base station shall include this
 8 field and shall set this field to the **AUTO_MSG_INTERVAL**
 9 value shown in Table 3.7.2.3.2.13-4 to indicate the minimum
 10 time interval between autonomous messages sent by a mobile
 11 station to the infrastructure. This parameter is intended to
 12 allow the infrastructure to limit the frequency of autonomous
 13 messages sent by a mobile station on the r-csch.

14 **Table 3.7.2.3.2.13-4. AUTO_MSG_INTERVAL Values**

AUTO_MSG_INTERVAL (binary)	Interval Length (milliseconds)
000	200
001	500
010	1000
011	1500
100	2000
101	5000
110	10000
111	15000

15

16 **MOB_QOS** - Indicator granting permission to the mobile station to request
 17 QoS parameter settings in the *Origination Message*, *Origination*
 18 *Continuation Message*, or *Enhanced Origination Message*.

19 The base station shall set this field to '1', if the mobile station
 20 is allowed to include a QoS record in the *Origination Message*,
 21 *Origination Continuation Message*, or *Enhanced Origination*
 22 *Message*; otherwise, the base station shall set this field to '0'.

23 **ENC_SUPPORTED** - Encryption fields included.

24 The base station shall set this field to '1' if the encryption
 25 related fields are included; otherwise the base station shall
 26 set this field to '0'.

27 **SIG_ENCRYPT_SUP** - Signaling encryption supported indicator.

28 If **ENC_SUPPORTED** is equal to '1', the base station shall
 29 include this field; otherwise, the base station shall omit this
 30 field. If this field is included, this field indicates which
 31 signaling encryption algorithms are supported by the base
 32 station.

- 1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
2 5.
- 3 If this field is included, the base station shall set the subfields
4 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 encryption algorithm is supported by
8 the base station; otherwise, the base station shall set the
9 subfield to '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 2.7.1.3.2.4-
18 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 **USE_SYNC_ID** - Sync ID supported indicator.
- 24 The base station shall set this field to '1' to indicate that the
25 mobile station is permitted to include the SYNC_ID field in the
26 *Page Response Message*, the *Reconnect Message*, the
27 *Origination Message*, and the *Enhanced Origination Message*;
28 otherwise, the base station shall set this field to '0'.
- 29 **CS_SUPPORTED** - Concurrent Services supported indicator.
- 30 If the base station supports concurrent services, the base
31 station shall set this field to '1'; otherwise, the base station
32 shall set this field to '0'.
- 33 **BCCH_SUPPORTED** - Primary Broadcast Control Channel Supported Indicator.
- 34 If the base station supports Primary Broadcast Control
35 Channel, the base station shall set this field to '1'; otherwise,
36 the base station shall set this field to '0'.
- 37 **MS_INIT_POS_LOC_SUP_IND**- Mobile station initiated position location determination
38 supported indicator.
- 39 If the base station supports mobile station initiated position
40 determination, the base station shall set this field to '1';
41 otherwise, the base station shall set this field to '0'.
- 42 **PILOT_INFO_REQ_SUPPORTED** - Pilot information request supported indicator.

- 1 If the base station supports mobile station request for pilot
2 information using the “Pilot Information” record in the *Base*
3 *Station Status Request Message*, the base station shall set this
4 field to ‘1’; otherwise, the base station shall set this field to ‘0’.
- 5 QPCH_BI_SUPPORTED – Quick Paging Channel broadcast indicator supported.
- 6 If QPCH_SUPPORTED is included and 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 If the base station supports broadcast indicators on the Quick
10 Paging Channel, the base station shall set this field to ‘1’;
11 otherwise the base station shall set this field to ‘0’.
- 12 QPCH_POWER_LEVEL_BCAST – Quick Paging Channel broadcast indicator transmit
13 power level.
- 14 If QPCH_BI_SUPPORTED is included and set to ‘1’, the base
15 station 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 the Quick Paging
18 Channel broadcast indicator transmit power level relative to
19 that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
- 20 BAND_CLASS_INFO_REQ – Band class information request indicator.
- 21 The base station shall set this field to ‘1’ if the
22 ALT_BAND_CLASS field is included in this message;
23 otherwise, the base station shall set this field to ‘0’.
- 24 ALT_BAND_CLASS – Alternate band class.
- 25 If BAND_CLASS_INFO_REQ is set to ‘0’, then 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 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 *Origination Message* and *Page*
32 *Response Message*.
- 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 *CDMA Off Time Report Message*,
36 the base station shall set this field to ‘1’; otherwise, the base
37 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

Table 3.7.2.3.2.13-5. CDMA Off Time Report Threshold Unit

CDMA_OFF_TIME_REP_UNIT (binary)	Time Unit (decimal)
0	80 ms
1	0.5 sec

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28

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.

If the base station supports message integrity, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

1	SIG_INTEGRITY_SUP_INCL	-	Signaling message integrity information included indicator.
2			
3			If MSG_INTEGRITY_SUP is set to '1', the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.
4			
5			
6			If the base station supports other integrity algorithm(s) in addition to the default integrity algorithm, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
7			
8			
9			
10	SIG_INTEGRITY_SUP	-	Signaling integrity algorithm supported by the base station.
11			If SIG_INTEGRITY_SUP_INCL is included and set to '1', the base station shall set this field as follows; otherwise, the base station shall omit this field.
12			
13			
14			The base station shall set this field to indicate the supported message integrity algorithms in addition to the default integrity algorithm.
15			
16			
17			This field consists of the subfields shown in Table 2.7.1.3.2.1-6.
18			
19			The base station shall set each subfield to '1' if the corresponding message integrity algorithm is supported by the base station; otherwise, the base station shall set the subfield to '0'.
20			
21			
22			
23			The base station shall set the RESERVED subfield to '00000000'.
24			
25	FOR_PDCH_SUPPORTED	-	Forward Packet Data Channel supported indicator.
26			If the base station supports the Forward Packet Data Channel (F-PDCH), the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
27			
28			
29	PDCH_CHM_SUPPORTED	-	PDCH Control Hold Mode supported indicator.
30			If FOR_PDCH_SUPPORTED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
31			
32			
33			The base station shall set this field to '1' to indicate that the base station supports the PDCH Control Hold Mode; otherwise, the base station shall set this field to '0'.
34			
35			
36	PDCH_PARMS_INCL	-	Forward Packet Data Channel related parameters included indicator.
37			
38			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:
39			
40			
41			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'.
42			
43			
44	FOR_PDCH_RLGAIN_INCL	-	Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.
45			

1 If PDCH_PARAMS_INCL is omitted, or if it is included and set
2 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 '1' if the following F-
5 PDCH gain related fields are included in this message;
6 otherwise, the base station shall set this field to '0'.

7 **RLGAIN_ACKCH_PILOT** - Reverse Acknowledgment Channel to pilot adjustment gain.

8 If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and
9 set 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 Reverse
12 Acknowledgment Channel to pilot adjustment gain expressed
13 as a two's complement value in units of 0.125 dB (see [2]).

14 **RLGAIN_CQICH_PILOT** - Reverse Channel Quality Indicator Channel to pilot
15 adjustment gain.

16 If FOR_PDCH_RLGAIN_INCL is omitted, or if it 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 Reverse Channel
20 Quality Indicator Channel to pilot adjustment gain expressed
21 as a two's complement value in units of 0.125 dB (see [2]).

22 **NUM_SOFT_SWITCHING_FRAMES** - Number of frames for R-CQICH soft switching.

23 If PDCH_PARAMS_INCL is not included, or is included and set
24 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 duration of the cell
27 switching period, in units of 20 ms, minus one, during which
28 the mobile station is to transmit the cell switch sequence on
29 the R-CQICH when it switches between two pilots which are
30 in different groups (see [3]).

31 **NUM_SOFTER_SWITCHING_FRAMES** - Number of frames for R-CQICH softer
32 switching.

33 If PDCH_PARAMS_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 duration of the cell
37 switching period, in units of 20 ms, minus one, during which
38 the mobile station is to transmit the cell switch sequence on
39 the R-CQICH when it switches between two pilots which are
40 in the same group (see [3]).

41 **NUM_SOFT_SWITCHING_SLOTS** - Number of slots per frame for R-CQICH soft switching.

42 If PDCH_PARAMS_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 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 is to transmit the cell switch indication by using
 5 Walsh cover of target on the R-CQICH when it switches
 6 between two pilots which are in different groups.

7 NUM_SOFTEN_SWITCHING_SLOTS - Number of slots per frame for R-CQICH softer
 8 switching.

9 If PDCH_PARAMS_INCL is not included, or is included and set
 10 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 duration of the cell
 13 switching slots within a switching frame, in units of 1.25 ms
 14 as specified in Table 3.7.2.3.2.21-10, during which the mobile
 15 station is to transmit the cell switch indication by using
 16 Walsh cover of target on the R-CQICH when it switches
 17 between two pilots which are in the same group.

18 PDCH_SOFT_SWITCHING_DELAY - F-PDCH soft switching delay.

19 If PDCH_PARAMS_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 minimum
 23 interruption seen by the mobile station, in units of 10 ms,
 24 minus one, when the mobile station is to transmit the cell
 25 switch sequence on the R-CQICH channel when it switches
 26 between two pilots which are in different groups (see [3]).

27 PDCH_SOFTEN_SWITCHING_DELAY - F-PDCH softer switching delay.

28 If PDCH_PARAMS_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 minimum
 32 interruption seen by the mobile station, in units of 10 ms,
 33 minus one, when the mobile station is to transmit the cell
 34 switch sequence on the R-CQICH channel when it switches
 35 between two pilots which are in the same group (see [3]).

36 WALSH_TABLE_ID - The index of the Walsh Table used.

37 If PDCH_PARAMS_INCL is not included, or is included and set
 38 to '0', the base station shall omit this field; otherwise, the
 39 base station shall set this field as follows:

40 The base station shall set this field to the index of the Walsh
 41 Table being used by the Packet Data Channel. (See [3]).

42 NUM_PDCCH - The number of Packet Data Control Channels supported.

43 If PDCH_PARAMS_INCL 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 as follows:

1	TKZ_ID	-	Tracking zone identifier.
2			If TKZ_MODE_SUPPORTED is set to '1', the base station shall
3			set this field to its tracking zone identifier; otherwise, the base
4			station shall omit this field.
5	PZ_HYST_ENABLED	-	Packet zone hysteresis enabled.
6			If the PACKET_ZONE_ID field is set to '00000000', the base
7			station shall omit this field; otherwise, the base station shall
8			include this field and set it as follows:
9			If the packet zone hysteresis feature is to be enabled at the
10			mobile station, the base station shall set this field to '1';
11			otherwise, the base station shall set this field to '0'.
12	PZ_HYST_INFO_INCL	-	Packet zone hysteresis information included indicator.
13			If the PZ_HYST_ENABLED field is included and is 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			If the base includes the PZ_HYST_LIST_LEN,
17			PZ_HYST_ACT_TIMER and PZ_HYST_TIMER fields, the base
18			station shall set this field to '1'; otherwise, the base station
19			shall set this field to '0'.
20	PZ_HYST_LIST_LEN	-	Packet zone hysteresis list length.
21			If the PZ_HYST_INFO_INCL field is included and is set to '1',
22			the base station shall include this field and set it as follows;
23			otherwise, the base station shall omit this field.
24			The base station shall set this field to the length of the packet
25			zone hysteresis list. This field shall be within the range '0001'
26			through '1111', inclusive.
27	PZ_HYST_ACT_TIMER	-	Packet zone hysteresis activation timer.
28			If the PZ_HYST_INFO_INCL field is included and is set to '1',
29			the base station shall include this field and set it as follows;
30			otherwise, the base station shall omit this field.
31			The base station shall set to the value of the packet zone
32			hysteresis activation timer (in units of seconds). This field
33			shall be within the range '00000001' through '11111111',
34			inclusive.
35	PZ_HYST_TIMER_MUL	-	Packet zone hysteresis timer multiplier.
36			If the PZ_HYST_INFO_INCL field is included and is set to '1',
37			the base station shall include this field and set it as follows;
38			otherwise, the base station shall omit this field.
39			The base station shall set the field to x, where $x \times 8^y$ seconds
40			is the value of the hysteresis timer and y is the value
41			indicated in the PZ_HYST_TIMER_EXP field. The base station
42			shall set this field to a value that is between 1 and 7
43			inclusive. The value 0 is reserved.
44	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 $x \times 8^y$ seconds
5 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 EXT_PREF_MSID_TYPE - Extended Preferred Access Channel Mobile Station Identifier
10 Type.

11 The base station shall set this field to the value shown in
12 Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding
13 to the type of MSID that the mobile station is to use on the
14 Access Channel.

15 MEID_REQD - MEID Required Indicator.

16 If EXT_PREF_MSID_TYPE is set to '11' and PREF_MSID_TYPE
17 is set to either '00' or '11', the base station shall omit this
18 field; otherwise, the base station shall include this field and
19 set it as follows:

20 The base station shall set this field to '1' to indicate that
21 network requires MEID (of mobile stations having R-UIM) in
22 registrations; otherwise the base station shall set this field to
23 '0'.

24 AUTO_FCSO_ALLOWED - Autonomous *Fast Call Setup Order* allowed indicator.

25 The base station shall set this field to '1' if the mobile station
26 is allowed to send an autonomous *Fast Call Setup Order*;
27 otherwise, the base station shall set this field to '0'.

28 REV_PDCH_SUPPORTED - Reverse Packet Data Channel supported indicator.

29 If FOR_PDCH_SUPPORTED 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:

32 If the base station supports the Reverse Packet Data Channel
33 (R-PDCH), the base station shall set this field to '1'; otherwise,
34 the base station shall set this field to '0'.

35 REV_PDCH_PARAMS_INCL - Reverse Packet Data Channel related parameters included
36 indicator.

37 If REV_PDCH_SUPPORTED 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 '1' if the R-PDCH
41 parameters are included in this message; otherwise, the base
42 station shall set this field to '0'.

43 REV_PDCH_RLGAIN_INCL - Reverse Packet Data Channel parameters related to
44 reverse link adjustment gains included indicator.

- 1 If REV_PDCH_PARAMS_INCL is omitted, or if it 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 '1' if the following R-
 5 PDCH gain related fields are included in this message;
 6 otherwise, the base station shall set this field to '0'.
- 7 **RLGAIN_SPICH_PILOT** - Reverse Secondary Pilot Channel to pilot adjustment gain.
- 8 If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and
 9 set 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 Reverse Secondary
 12 Pilot Channel to pilot adjustment gain expressed as a two's
 13 complement value in units of 0.125 dB (see [2]).
- 14 **RLGAIN_REQCH_PILOT** - Reverse Request Channel to pilot adjustment gain.
- 15 If REV_PDCH_RLGAIN_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 the Reverse Request
 19 Channel to pilot adjustment gain expressed as a two's
 20 complement value in units of 0.125 dB (see [2]).
- 21 **RLGAIN_PDCCH_PILOT** - Reverse Packet Data Control Channel to pilot adjustment
 22 gain.
- 23 If REV_PDCH_RLGAIN_INCL is omitted, or if it 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 Reverse Packet Data
 27 Channel to pilot adjustment gain expressed as a two's
 28 complement value in units of 0.125 dB (see [2]).
- 29 **REV_PDCH_PARAMS_1_INCL** - Reverse Packet Data Channel parameters subset included
 30 indicator.
- 31 If REV_PDCH_PARAMS_INCL is omitted, or if it is included and
 32 set to '0', the base station shall omit this field; otherwise, the
 33 base station shall include this field, and set it as follows.
- 34 The base station shall set this field to '1' if the following R-
 35 PDCH parameters are included in this message; otherwise,
 36 the base station shall set this field to '0'.
- 37 **REV_PDCH_TABLE_SEL** - Reverse Packet Data Channel Table selector.
- 38 If REV_PDCH_PARAMS_1_INCL is omitted, or if it is included
 39 and 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 The base station shall set this field to the Reverse Packet Data
 42 Channel Table selector (see [2]).
- 43 **REV_PDCH_MAX_AUTO_TPR** - Reverse Packet Data Channel maximum traffic to pilot
 44 ratio for autonomous transmission.

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 maximum traffic to
5 pilot ratio for autonomous transmission on the Reverse
6 Packet Data Channel (see [2] and [3]).

7 The base station shall set this field to a value in the range 0 to
8 18 dB inclusive in units of 0.125 dB.

9 REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on
10 the Reverse PDCH in the non-boosted mode.

11 If REV_PDCH_PARMS_1_INCL is omitted, or if it is included
12 and set to '0', the base station shall omit this field; otherwise,
13 the base station shall include this field and set it as follows:

14 The base station shall set this field to one less the maximum
15 number of allowed ARQ rounds on the Reverse PDCH in the
16 non-boosted mode. The base station shall set this field to 0, 1,
17 or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

18 REV_PDCH_OPER_PARMS_INCL- Reverse Packet Data Channel operational parameters
19 included indicator.

20 If REV_PDCH_PARMS_INCL is omitted, or if it is included and
21 set to '0', the base station shall omit this field; otherwise, the
22 base station shall include this field, and set it as follows.

23 The base station shall set this field to '1' if the following R-
24 PDCH operational parameters are included in this message;
25 otherwise, the base station shall set this field to '0'.

26 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET - Maximum Allowed Reverse
27 PDCH encoder packet size.

28 If REV_PDCH_OPER_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 the maximum size
33 encoder packet that the mobile station is allowed to use. (see
34 [2] and [3]).

35 The base station shall set this field to a value in the range 0 to
36 10 inclusive, corresponding to the encoder packet sizes 192,
37 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and
38 18456 bits respectively.

39 REV_PDCH_DEFAULT_PERSISTENCE - Reverse Packet Data Channel default initial
40 persistence.

41 If REV_PDCH_OPER_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:

1 The base station shall set this field to '1' if the mobile station
2 is to be persistent at the call setup; otherwise, the base
3 station shall set this field to '0' (See [3]).

4 REV_PDCH_RESET_PERSISTENCE - Reverse Packet Data Channel reset persistence
5 indicator.

6 If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
7 included and 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' if, at the end of a
11 persistent grant, the mobile station shall reset its persistent
12 indicator to persistent; otherwise, the base station shall set
13 this field to '0' if the mobile station shall reset its persistent
14 indicator to non-persistent (See [3]).

15 REV_PDCH_GRANT_PRECEDENCE - Reverse Packet Data Channel Grant Precedence
16 Indicator.

17 If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
18 included and set to '0', 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 '1' if unicast Forward
22 Grant Channel messages have precedence over Rate Control
23 commands; otherwise, the base station shall set this field to
24 '0' to indicate that Rate Control down commands from non-
25 serving sectors have precedence over Forward Grant Channel
26 messages (see [3]).

27 REV_PDCH_MSIB_SUPPORTED - Reverse PDCH MSIB usage indicator.

28 If REV_PDCH_OPER_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 '1' if the mobile station
33 is to use the MSIB bit on the Reverse Packet Data Control
34 Channel; otherwise, the base station shall set this field to '0'
35 (see [3]).

36 REV_PDCH_SOFT_SWITCHING_RESET_IND - Reverse Packet Data Channel soft
37 switching reset indicator.

38 If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
39 included and set to '0', the base station shall omit this field;
40 otherwise, the base station shall include this field and set it
41 as follows:

42 The base station shall set this field to '1' if the mobile station
43 is to initialize RPDCHCF when soft selection occurs in the
44 FPDCHCF; otherwise, the base station shall set this field to '0'
45 (see [3]).

46 SDB_IN_RCNM_IND - Short Data Burst allowed in *Reconnect Message* indicator.

- 1 If RECONNECT_MSG_IND is set to '0' or SDB_SUPPORTED is
 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 '1' if the mobile station
 5 is allowed to include a Short Data Burst (see [30]) in the
 6 *Reconnect Message*; otherwise, the base station shall set this
 7 field to '0'.
- 8 SENDING_BSPM - *BCMC Service Parameters Message* indicator.
 9
 10 If the base station is sending the *BCMC Service Parameters*
 11 *Message* on the Paging Channel, it shall set this field to '1';
 otherwise, it shall set this field to '0'.
- 12 BSPM_PERIOD_INDEX - BSPM Transmission Periodicity Index.
 13
 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
 18 The base station shall set this field to the BSPM transmission
 19 periodicity index corresponding to the periodicity with which
 the BSPM with DIFF_BSPM equal to '0' is transmitted on the
 paging channel.
- 20 CAND_BAND_INFO_REQ - Candidate band class information request indicator
 21
 22 The base station shall set this field to '1' when requesting
 23 mobiles to report whether various candidate band class and
 24 band subclass (if applicable) combinations are supported;
 otherwise, the base station shall set this field to '0'.
 25
 26 The base station shall not include more than 16 band class-
 band subclass queries in this message.
- 27 NUM_CAND_BAND_CLASS - Number of candidate band classes
 28
 29 If CAND_BAND_INFO_REQ 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:
 32
 33 The base station shall set this field to the number of
 candidate band classes included in the record minus one.
- 33 If CAND_BAND_INFO_REQ is set to '1', the base station shall include
 34 NUM_CAND_BAND_CLASS + 1 occurrences of the following record:
- 35 CAND_BAND_CLASS - Candidate band class
 36
 37 The base station shall set this field (see [30]) to a band class
 38 for which the mobile is to report it's capabilities upon system
 39 access. It may be used in conjunction with the
 40 BAND_SUBCLASS_IND fields to specify band subclass(es) for
 41 which the mobile is to report it's capabilities upon system
 access.
- 42 SUBCLASS_INFO_INCL - Band subclass information included

- 1 The base station shall set this field to '0' when no band
2 subclasses are associated with CAND_BAND_CLASS or if the
3 base station requires only the band class capabilities of the
4 mobile station. Otherwise, the base station shall set this field
5 to '1'.
- 6 SUBCLASS_REC_LEN - Band subclass subrecord length
- 7 If SUBCLASS_INFO_INCL is set to '0', the base station shall
8 omit this field; otherwise, the base station shall set this field
9 as follows:
- 10 The base station shall set this field to the number of band
11 subclass indicator fields included in the subrecord minus
12 one. The number of subclass indicator fields included
13 depends on the highest band subclass being queried for
14 mobile support for the associated CAND_BAND_CLASS (i.e. if
15 the highest band subclass being queried is K, then
16 SUBCLASS_REC_LEN = K).
- 17 If the SUBCLASS_REC_LEN field is included, the base station shall include
18 SUBCLASS_REC_LEN +1 occurrences of the following subrecord. The first field included
19 corresponds to band subclass '0' and the Nth field included corresponds to band subclass
20 'N-1'.
- 21 BAND_SUBCLASS_IND - Band subclass indicator
- 22 The base station shall set this field to '1' if it requires the
23 mobile to report whether it supports this band subclass for
24 the associated CAND_BAND_CLASS; otherwise, the base
25 station shall set this field to '0'.
- 26 The mobile station is to indicate its capability to support the
27 candidate band class and band subclass (if applicable)
28 combination in the *Registration Message*, *Origination Message*,
29 and *Page Response Message*.
- 30 TX_PWR_LIMIT_INCL - Transmit Power Limit Inclusion for the current base station
- 31 If the transmit power limit field 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 TX_PWR_LIMIT - Transmit Power Limit for the current base station
- 35 If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit
36 this field; otherwise, the base station shall include this field
37 and set to as follows.
- 38 The base station shall set this field to thirty dB more than
39 transmit power limit in dBm EIRP, in steps of 1 dB. This field
40 can take the values 30 to 53 corresponding to maximum
41 transmit power values 0 dBm to 23 dBm.
- 42 BYPASS_REG_IND - Indication to bypass the power up registration upon the
43 change of bands, serving systems and frequency blocks.
- 44 The base station shall set this field to '00' if the mobile station
45 is to perform a power up registration upon band, frequency
46 block or serving system change.

1 The base station shall set this field to '01' if the mobile station
 2 is to bypass the power up registration requirement upon
 3 band, frequency block or serving system changes due to
 4 processing the *Extended CDMA Channel List Message*.

5 The base station shall set this field to '10' if the mobile station
 6 is to bypass the power up registration requirement upon
 7 band, frequency block or serving system change when the SID
 8 remains the same.

9 The base station shall set this field to '11' if the mobile station
 10 is to bypass the power up registration requirement upon
 11 band, frequency block or serving system change.

12 3.7.2.3.2.14 Extended Neighbor List Message

13 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

}

14

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 base station, in units of 64 PN chips.

18 CONFIG_MSG_SEQ - Configuration message sequence number.

19 The base station shall set this field to CONFIG_SEQ
 20 (see 3.6.2.2).

21 PILOT_INC - Pilot PN sequence offset index increment.

22 A mobile station searches for Remaining Set pilots at pilot PN
 23 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 should
4 set this field to the largest increment such that the pilot PN
5 sequence offsets of all its neighbor base stations are integer
6 multiples of that increment.

7 The base station shall set this field to a value in the range 1 to
8 15 inclusive.

1 The base station shall include one occurrence of the following record for each pilot that a
 2 mobile station is to place in its Neighbor Set.

3 NGHBR_CONFIG - Neighbor configuration.

4 The base station shall set this field to the value shown in
 5 Table 3.7.2.3.2.14-1 corresponding to the configuration of this
 6 neighbor.

7

8 **Table 3.7.2.3.2.14-1. Neighbor Configuration Field**

Value (binary)	Neighbor Configuration
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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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"> • 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. • 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>.

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"> • 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. • 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.
100-111	Reserved.

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- `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

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- `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.
- `NGHBR_FREQ` - Neighbor frequency assignment.

1 If the `FREQ_INCL` 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 search. If the `FREQ_INCL` bit
6 is set to '0', the base station shall omit this field.

7

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 × 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.

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6

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

7
8
9
10
11

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

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24

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.

1 **Table 3.7.2.3.2.15-2. Operating Mode for MOB_P_REV Less Than or Equal to Three**

Description	Value (binary)
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.	

2

3 **Table 3.7.2.3.2.15-3. Operating Mode for MOB_P_REV Greater Than Three**

Description	Standards	Value (binary)
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.		

4

5 **NUM_FIELDS** - Number of requested fields in this message.

6 The base station shall set this field to the number of
7 occurrences of RECORD_TYPE in this message.

8 The base station shall only request the status information records qualified by the included
9 qualification information (see Table 2.7.4-1) in this message. The base station shall include
10 one occurrence of the following field for each information record that is requested:

11 **RECORD_TYPE** - Information record type.

1
2
3
4
5
6
7
8

The base station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the information record requested.

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 Table2.7.4-1).

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 type
 23 of redirection specified by this record.

24

1

Table 3.7.2.3.2.16-2. Redirection Record Types

Description	RECORD_TYPE E (binary)
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

5

6

7

If RECORD_TYPE equals to '00000000', the base station shall set this field to '00000000'; otherwise, the base station shall set this field to the number of octets in the type-specific fields of this redirection record.

8

Type-specific fields - Redirection record type-specific fields.

9

10

The base station shall include type-specific fields based on the RECORD_TYPE of this redirection record.

11

12

If RECORD_TYPE is equal to '00000000', the base station shall not include the type-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, as specified in [30].

5

6

EXPECTED_SID - Expected SID.

7

If the base station is redirecting the mobile station to a specific system, the base station shall set this field to the SID of that system; otherwise, the base station shall set this field to 0.

8

9

10

11

EXPECTED_NID - Expected NID.

12

If the base station is redirecting the mobile station to a specific network, the base station shall set this field to the NID of that network; otherwise, the base station shall set this field to 65535.

13

14

15

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 occurrences of the CDMA_CHAN field in this record.

20

21

CDMA_CHAN - CDMA Channel number.

22

For each CDMA Channel on which the mobile station is to attempt to acquire a CDMA system, the base station shall include one occurrence of this field specifying the associated CDMA Channel number.

23

24

25

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'.

1 3.7.2.3.2.17 General Page Message

2 MSG_TAG: GPM

3 When Layer 3 at the base station sends a PDU corresponding to the *General Page Message*
 4 to Layer 2, it also sends the GPM Common fields to Layer 2. These GPM Common fields
 5 and PDUs are used by Layer 2 to assemble a Layer 2 PDU corresponding to the *General*
 6 *Page Message* (see [4]).

7 GPM Common Fields:

8

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 × ADD_LENGTH

9

10 PDU Format for a mobile station-addressed page:

11

Field	Length (bits)
SERVICE_OPTION	0 or 16

12

13 PDU Format for a broadcast page: There are no Layer 3 fields associated with this record.

14

15 PDU Format for an enhanced broadcast page:

16

Field	Length (bits)
BCN	3
TIME_OFFSET	10
REPEAT_TIME_OFFSET	0 or 5
ADD_BCAST_RECORD	0 or 8 × EXT_BCAST_ SDU_LENGTH (see [4])

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34

- CONFIG_MSG_SEQ - Configuration message sequence number.
The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).
- ACC_MSG_SEQ - Access parameters message sequence number.
The base station shall set this field to ACC_CONFIG_SEQ (see 3.6.2.2).
- CLASS_0_DONE - Class 0 pages are done.
If all messages and records directed to mobile stations operating in the slotted mode, active in this slot, and having an assigned class 0 IMSI have been sent by the end of this *General Page Message*, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- CLASS_1_DONE - Class 1 pages are done.
If all messages and records directed to mobile stations operating in the slotted mode, active in this slot, and having an assigned class 1 IMSI have been sent by the end of this *General Page Message*, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- TMSI_DONE - TMSI pages are done.
If all the page records having PAGE_CLASS equal to '10' or other directed messages for mobile stations operating in the slotted mode, active in this slot, and having an assigned TMSI have been sent by the end of this *General Page Message*, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- ORDERED_TMSIS - TMSIs sent in numerical order.
If all the page records of PAGE_CLASS equal to '10' are sent such that the TMSI code values of the TMSI_CODE_ADDR fields for the mobile stations operating in the slotted mode are in ascending numerical order in all the *General Page Messages* sent within this slot, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- 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 to
32			which the mobile station is being directed.
33			Otherwise,,the base station shall set this field to one less than
34			the time offset, in units of 40 ms, from the beginning of the
35			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:

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 type
 8 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 × 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 purpose of the message.

9

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', the base station shall set this field to the queue position of the PACA call. If the queue position exceeds 255, the base station shall set this field to '1111111'. If the queue position is unknown or the PURPOSE field of this message is set to '0010' or '0011', the base station shall set this field to '00000000'.

15

16

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20

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**

PACA_TIMEOUT Value (binary)	Timer Length (Minutes)
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] ¹¹¹

3

¹¹¹ This is not applicable when the ECAM is sent using the GEM.

- 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_IND	0 or 1
FIXED_PREAMBLE_TRANSMIT_IND	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)
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- 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)

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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
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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)
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- 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_PARAMS_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_SOFTER_SWITCHING_FRAMES	0 or 4
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTER_SWITCHING_SLOTS	0 or 2
CHM_SWITCHING_PARAMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTER_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFT_SWITCHING_SLOTS_CHM	0 or 2
NUM_SOFTER_SWITCHING_SLOTS_CHM	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTER_SWITCHING_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
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} (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
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} (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)

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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.

Table 3.7.2.3.2.21-1. Assignment Mode

Value (binary)	Assignment Mode
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.	

DIRECT_CH_ASSIGN_IND - Direct Channel Assignment Indicator.

If ASSIGN_MODE is set to a value other than '100' or '101', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If any channel assigned by this message is to use Radio Configuration 1 or 2 (see [2]), then the base station shall set this field to '0'. Otherwise, base station shall set this field as follows:

- If this message is for a mobile station terminated call using direct channel assignment, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

If this field is set to '1', the base station should send this message in unassured mode.

RESERVED_2 - Reserved bits.

If ASSIGN_MODE is set to '100' or '101', the base station shall set this field to '0000'; otherwise, the base station shall set this field to '00000'.

Additional record fields - Additional record fields.

The additional record fields are determined by the value of ASSIGN_MODE, as described below.

If the ASSIGN_MODE field is set to '000', the base station shall include the following fields:

- 1 FREQ_INCL - Frequency included indicator.
- 2 If the BAND_CLASS and CDMA_FREQ fields are included in
- 3 this assignment record, the base station shall set this bit to
- 4 '1'. If the BAND_CLASS and CDMA_FREQ fields are not
- 5 included in this assignment record, the base station shall set
- 6 this bit to '0'.
- 7 DEFAULT_CONFIG - Default Configuration.
- 8 If the GRANTED_MODE field is set to '00', the base station
- 9 shall set this field as specified in Table 3.7.2.3.2.21-2 to
- 10 indicate an initial multiplex option and radio configuration for
- 11 the Forward and Reverse Traffic Channels.
- 12 If MOB_P_REV is less than six, the base station shall not set
- 13 this field to '100'.

14 **Table 3.7.2.3.2.21-2. Default Configuration**

Value (binary)	Default Configuration
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.	

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2 BYPASS_ALERT_ANSWER - Bypass alert indicator.

3 If the mobile station is to bypass the *Waiting for Order*
 4 *Substate* and the *Waiting for Mobile Station Answer Substate*,
 5 the base station shall set this field to '1'; otherwise, the base
 6 station shall set this field to '0'.

7 RESERVED - Reserved bit.

8 The base station shall set this field to '0'.

9 NUM_PILOTS - Number of pilots in the Active Set.

10 The base station shall set this field to number of pilots that
 11 are to be in the mobile station's Active Set on the Traffic
 12 Channel minus one. The base station shall set this field to
 13 the value in the range 0 to $N_{6m}-1$ inclusive.

14 GRANTED_MODE - Granted mode.

15 The base station shall set this field to '00' to indicate that the
 16 mobile station is to use an initial service configuration
 17 consisting of the multiplex option and radio configuration
 18 defined by the DEFAULT_CONFIG field for the Forward and
 19 Reverse Traffic Channels, and to indicate that service
 20 negotiation may take place before the base station sends one
 21 of the following messages: *Service Connect Message*, *General*
 22 *Handoff Direction Message* (with SCR) or *Universal Handoff*
 23 *Direction Message* (with SCR).

24 The base station shall set this field to '01' to indicate that the
 25 mobile station is to use an initial service configuration
 26 consisting of the default multiplex option that is derived from
 27 the radio configuration corresponding to Table 3.7.2.3.2.21-3,
 28 and to indicate that service negotiation may take place before
 29 the base station sends one of the following messages: *Service*
 30 *Connect Message*, *General Handoff Direction Message* (with
 31 SCR) or *Universal Handoff Direction Message* (with SCR).

32 The base station shall set this field to '10' to indicate that the
 33 mobile station is to use an initial service configuration
 34 consisting of the default multiplex option that is derived from
 35 the radio configuration corresponding to Table 3.7.2.3.2.21-3,
 36 and to indicate that service negotiation is not to take place
 37 before the base station sends one of the following messages:
 38 *Service Connect Message*, *General Handoff Direction Message*
 39 (with SCR) or *Universal Handoff Direction Message* (with SCR).

1 **Table 3.7.2.3.2.21-3. Mapping between Multiplex Options and Radio Configurations**

Multiplex Option	Radio Configuration
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

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- 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 *Service*
- 35 *Connect Message* 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 *Service*
- 44 *Connect Message* is sent to the mobile station.

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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

Value (binary)	Radio Configuration
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.	

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- 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 Fundamental
9 Channel Outer Loop E_b/N_t setpoint, in units of 0.125 dB.
- 10 REV_FCH_GATING_MODE - Reverse eighth gating mode indicator.
11 The base station shall set this field to '1' if the mobile station
12 is allowed to perform the reverse eighth gating mode where
13 the 1/8th rate frames on the Reverse Fundamental Channel
14 are gated off for 10 ms per frame (see [2]); otherwise, the base
15 station shall set this field to '0'.
16 The base station shall not set this field to '1' if
17 REV_FCH_GATING_REQ included in the *Origination Message*
18 or *Page Response Message* is set to '0'.
- 19 REV_PWR_CNTL_DELAY_INCL - Reverse power control delay included indicator.
20 If REV_FCH_GATING_MODE 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
24 REV_PWR_CNTL_DELAY is included in this message;
25 otherwise, the base station shall set this field to '0'.
26 If the REV_FCH_GATING_MODE field in this message is set to
27 '1' and the REV_PWR_CNTL_DELAY_INCL field in the
28 *Extended System Parameters Message* or *MC-RR Parameters*
29 *Message* is set to '0', the base station shall set this field to '1'.
- 30 REV_PWR_CNTL_DELAY - The reverse power control delay.
31 If REV_PWR_CNTL_DELAY_INCL is set to '0', the base station
32 shall omit this field; otherwise, the base station shall include
33 this field and set it as follows:
34 The base station shall set this field to the closed-loop reverse
35 power control delay minus one (the closed-loop reverse power
36 control delay is the time between the end of a gated-on
37 reverse PCG and the beginning of the reverse PCG where the
38 corresponding feedback is sent on the Forward Power Control
39 Subchannel, see [2]) in units of 1.25 ms.
- 40 D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.
41 If ENCRYPT_MODE is set to '11', the base station shall include
42 this field and shall set it to the dedicated channel signaling
43 encryption mode, as shown in Table 3.7.4.5-1; otherwise the base
44 station shall omit this field.
- 45 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 channel
13 signaling encryption mode, as shown in Table 3.7.4.5-1;
14 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 field is set to '1', the base station
19 shall require the LAC Layer to include a MACI in this
20 message; otherwise, the base station shall require the LAC
21 Layer not to include a MACI in this message.

22 CHANGE_KEYS - Change keys indicator

23 If MSG_INT_INFO_INCL 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 The base station shall set this field to '0' to command the
27 mobile station not to update the encryption key and integrity
28 key. The base station shall set this field to '1' to command the
29 mobile station to update the encryption key and integrity key
30 to the latest being generated.

31 USE_UAK - Use UAK indicator

32 If MSG_INT_INFO_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 If the base station receives an authentication vector with a
36 UAK, the base station shall set this field to '1' to indicate that
37 the mobile station is to use UMAC; otherwise, the base station
38 shall set this field to '0' to indicate that the mobile station is
39 to use MAC-I.

40 PLCM_TYPE_INCL - The Public Long Code Mask type included indicator.

41 The base station shall set this field to '1' if the base station
42 include PLCM_TYPE in the message; otherwise, the base
43 station shall set this field to '0'.

44 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

PLCM_TYPE (binary)	Descriptions
0000	PLCM derived from ESN
0001	PLCM specified by the base station
0010	PLCM derived from <code>IMSI_O_S</code> when <code>IMSI_O</code> is derived from <code>IMSI_M</code>
0011	PLCM derived from <code>IMSI_O_S</code> when <code>IMSI_O</code> is derived from <code>IMSI_T</code>
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 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 SCR).
- 27 The base station shall set this field to '11' to instruct the
28 mobile station to use the stored service configuration (that is,
29 both the Service Configuration information record and the
30 Non-negotiable Service Configuration information record).
- 31 SR_ID_RESTORE - Service reference identifier to be restored.
- 32 If the GRANTED_MODE field is not set to '11', the base
33 station shall omit this field; otherwise, the base station shall
34 include this field and set it as follows:
- 35 o If the mobile station is to restore all the service option
36 connections from the stored service configuration, the
37 base station shall set this field to '111'.
- 38 o If the mobile station is to restore more than one but not
39 all the service option connections from the stored service
40 configuration, the base station shall set this field to '000'.
- 41 o Otherwise, the base station shall set this field to the
42 service reference identifier corresponding to the service
43 option connection to be restored.

1 SR_ID_RESTORE_BITMAP – Bitmap of service reference identifiers to be restored.

2 If the SR_ID_RESTORE field is included and set to '000', the
3 base station shall include this field and set it as follows;
4 otherwise, the 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 option
8 connection of the corresponding service reference identifier;
9 otherwise, the base station shall set the subfield to '0'.

10 **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

11
12 DEFAULT_CONFIG – Default Configuration.

13 If the GRANTED_MODE field is set to '00', the base station
14 shall set this field as specified in Table 3.7.2.3.2.21-2 to
15 indicate an initial multiplex option and Radio Configuration
16 for the Forward and Reverse Traffic Channels.

17 FOR_RC – Forward Traffic Channel radio configuration.

18 The base station shall set this field to the radio configuration
19 (see Table 3.7.2.3.2.21-4) to be used by the mobile station on
20 the Forward Traffic (Fundamental and Dedicated Control)
21 Channel before the first *Service Connect Message* is sent to
22 the mobile station.

23 If GRANTED_MODE is set to '00', and DEFAULT_CONFIG is
24 not set to '100' (see Table 3.7.2.3.2.21-2), the base station
25 shall set this field to either '00001' or '00010' (see Table
26 3.7.2.3.2.21-4).

27 REV_RC – Reverse Traffic Channel radio configuration.

28 The base station shall set this field to the radio configuration
29 (see Table 3.7.2.3.2.21-4) to be used by the mobile station on
30 the Reverse Traffic (Fundamental and Dedicated Control)
31 Channel before the first *Service Connect Message* is sent to
32 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 × 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 _s . The base station shall set the value in units
22			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 _{6m} -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.

Table 3.7.2.3.2.21-7. Channel Indicator

Value (Binary)	Channels Being Assigned
00	Reserved
01	Fundamental Channel only
10	Dedicated Control Channel only
11	Both Fundamental Channel and Dedicated Control Channel

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- CH_RECORD_LEN - Channel record length.
The base station shall set this field to the number of octets in the CH_RECORD_FIELDS included in this channel record.
- CH_RECORD_FIELDS - Channel record fields.
The channel record fields are determined by the value of CH_IND, as described below.
- REV_FCH_GATING_MODE - Reverse eighth gating mode indicator.
The base station shall set this field to '1' if the mobile station is allowed to perform the reverse eighth gating mode where the 1/8th rate frames on the Reverse Fundamental Channel are gated off for 10 ms per frame (see [2]); otherwise, the base station shall set this field to '0'.
The base station shall not set this field to '1' if REV_FCH_GATING_REQ included in the *Origination Message* or *Page Response Message* is set to '0'.
- REV_PWR_CNTL_DELAY_INCL - Reverse power control delay included indicator.
If REV_FCH_GATING_MODE 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 REV_PWR_CNTL_DELAY is included in this message; otherwise, the base station shall set this field to '0'.
If the REV_FCH_GATING_MODE field in this message is set to '1' and the REV_PWR_CNTL_INCL field in the *Extended System Parameters Message* is set to '0', the base station shall set this field to '1'.
- REV_PWR_CNTL_DELAY - The reverse power control delay.
If REV_PWR_CNTL_DELAY_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:

Table 3.7.2.3.2.21-8. 1X Reverse Link Frequency Offset

1XRL_FREQ_OFFSET (Binary)	1X Reverse Link frequency offset
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

- MSG_INT_INFO_INCL – Message integrity information included indicator
- The base station shall set this field to '1' if the base station supports message integrity; otherwise, the base station shall set this field to '0'. If this message is to include a MACI in the LAC Layer, the base station shall set this field to '1'.
- CHANGE_KEYS – Change keys indicator
- If MSG_INT_INFO_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' to command the mobile station not to update the encryption key and integrity key. The base station shall set this field to '1' to command the mobile station to update the encryption key and integrity key to the latest being generated.
- USE_UAK – Use UAK indicator
- If MSG_INT_INFO_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:
- 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.
- PLCM_TYPE_INCL – The Public Long Code Mask type included indicator.
- The base station shall set this field to '1' if the base station include PLCM_TYPE in the message; otherwise, the base station shall set this field to '0'.
- 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 mobile
12 station is different from the MCC or MNC of this base station).
- 13 PLCM_39 - The 39 LSB bits of the Public Long Code Mask.
- 14 If PLCM_TYPE is not set to '0001', the base station shall omit
15 this field; otherwise, the base station shall include this field
16 and set it to the 39 least significant bits of the public long
17 code mask as defined in 3.6.4.1.10.
- 18 SYNC_ID_INCL - Service Configuration synchronization identifier included
19 indicator.
- 20 The base station shall omit this field if the GRANTED_MODE
21 field is not set to '11'; otherwise, the base station shall include
22 this field and set it as follows:
- 23 If the mobile station is to use a stored service configuration
24 corresponding to SYNC_ID field 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 SYNC_ID_LEN - Service Configuration synchronization identifier length
28 indicator.
- 29 If the SYNC_ID_INCL field is not included or is included and
30 is set to '0', the base station shall omit this field; otherwise
31 the base station shall include this field and set it as follows:
- 32 The base station shall set this field to the length of the
33 SYNC_ID field included in this message.
- 34 SYNC_ID - Service Configuration synchronization identifier.
- 35 If the SYNC_ID_INCL field is not included or is included and
36 is set to '0', the base station shall omit this field; otherwise,
37 the base station shall include this field and set it as follows:
- 38 The base station shall set this field to the Service
39 Configuration synchronization identifier corresponding to the
40 stored service configuration that the mobile station is to use.
- 41 CONFIG_MSG_SEQ - Configuration message sequence number.
- 42 If the DIRECT_CH_ASSIGN_IND is 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 CONFIG_SEQ
2		(see 3.6.2.2).
3	RTC_NOM_PWR	- Reverse Traffic Channel Nominal Power.
4		If DIRECT_CH_ASSIGN_IND is set to '0', the base station shall
5		omit this field; otherwise, the base station shall include this
6		field and set it as follows:
7		The base station shall set this field to the value of the nominal
8		power correction to be used by the mobile station when
9		transmitting on the Reverse Traffic Channel after the Direct
10		Channel Assignment call setup procedure as specified in
11		2.6.4.2. The base station shall set this field as a two's
12		complement signed binary number, in units of 1 dB.
13	RESPOND_IND	- Response requested indicator.
14		If DIRECT_CH_ASSIGN_IND 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 '1' if the mobile station
18		is to respond to the <i>Extended Channel Assignment Message</i>
19		with a <i>Page Response Message</i> or <i>Reconnect Message</i> in
20		unassured mode on the r-csch; otherwise, the base station
21		shall set this field to '0' to indicate that the mobile station is
22		not to respond on the r-csch.
23	DIRECT_CH_ASSIGN_RECOVER_IND	- Direct Channel Assignment Recover Indicator
24		If DIRECT_CH_ASSIGN_IND 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 transmit a <i>Page Response Message</i> or a <i>Reconnect</i>
29		<i>Message</i> after failing to acquire the forward traffic channel
30		assigned in this message; otherwise, the base station shall set
31		this field to '0'.
32	FIXED_PREAMBLE_TRANSMIT_IND	- Fixed Preamble Length Transmission Indicator.
33		If GRANTED_MODE is not set to '11', 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 if the
37		mobile station is allowed to enter the <i>Traffic Channel Substate</i>
38		of the <i>Mobile Station Control on the Traffic Channel State</i> after
39		sending the number of preambles specified in this message;
40		otherwise the base station shall set this field to '0'.
41		If any channel assigned by this message is to use Radio
42		Configuration 1 or 2 (see [2]), then the base station shall set
43		this field to '0'.
44	FIXED_NUM_PREAMBLE	- Traffic Channel preamble length.

1 If FIXED_PREAMBLE_TRANSMIT_IND 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 to
 4 the minimum length of Traffic Channel preamble that the
 5 mobile station is to transmit, before entering the *Traffic*
 6 *Channel Substate* of the *Mobile Station Control on the Traffic*
 7 *Channel State* without having received a *forward dedicated*
 8 *channel acquired* indication from Layer 2 (see [4]).

9 The base station shall set FIXED_NUM_PREAMBLE to the
 10 value shown in Table 3.7.2.3.2.21-8a corresponding to the
 11 Traffic Channel preamble length in ms.

12 **Table 3.7.2.3.2.21-8a Traffic Channel Preamble Length**

FIXED_NUM_PREAMBLE (binary)	Preamble Length in ms
000	0
001	20
010	40
011	60
100	80
101	100
110	200
111	300

13 EARLY_RL_TRANSMIT_IND - Early Reverse Link Transmission indicator.
 14 The base station shall set this field to '1' if, upon channel
 15 assignment, the mobile station is to enable the transmitter
 16 prior to receiving sufficient signal quality on the forward link;
 17 otherwise, the base station shall set this field to '0'.

18 TX_PWR_LIMIT_INCL - Transmit Power Limit Inclusion for the current base station
 19 If the transmit power limit field is included in this message,
 20 the base station shall set this field to '1'; otherwise, the base
 21 station shall set this field to '0'.

22 TX_PWR_LIMIT - Transmit Power Limit for the current base station
 23 If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit
 24 this field; otherwise, the base station shall include this field
 25 and set to as follows.
 26 The base station shall set this field to thirty dB more than
 27 transmit power limit in dBm EIRP, in steps of 1 dB. This field
 28 can take the values 30 to 53 corresponding to maximum
 29 transmit power values 0 dBm to 23 dBm.

30 RESERVED - Reserved bits.

1

Table 3.7.2.3.2.21-9. Pilot Record Types

Description	PILOT_REC_TYPE (binary)
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

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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.

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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 PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

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PWR_COMB_IND - Power control symbol combining indicator.
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'.

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CODE_CHAN_FCH - Code channel index for the Fundamental Channel.

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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.

- 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 Channel
 13 associated with this pilot. If FOR_RC is set to a Radio
 14 Configuration associated with Spreading Rate 3, the base
 15 station shall set this field to the quasi-orthogonal function
 16 mask identifier that the mobile station is to use on the
 17 Forward Fundamental Channel on the center SR3 frequency.
- 18 3X_FCH_INFO_INCL - 3X Fundamental Channel information included indicator.
 19 If the 3X Fundamental Channel information is included, the
 20 base station shall set this field to '1'; otherwise, the base
 21 station shall set this field to '0'.
- 22 The base station shall include NUM_PILOTS plus one occurrences of the following record if
 23 3X_FCH_INFO_INCL is set to '1'. The base station shall use the same order for the
 24 following fields as is used for the PILOT_PN fields listed in this message.
- 25 3X_FCH_LOW_INCL - FCH code channel on the lowest SR3 frequency included
 26 indicator.
- 27 If the Fundamental Channel on the lowest SR3 frequency has
 28 a different code channel than the Fundamental Channel on
 29 the center SR3 frequency, the base station shall set this field
 30 to '1'; otherwise, the base station shall set this field to '0'.
- 31 QOF_MASK_ID_FCH_LOW - QOF index for the Fundamental Channel on the lowest
 32 SR3 frequency.
- 33 If 3X_FCH_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 Fundamental Channel on the lowest SR3 frequency.
- 39 CODE_CHAN_FCH_LOW - Code channel for the Fundamental Channel on the lowest
 40 SR3 frequency.
- 41 If 3X_FCH_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 PWR_COMB_IND - Power control symbol combining indicator.
2
3 If this pilot will carry the same closed-loop power control
4 subchannel bits as that of the previous pilot in this message,
5 the base station shall set this field to '1'; otherwise, the base
6 station shall set this field to '0'. The base station shall set
7 this field to '0' in the first record in the pilot list.
- 8 CODE_CHAN_DCCH - Code channel index for the Dedicated Control Channel.
9
10 If FOR_RC is set to a Radio Configuration associated with
11 Spreading Rate 1, the base station shall set this field to the
12 code channel index (see [2]), in the range of 1 to 127
13 inclusive, that the mobile station is to use on the Forward
14 Dedicated Control Channel associated with this pilot. If
15 FOR_RC is set to a Radio Configuration associated with
16 Spreading Rate 3, the base station shall set this field to the
17 code channel index in the range of 1 to 255 inclusive, that the
18 mobile station is to use on the Forward Dedicated Control
19 Channel on the center SR3 frequency.
20
21 If Radio Configuration 3 or 5 (see [2]) is used, the base station
22 shall set this field in the range 1 to 63 inclusive. If Radio
23 Configuration 4, 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 QOF_MASK_ID_DCCH - Quasi-Orthogonal Function Mask Identifier for the Dedicated
28 Control Channel.
29
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 3, the
36 base station shall set this field to the quasi-orthogonal
37 function mask identifier (see [2]) that the mobile station is to
38 use on the Forward Dedicated Control Channel on the center
39 SR3 frequency.
- 40 3X_DCCH_INFO_INCL - 3X Dedicated Control Channel information included indicator.
41
42 If the 3X Dedicated Control Channel information is included,
43 the base station shall set this field to '1'; otherwise, the base
44 station shall set this field to '0'.
45
46 The base station shall include NUM_PILOTS plus one occurrences of the following record if
47 3X_DCCH_INFO_INCL is set to '1'. The base station shall use the same order for the
48 following fields as is used for the PILOT_PN fields listed in this message.
- 49 3X_DCCH_LOW_INCL - DCCH code channel on the lowest SR3 frequency included
50 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_BCNC_IND - BCNC on fundicated channel Indicator.

9 If the channel assignment in this message contains a Forward
10 Fundicated Channel used for BCNC transmission, the base
11 station shall set this field to '1'; otherwise, the base station
12 shall set this field to '0'.

13 If FUNDICATED_BCNC_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 Fundamental
16 Channel Outer Loop E_b/N_t setpoint, in units of 0.125 dB.
- 17 FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.
18 The base station shall set this field to the target Frame Error
19 Rate on the Dedicated Control Channel.
- 20 FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop E_b/N_t
21 setpoint.
22 The base station shall set this field to minimum Dedicated
23 Control Channel Outer Loop E_b/N_t setpoint, in units of 0.125
24 dB.
- 25 FPC_DCCH_MAX_SETPT - Maximum Dedicated Control Channel Outer Loop E_b/N_t
26 setpoint.
27 The base station shall set this field to maximum Dedicated Control Channel Outer Loop
28 E_b/N_t setpoint, in units of 0.125 dB.
- 29 The base station shall include NUM_PILOTS plus one occurrences of the following three-
30 field record, one for each member of the mobile station's Active Set on the Traffic Channel.
- 31 PILOT_PN - Pilot PN sequence offset index.
32 The base station shall set this field to the pilot PN sequence
33 offset for this pilot in units of 64 PN chips.
- 34 ADD_PILOT_REC_INCL - Additional pilot information included indicator.
35 The base station shall set this field to '1' if additional pilot
36 information listed in PILOT_REC_TYPE and RECORD_LEN
37 fields are included. The base station shall set this field to '0'
38 if the corresponding pilot is the common pilot and there is no
39 additional pilot information included.
- 40 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 Rate
31			3, the base station shall set this field to the code channel
32			index that the mobile station is to use on the Forward
33			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 Channel
 5 associated with this pilot. If FOR_RC is set to a Radio
 6 Configuration associated with Spreading Rate 3, the base
 7 station shall set this field to the quasi-orthogonal function
 8 mask identifier that the mobile station is to use on the
 9 Forward Fundamental Channel on the center SR3 frequency.
- 10 **CODE_CHAN_DCCH** - Code channel index for the Dedicated Control Channel.
- 11 If FOR_RC is set to a Radio Configuration associated with
 12 Spreading Rate 1, the base station shall set this field to the
 13 code channel index (see [2]), in the range of 1 to 127
 14 inclusive, that the mobile station is to use on the Dedicated
 15 Control Channel associated with this pilot. If FOR_RC is set to
 16 a Radio Configuration associated with Spreading Rate 3, the
 17 base station shall set this field to the code channel index in
 18 the range of 1 to 255 inclusive, that the mobile station is to
 19 use on the Dedicated Control Channel on the center SR3
 20 frequency.
- 21 If Radio Configuration 3 or 5 (see [2]) is used, the base station
 22 shall set this field in the range 1 to 63 inclusive. If Radio
 23 Configuration 4, 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 **QOF_MASK_ID_DCCH** - Quasi-Orthogonal Function Mask Identifier for the Dedicated
 28 Control Channel.
- 29 If FOR_RC is set to a Radio Configuration associated with
 30 Spreading Rate 1, the base station shall set this field to the
 31 quasi-orthogonal function mask identifier (see [2]) that the
 32 mobile station is to use on the Forward Dedicated Control
 33 Channel associated with this pilot. If FOR_RC is set to a
 34 Radio Configuration associated with Spreading Rate 1, the
 35 base station shall set this field to the quasi-orthogonal
 36 function mask identifier that the mobile station is to use on
 37 the Forward Dedicated Control Channel on the center SR3
 38 frequency.
- 39 **3X_FCH_INFO_INCL** - 3X Fundamental Channel information included indicator.
- 40 If the 3X Fundamental Channel information is included, the
 41 base station shall set this field to '1'; otherwise, the base
 42 station shall set this field to '0'.
- 43 The base station shall include NUM_PILOTS plus one occurrences of the following record if
 44 3X_FCH_INFO_INCL is set to '1'. The base station shall use the same order for the
 45 following fields as is used for the PILOT_PN fields listed in this message.
- 46 **3X_FCH_LOW_INCL** - FCH code channel on the lowest SR3 frequency included
 47 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 '0'.

5 QOF_MASK_ID_FCH_LOW - QOF index for the Fundamental Channel on the lowest
6 SR3 frequency.

7 If 3X_FCH_LOW_INCL is set to '0', the base station shall omit
8 this field; otherwise, the base station shall set this field as
9 follows:

10 The base station shall set this field to the index of the Quasi-
11 orthogonal function (see [2]) corresponding to the QOF index
12 for the Fundamental Channel on the lowest SR3 frequency.

13 CODE_CHAN_FCH_LOW - Code channel for the Fundamental Channel on the lowest
14 SR3 frequency.

15 If 3X_FCH_LOW_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 code channel index
19 (see [2]) that the mobile station is to use on the Fundamental
20 Channel on the lowest SR3 frequency. If Radio Configuration
21 6 or 8 is used, the base station shall set this field in the range
22 1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
23 base station shall set this field in the range 1 to 255 inclusive.

24 3X_FCH_HIGH_INCL - FCH code channel on the highest SR3 frequency included
25 indicator.

26 If the Fundamental Channel on the highest SR3 frequencies
27 has a different code channel than the Fundamental 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 '0'.

30 QOF_MASK_ID_FCH_HIGH - QOF index for the Fundamental Channel on the highest
31 SR3 frequency.

32 If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
33 this field; otherwise, the base station shall set this field as
34 follows:

35 The base station shall set this field to the index of the Quasi-
36 orthogonal function (see [2]) corresponding to the QOF index
37 for the Fundamental Channel on the highest SR3 frequency.

38 CODE_CHAN_FCH_HIGH - Code channel for the Fundamental Channel on the highest
39 SR3 frequency.

40 If 3X_FCH_HIGH_INCL is set to '0', the base station shall omit
41 this field; otherwise, the base station shall set this field as
42 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 indicator.
9 If the 3X Dedicated Control Channel information is included,
10 the base station shall set this field to '1'; otherwise, the base
11 station shall set this field to '0'.
- 12 The base station shall include NUM_PILOTS plus one occurrences of the following record if
13 3X_DCCH_INFO_INCL is set to '1'. The base station shall use the same order for the
14 following fields as is used for the PILOT_PN fields listed in this message.
- 15 3X_DCCH_LOW_INCL - DCCH code channel on the lowest SR3 frequency included
16 indicator.
17 If the Dedicated Control Channel on the lowest SR3
18 frequencies has a different code channel than the Dedicated
19 Control Channel on the center SR3 frequency, the base
20 station shall set this field to '1'; otherwise, the base station
21 shall set this field to '0'.
- 22 QOF_MASK_ID_DCCH_LOW - QOF index for the Dedicated Control Channel on the
23 lowest SR3 frequency.
24 If 3X_DCCH_LOW_INCL is set to '0', the base station shall
25 omit this field; otherwise, the base station shall set this field
26 as follows:
27 The base station shall set this field to the index of the Quasi-
28 orthogonal function (see [2]) corresponding to the QOF index
29 for the Dedicated Control Channel on the lowest SR3
30 frequency.
- 31 CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the
32 lowest SR3 frequency.
33 If 3X_DCCH_LOW_INCL is set to '0', the base station shall
34 omit this field; otherwise, the base station shall set this field
35 as 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 Dedicated
38 Control Channel on the lowest 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 3X_DCCH_HIGH_INCL - DCCH code channel on the highest SR3 frequency included
44 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_BCMC_IND – BCMC on fundicated channel Indicator.

28 If the channel assignment in this message contains a Forward
29 Fundicated Channel used for BCMC transmission, the base
30 station shall set this field to '1'; otherwise, the base station
31 shall set this field to '0'.

32 REV_FCH_ASSIGNED – Reverse FCH channel assigned indicator.

33 If the FUNDICATED_BCMC_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_BCMC_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 <code>FREQ_INCL</code> 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 <code>FREQ_INCL</code> bit is set to '0', the
7			base station shall omit this field.
8	CDMA_FREQ	-	Frequency assignment.
9			If the <code>FREQ_INCL</code> 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 <code>FREQ_INCL</code> 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 information record</i> and the
43			<i>Non-negotiable Service Configuration information record</i>)
44			The base station shall not set this field to '00'.

- 1 SR_ID_RESTORE - Service reference identifier to be restored.
2
3 If the GRANTED_MODE field is not set to '11', the base
4 station shall omit this field; otherwise, the base station shall
5 include this field and set it as follows:
6
7 o If the mobile station is to restore all the service option
8 connections from the stored service configuration, the
9 base station shall set this field to '111'.
10
11 o If the mobile station is to restore more than one but not
12 all the service option connections from the stored service
13 configuration, the base station shall set this field to '000'.
14
15 o Otherwise, the base station shall set this field to the
16 service reference identifier corresponding to the service
17 option connection to be restored.
- 14 SR_ID_RESTORE_BITMAP - Bitmap of service reference identifiers to be restored.
15
16 If the SR_ID_RESTORE field is included and set to '000', the
17 base station shall include this field and set it as follows;
18 otherwise, the base station shall omit this field.
19
20 This field consists of the subfields defined in Table
21 3.7.2.3.2.21-6. The base station shall set a subfield to '1' to
22 indicate that the mobile station is to restore the service option
23 connection of the corresponding service reference identifier;
24 otherwise, the base station shall set the subfield to '0'.
- 23 FRAME_OFFSET - Frame offset.
24
25 The Forward and Reverse Traffic Channel frames are delayed
26 FRAME_OFFSET × 1.25 ms relative to system timing (see [2]).
27
28 The base station shall set this field to the Forward and
29 Reverse Traffic Channel frame offset (the frame offset does not
30 apply to the F-PDCH).
- 29 ENCRYPT_MODE - Message encryption mode.
30
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.
- 34 D_SIG_ENCRYPT_MODE - Dedicated channel encryption mode indicator.
35
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.
- 39 ENC_KEY_SIZE - Encryption key size indication.
40
41 If ENCRYPT_MODE is set to '10' or '11', the base station shall
42 include this field and shall set it to the encryption key size, as
43 shown in Table 3.7.4.5-2; otherwise, the base station shall omit
44 this field.

1	C_SIG_ENCRYPT_MODE_INCL	-	Common channel signaling encryption mode included
2			indicator.
3			If common channel signaling encryption information is
4			included in this message, the base station shall set this field
5			to '1'; otherwise, the base station shall set this field to '0'.
6	C_SIG_ENCRYPT_MODE	-	Common channel signaling encryption mode indicator.
7			If C_SIG_ENCRYPT_MODE_INCL is set to '1', the base station
8			shall include this field and shall set it to the common channel
9			signaling encryption mode, as shown in Table 3.7.4.5-1;
10			otherwise, the base station shall omit this field.
11	MSG_INT_INFO_INCL	-	Message integrity information included indicator
12			The base station shall set this field to '1' if the base station
13			supports message integrity; otherwise, the base station shall
14			set this field to '0'. If this message is to include a MACI in the
15			LAC Layer, the base station shall set this field to '1'.
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 station
32			shall set this field to '0' to indicate that the mobile station is
33			to use MAC-I.
34	PLCM_TYPE_INCL	-	The Public Long Code Mask type included indicator.
35			The base station shall set this field to '1' if the base station
36			include PLCM_TYPE in the message; otherwise, the base
37			station shall set this field to '0'.
38	PLCM_TYPE	-	The Public Long Code Mask type indicator.
39			If PLCM_TYPE_INCL is set to '0', the base station shall omit
40			this field; otherwise, the base station shall include this field
41			and set it as follows.
42			The base station shall set this field to the corresponding
43			Public Long Code Mask type as specified in Table
44			3.7.2.3.2.21-5.

- 1 PLCM_TYPE '0010' shall not be used when the mobile station
2 is not in its home country (i.e., the MCC of the mobile station
3 is different from the MCC of this base station).
- 4 PLCM_TYPE '0011' shall not be used when the mobile station
5 is not in its home network (i.e., the MCC or MNC of the mobile
6 station is different from the MCC or MNC of this base station).
- 7 PLCM_39 - The 39 LSB bits of the Public Long Code Mask.
- 8 If PLCLM_TYPE is not set to '0001', the base station shall omit
9 this field; otherwise, the base station shall include this field
10 and set it to the 39 least significant bits of the public long
11 code mask as defined in 3.6.4.1.10.
- 12 RLGAIN_ADJ - Reverse Traffic Channel power .
- 13 If DIRECT_CH_ASSIGN_IND field is set to '0', the base station
14 shall set this field to adjust the initial Traffic Channel
15 transmission power relative to the Access Channel or
16 Enhanced Access Channel transmission power. The base
17 station shall set this field as a two's complement signed
18 binary number, in units of 1 dB.
- 19 If DIRECT_CH_ASSIGN_IND field is set to '1', the base station
20 shall set this field to adjust the initial Traffic Channel
21 transmission power. The base station shall set this field as a
22 two's complement signed binary number, in units of 1 dB.
- 23 NUM_PILOTS - Number of pilots in the Active Set.
- 24 The base station shall set this field to number of pilots that
25 are to be in the mobile station's Active Set on the Traffic
26 Channel minus one. The base station shall set this field to
27 the value in the range 0 to $N_{6m}-1$ inclusive.
- 28 EXT_CH_IND - Extended Channel Indicator.
- 29 The base station shall set this field as shown in
30 Table 2.7.1.3.2.4-11.
- 31 FPC_SUBCHAN_GAIN - Forward Power Control Subchannel relative gain.
- 32 If EXT_CH_IND signals the allocation of a F-FCH, or a F-
33 DCCH, the base station shall include this field and shall set it
34 as follows; otherwise, the base station shall omit this field.
- 35 The base station shall set this field to the power level of the
36 forward link power control subchannel relative to the power
37 level of 20 ms frames at a 9600 bps or 14400 bps rate on the
38 Forward Fundamental Channel or the Forward Dedicated
39 Control Channel indicated by FPC_PRI_CHAN_S.
- 40 The base station shall set the value in units of 0.25 dB.
- 41 REV_FCH_GATING_MODE - Reverse eighth gating mode indicator.
- 42 If EXT_CH_IND signals the allocation of R-FCH, the base
43 station shall include this field and shall set it as follows;
44 otherwise, the base station shall omit this field.

1 The base station shall set this field to '1' if the mobile station
2 is allowed to perform the reverse eighth gating mode where
3 the 1/8th rate frames on the Reverse Fundamental Channel
4 are gated off for 10 ms per frame (see [2]); otherwise, the base
5 station shall set this field to '0'.

6 The base station shall not set this field to '1' if
7 REV_FCH_GATING_REQ included in the *Origination Message*
8 or *Page Response Message* is set to '0'.

9 REV_PWR_CNTL_DELAY_INCL - Reverse power control delay included indicator.

10 If REV_FCH_GATING_MODE is not included, or is included
11 and 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 '1' if
15 REV_PWR_CNTL_DELAY is included in this message;
16 otherwise, the base station shall set this field to '0'.

17 If the REV_FCH_GATING_MODE field in this message is set to
18 '1' and the REV_PWR_CNTL_INCL field in the *Extended*
19 *System Parameters Message* is set to '0', the base station shall
20 set this field to '1'.

21 REV_PWR_CNTL_DELAY - The reverse power control delay.

22 If REV_PWR_CNTL_DELAY_INCL is not included, or is
23 included and set to '0', then 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 the closed-loop reverse
27 power control delay minus one (the closed-loop reverse power
28 control delay is the time between the end of a gated-on
29 reverse PCG and the beginning of the reverse PCG where the
30 corresponding feedback is sent on the Forward Power Control
31 Subchannel, see [2]), in units of 1.25 ms.

32 FULL_CI_FEEDBACK_IND - Full C/I feedback rate indicator.

33 If the mobile station is to send full C/I feedback every 1.25
34 ms, the base station shall set this field to '1'. If the mobile
35 station is to transmit full C/I feedback every 20 ms, the base
36 station shall set this field to '0'.

37 FOR_CPCCH_RATE - The Forward Common Power Control Channel Rate.

38 If EXT_CH_IND equals '01000', the base station shall include
39 this field and shall set it as follows; otherwise, the base
40 station shall omit this field.

41 The base station shall set this field to the rate of the Forward
42 Common Power Control Channel as specified in Table
43 3.7.2.3.2.21-12.

Table 3.7.2.3.2.21-12 Rate of the Forward Common Power Control Channel.

FOR_CPCCH_RATE (binary)	Rate of the F-CPCCH (Hz)
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.

Encoded update rate (binary)	CPCCH/RCCH Update rate (Hz)
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.

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 Packet Data Channel.

REV_PDCH_RC - Reverse Packet Data Channel radio configuration.

- 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 the radio configuration
 5 (see Table 3.7.2.3.2.21-4) to be used by the mobile station on
 6 the Reverse Packet Data Channel.
- 7 FOR_FCH_DCCH_RC - Forward Fundamental Channel or Forward Dedicated Control
 8 Channel radio configuration.
- 9 If EXT_CH_IND signals the allocation of a F-FCH, or a F-
 10 DCCH, the base station shall include this field and shall set it
 11 as follows; otherwise, the base station shall omit this field.
- 12 The base station shall set this field to the radio configuration
 13 (see Table 3.7.2.3.2.21-4) to be used by the mobile station on
 14 the Forward Fundamental Channel, or on the Forward
 15 Dedicated Control Channel, or on both.
- 16 The initial service configuration consisting of the default
 17 multiplex option that is to be used by the mobile station is
 18 derived from the radio configuration corresponding to Table
 19 3.7.2.3.2.21-3.
- 20 REV_FCH_DCCH_RC - Reverse Fundamental Channel or Reverse Dedicated Control
 21 Channel radio configuration.
- 22 If EXT_CH_IND signals the allocation of a R-FCH, or a R-
 23 DCCH, the base station shall include this field and shall set it
 24 as follows; otherwise, the base station shall omit this field.
- 25 The base station shall set this field to the radio configuration
 26 (see Table 3.7.2.3.2.21-4) to be used by the mobile station on
 27 the Reverse Fundamental Channel, or on the Reverse
 28 Dedicated Control Channel, or on both.
- 29 The initial service configuration consisting of the default
 30 multiplex option that is to be used by the mobile station is
 31 derived from the radio configuration corresponding to Table
 32 3.7.2.3.2.21-3.
- 33 FPC_PRI_CHAN - Power Control Subchannel indicator.
- 34 If EXT_CH_IND signals the allocation of a F-FCH and a F-
 35 DCCH, the base station shall set this field as follows;
 36 otherwise, the base station shall omit this field.
- 37 The base station shall set this field to '0' if the mobile station
 38 is to perform the primary inner loop estimation on the
 39 received Forward Fundamental Channel. The base station
 40 shall set this field to '1' if the mobile station is to perform the
 41 primary inner loop estimation on the received Forward
 42 Dedicated Control Channel.
- 43 If the F-CPCCH is assigned, the base station shall multiplex
 44 the Power Control Subchannel on the F-CPCCH; otherwise:

- 1 If this field is set to '0', the base station shall multiplex the
 2 Power Control Subchannel on the Forward Fundamental
 3 Channel; otherwise, the base station shall multiplex the
 4 Power Control Subchannel on the Forward Dedicated Control
 5 Channel.
- 6 FPC_FCH_INIT_SETPT - Initial Fundamental Channel outer loop E_b/N_t setpoint.
 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, the base station shall omit this field.
 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 If EXT_CH_IND signals the allocation of a F-FCH, 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 target Frame Error
 17 Rate on the Forward Fundamental Channel, as specified in
 18 Table 3.7.3.3.2.25-2.
- 19 FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop E_b/N_t setpoint.
 20 If EXT_CH_IND signals the allocation of a F-FCH, the base
 21 station shall include this field and shall set it as follows;
 22 otherwise it shall be omitted.
 23 The base station shall set this field to minimum Fundamental
 24 Channel Outer Loop E_b/N_t setpoint, in units of 0.125 dB.
- 25 FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop E_b/N_t setpoint.
 26 If EXT_CH_IND signals the allocation of a F-FCH, 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 maximum Fundamental
 30 Channel Outer Loop E_b/N_t setpoint, in units of 0.125 dB.
- 31 FPC_DCCH_INIT_SETPT - Initial Dedicated Control Channel outer loop E_b/N_t setpoint.
 32 If EXT_CH_IND signals the allocation of a F-DCCH, the base
 33 station shall include this field and shall set it as follows;
 34 otherwise it shall be omitted.
 35 The base station shall set this field to initial Dedicated
 36 Control Channel outer loop E_b/N_t setpoint, in units of 0.125
 37 dB.
- 38 FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.
 39 If EXT_CH_IND signals the allocation of a F-DCCH, 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 target Frame Error
 43 Rate on the Dedicated Control Channel, as specified in Table
 44 3.7.3.3.2.25-2.

- 1 FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop E_b/N_t
2 setpoint.
3 If EXT_CH_IND signals the allocation of a F-DCCH, the base
4 station shall include this field and shall set it as follows;
5 otherwise it shall be omitted.
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 If EXT_CH_IND signals the allocation of a F-DCCH, the base
12 station shall include this field and shall set it as follows;
13 otherwise it shall be omitted.
14 The base station shall set this field to maximum Dedicated
15 Control Channel Outer Loop E_b/N_t setpoint, in units of 0.125
16 dB.
- 17 PDCH_GROUP_IND_INCL- Packet Data Channel Group Indicator included flag.
18 The base station shall set this field to '1' if the
19 PDCH_GROUP_IND fields are included; otherwise, the base
20 station shall set this field to '0'.
21 If this field is set to '0', the mobile station is to use
22 PWR_COMB_IND to determine whether the softer or soft
23 reselection parameters are used when re-pointing between
24 pilots in its Active Set (see [3]).
- 25 FOR_PDCH_PARAMS_INCL - Indicator of the inclusion of Forward Packet Data Channel
26 configuration fields.
27 The base station shall set this field to '1' if the Forward Packet
28 Data Channel configuration fields are included; otherwise, the
29 base station shall set this field to '0'.
- 30 FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to
31 reverse link adjustment gains included indicator.
32 If FOR_PDCH_PARAMS_INCL is omitted, or if it is included and
33 set to '0', the base station shall omit this field; otherwise, the
34 base station shall include this field, and set it as follows.
35 The base station shall set this field to '1' if the following F-
36 PDCH gain related fields are included in this message;
37 otherwise, the base station shall set this field to '0'.
- 38 RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.
39 If FOR_PDCH_RLGAIN_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 the Reverse
43 Acknowledgment Channel to pilot adjustment gain expressed
44 as a two's complement value in units of 0.125 dB (see [2]).

- 1 RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot
2 adjustment gain.
- 3 If FOR_PDCH_RLGAIN_INCL 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 Reverse Channel
7 Quality Indicator Channel to pilot adjustment gain expressed
8 as a two's complement value in units of 0.125 dB (see [2]).
- 9 NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.
- 10 If FOR_PDCH_PARAMS_INCL is equal to '0', the base station
11 shall omit this field; otherwise, the base station shall include
12 this field and set it as follows:
- 13 The base station shall set this field to the duration of the cell
14 switching period, in units of 20 ms, minus one, during which
15 the mobile station is to transmit the cell switch sequence on
16 the R-CQICH channel when it switches between two pilots
17 which are in different groups.
- 18 If PDCH_GROUP_IND_INCL is set to '1', these groups are
19 indicated by PDCH_GROUP_IND; otherwise, they are
20 indicated by PWR_COMB_IND.
- 21 NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer
22 switching.
- 23 If FOR_PDCH_PARAMS_INCL is equal to '0', the base station
24 shall omit this field; otherwise, the base station shall include
25 this field and set it as follows:
- 26 The base station shall set this field to the duration of the cell
27 switching period, in units of 20 ms, minus one, during which
28 the mobile station is to transmit the cell switch sequence on
29 the R-CQICH channel when it switches between two pilots
30 which are in the same group.
- 31 If PDCH_GROUP_IND_INCL is set to '1', these groups are
32 indicated by PDCH_GROUP_IND; otherwise, they are
33 indicated by PWR_COMB_IND.
- 34 NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.
- 35 If FOR_PDCH_PARAMS_INCL is equal 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 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 is to transmit the cell switch indication by using
42 Walsh cover of target on the R-CQICH when it switches
43 between two pilots 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.

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Table 3.7.2.3.2.21-10 Number of slots per frame for R-CQICH switching.

NUM_SOFT/SOFTER _SWITCHING_SLOTS (binary)	Number of slots per frame for R-CQICH switching.
00	2
01	4
10	7
11	Reserved

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7 NUM_SOFTER_SWITCHING_SLOTS - Number of slots per frame for R-CQICH softer
 8 switching.

9 If FOR_PDCH_PARMS_INCL is equal 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 duration of the cell
 13 switching slots within a switching frame, in units of 1.25 ms
 14 as specified in Table 3.7.2.3.2.21-10, during which the mobile
 15 station is to transmit the cell switch indication by using
 16 Walsh cover of target on the R-CQICH when it switches
 17 between two pilots which are in the same group.

18 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 19 indicated by PDCH_GROUP_IND; otherwise, they are
 20 indicated by PWR_COMB_IND.

21 CHM_SWITCHING_PARMS_INCL - Control Hold Mode fields included indicator.

22 If FOR_PDCH_PARMS_INCL 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' if the switching
 26 parameters for Control Hold Mode are included; otherwise,
 27 the base station shall set this field to '0'.

28 NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft
 29 switching while in Control Hold.

30 If CHM_SWITCHING_PARMS_INCL is omitted or equal to '0',
 31 the base station shall omit this field; otherwise, the base
 32 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 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 different groups.

6 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 7 indicated by PDCH_GROUP_IND; otherwise, they are
 8 indicated by PWR_COMB_IND.

9 NUM_SOFTEN_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer
 10 switching while in Control Hold.

11 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',
 12 the base station shall omit this field; otherwise, the base
 13 station shall include this field and set it 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 the same group.

19 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 20 indicated by PDCH_GROUP_IND; otherwise, they are
 21 indicated by PWR_COMB_IND.

22 NUM_SOFT_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH soft
 23 switching while in Control Hold.

24 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',
 25 the base station shall omit this field; otherwise, the base
 26 station shall include this field and set it as follows:

27 The base station shall set this field to the duration of the cell
 28 switching slots within a switching frame, in units of 1.25 ms
 29 as specified in Table 3.7.2.3.2.21-10, during which the mobile
 30 station, while in Control Hold, is to transmit the cell switch
 31 indication by using Walsh cover of target on the R-CQICH
 32 when it switches between two pilots which are in different
 33 groups.

34 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 35 indicated by PDCH_GROUP_IND; otherwise, they are
 36 indicated by PWR_COMB_IND.

37 NUM_SOFTEN_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH
 38 softer switching while in Control Hold.

39 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',
 40 the base station shall omit this field; otherwise, the base
 41 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' if
 28 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].

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Table 3.7.2.3.2.21-11 Repetition factor for the F-RCCH.

FOR_RCCH_ REPETITION (binary)	Repetition factor for the F-RCCH.
00	2
01	4
10	8
11	Reserved

FOR_RCCH_UPDATE_RATE - Forward Rate Control Subchannel update rate.

If **FOR_RCCH_ASSIGNED** 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 the update rate of the Rate Control Subchannel on all pilots as specified in Table 3.7.2.3.2.21-13. See [2].

FOR_ACKCH_ASSIGNED - Forward Acknowledgment Channel assignment indicator.

If **EXT_CH_IND** signals the allocation of a R-PDCH, 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 '1' if the mobile station is to listen to acknowledgments on the Forward Acknowledgment Channel; otherwise, the base station shall set this field to '0' (see [2] and [3]).

FOR_ACKCH_MODE - Forward Acknowledgment Channel Mode.

If **FOR_ACKCH_ASSIGNED** 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 the Acknowledgment Channel operation mode identifier that governs how the Acknowledgment channel is demodulated. See [2] and [3] for the details.

The base station shall set this field to '00' if the mobile station is to attempt the reception of the Forward Acknowledgment Channel from all members of the reduced active set of the Forward Packet Data Channel, and is not to softer combine acknowledgments.

The base station shall set this field to '01' if the mobile station is to attempt reception of the Forward Acknowledgment Channel from all members of the reduced active set, and is to combine the acknowledgments from all sectors in the same combining indicator set.

The base station shall set this field to '10' if the mobile station is to attempt reception of the Forward Acknowledgment Channel from the serving sector only.

1		The base station shall set this field to '11' if the mobile station
2		is to combine the Forward Acknowledgment Channel from all
3		sectors in the same combining indicator set as the serving
4		sector.
5	FOR_ACKCH_COMB_SEL-	Forward Acknowledgment Channel Combining method
6		selector.
7		If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
8		set to '0', or if FOR_ACKCH_MODE is omitted, or if it is
9		included and set to '00' or '10', or if PDCH_GROUP_IND_INCL
10		is set to '0', the base station shall omit this field; otherwise, it
11		shall include it and set it as follows.
12		The base station shall set this field to '0' if the mobile station
13		is to use PWR_COMB_IND as a combining indicator when
14		receiving the Forward Acknowledgment Channel; otherwise, it
15		shall set it to '1' if the mobile station is to use
16		PDCH_GROUP_IND as the indicator for combining sectors.
17	REV_PDCH_PARMS_INCL	- Reverse Packet Data Channel related parameters included
18		indicator.
19		If EXT_CH_IND signals the allocation of a R-PDCH, the base
20		station shall include this field and shall set it as follows;
21		otherwise, the base station shall omit this field.
22		The base station shall set this field to '1' if the following R-
23		PDCH parameters are included in this message; otherwise,
24		the base station shall set this field to '0'.
25	REV_PDCH_RLGAIN_INCL	- Reverse Packet Data Channel parameters related to
26		reverse link adjustment gains included indicator.
27		If REV_PDCH_PARMS_INCL is omitted, or if it is included and
28		set to '0', the base station shall omit this field; otherwise, the
29		base station shall include this field, and set it as follows.
30		The base station shall set this field to '1' if the following R-
31		PDCH gain related fields are included in this message;
32		otherwise, the base station shall set this field to '0'.
33	RLGAIN_SPICH_PILOT	- Reverse Secondary Pilot Channel to pilot adjustment gain.
34		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and
35		set to '0', the base station shall omit this field; otherwise, the
36		base station shall include this field, and set it as follows.
37		The base station shall set this field to the Reverse Secondary
38		Pilot Channel to pilot adjustment gain expressed as a two's
39		complement value in units of 0.125 dB (see [2]).
40	RLGAIN_REQCH_PILOT	- Reverse Request Channel to pilot adjustment gain.
41		If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and
42		set to '0', the base station shall omit this field; otherwise, the
43		base station shall include this field, and set it as follows.
44		The base station shall set this field to the Reverse Request
45		Channel to pilot adjustment gain expressed as a two's
46		complement value in units of 0.125 dB (see [2]).

- 1 RLGAIN_PDCCH_PILOT - Reverse Packet Data Control Channel to pilot adjustment
2 gain.
- 3 If REV_PDCH_RLGAIN_INCL 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 Reverse Packet Data
7 Channel to pilot adjustment gain expressed as a two's
8 complement value in units of 0.125 dB (see [2]).
- 9 REV_PDCH_PARAMS_1_INCL - Reverse Packet Data Channel parameters subset included
10 indicator.
- 11 If REV_PDCH_PARAMS_INCL is omitted, or if it is included and
12 set to '0', the base station shall omit this field; otherwise, the
13 base station shall include this field, and set it as follows.
- 14 The base station shall set this field to '1' if the following R-
15 PDCH parameters are included in this message; otherwise,
16 the base station shall set this field to '0'.
- 17 REV_PDCH_TABLE_SEL - Reverse Packet Data Channel Table selector.
- 18 If REV_PDCH_PARAMS_1_INCL is omitted, or if it is included
19 and set to '0', the base station shall omit this field; otherwise,
20 the base station shall include this field, and set it as follows.
- 21 The base station shall set this field to the Reverse Packet Data
22 Channel Table selector (see [2]).
- 23 REV_PDCH_MAX_AUTO_TPR - Reverse Packet Data Channel maximum traffic to pilot
24 ratio for autonomous transmission.
- 25 If REV_PDCH_PARAMS_1_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 the maximum traffic to
29 pilot ratio for autonomous transmission on the Reverse
30 Packet Data Channel (see [2] and [3]).
- 31 The base station shall set this field to a value in the range 0 to
32 18 dB inclusive in units of 0.125 dB.
- 33 The base station shall include NUM_PILOTS plus one occurrences of the following record,
34 one for each member of the mobile station's Active Set on the Traffic Channel.
- 35 PILOT_PN - Pilot PN sequence offset index.
- 36 The base station shall set this field to the pilot PN sequence
37 offset for this pilot in units of 64 PN chips.
- 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 PILOT_REC_TYPE and RECORD_LEN
41 fields are included. The base station shall set this field to '0'
42 if the corresponding pilot is the common pilot and there is no
43 additional pilot information included.
- 44 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 FOR_PDCH_INCL - Forward Packet Data Channel assignment included indicator.
- 20 The base station shall set this field to '1' if the MS is assigned
 21 resources on the F-PDCH channel; otherwise, the base station
 22 shall set this field to '0'. This field shall be set to '1' for at least
 23 one of the pilots included in this message.
- 24 WALSH_TABLE_ID - The index of the Walsh Table used.
- 25 If FOR_PDCH_PARAMS_INCL is set to '1', and
 26 FOR_PDCH_INCL is set to '1', the base station shall include
 27 this field and set it as follows; otherwise, the base station
 28 shall omit this field.
- 29 The base station shall set this field to the index of the Walsh
 30 Table being used by the Packet Data Channel. (See [3]).
- 31 NUM_PDCCH - The number of Packet Data Control Channels supported.
- 32 If FOR_PDCH_PARAMS_INCL is set to '1', and
 33 FOR_PDCH_INCL is set to '1', the base station shall include
 34 this field and set it as follows; otherwise, the base station
 35 shall omit this field.
- 36 The base station shall set this field to '000' if the pilot
 37 supports one Packet Data Control Channel. The base station
 38 shall set this field to '001' if the pilot supports two Packet
 39 Data Control Channels. The base station shall not set this
 40 field to any other value.
- 41 The base station shall include *NUM_PDCCH+1* occurrences of the following one-field record:

1	FOR_PDCCH_WALSH	-	Forward Packet Data Control Channel Walsh code
2			assignment.
3			If FOR_PDCH_PARAMS_INCL is set to '1', and
4			FOR_PDCH_INCL is set to '1', the base station shall include
5			this field and set it as follows; otherwise, the base station
6			shall omit this field.
7			The base station shall set this field to the Walsh code
8			assignment for the Forward Packet Data Control Channel.
9			If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
10			shall be included first, followed by the Walsh code for
11			PDCCH1
12	MAC_ID	-	Medium Access Control index.
13			If FOR_PDCH_INCL 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 MAC index assigned
17			to the mobile station by this pilot.
18			The base station shall set this field to an integer value larger
19			than 63.
20	REV_CQICH_COVER	-	Reverse Channel Quality Indicator Channel cover.
21			If FOR_PDCH_INCL 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			The base station shall set this field to the index of the R-
25			CQICH cover associated with this pilot (See [2]).
26	FOR_CPCCH_WALSH	-	The Forward Common Power Control Channel Walsh code
27			assignment.
28			If EXT_CH_IND signals the allocation of a F-CPCCH, and
29			either of the following conditions is true:
30		-	EXT_CH_IND signals the allocation of a F-FCH or a F-
31			DCCH
32		-	all of the following conditions are true:
33		+	FOR_PDCH_INCL is set to '1'
34		+	EXT_CH_IND does not signal allocation of a F-FCH
35		+	EXT_CH_IND does not signal allocation of a F-DCCH
36			the base station shall include this field and shall set it as
37			follows; 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 Common Power Control Channel.

- 1 FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.
 2 If EXT_CH_IND signals the allocation of a F-CPCCH, and
 3 either of the following conditions is true:
 4 - EXT_CH_IND signals the allocation of a F-FCH or a F-
 5 DCCH
 6 - all of the following conditions are true:
 7 + FOR_PDCH_INCL is set to '1'
 8 + EXT_CH_IND does not signal allocation of a F-FCH
 9 + EXT_CH_IND does not signal allocation of a F-DCCH
 10 the base station shall include this field and shall set it as
 11 follows; otherwise, the base station shall omit this field.
 12 The base station shall set this field to the Forward Common
 13 Power Control Channel Subchannel associated with this base
 14 station.
 15 If FOR_CPCCH_RATE is omitted, or if it is included and set to
 16 '00', the base station shall set this field to a value in the range
 17 0 to 23 inclusive. If FOR_CPCCH_RATE is included and set
 18 set to '01', the base station shall set this field to a value in the
 19 range 0 to 47 inclusive. If FOR_CPCCH_RATE is included and
 20 set set to '10', the base station shall set this field to a value in
 21 the range 0 to 95 inclusive.
- 22 PWR_COMB_IND - Power control symbol combining indicator.
 23 If this pilot will carry the same closed-loop power control
 24 subchannel bits as that of the previous pilot in this message,
 25 the base station shall set this field to '1'; otherwise, the base
 26 station shall set this field to '0'. The base station shall set
 27 this field to '0' in the first record in the pilot list.
- 28 PDCH_GROUP_IND - Packet Data Channel Group Indicator.
 29 If PDCH_GROUP_IND_INCL 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.
 32 If the mobile station is to use the softer reselection
 33 parameters when re-pointing between this pilot and the
 34 previous pilot that has a F-PDCH assigned to this mobile
 35 station in this message (i.e. FOR_PDCH_INCL is set to '1'), the
 36 base station shall set this field to '1' (see [3]).
 37 If the mobile station is to use the soft reselection parameters
 38 when re-pointing between this pilot and the previous pilot in
 39 this message that has a F-PDCH assigned to this mobile
 40 station (i.e. FOR_PDCH_INCL is set to '1'), the base station
 41 shall set this field to '0' (see [3]).
 42 The base station shall set this field to '0' in the first record in
 43 the pilot list that has a F-PDCH assigned to this mobile
 44 station (i.e. FOR_PDCH_INCL is set to '1').

1	FOR_ACKSCH_INDEX	-	Forward Acknowledgment Subchannel Index.
2			If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
3			set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
4			does not signal the allocation of a R-PDCH, the base station
5			shall omit this field; otherwise, it shall include it and set it as
6			follows.
7			The base station shall set this field to the subchannel index of
8			the Forward Acknowledgment Channel (see [2]). The base
9			station should not use FOR_ACKSCH_INDEX = 0, 1, 2, 96,
10			97, or 98.
11	FOR_RCCH_INCL	-	Forward Rate Control Subchannel included flag.
12			If FOR_PDCH_INCL is set to '0', or if FOR_RCCH_ASSIGNED
13			is omitted, or if it is included and 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 '1' if a Forward Rate
17			Control Channel Subchannel is allocated on this pilot (see
18			[2]); otherwise, the base station shall set this field to '0'.
19			The base station shall set this field to a non zero value for at
20			least one pilot in this message.
21	FOR_RCCH_WALSH_INDEX	-	Walsh Code for the Forward Rate Control Channel
22			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 Walsh code of the
27			Forward Rate Control Channel Subchannel (see [2]).
28	FOR_RCSCH_INDEX	-	Forward Rate Control Subchannel.
29			If FOR_RCCH_INCL is omitted, or if it is included and set to
30			'0', 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 subchannel index of
33			the Rate Control Subchannel on this pilot (see [2]).
34			If FOR_RCCH_REPETITION is set to '00', the base station
35			shall set this field to a value in the range 0 to 95 inclusive. If
36			FOR_RCCH_REPETITION is set to '01', the base station shall
37			set this field to a value in the range 0 to 47 inclusive. If
38			FOR_RCCH_REPETITION is set to '10', the base station shall
39			set this field to a value in the range 0 to 23 inclusive.
40			The base station shall set this field to the subchannel offset of
41			the Rate Control Subchannel on this pilot.
42	NUM_FOR_GCH	-	Number of Forward Grant Channels
43			If FOR_PDCH_INCL is set to '0', or if FOR_GCH_ASSIGNED is
44			omitted, or if it is included and set to '0', the base station
45			shall omit this field; otherwise, the base station shall include
46			this field and set it as follows.

- 1 The base station shall set this field to the value of the nominal
2 power correction to be used by the mobile station when
3 transmitting on the Reverse Traffic Channel after the Direct
4 Channel Assignment call setup procedure. The base station
5 shall set this field as a two's complement signed binary
6 number, in units of 1 dB.
- 7 RESPOND_IND - Response requested indicator.
- 8 If DIRECT_CH_ASSIGN_IND 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 '1' if the mobile station
12 is to respond to the *Extended Channel Assignment Message*
13 with a *Page Response Message* or *Reconnect Message* in
14 unassured mode on the r-csch; otherwise, the base station
15 shall set this field to '0' to indicate that the mobile station is
16 not to respond on the r-csch.
- 17 DIRECT_CH_ASSIGN_RECOVER_IND - Direct Channel Assignment Recover Indicator.
- 18 If DIRECT_CH_ASSIGN_IND 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 mobile station
22 is to transmit a *Page Response Message* or a *Reconnect*
23 *Message* after failing to acquire the forward traffic channel
24 assigned in this message; otherwise, the base station shall set
25 this field to '0'.
- 26 EARLY_RL_TRANSMIT_IND - Early Reverse Link Transmission indicator.
- 27 If FOR_CPCCH_RATE is included and not set to '00', the base
28 station shall omit this field; otherwise, the base station shall
29 include this field and set it as follows.
- 30 The base station shall set this field to '1' if, upon channel
31 assignment, the mobile station is to enable the transmitter
32 prior to receiving sufficient signal quality on the forward link;
33 otherwise, the base station shall set this field to '0'.
- 34 FUNDICATED_BCNC_IND - BCMC on fundicated channel Indicator.
- 35 If the channel assignment in this message contains a Forward
36 Fundicated Channel used for BCNC transmission, 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 FIXED_PREAMBLE_TRANSMIT_IND - Fixed Number of Preambles Transmission
 17 Indicator.
- 18 If GRANTED_MODE is not set to '11', 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' to indicate if the
 22 mobile station is allowed to enter *Traffic Channel Substate* of
 23 the *Mobile Station Control on the Traffic Channel State* after
 24 sending the number of preambles specified in this message;
 25 otherwise the base station shall set this field to '0'.
- 26 If any channel assigned by this message is to use Radio
 27 Configuration 1 or 2 (see [2]), then the base station shall set
 28 this field to '0'.
- 29 FIXED_NUM_PREAMBLE - Traffic Channel preamble length.
- 30 If FIXED_PREAMBLE_TRANSMIT_IND is not included, or is
 31 included and set to '0', the base station shall omit this field;
 32 otherwise, the base station shall include this field and set it to
 33 the minimum length of Traffic Channel preamble that the
 34 mobile station is to transmit, before entering the *Traffic*
 35 *Channel Substate* of the *Mobile Station Control on the Traffic*
 36 *Channel State* without having received a *forward dedicated*
 37 *channel acquired* indication from Layer 2 (see [4]).
- 38 The base station shall set FIXED_NUM_PREAMBLE to the
 39 value shown in Table 3.7.2.3.2.21-13 corresponding to the
 40 Traffic Channel preamble length in ms.
- 41 TX_PWR_LIMIT_INCL - Transmit Power Limit inclusion for the current base station
- 42 If the transmit power limit field is included in this message,
 43 the base station shall set this field to '1'; otherwise, the base
 44 station shall set this field to '0'.
- 45 TX_PWR_LIMIT - Transmit Power Limit for the current base station

1 If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit
2 this field; otherwise, the base station shall include this field
3 and set to as follows.

4 The base station shall set this field to thirty dB more than
5 transmit power limit in dBm EIRP, in steps of 1 dB. This field
6 can take the values 30 to 53 corresponding to maximum
7 transmit power values 0 dBm to 23 dBm.

8

- 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)

Field	Length (bits)
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 × RECORD_LEN
SRCH_OFFSET_NGHR	0 or 3

} (NUM_NGHR)

BCCH_IND_INCL	1
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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
3
4
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10

- PILOT_PN - Pilot PN sequence offset index.
The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.
- CONFIG_MSG_SEQ - Configuration message sequence number.
The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).
- PILOT_INC - Pilot PN sequence offset index increment.
A mobile station searches for Remaining Set pilots at pilot PN 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 should
 4 set this field to the largest increment such that the pilot PN
 5 sequence offsets of all its neighbor base stations are integer
 6 multiples of that increment.

7 The base station shall set this field to a value in the range 1 to
 8 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**

Value (binary)	Description
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 base
 4 station shall omit this field.

5 The base station shall set this field to the duration of the base
 6 station transmit window, during each period, in units of 80
 7 ms. The base station should set this field to a value of 3 or
 8 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_NGHBR - 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

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Table 3.7.2.3.2.22-2. Neighbor Configuration Field

Value (binary)	Neighbor Configuration
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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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"> • 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. • 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>.
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"> • 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. • 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.
100-111	Reserved.

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`NGHBR_PN` - Neighbor pilot PN sequence offset index.

If `NGHBR_CONFIG_PN_INCL` = '1', the base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips; otherwise, the base station shall omit this field.

`SEARCH_PRIORITY` - Pilot Channel search priority.

If `NGHBR_SRCH_MODE` = '01' or `NGHBR_SRCH_MODE` = '11', then 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 3.7.2.3.2.22-3. If `NGHBR_SRCH_MODE` is set to any other value, the base station shall omit this field.

Table 3.7.2.3.2.22-3. Search Priority Field

Value (binary)	Search Priority
00	Low
01	Medium
10	High
11	Very High

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- SRCH_WIN_NGHR - Neighbor pilot channel search window size.
If NGHR_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 NGHR_SRCH_MODE is set to any other value, the base station shall omit this field.
- FREQ_INCL - Frequency included indicator.
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:
If the NGHR_BAND and NGHR_FREQ fields are included for this neighbor base station, the base station shall set this bit to '1'. If the NGHR_BAND and NGHR_FREQ fields are not included in this assignment record, the base station shall set this bit to '0'.
- NGHR_BAND - Neighbor band class.
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.
- NGHR_FREQ - Neighbor frequency assignment.
If the FREQ_INCL bit is omitted or is set to '0', the base station shall omit this field.
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.
If the FREQ_INCL bit is included and is set to '1' and the corresponding neighbor has a 3X 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 center SR3 frequency assignment containing the Paging Channel the mobile station is to search.

- 1 TIMING_INCL - Timing included indicator.
- 2 If USE_TIMING is set to '1', the base station shall include the
- 3 field TIMING_INCL and set this field as described below;
- 4 otherwise, the base station shall omit this field.
- 5 If base station timing information is included for this neighbor
- 6 base station, the base station shall set this field to '1';
- 7 otherwise, the base station shall set this field to '0'.
- 8 NGHBR_TX_OFFSET - Neighbor transmit time offset.
- 9 If TIMING_INCL is included and is set to '1', the base station
- 10 shall include the field NGHBR_TX_OFFSET and set this field
- 11 as described below; otherwise, the base station shall omit this
- 12 field.
- 13 The base station shall set this field to the time offset, in units
- 14 of 80 ms, from the beginning of the neighbor timing period to
- 15 the beginning of the first base station transmit window within
- 16 the period. The beginning of the neighbor timing period
- 17 occurs when $\lfloor t/4 \rfloor \bmod (16384) = 0$.
- 18 NGHBR_TX_DURATION - Neighbor transmit time duration.
- 19 If TIMING_INCL is included and is set to '1' and
- 20 GLOBAL_TIMING_INCL is set to '0', the base station shall
- 21 include the field NGHBR_TX_DURATION and set this field as
- 22 described below; otherwise, the base station shall omit this
- 23 field.
- 24 The base station shall set this field to duration of the base
- 25 station transmit window, during each period, in units of
- 26 80 ms. The base station should set this field to a value of 3 or
- 27 greater.
- 28 NGHBR_TX_PERIOD - Neighbor transmit time period.
- 29 If TIMING_INCL is included and is set to '1' and
- 30 GLOBAL_TIMING_INCL is set to '0', the base station shall
- 31 include the field NGHBR_TX_PERIOD and set this field as
- 32 described below; otherwise, the base station shall omit this
- 33 field.
- 34 The base station shall set this field to duration of the period,
- 35 in units of 80 ms.
- 36 NUM_ANALOG_NGHBR - Number of neighboring analog systems.
- 37 The base station shall set this field to the number of
- 38 neighboring analog systems included in the message. The
- 39 base station shall set this field to '000'.
- 40
- 41 The base station shall include one occurrence of the following record for each neighboring
- 42 analog system included in the message:
- 43 BAND_CLASS - Band class.
- 44 The base station shall set this field to the CDMA band class,
- 45 as specified in [30].

1 SYS_A_B - System A/B.

2 If BAND_CLASS is set to '00000' or to '00011', the base
3 station shall set this field to the value shown in Table
4 3.7.2.3.2.22-4 corresponding to the availability of neighboring
5 analog systems; otherwise, the base station shall set this field
6 to '00'.

7 **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

8
9 SRCH_OFFSET_INCL - Neighbor pilot channel search window offset included.

10 If NGHBR_SRCH_MODE = '10' or '11' and if the
11 SRCH_OFFSET_NGHBR field is included in the following
12 records, the base station shall set this bit to '1'; otherwise, the
13 base station shall set this bit to '0'.

14 The base station shall include one occurrence of the following record for each pilot that a
15 mobile station is to place in its Neighbor Set. The base station shall use the same order for
16 the following record in this message as is used for pilots which are listed in the *Neighbor*
17 *List Message* or *Extended Neighbor List Message*. Specifically, the i^{th} occurrence of the
18 following record shall correspond the i^{th} pilot in the *Neighbor List Message* or in the
19 *Extended Neighbor List Message*.

20 ADD_PILOT_REC_INCL - Additional pilot information included indicator.

21 The base station shall set this field to '1' if additional pilot
22 information listed in the NGHBR_PILOT_REC_TYPE and
23 RECORD_LEN fields are included. The base station shall set
24 this field to '0' if the corresponding pilot is the common pilot
25 and there is no additional pilot information included.

26 NGHBR_PILOT_REC_TYPE - Neighbor Pilot record type

27 If ADD_PILOT_REC_INCL is set to '1', the base station shall
28 set this field to the NGHBR_PILOT_REC_TYPE value shown in
29 Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record
30 specified by this record.

31

1

Table 3.7.2.3.2.22-5. Neighbor Pilot Record Types

Description	NGHBR_PILOT_REC_TYP E (binary)
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

If ADD_PILOT_REC_INCL is set to '0', the base station shall omit this field.

10

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

If ADD_PILOT_REC_INCL is set to '0', the base station shall omit this field.

16

17

18

If NGHBR_PILOT_REC_TYPE is equal to '000', the base station shall include the following fields:

19

20

Field	Length (bits)
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.

20 **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

AUX_TD_POWER_LEVEL	Transmit Power Level
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:

Field	Length (bits)
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-orthogonal function (see [2] on the frequency of the primary pilot.
2			
3			
4	WALSH_LENGTH	-	Length of the Walsh Code.
5			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 frequency of the primary pilot.
6			
7			
8			
9	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
10			The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the frequency of the primary pilot.
11			
12			
13	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.
14			
15			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 shall set this field to '0'; otherwise, the base station shall set this field to '1'.
16			
17			
18			
19			
20		QOF1	- Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.
21			
22			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
23			
24			
25			The base 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.
26			
27			
28	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.
29			
30			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
31			
32			
33			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 lower frequency of the two remaining SR3 frequencies.
34			
35			
36			
37			
38	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.
39			
40			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
41			
42			
43			The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the lower frequency of the two remaining SR3 frequencies.
44			
45			

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			

1 If BCCH_IND_INCL is set to '1', the base station shall include one occurrence of the
 2 following field for each pilot that a mobile station is to place in its Neighbor Set. The base
 3 station shall use the same order for the following record in this message as is used for
 4 pilots which are listed in the *Neighbor List Message* or *Extended Neighbor List Message*.
 5 Specifically, the i^{th} occurrence of the following record shall correspond the i^{th} pilot in the
 6 *Neighbor List Message* or in the *Extended Neighbor List Message*.

- 7 BCCH_SUPPORT - BCCH support indicator.
- 8 If this neighbor base station supports Broadcast Control
 9 Channel, the base station shall set this field to '1'; otherwise,
 10 the base station shall set this field to '0'.
- 11 RESQ_ENABLED - Call rescue feature enabled indicator.
- 12 The base station shall set this field to '1' if the call rescue
 13 feature is enabled and there is at least one occurrence of
 14 NGHBR_RESQ_CONFIGURED set to '1' in this message;
 15 otherwise, the base station shall set this field to '0'.
- 16 RESQ_DELAY_TIME - Call rescue delay timer value.
- 17 If RESQ_ENABLED 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 the value of the call
 21 rescue delay timer to be used by the mobile station, in units
 22 of 80 ms.
- 23 RESQ_ALLOWED_TIME - Call rescue allowed timer value.
- 24 If RESQ_ENABLED is set to '0', the base station shall omit
 25 this field; otherwise, the base station shall include this field
 26 and set it as follows:
- 27 The base station shall set this field to the value of the call
 28 rescue allowed timer to be used by the mobile station, in
 29 units of 80 ms.
- 30 RESQ_ATTEMPT_TIME - Call rescue attempt timer value.
- 31 If RESQ_ENABLED is set to '0', the base station shall omit
 32 this field; otherwise, the base station shall include this field
 33 and set it as follows:
- 34 The base station shall set this field to the value of the call
 35 rescue attempt timer to be used by the mobile station, in
 36 units of 40 ms.
- 37 RESQ_CODE_CHAN - Code channel index for the Rescue 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:

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_{3m} 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 declaring
40		L2 Acknowledgment Failure when Call Rescue is enabled
41		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 field;
11 otherwise, the base station shall include this field and set it
12 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 than
17 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 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 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 than
29 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 if
 14 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 that
 37 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.
- 42 NGHBR_PN - Neighbor pilot PN sequence offset index.
- 43 The base station shall set this field to the pilot PN sequence
 44 offset for this neighbor, in units of 64 PN chips.
- 45 NGHBR_FREQ_INCL - Neighbor frequency information included indicator.

1 The base station shall set this field to '1' if the neighbor
2 frequency information is included in this message; otherwise,
3 the base station shall set this field to '0'.

4 NGHBR_BAND - Neighbor band class.

5 If the NGHBR_FREQ_INCL field 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 the CDMA band class,
9 as specified in [30], corresponding to the CDMA frequency
10 assignment for the CDMA Channel containing this neighbor.

11 NGHBR_FREQ - Neighbor frequency assignment.

12 If the NGHBR_FREQ_INCL 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 the CDMA Channel
16 number, in the specified CDMA band class, corresponding to
17 the CDMA frequency assignment for this neighbor.

18 PN_ASSOCIATION_IND - Neighbor PN association indicator.

19 The base station shall set this field to '1' if the system identified by
20 this system record has the same PN assignment as the MC system to
21 which this BS belongs; otherwise, the base station shall set this field
22 to '0'.

23 DATA_ASSOCIATION_IND - Neighbor data association indicator.

24 The base station shall set this field to '1' if the system identified by
25 this system record can reach the same set of PDSNs as the MC
26 system to which this BS belongs; otherwise, the base station shall
27 set this field to '0'.

28 HRPD_NGHBR_REC_RESERVED - HRPD neighbor record reserved bits.

29 The base station shall add reserved bits as needed in order to make
30 the length of this record equal to an integer number of octets. The
31 base station shall set these bits to '0'.

32

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.
 25 If the corresponding User Zone allows for temporary
 26 subscription, the base station shall set this field to '1';
 27 otherwise, the base station shall set this field to '0'.

28

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.

20

Table 3.7.2.3.2.24-1. Radio Interface Type

RADIO_INTERFACE_TYPE (binary)	Descriptions
0000	MC system
0001-1111	Reserved

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:	
<i>{ (NUM_UZID or 0)</i>	
UZID	0 or 16
UZ_REV	0 or 4
TEMP_SUB	0 or 1
<i>} (NUM_UZID or 0)</i>	
<i>} (NUM_PRI_NGHBR)</i>	
RESERVED	0 - 7 (as needed)

2

3 COMMON_INCL - Common configuration included indicator.
 4
 5 If all private neighbor base stations included in this message
 6 are on the same CDMA band class and CDMA Channel
 7 number as specified in the COMMON_BAND_CLASS and
 8 COMMON_NGHBR_FREQ fields, the base station shall set
 9 this field to '1'; otherwise, the base station shall set this field
 10 to '0'.

11 COMMON_BAND_CLASS - Neighbor band class.
 12 If COMMON_INCL is set to '1', the base station shall set this
 13 field to the CDMA band class as specified in [30]
 14 corresponding to the CDMA frequency assignment for the
 15 CDMA Channel containing the Paging Channel or the Forward
 16 Common Control Channel for all private neighbors; otherwise,
 17 the base station shall omit this field.

18 COMMON_NGHBR_FREQ - Neighbor frequency assignment.
 19 If the COMMON_INCL bit is set to '1', the base station shall
 20 set this field to the CDMA Channel number, in the specified
 21 CDMA band class, corresponding to the CDMA frequency
 22 assignment for the CDMA Channel containing the Paging
 23 Channel or the Forward Common Control Channel for all
 24 private neighbor base station; otherwise, the base station
 25 shall omit this field.

26 SRCH_WIN_N - Search window size for the Private Neighbor Set.
 27 The base station shall set this field to the value shown in
 28 Table 2.6.6.2.1-1 corresponding to the search window size to
 29 be used by mobile stations for the Private Neighbor Set.

30 NUM_PRI_NGHBR - Number of private neighbor pilot PN sequences.
 31 The base station shall set this field to the number of private
 32 neighbors included in the message.

32

- 1 The base station shall include NUM_PRI_NGHBR 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_NGHBR_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 NGHBR_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 NGHBR_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 NGHBR_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 NGHBR_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 NGHBR_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
3
4
5
6
7
8
9
10
11
12

- TD_POWER_LEVEL - TD Transmit Power Level.
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.
- 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 this field to '0000'.

If NGHBR_PILOT_REC_TYPE is equal to '001', the base station shall include the following fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

13
14
15
16
17
18
19
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21
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23
24
25
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28
29

- QOF - Quasi-orthogonal function index.
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 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.
- AUX_PILOT_WALSH - Walsh Code for the Auxiliary Pilot.
The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot.
- 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 '010', the base station shall include the following 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

4

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.

5

6

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

7

WALSH_LENGTH - Length of the Walsh Code.

8

9

10

11

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.

12

AUX_WALSH - Walsh Code for the Auxiliary Pilot.

13

14

The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

15

AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot Power Level.

16

17

18

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.

19

TD_MODE - Transmit Diversity mode.

20

21

The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

22

RESERVED - Reserved bits.

23

24

The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

25

26

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

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			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 of
6			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.

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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'.

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_T D	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 which cannot be supported by the base station from accessing the system.

6

7

8

The base station shall set this field to the minimum protocol revision level that it supports.

9

10

SID - System identification.

11

The base station shall set this field to the system identification number for this system (see 2.6.5.2).

12

13

NID - Network identification.

14

This field serves as a sub-identifier of a system as defined by the owner of the SID.

15

16

The base station shall set this field to the network identification number for this network (see 2.6.5.2).

17

18

PILOT_PN - Pilot PN sequence offset index.

19

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

20

21

LC_STATE - Long code state.

22

The base station shall set this field to the long code state at the time given by the SYS_TIME field of this message.

23

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 $SYS_TIME - (LP_SEC \times 12.5) + (LTM_OFF \times 22500)$.
- 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.

27 **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.
- 30 The base station shall set this field to the CDMA Channel
 31 number corresponding to the CDMA frequency assignment for
 32 the CDMA Channel containing a Primary Paging Channel.¹¹²

¹¹² 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.

1	EXT_CDMA_FREQ	-	Extended frequency assignment.
2			The base station shall set this field to the CDMA Channel
3			number corresponding to the CDMA frequency assignment for
4			the CDMA Channel containing a Primary Paging Channel that
5			a mobile station capable of Radio Configurations greater than
6			2 or capable of supporting Quick Paging Channel will use.
7	SR1_BCCH_NON_TD_INCL	-	Common Channel in non TD mode on Spreading Rate 1
8			information included indicator.
9			The base station shall set this field to '1' if the base station
10			includes common channels (BCCH/F-CCCH/EACH)
11			information in non TD mode; otherwise, the base station shall
12			set this field to '0'.
13	SR1_NON_TD_FREQ_INCL	-	Non Transmit Diversity frequency included indicator.
14			If SR1_BCCH_NON_TD_INCL is set to '0', the base station
15			shall omit this field; otherwise, the base station shall set this
16			field as follows:
17			The base station shall set this field to '1' if
18			SR1_CDMA_FREQ_NON_TD is included in the message. The
19			base station shall set this field to '0' if the frequency specified
20			by the EXT_CDMA_FREQ field is used for BCCH frequency
21			assignment.
22	SR1_CDMA_FREQ_NON_TD	-	Frequency assignment for non-transmit diversity
23			operation.
24			If SR1_NON_TD_FREQ_INCL is not included, or is included
25			and set to '0', the base station shall omit this field; otherwise,
26			the base station shall set this field as follows:
27			The base station shall set this field to the CDMA Channel
28			number corresponding to the CDMA frequency assignment for
29			the CDMA Channel containing a Broadcast Control Channel
30			that does not support the TD operation.
31	SR1_BRAT_NON_TD	-	BCCH data rate in non-TD mode for Spreading Rate 1.
32			If SR1_BCCH_NON_TD_INCL is set to '0', the base station
33			shall omit this field; otherwise, the base station shall set this
34			field as follows:
35			The base station shall set this field to the BRAT field value
36			shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
37			used by the Primary Broadcast Control Channel in the
38			system.

Table 3.7.2.3.2.26-2. Broadcast Control Channel Data Rate

BRAT Field (binary)	Broadcast Control Channel data rate
00	4800 bps
01	9600 bps
10	19200bps
11	Reserved

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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 - BCCH data rate in Transmit Diversity mode for Spreading Rate 1.
 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:

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 in the
 4 system.

5 SR1_CRAT_TD - BCCH code rate in Transmit Diversity mode for Spreading
 6 Rate 1.

7 If SR1_TD_INCL is set to '0', the base station shall omit this
 8 field; otherwise, the base station shall set this field as follows:

9 The base station shall set this field to '0' if the BCCH Code
 10 Rate is 1/4 (see [2]). The base station shall set this field to '1'
 11 if the BCCH Code Rate is 1/2 (see [2]).

12 SR1_BCCH_CODE_CHAN_TD - Walsh code for the Spreading Rate 1 BCCH in
 13 Transmit Diversity mode.

14 If SR1_TD_INCL is set to '0', the base station shall omit this
 15 field; otherwise, the base station shall set this field as follows:

16 The base station shall set this field to the Walsh code
 17 corresponding to the Spreading Rate 1 BCCH in Transmit
 18 Diversity mode.

19 SR1_TD_MODE - Spreading Rate 1 Transmit Diversity Mode.

20 If SR1_TD_INCL is set to '0', the base station shall omit this
 21 field; otherwise, the base station shall set this field as follows:

22 The base station shall set this field corresponding to Table
 23 3.7.2.3.2.26-3.

24 **Table 3.7.2.3.2.26-3. TD Mode**

TD_MODE	Descriptions
00	OTD (Orthogonal Transmit Diversity) mode
01	STS (Space Time Spreading) mode
10-11	Reserved

25
 26 SR1_TD_POWER_LEVEL - Spreading Rate 1 TD transmit power level.

27 If SR1_TD_INCL is set to '0', the base station shall omit this
 28 field; otherwise, the base station shall set this field as follows:

29 The base station shall set this field to the TD transmit power
 30 level relative to that of the Forward Pilot Channel, as specified
 31 in Table 3.7.2.3.2.26-4.

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Table 3.7.2.3.2.26-4. 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

SR3_INCL - Spreading Rate 3 information included indicator.
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'.

SR3_CENTER_FREQ_INCL - Center SR3 frequency assignment included.
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 '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'.

SR3_CENTER_FREQ - Center SR3 frequency assignment.
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:
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.

SR3_BRAT - Spreading Rate 3 BCCH data rate.
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 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.

SR3_BCCH_CODE_CHAN - Spreading Rate 3 BCCH Walsh code.
If SR3_INCL is set to '0', the base station shall omit this field; 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 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 **Table 3.7.2.3.2.26-5. The Position of the Primary SR3 Pilot**

SR3_PRIMARY_PILOT (Binary)	Position
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

10

11 SR3_PILOT_POWER1 – The primary SR3 pilot power level relative to that of the pilot
12 on the lower frequency of the two remaining SR3 frequencies.

13 If SR3_INCL is set to '0', the base station shall omit this field;
14 otherwise, the base station shall set this field to the value
15 shown in Table 3.7.2.3.2.26-6 corresponding to the power
16 level of the primary pilot with respect to the pilot on the lower
17 frequency of the two remaining SR3 frequencies.

18

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Table 3.7.2.3.2.26-6. Pilot Transmission Power

SR3_PILOT_POWER1 , SR3_PILOT_POWER2 (Binary)	Relative Transmission Power
000	0dB
001	1dB
010	2dB
011	3dB
100	4dB
101	5dB
110	6dB
111	7dB

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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.

DS_INCL

- Direct Spread (DS) System and Information Available.

If the base station is a pilot beacon and includes the DS_BLOB field (containing information on how to access a DS system, see [32]), the base station shall set this field to '1'; otherwise the base shall set this field to '0'.

DS_BLOB

- Access Information about a Direct Spread (DS) System.

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.

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 × 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 × ADD_RECORD_LEN
ADD_LAST_SEARCH_RECORD_I ND	1

}{(NUM_ADD_RECORD)}

4

5

PILOT_PN - Pilot PN sequence offset index.

- 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 ADD_EXCL_P_REV_IND - Additional excluding mobile protocol revision indicator.
2
3 If the ADD_REDIRECT_P_REV_INCL is set to '1', the base
4 station shall include this field and set this field as described
5 below; otherwise, the base station shall omit this field.
6
7 If mobile stations with MOB_P_REV in the range between
8 ADD_REDIRECT_P_MIN and ADD_REDIRECT_P_MAX
9 inclusive are excluded from this global service redirection, the
10 base station shall set this field to '1'. Otherwise, if the mobile
11 stations with MOB_P_REV in the protocol revision range
12 specified in ADD_REDIRECT_P_MIN and
13 ADD_REDIRECT_P_MAX are subjected to the redirection, the
14 base station shall set this field to '0'.
- 13 ADD_REDIRECT_P_MIN - Additional minimum redirection protocol revision.
14
15 If ADD_REDIRECT_P_REV_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
19 The base station shall set this field to the minimum protocol
20 revision of which mobile stations are subjected to as specified
21 by the action contained in ADD_EXCL_P_REV_IND (i.e., to be
22 redirected or excluded from redirection). The base station
23 shall set this field to a protocol revision equal to or greater
24 than six.
- 23 ADD_REDIRECT_P_MAX - Additional maximum redirection protocol revision.
24
25 If ADD_REDIRECT_P_REV_INCL 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
29 The base station shall set this field to the maximum protocol
30 revision of which mobile stations are subjected to as specified
31 by the action contained in ADD_EXCL_P_REV_IND (i.e., to be
32 redirected or excluded from redirection). The base station
33 shall set this field to a protocol revision equal to or greater
34 than six.
- 33 ADD_RECORD_TYPE - Additional redirection record type.
34
35 The base station shall set this field to the RECORD_TYPE
36 value shown in Table 3.7.2.3.2.16-2 corresponding to the type
37 of redirection specified by this record.
- 37 ADD_RECORD_LEN - Additional redirection record length.
38
39 The base station shall set this field to the number of octets in
40 the type-specific fields of this redirection record.
- 40 Type-specific fields - Redirection record type-specific fields.
41
42 The base station shall include type-specific fields based on
43 the ADD_RECORD_TYPE of this redirection record, as
44 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:

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)

CLASS_INFO_INCL	
CLASS_REC_LEN	

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 th 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 as
 13 the band class where this message is being transmitted. If
 14 SUBCLASS_INFO_INCL is equal to '1', this CDMA channel
 15 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 as
 25 the band class where this message is being transmitted. If
 26 SUBCLASS_INFO_INCL is equal to '1', this CDMA channel
 27 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 *Extended CDMA Channel List Message* 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 '0'.
- 26 TD_POWER_LEVEL - Transmit diversity power level.
- 27 If TD_HASH_IND is set to '0', the base station shall omit this
28 field; otherwise, the base station shall include this field and
29 set it to the transmit diversity transmission power level
30 relative to that of the Forward Pilot Channel, as specified in
31 Table 3.7.2.3.2.26-4.
- 32 CDMA_BAND - Current band class.
- 33 The base station shall set this field to the CDMA band class
34 (see [30]) corresponding to the CDMA frequency assignment
35 for the CDMA Channel where this message is being
36 transmitted.
- 37 SUBCLASS_INFO_INCL - Band subclass information included
- 38 The base station shall set this field to '0' when no band
39 subclasses are associated with the listed CDMA_FREQ
40 channels or when band subclasses are not to be factored into
41 the mobile station's hashing algorithm; otherwise, the base
42 station shall set this field to '1'.
- 43 SUBCLASS_REC_LEN - Band subclass subrecord length

1 If SUBCLASS_INFO_INCL is set to '0', the base station shall
 2 omit this field; otherwise, the base station shall set this field
 3 as follows:

4 The base station shall set this field to the number of band
 5 subclass indicator fields included in the subrecord minus
 6 one. The number of band subclass indicator fields included
 7 is limited to the highest band subclass supported on any of
 8 the CDMA_FREQ channels listed above for the current band
 9 (i.e. if the highest band subclass is K, then
 10 SUBCLASS_REC_LEN = K).

11 If the SUBCLASS_REC_LEN field is included, the base station shall include
 12 SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included
 13 corresponds to band subclass '0' and the Nth field included corresponds to band subclass
 14 'N-1'.

15 CDMA_SUBCLASS - Band subclass indicator

16 The base station shall set this field to '1' if the corresponding
 17 band subclass is supported on any of the CDMA_FREQ
 18 channels listed above; otherwise, the base station shall set
 19 this field to '0'.

20 CDMA_FREQ_WEIGHT_INCL - CDMA frequency weight included indicator

21 The base station shall set this field to '1' if the
 22 CDMA_FREQ_WEIGHT fields are included in this message;
 23 otherwise, it shall set this field to '0'.

24 If CDMA_FREQ_WEIGHT_INCL is included and set to '1', the base station shall include
 25 NUM_FREQ occurrences of the following one-field record:

26 CDMA_FREQ_WEIGHT - CDMA frequency weight

27 The base station shall set this field to one less than the weight
 28 for this CDMA channel to be used in channel hashing by the
 29 mobile station.

30 NUM_BAND - Number of CDMA Bands

31 The base station shall set this field to the number of
 32 additional bands listed in this message.

33 The base station shall include NUM_BAND occurrences of the following record:

34 ADD_CDMA_BAND - Band class.

35 The base station shall set this field to the CDMA band class,
 36 as specified in [30], corresponding to the additional CDMA
 37 frequencies (ADD_CDMA_FREQ) included in this record.

38 ADD_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 band or when band
 41 subclasses are not to be factored into the mobile station's
 42 hashing algorithm; otherwise, the base station shall set this
 43 field to '1'.

44 ADD_SUBCLASS_REC_LEN - Band subclass subrecord length

1 If ADD_SUBCLASS_INFO_INCL is set to '0', the base station
 2 shall omit this field; otherwise, the base station shall set this
 3 field as follows:

4 The base station shall set this field to the number of band
 5 subclass indicator fields included in the subrecord minus
 6 one. The number of band subclass indicator fields included
 7 is limited to the highest band subclass supported on the band
 8 listed above (i.e. if the highest band subclass is K, then
 9 ADD_SUBCLASS_REC_LEN = K).

10 If the ADD_SUBCLASS_REC_LEN field is included, the base station shall include
 11 ADD_SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field
 12 included corresponds to band subclass '0' and the Nth field included corresponds to band
 13 subclass 'N-1'.

14 ADD_CDMA_SUBCLASS - Band subclass indicator

15 The base station shall set this field to '1' if the corresponding
 16 band subclass is supported on the band listed above;
 17 otherwise, the base station shall set this field to '0'.

18 ADD_TD_MODE - Transmit diversity mode.

19 If TD_SEL_INCL is set to '0', the base station shall omit this
 20 field; otherwise, the base station shall include this field and
 21 set it as follows:

22 The base station shall set this field to the Transmit Diversity
 23 mode on the ADD_CDMA_BAND listed above, as specified in
 24 Table 3.7.2.3.2.26-3.

25 BYPASS_SYS_DET_IND - Direct to idle allowed indicator.

26 The base station shall set this field to '1' if the mobile station
 27 is allowed to go directly to idle state on any CDMA channel
 28 belonging to the ADD_CDMA_BAND listed above.

29 NUM_ADD_FREQ - Number of additional CDMA Frequencies

30 The base station shall set this field to the number of
 31 occurrences of the ADD_CDMA_FREQ field included hereafter.

32 The mobile station shall include NUM_ADD_FREQ occurrences of the following record:

33 ADD_CDMA_FREQ - CDMA Channel frequency assignment.

34 If this message is sent on the Paging Channel:

35 The base station shall set this field to the CDMA channel
 36 number corresponding to the CDMA frequency
 37 assignment for a CDMA Channel containing a Paging
 38 Channel (see [2]).

39 This CDMA channel resides in the band class listed in this
 40 ADD_CDMA_BAND record. If
 41 ADD_SUBCLASS_INFO_INCL is equal to '1', this CDMA
 42 channel shall also reside in at least one supported
 43 ADD_CDMA_SUBCLASS included in this
 44 ADD_CDMA_BAND record.

1 If this message is sent on the Primary Broadcast Control
2 Channel:

3 The base station shall set this field to the CDMA Channel
4 number corresponding to the CDMA frequency
5 assignment for a CDMA Channel containing a Primary
6 Broadcast Control Channel and Forward Common Control
7 Channel (see [2]).

8 This CDMA channel resides in the band class listed in this
9 ADD_CDMA_BAND record. If
10 ADD_SUBCLASS_INFO_INCL is equal to '1', this CDMA
11 channel shall also reside in at least one supported
12 ADD_CDMA_SUBCLASS included in this
13 ADD_CDMA_BAND record.

14 If the base station supports a CDMA frequency
15 assignment without transmit diversity, the base station
16 should not set the first occurrence of this field to a CDMA
17 channel number corresponding to a transmit diversity
18 frequency assignment.

19 ADD_RC_QPCH_HASH_IND - RC QPCH channel hashing indicator

20 If RC_QPCH_SEL_INCL 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 '1', if the corresponding
24 CDMA channel is to be selected for channel hashing by
25 mobile stations capable of Radio Configurations greater than
26 two or capable of supporting Quick Paging Channel.

27 ADD_TD_HASH_IND - Transmit diversity hash indicator.

28 If TD_SEL_INCL is set to '0', the base station shall omit this
29 field; otherwise, the base station shall include this field and
30 set it as follows:

31 If the associated ADD_CDMA_FREQ is to be selected for
32 CDMA channel hashing by mobile stations capable of
33 supporting transmit diversity [TD_MODE], the base station
34 shall set the field to '1'; otherwise, the base station shall set
35 this field to '0'.

36 ADD_TD_POWER_LEVEL - Transmit diversity power level.

37 If ADD_TD_HASH_IND is not included or is included and set
38 to '0', the base station shall omit this field; otherwise, the
39 base station shall include this field and set it to the transmit
40 diversity transmission power level relative to that of the
41 Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

42 ADD_CDMA_FREQ_WEIGHT - CDMA frequency weight

43 If CDMA_FREQ_WEIGHT_INCL is set to '0', the base station
44 shall omit this field; otherwise, the base station shall include
45 this field and set it as follows:

1
2
3
4

The base station shall set this field to one less than the 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

Field	Length (bits)
TMSI_ZONE_LEN	4
TMSI_ZONE	8 × 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

ZONE_TIMER Value (binary)	Timer Length (Minutes)
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

HOME_REG - Home registration indicator.

12

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

FOR_SID_REG - SID roamer registration indicator.

19

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'.

20

21

22

23

24

25

FOR_NID_REG - NID roamer registration indicator.

26

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'.

27

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 '0'.
6	POWER_DOWN_REG	-	Power-down registration indicator.
7			If mobile stations enabled for autonomous registration are to
8			register immediately before powering down, the base station
9			shall set this field to '1'; otherwise, the base station shall set
10			this field to '0'.
11	PARAMETER_REG	-	Parameter-change registration indicator.
12			If mobile stations are to register on parameter change events
13			as specified in 2.6.5.1.6, the base station shall set this field to
14			'1'. If not, the base station shall set this field to '0'.
15	REG_PRD	-	Registration period.
16			If mobile stations are not to perform timer-based registration,
17			the base station shall set this field to '0000000'. If mobile
18			stations are to perform timer-based registration, the base
19			station shall set this field to the value in the range 29 to 85
20			inclusive, such that the desired timer value is
21			$\lfloor 2\text{REG_PRD}/4 \rfloor \times 0.08 \text{ seconds.}$
22	DIST_REG_INCL	-	Distance-Based Registration Information Included.
23			The base station shall set this field to '1' if it includes
24			distance-based registration information in the message and
25			mobile stations are to perform distance-based registration;
26			otherwise the base station shall set this field to '0'.
27	REG_DIST	-	Registration distance.
28			If DIST_REG_INCL is set to '1', the base station shall include
29			the field REG_DIST and shall set this field as shown below;
30			otherwise, the base station shall omit this field.
31			The base station shall set this field to the non-zero "distance"
32			beyond which the mobile station is to re-register (see
33			2.6.5.1.4).
34	DELETE_FOR_TMSI	-	Delete foreign TMSI.
35			The base station shall set this field to '1' to cause the mobile
36			station to delete its TMSI if the TMSI was assigned in a
37			different TMSI zone from that specified by the TMSI_ZONE
38			field of this message; otherwise, the base station shall set this
39			field to '0'.
40	USE_TMSI	-	Use TMSI indicator.
41			The base station shall set this field to the value shown in
42			Table 3.7.2.3.2.13-1 corresponding to the type of MSID that
43			the mobile station is to use on the Enhanced Access Channel.

1	PREF_MSID_TYPE	- Preferred Enhanced Access Channel Mobile Station Identifier
2		Type.
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 include
22		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 Message</i> .
30	AUTO_MSG_SUPPORTED	- Autonomous message supported indicator.
31		If the base station allows the autonomous delivery of the
32		<i>Device Information Message</i> on the r-csch, the base station
33		shall set this field to '1'; otherwise, the base station shall set
34		this field to '0'.
35	AUTO_MSG_INTERVAL	- Autonomous message interval.

1 If AUTO_MSG_SUPPORTED is set to '0', the base station shall
2 omit this field; otherwise, the base station shall include this
3 field and shall set this field to the AUTO_MSG_INTERVAL
4 value shown in Table 3.7.2.3.2.13-4 to indicate the minimum
5 time interval between autonomous messages sent by a mobile
6 station to the infrastructure. This parameter is intended to
7 allow the infrastructure to limit the frequency of autonomous
8 messages sent by a mobile station on the r-csch.

9 OTHER_INFO_INCL - Other information included indicator.
10 The base station shall set this field to '1' if the MC-RR
11 Parameters Message is not sent (see [32]); otherwise, the base
12 station shall set this field to '0'.

13 BASE_ID - Base station identification.
14 If OTHER_INFO_INCL is set to '1', the base station shall
15 include this field and set it as follows; otherwise, the base
16 station shall omit this field.
17 The base station shall set this field to its identification
18 number.

19 MCC - Mobile Country Code.
20 If OTHER_INFO_INCL is set to '1', the base station shall
21 include this field and set it as follows; otherwise, the base
22 station shall omit this field.
23 The base station shall set this field to the MCC (see 2.3.1)

24 IMSI_11_12 - 11th and 12th digits of the IMSI.
25 If OTHER_INFO_INCL is set to '1', the base station shall
26 include this field and set it as follows; otherwise, the base
27 station shall omit this field.
28 The base station shall set this field to the IMSI_11_12 (see
29 2.3.1).

30 BROADCAST_GPS_ASST - Broadcast GPS Assist Indicator.
31 If OTHER_INFO_INCL is set to '1', the base station shall
32 include this field and set it as follows; otherwise, the base
33 station shall omit this field.
34 The base station shall set this field to '1' if it supports
35 Broadcast GPS Assist capability; otherwise, the base station
36 shall set this field to '0'.

37 SIG_ENCRYPT_SUP - Signaling encryption supported indicator.
38 If OTHER_INFO_INCL is set to '1', the base station shall
39 include this field and set it as follows; otherwise, the base
40 station shall omit this field.

1		This field consists of the subfields shown in Table 2.7.1.3.2.1-
2		5.
3		If this field is included, the base station shall set the subfields
4		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 encryption algorithm is supported by
8		the base station; otherwise, the base station shall set the
9		subfield to '0'.
10		The base station shall set the RESERVED subfield to '00000'.
11	CS_SUPPORTED	- Concurrent Services supported indicator.
12		If the base station supports concurrent services, the base
13		station shall set this field to '1'; otherwise, the base station
14		shall set this field to '0'.
15	MS_INIT_POS_LOC_SUP_IND	- Mobile station initiated position location determination
16		supported indicator.
17		If the base station supports mobile station initiated position
18		determination, the base station shall set this field to '1';
19		otherwise, the base station shall set this field to '0'.
20	MSG_INTEGRITY_SUP	- Message integrity supported indicator.
21		If the base station supports message integrity the base station
22		shall set this field to '1'; otherwise, the base station shall set
23		this field to '0'.
24	SIG_INTEGRITY_SUP_INCL	- Signaling message integrity information included
25		indicator.
26		If MSG_INTEGRITY_SUP is set to '1', the base station shall
27		include this field and set it as follows; otherwise, the base
28		station shall omit this field.
29		If the base station supports other integrity algorithm(s) in
30		addition to the default integrity algorithm, the base station
31		shall set this field to '1'; otherwise, the base station shall set
32		this field to '0'.
33	SIG_INTEGRITY_SUP	- Signaling integrity algorithm supported by the base station.
34		If SIG_INTEGRITY_SUP_INCL is included and is set to '1',
35		the base station shall set this field as follows; otherwise, the
36		base station shall omit this field.
37		The base station shall set this field to indicate the supported
38		message integrity algorithms in addition to the default
39		integrity algorithm.

1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
2 6.

3 The base station shall set each subfield to '1' if the
4 corresponding message integrity algorithm is supported by
5 the base station; otherwise, the base station shall set the
6 subfield to '0'.

7 The base station shall set the RESERVED subfield to
8 '00000000'.

9 IMSI_10_INCL - IMSI_10 included.

10 If the MNC is a 3-digit number and the base station wants to
11 convey the third digit of the MNC to the mobile station, the
12 base station shall set this field to '1'; otherwise, the base
13 station shall set this field to '0'.

14 IMSI_10 - The least significant digit of MNC when the MNC is a 3-digit
15 number.

16 If IMSI_10_INCL is set to '0', the base station shall omit this
17 field; otherwise, the base station shall set this field to the least
18 significant digit of MNC converted to binary by the standard
19 decimal-to-binary conversion as shown in Table 2.3.1.1-1.

20 MAX_ADD_SERV_INSTANCE - Maximum number of additional service reference
21 identifiers allowed in origination

22 If the CS_SUPPORTED 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 maximum number
26 of additional service reference identifiers that can be included
27 in the *Origination Message* or *Enhanced Origination Message*.

28 TKZ_MODE_SUPPORTED- Tracking zone mode supported indicator.

29 The base station shall set this field to '1' if tracking zone mode
30 is supported; otherwise, the base station shall set this field to
31 '0'.

32 TKZ_ID - Tracking zone identifier.

33 If TKZ_MODE_SUPPORTED is set to '1', the base station shall
34 set this field to its tracking zone identifier; otherwise, the base
35 station shall omit this field.

36 PZ_HYST_ENABLED - Packet zone hysteresis enabled.

37 If the PACKET_ZONE_ID field is set to '00000000', the base
38 station shall omit this field; otherwise, the base station shall
39 include this field and set it as follows:

40 If the packet zone hysteresis feature is to be enabled at the
41 mobile station, the base station shall set this field to '1';
42 otherwise, the base station shall set this field to '0'.

43 PZ_HYST_INFO_INCL - Packet zone hysteresis information included indicator.

- 1 If the PZ_HYST_ENABLED 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 If the base includes the PZ_HYST_LIST_LEN,
 5 PZ_HYST_ACT_TIMER and packet zone hysteresis timer
 6 related fields, the base station shall set this field to '1';
 7 otherwise, the base station shall set this field to '0'.
- 8 **PZ_HYST_LIST_LEN** - Packet zone hysteresis list length.
- 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 this field to the length of the packet
 13 zone hysteresis list. This field shall be within the range '0001'
 14 through '1111', inclusive.
- 15 **PZ_HYST_ACT_TIMER** - Packet zone hysteresis activation timer.
- 16 If the PZ_HYST_INFO_INCL field is included and is set to '1',
 17 the base station shall include this field and set it as follows;
 18 otherwise, the base station shall omit this field.
- 19 The base station shall set to the value of the packet zone
 20 hysteresis activation timer (in units of seconds). This field
 21 shall be within the range '00000001' through '11111111',
 22 inclusive.
- 23 **PZ_HYST_TIMER_MUL** - Packet zone hysteresis timer multiplier.
- 24 If the PZ_HYST_INFO_INCL field is included and is set to '1',
 25 the base station shall include this field and set it as follows;
 26 otherwise, the base station shall omit this field.
- 27 The base station shall set the field to x , where $x \times 8^y$ seconds
 28 is the value of the hysteresis timer and y is the value
 29 indicated in the PZ_HYST_TIMER_EXP field. The base station
 30 shall set this field to a value that is between 1 and 7
 31 inclusive. The value 0 is reserved.
- 32 **PZ_HYST_TIMER_EXP** - Packet zone hysteresis timer exponent.
- 33 If the PZ_HYST_INFO_INCL field is included and is set to '1',
 34 the base station shall include this field and set it as follows;
 35 otherwise, the base station shall omit this field.
- 36 The base station shall set the field to y , where $x \times 8^y$ seconds
 37 is the value of the hysteresis timer and x is the value
 38 indicated in the PZ_HYST_TIMER_MUL field. The base station
 39 shall set this field to a value that is between 0 and 4
 40 inclusive. All the other values are reserved.
- 41 **EXT_PREF_MSID_TYPE** - Extended Preferred Enhanced Access Channel Mobile Station
 42 Identifier Type.
- 43 The base station shall set this field to the value shown in
 44 Table 3.7.2.3.2.13-1 and Table 3.7.2.3.2.13-1a corresponding
 45 to the type of MSID that the mobile station is to use on the
 46 Enhanced Access Channel.

1 MEID_REQD - MEID Required Indicator.

2 If EXT_PREF_MSID_TYPE is set to '11' and PREF_MSID_TYPE

3 is set to either '00' or '11', 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 '1' to indicate that

7 network requires MEID (of mobile stations having R-UIM) in

8 registrations; otherwise the base station shall set this field to

9 '0'.

10

11

- 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

Field	Length (bits)
ADD_FIELDS_LEN	8
ADD_FIELDS	8 × 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_IO_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)

Field	Length (bits)
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)

Field	Length (bits)
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
FREQ_GEN_OVHD_INF_IND	0 or 1
RESERVED	0 or (NUM_OPT_MSG_ BITS - 11)
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_PARAMS_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
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_NO RMAL	0 or 2
REV_PDCH_OPER_PARMS_INCL	0 or 1
REV_PDCH_MAX_SIZE_ALLOWED_E NCODER_PACKET	0 or 4
REV_PDCH_DEFAULT_PERSISTENC E	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_RES ET_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
RC_BITMAP_CAPABILITY_EXT_ALLOWED	0 or 1
CRRM_MSG_IND	0 or 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
ADD_LOC_GEM_ALLOWED	0 or 1

1

2

PILOT_PN - Pilot PN sequence offset index.

1		If SR3_INCL is set to '0', the base station shall omit this field;
2		otherwise, the base station shall set this field as follows:
3		The base station shall set this field to the BCCH rate field
4		value shown in Table 3.7.2.3.2.26-2 corresponding to the data
5		rate used by the Primary Broadcast Control Channel in the
6		system.
7	SR3_BCCH_CODE_CHAN	- Spreading Rate 3 BCCH Walsh code index.
8		If SR3_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 Walsh code index
11		corresponding to the Spreading Rate 3 BCCH.
12	SR3_PRIMARY_PILOT	- Primary SR3 pilot.
13		If SR3_INCL is set to '0', the base station shall omit this field;
14		otherwise, the base station shall set this field as follows:
15		The base station shall set this field to the value shown in
16		Table 3.7.2.3.2.26-5 corresponding to the position of the
17		primary SR3 pilot.
18	SR3_PILOT_POWER1	- The primary SR3 pilot power level relative to that of the pilot
19		on the lower frequency of the two remaining SR3 frequencies.
20		If SR3_INCL is set to '0', the base station shall omit this field;
21		otherwise, the base station shall set this field to the value
22		shown in Table 3.7.2.3.2.26-6 corresponding to the power
23		level of the primary pilot with respect to the pilot on the lower
24		frequency of the two remaining SR3 frequencies.
25	SR3_PILOT_POWER2	- The primary SR3 pilot power level relative to that of the pilot
26		on the higher frequency of the two remaining SR3
27		frequencies.
28		If SR3_INCL is set to '0', the base station shall omit this field;
29		otherwise, the base station shall set this field to the value
30		shown in Table 3.7.2.3.2.26-6 corresponding to the power
31		level of the primary pilot with respect to the pilot on the
32		higher frequency of the two remaining SR3 frequencies.
33	SRCH_WIN_A	- Search window size for the Active Set and Candidate Set.
34		The base station shall set this field to the value shown in
35		Table 2.6.6.2.1-1 corresponding to the search window size to
36		be used by mobile stations for the Active Set and Candidate
37		Set.
38	SRCH_WIN_R	- Search window size for the Remaining Set.
39		The base station shall set this field to the value shown in
40		Table 2.6.6.2.1-1 corresponding to the search window size to
41		be used by mobile stations for the Remaining Set.
42	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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
5 *Measurement Message* initiating the handoff process (see
6 2.6.6.2.5.2).
- 7 The base station shall set this field to the pilot detection
8 threshold, expressed as an unsigned binary number equal to
9 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
- 10 T_DROP - Pilot drop threshold.
- 11 This value is used by mobile stations to start a handoff drop
12 timer for pilots in the Active Set and the Candidate Set (see
13 2.6.6.2.3).
- 14 The base station shall set this field to the pilot drop threshold,
15 expressed as an unsigned binary number equal to
16 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
- 17 T_COMP - Active Set versus Candidate Set comparison threshold.
- 18 Mobile stations transmit a *Pilot Strength Measurement*
19 *Message* or *Extended Pilot Strength Measurement Message*
20 when the strength of a pilot in the Candidate Set exceeds that
21 of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).
- 22 The base station shall set this field to the threshold Candidate
23 Set pilot to Active Set pilot ratio, in units of 0.5 dB.
- 24 T_TDROP - Drop timer value.
- 25 Timer value after which an action is taken by mobile stations
26 for a pilot that is a member of the Active Set or Candidate Set,
27 and whose strength has not become greater than T_DROP. If
28 the pilot is a member of the Active Set, a *Pilot Strength*
29 *Measurement Message* or *Extended Pilot Strength Measurement*
30 *Message* is issued. If the pilot is a member of the Candidate
31 Set, it will be moved to the Neighbor Set.
- 32 The base station shall set this field to the T_TDROP value
33 shown in Table 2.6.6.2.3-1 corresponding to the drop timer
34 value to be used by mobile stations.
- 35 NGHBR_MAX_AGE - Neighbor Set maximum AGE.
- 36 The base station shall set this field to the maximum AGE
37 value beyond which mobile stations are to drop members
38 from the Neighbor Set (see 2.6.6.2.6.3).
- 39 SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the
40 Active Set, or dropping a pilot from the Active Set (see
41 2.6.6.2.3 and 2.6.6.2.5.2).
- 42 The base station shall set this field as an unsigned binary
43 number.

1	ADD_INTERCEPT	-	The intercept in the inequality criterion for adding a pilot to the Active Set (see 2.6.6.2.5.2).
2			
3			The base station shall set this field as a two's complement signed binary number, in units of 0.5 dB.
4			
5	DROP_INTERCEPT	-	The intercept in the inequality criterion for dropping a pilot from the Active Set (see 2.6.6.2.3).
6			
7			The base station shall set this field as a two's complement signed binary number, in units of 0.5 dB.
8			
9	ENC_SUPPORTED	-	Encryption fields included.
10			The base station shall set this field to '1' if the encryption related fields are included; otherwise the base station shall set this field to '0'.
11			
12			
13	SIG_ENCRYPT_SUP	-	Signaling encryption supported indicator.
14			If ENC_SUPPORTED is equal to '1', the base station shall include this field; otherwise, the base station shall omit this field. If this field is included, this field indicates which signaling encryption algorithms are supported by the base station.
15			
16			
17			
18			
19			This field consists of the subfields shown in Table 2.7.1.3.2.1-5.
20			
21			If this field is included, the base station shall set the subfields as follows:
22			
23			The base station shall set the CMEA subfield to '1'.
24			The base station shall set each other subfield to '1' if the corresponding signaling encryption algorithm is supported by the base station; otherwise, the base station shall set the subfield to '0'.
25			
26			
27			
28			The base station shall set the RESERVED subfield to '00000'.
29	UI_ENCRYPT_SUP	-	User information encryption supported indicator.
30			If ENC_SUPPORTED is equal to '1', the base station shall include this field; otherwise, the base station shall omit this field. If this field is included, the base station shall set this field to indicate the supported user information encryption algorithms.
31			
32			
33			
34			

1 This field consists of the subfields shown in Table 2.7.1.3.2.4-
2 9.

3 The base station shall set each subfield to '1' if the
4 corresponding user information encryption algorithm is
5 supported by the base station; otherwise, the base station
6 shall set the subfield to '0'.

7 ADD_FIELDS_LEN - Additional fields length.

8 The base station shall set this field to the number of octets
9 included in the ADD_FIELDS.

10 ADD_FIELDS - Additional fields.

11 If the ADD_FIELDS_LEN field is not equal to '00000000', the
12 base station shall include the following fields as additional
13 fields.

14

Field	Length (bits)
RESERVED	0 – 7 (as needed)

15 CCH_INFO_INCL - Common Channel information included indicator.

16 If the message is sent on the f-csch and additional
17 information is included, the base station shall set this field to
18 '1'; otherwise, the base station shall set this field to '0'.

19 The base station shall set this field to '1'.

20 MCC - Mobile Country Code.

21 If CCH_INFO_INCL is set to '1', the base station shall include
22 this field and set it as follows; otherwise, the base station
23 shall omit this field.

24 The base station shall set this field to the MCC (see 2.3.1)

25 IMSI_11_12 - 11th and 12th digits of the IMSI.

26 If CCH_INFO_INCL is set to '1', the base station shall include
27 this field and set it as follows; otherwise, the base station
28 shall omit this field.

29 The base station shall set this field to the IMSI_11_12 (see
30 2.3.1).

31 MAX_SLOT_CYCLE_INDEX - Maximum slot cycle index.

32 If CCH_INFO_INCL is set to '1', the base station shall include
33 the field MAX_SLOT_CYCLE_INDEX and shall set this field as
34 shown below; otherwise, the base station shall omit this field.

35 The base station shall set this field to the
36 SLOT_CYCLE_INDEX value corresponding to the maximum
37 slot cycle length permitted (see 2.6.2.1.1).

38 PWR_REP_THRESH - Power control reporting threshold.

- 1 If CCH_INFO_INCL is set to '1', the base station shall include
 2 the field PWR_REP_THRESH and shall set this field as shown
 3 below; otherwise, the base station shall omit this field.
- 4 The base station shall set this field to the number of bad
 5 frames (see [2]) to be received in a measurement period on the
 6 channel which carries the Power Control Subchannel before
 7 mobile stations are to generate a *Power Measurement Report*
 8 *Message* (see 2.6.4.1.1). If the base station sets
 9 PWR_THRESH_ENABLE to '1', it shall not set this field to
 10 '00000'.
- 11 **PWR_REP_FRAMES** - Power control reporting frame count.
- 12 If CCH_INFO_INCL is set to '1', the base station shall include
 13 the field PWR_REP_FRAMES and shall set this field as shown
 14 below; otherwise, the base station shall omit this field.
- 15 The base station shall set this field to the value such that the
 16 number given by
- 17
$$\lfloor 2^{(PWR_REP_FRAMES/2)} \times 5 \rfloor \text{ frames}$$
- 18 is the number of frames over which mobile stations are to
 19 count frame errors.
- 20 **PWR_THRESH_ENABLE** - Threshold report mode indicator.
- 21 If CCH_INFO_INCL is set to '1', the base station shall include
 22 the field PWR_THRESH_ENABLE and shall set this field as
 23 shown below; otherwise, the base station shall omit this field.
- 24 If mobile stations are to generate threshold *Power*
 25 *Measurement Report Messages*, the base station shall set this
 26 field to '1'. If mobile stations are not to generate threshold
 27 *Power Measurement Report Messages*, the base station shall
 28 set this field to '0'.
- 29 **PWR_PERIOD_ENABLE** - Periodic report mode indicator.
- 30 If CCH_INFO_INCL is set to '1', the base station shall include
 31 the field PWR_PERIOD_ENABLE and shall set this field as
 32 shown below; otherwise, the base station shall omit this field.
- 33 If mobile stations are to generate periodic *Power Measurement*
 34 *Report Messages*, the base station shall set this field to '1'. If
 35 mobile stations are not to generate periodic *Power*
 36 *Measurement Report Messages*, the base station shall set this
 37 field to '0'.
- 38 **PWR_REP_DELAY** - Power report delay.
- 39 The period that mobile stations wait following a *Power*
 40 *Measurement Report Message* before restarting frame counting
 41 for power control purposes.
- 42 If CCH_INFO_INCL is set to '1', the base station shall include
 43 the field PWR_REP_DELAY and shall set this field as shown
 44 below; otherwise, the base station shall omit this field.

- 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 its longitude in units of
 5 0.25 second, expressed as a two's complement signed number
 6 with positive numbers signifying East longitude. The base
 7 station shall set this field to a value in the range -2592000 to
 8 2592000 inclusive (corresponding to a range of -180° to
 9 +180°).
- 10 The base station shall set this field to all zeros if its longitude
 11 is not known.
- 12 **PILOT_REPORT** - Pilot reporting indicator.
- 13 If CCH_INFO_INCL is set to '1', the base station shall include
 14 the field PILOT_REPORT and shall set this field as shown
 15 below; 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 report the additional pilots which have pilot strengths
 18 exceeding T_ADD in all Enhanced Access Channel messages.
 19 The base station shall set this field to '0' if the mobile station
 20 is to report the additional pilots which have pilot strengths
 21 exceeding T_ADD only in the *Origination Message*, *Reconnect*
 22 *Message*, and the *Page Response Message*.
- 23 **ACC_ENT_HO_ORDER** - Access entry handoff permitted indicator.
- 24 If CCH_INFO_INCL is set to '1', the base station shall include
 25 this field and set it as described below; otherwise, the base
 26 station shall omit this field.
- 27 The base station shall set this field to '1' if the mobile station
 28 is permitted to perform an access entry handoff after receiving
 29 a message while performing the *Mobile Station Order and*
 30 *Message Processing Operation* in the *Mobile Station Idle State*
 31 (see 2.6.2.4); otherwise, the base station shall set this field to
 32 '0'.
- 33 **ACCESS_HO** - Access handoff permitted indicator.
- 34 If CCH_INFO_INCL is set to '1', the base station shall include
 35 this field and set it as described below; otherwise, the base
 36 station shall omit this field.
- 37 The base station shall set this field to '1' if the mobile station
 38 is permitted to perform an access handoff (see 2.6.3.1.3.2);
 39 otherwise, the base station shall set this field to '0'.
- 40 **ACCESS_HO_MSG_RSP** - Access handoff permitted for message response indicator.
- 41 If ACCESS_HO is included and set to '1', the base station
 42 shall include this field and set it as described below;
 43 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 handoff after receiving a
3 message and before responding to that message in the *System*
4 *Access State*; otherwise, the base station shall set this field to
5 '0'.

6 ACCESS_PROBE_HO - Access probe handoff permitted indicator.

7 If CCH_INFO_INCL is set to '1', the base station shall include
8 this field and set it as described below; otherwise, the base
9 station shall omit this field.

10 The base station shall set this field to '1' if the mobile station
11 is permitted to perform an access probe handoff (see
12 2.6.3.1.3.3); otherwise, the base station shall set this field to
13 '0'.

14 ACC_HO_LIST_UPD - Access handoff list update permitted indicator.

15 If ACCESS_PROBE_HO is included and is 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 The base station shall set this field to '1' if the mobile station
19 is permitted to update the access handoff list during an
20 access attempt (see 2.6.3.1.7.2); otherwise, the base station
21 shall set this field to '0'.

22 ACC_PROBE_HO_OTHER_MSG - Access probe handoff permitted for messages other
23 than the *Origination Message*, *Reconnect Message*, and the
24 *Page Response Message*.

25 If ACCESS_PROBE_HO is included and set to '1', the base
26 station shall include this field and set it as described below;
27 otherwise, the base station shall omit this field.

28 The base station shall set this field to '1' if the mobile station
29 is permitted to perform an access probe handoff for messages
30 other than the *Origination Message*, *Reconnect Message*, and
31 the *Page Response Message*. The base station shall set this
32 field to '0' if the mobile station is permitted to perform an
33 access probe handoff only for the *Origination Message*,
34 *Reconnect Message*, and the *Page Response Message*. See
35 2.6.3.1.3.3.

36 MAX_NUM_PROBE_HO - Maximum number of times that the mobile station is
37 permitted to perform an access probe handoff.

38 If ACCESS_PROBE_HO is included and set to '1', the base
39 station shall include this field and set it as described below;
40 otherwise, the base station shall omit this field.

41 The base station shall set this field to the maximum number
42 of times the mobile station is allowed to perform an access
43 probe handoff within an access attempt minus one.

- 1 FCCCH_CODE_CHAN - Code channel index for the Forward Common Control
 2 Channel.
 3 The base station shall set this field to the code channel index
 4 (see [2]) in the range 1 to 255 inclusive that the mobile station
 5 is to use on the Forward Common Control Channel.
- 6 BCAST_INDEX - Broadcast index.
 7 If CCH_INFO_INCL is set to '1', the base station shall include
 8 the field BCAST_INDEX and shall set this field as shown
 9 below; otherwise, the base station shall omit this field.
 10 If Periodic Enhanced Broadcast Paging is disabled, the base
 11 station shall set this field to '000'; otherwise, the base station
 12 shall set this field to the Broadcast Index (see 2.6.2.1.1.3.3.2).
- 13 NUM_BCCH_BCAST - The number of Broadcast Control Channels used for
 14 transmitting broadcast messages.
 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 the number of
 19 Broadcast Control Channels used for transmitting broadcast
 20 messages.
- 21 If the NUM_BCCH_BCAST field is included, the base station shall set NUM_BCCH_BCAST
 22 occurrences of the following three-field record, where the ith occurrence corresponds to a
 23 BCCH indexed by BCN of i+1:
- 24 BCCH_CODE_CHAN - The Walsh Code index for the Broadcast Control Channel.
 25 The base station shall set this field to the Walsh code
 26 corresponding to the Broadcast Control Channel.
- 27 BRAT - BCCH data rate.
 28 The base station shall set this field to the BRAT field value
 29 shown in Table 3.7.2.3.2.31-2 corresponding to the data rate
 30 used by the Broadcast Control Channel to which the mobile
 31 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

- 33
 34 BCCH_CODE_RATE - BCCH code rate.

- 1 For spreading rate 1, the base station shall set this field to '0'
 2 if the BCCH Code Rate is 1/4 (see [2]). For spreading rate 1,
 3 the base station shall set this field to '1' if the BCCH code rate
 4 is 1/2 (see [2]). For spreading rate 3, the base station shall
 5 set this field to '0'.
- 6 QPCH_SUPPORTED - Quick Paging Channel Supported Indication.
 7 If CCH_INFO_INCL is set to '1', the base station shall include
 8 the field QPCH_SUPPORTED and shall set this field as shown
 9 below; otherwise, the base station shall omit this field.
 10 If the base station supports Quick Paging Channel operation,
 11 the base station shall set this field to '1'; otherwise the base
 12 station shall set this field to '0'.
- 13 NUM_QPCH - Number of Quick Paging Channels.
 14 If QPCH_SUPPORTED is included and set to '1', the base
 15 station 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 the number of Quick
 18 Paging Channels on this CDMA Channel. The base station
 19 shall not set this field to '00'.
- 20 QPCH_RATE - Quick Paging Channel indicator rate.
 21 If QPCH_SUPPORTED 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 QPCH_RATE field
 25 value shown in Table 3.7.2.3.2.13-2 corresponding to the
 26 indicator rate used by the Quick Paging Channel in the
 27 system.
- 28 QPCH_POWER_LEVEL_PAGE - Quick Paging Channel paging indicator transmit power
 29 level.
 30 If QPCH_SUPPORTED is included and set to '1', the base
 31 station shall include this field and set it as described below;
 32 otherwise, the base station shall omit this field.
 33 The base station shall set this field to the Quick Paging
 34 Channel paging indicator transmit power level relative to that
 35 of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.

1

Table 3.7.2.3.2.31-3. Quick Paging Channel Transmit Power Level

QPCH_POWER_LEVEL_PAGE QPCH_POWER_LEVEL_CONFIG QPCH_POWER_LEVEL_BCAST (binary)	Transmit Power Level
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

2

3 QPCH_CCI_SUPPORTED - Quick Paging Channel configuration change indicator
4 supported.

5 If QPCH_SUPPORTED is included and set to '1', the base
6 station shall include this field and set it as described below;
7 otherwise, the base station shall omit this field.

8 If the base station supports configuration change indicators
9 on the Quick Paging Channel, the base station shall set this
10 field to '1'; otherwise the base station shall set this field to '0'.

11 QPCH_POWER_LEVEL_CONFIG - Quick Paging Channel configuration change indicator
12 transmit power level.

13 If QPCH_CCI_SUPPORTED is included and set to '1', the base
14 station shall include this field and set it as described below;
15 otherwise, the base station shall omit this field.

16 The base station shall set this field to the Quick Paging
17 Channel configuration change indicator transmit power level
18 relative to that of the Pilot Channel as specified in Table
19 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 station
 8 is to use on the Quick Paging Channel for Spreading Rate 3.
- 9 QPCH_BI_SUPPORTED - Quick Paging Channel broadcast indicator supported.
- 10 If QPCH_SUPPORTED is included and set to '1', the base
 11 station shall include this field and set it as described below;
 12 otherwise, the base station shall omit this field.
- 13 If the base station supports broadcast indicators on the Quick
 14 Paging Channel, the base station shall set this field to '1';
 15 otherwise the base station shall set this field to '0'.
- 16 QPCH_POWER_LEVEL_BCAST - Quick Paging Channel broadcast indicator transmit
 17 power level.
- 18 If QPCH_BI_SUPPORTED is included and set to '1', the base
 19 station shall include this field and set it as described below;
 20 otherwise, the base station shall omit this field.
- 21 The base station shall set this field to the Quick Paging
 22 Channel broadcast indicator transmit power level relative to
 23 that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
- 24 SDB_SUPPORTED - Short Data Burst supported indicator.
- 25 If CCH_INFO_INCL is set to '1', the base station shall include
 26 the field SDB_SUPPORTED 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 '1' if the mobile station
 29 is permitted to send a Short Data Burst; otherwise, the base
 30 station shall set this field to '0'.
- 31 BROADCAST_GPS_ASST - Broadcast GPS Assist Indicator.
- 32 If CCH_INFO_INCL is set to '1', the base station shall include
 33 the field BROADCAST_GPS_ASST and shall set this field as
 34 shown below; otherwise, the base station shall omit this field.
- 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 RLGAIN_TRAFFIC_PILOT - Gain adjustment of the Reverse Traffic Channel relative to the
 39 Reverse Pilot Channel for Radio Configurations greater than
 40 2.
- 41 If CCH_INFO_INCL is set to '1', the base station shall include
 42 the field RLGAIN_TRAFFIC_PILOT and shall set this field as
 43 shown below; otherwise, the base station shall omit this field.

- 1 SENDING_RAND - *ANSI-41 RAND Message* indicator.
- 2 If NUM_OPT_MSG_BITS is included and is equal to or greater
3 than 1, the base station shall include the field
4 SENDING_RAND and shall set this field as shown below;
5 otherwise, the base station shall omit this field.
- 6 If the base station is sending the *ANSI-41 RAND Message* on
7 the Primary Broadcast Control Channel, it shall set this field
8 to '1'; otherwise, it shall set this field to '0'.
- 9 PRI_NGHBR_LST - *Private Neighbor List Message* indicator.
- 10 If NUM_OPT_MSG_BITS is included and is equal to or greater
11 than 2, the base station shall include the field
12 PRI_NGHBR_LST and shall set this field as shown below;
13 otherwise, the base station shall omit this field.
- 14 If the base station is sending the *Private Neighbor List*
15 *Message* on the Primary Broadcast Control Channel, it shall
16 set this field to '1'; otherwise, it shall set this field to '0'.
- 17 USER_ZONE_ID - *User Zone Identification Message* indicator.
- 18 If NUM_OPT_MSG_BITS is included and is equal to or greater
19 than 3, the base station shall include the field
20 USER_ZONE_ID and shall set this field as shown below;
21 otherwise, the base station shall omit this field.
- 22 If the base station is sending the *User Zone Identification*
23 *Message* on the Primary Broadcast Control Channel, it shall
24 set this field to '1'; otherwise, it shall set this field to '0'.
- 25 EXT_GLOBAL_REDIRECT - *Extended Global Service Redirection Message* indicator.
- 26 If NUM_OPT_MSG_BITS is included and is equal to or greater
27 than 4, the base station shall include the field
28 EXT_GLOBAL_REDIRECT and shall set this field as shown
29 below; otherwise, the base station shall omit this field.
- 30 If the base station is sending the *Extended Global Service*
31 *Redirection Message* on the Primary Broadcast Control
32 Channel, it shall set this field to '1'; otherwise, the base
33 station shall set this field to '0'.
- 34 AP_PILOT_INFO - *Access Point Pilot Information Message* indicator.
- 35 If NUM_OPT_MSG_BITS is included and is equal to or greater
36 than 5, the base station shall include the field
37 AP_PILOT_INFO and shall set this field as shown below;
38 otherwise, the base station shall omit this field.
- 39 If the base station is sending the *Access Point Pilot Information*
40 *Message* on the Primary Broadcast Control Channel, it shall
41 set this field to '1'; otherwise, the base station shall set this
42 field to '0'.
- 43 AP_IDT - *Access Point Identification Message* 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 station
4 shall omit this field.
- 5 If the base station is sending the *Access Point Identification*
6 *Message* 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 - *Access Point Identification Text Message* 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 *Access Point Identification*
15 *Text Message* 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 - *General Overhead Information Message* 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 shall
22 omit this field.
- 23 If the base station is sending the *General Overhead*
24 *Information Message* on the Paging Channel, it shall set this
25 field to '1'; otherwise, the base station shall set this field to '0'.
- 26 FD_CHAN_LST_IND - *Flex Duplex CDMA Channel List Message* indicator.
- 27 If NUM_OPT_MSG is equal to or greater than 9, the base
28 station shall include the field FD_CHAN_LST_IND and shall
29 set this field as shown below; otherwise, the base station shall
30 omit this field.
- 31 If the base station is sending the *Flex Duplex CDMA Channel*
32 *List Message* on the Primary Broadcast Control Channel, it
33 shall set this field to '1'; otherwise, the base station shall set
34 this field to '0'.
- 35 ATIM_IND - *Alternative Technologies Information Message* indicator.
- 36 If NUM_OPT_MSG is equal to or greater than 10, the base
37 station shall include the field ATIM_IND and shall set this
38 field as shown below; otherwise, the base station shall omit
39 this field.
- 40 If the base station is sending the *Alternative Technologies*
41 *Information Message* on the Paging Channel, it shall set this
42 field to '1'; otherwise, the base station shall set this field to '0'.
- 43 FREQ_GEN_OVHD_INF_IND - *Frequent General Overhead Information Message* indicator.

1 If NUM_OPT_MSG is equal to or greater than 11, the base
 2 station shall include the field `FREQ_GEN_OVHD_INF_IND` and
 3 shall set this field as shown below; otherwise, the base station
 4 shall omit this field.

5 If the base station is sending the *Frequent General Overhead*
 6 *Information Message* on the Paging Channel, it shall set this
 7 field to '1'; otherwise, the base station shall set this field to '0'.

8

9 `RESERVED` - Reserved bits.

10 If NUM_OPT_MSG_BITS is included and is equal to or greater
 11 than 12, the base station shall include the field `RESERVED`
 12 and shall set this field as shown below; otherwise, the base
 13 station shall omit this field.

14 The base station shall add (NUM_OPT_MSG_BITS – 11)
 15 reserved bits. The base station shall set these bits to '0'.

16 `PILOT_INFO_REQ_SUPPORTED` - Pilot information request supported 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 If the base station supports mobile station request for pilot
 21 information using the "Pilot Information" record in the *Base*
 22 *Station Status Request Message*, the base station shall set this
 23 field to '1'; otherwise, the base station shall set this field to '0'.

24 `BAND_CLASS_INFO_REQ` - Band class information request indicator.

25 If `CCH_INFO_INCL` is set to '1', the base station shall include
 26 this field and set it as shown below; otherwise, the base
 27 station shall omit this field.

28 The base station shall set this field to '1' if the
 29 `ALT_BAND_CLASS` field is included in this message;
 30 otherwise, the base station shall set this field to '0'.

31 `ALT_BAND_CLASS` - Alternate band class.

32 If `BAND_CLASS_INFO_REQ` is not included, or is included
 33 and set to '0', then 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 an alternate CDMA
 37 band class (see [30]) supported by the base station. The
 38 mobile station is to indicate its capability to support the
 39 alternate band class in the *Origination Message* and *Page*
 40 *Response Message*.

41 `CDMA_OFF_TIME_REP_SUP_IND` - CDMA off time report supported indicator.

42 If the base station supports mobile station report for CDMA
 43 off time information using the *CDMA Off Time Report Message*,
 44 the base station shall set this field to '1'; otherwise, the base
 45 station shall set this field to '0'.

- 1 CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit
 2 If CDMA_OFF_TIME_REP_SUP_IND 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 time unit used in
 6 CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table
 7 3.7.2.3.2.13-5
- 8 CDMA_OFF_TIME_REP_THRESHOLD – CDMA off time report threshold
 9 If CDMA_OFF_TIME_REP_SUP_IND is set to ‘0’, the base
 10 station shall omit this field; otherwise, the base station shall
 11 include this field and set it as follows:
 12 The base station shall set this field to the time in units of
 13 CDMA_OFF_TIME_REP_THRESHOLD_UNIT such that if the
 14 mobile station goes away from the CDMA traffic channel
 15 longer than this value, the mobile station is to send a *CDMA*
 16 *Off Time Report Message*.
- 17 CHM_SUPPORTED – Control Hold Mode supported indicator.
 18 The base station shall set this field to ‘1’ to indicate that the
 19 base station supports the Control Hold Mode; otherwise, the
 20 base station shall set this field to ‘0’.
- 21 RELEASE_TO_IDLE_IND - Release to Idle State allowed indicator.
 22 If the mobile station is allowed to return to the *Mobile Station*
 23 *Idle State* upon call release, the base station shall set this field
 24 to ‘1’; otherwise, the base station shall set this field to ‘0’.
- 25 RECONNECT_MSG_IND - *Reconnect Message* supported indicator.
 26 The base station shall set this field to ‘0’ if the mobile station
 27 is not allowed to send a *Reconnect Message* instead of an
 28 *Origination Message* or a *Page Response Message*; otherwise,
 29 the base station shall set this field to ‘1’.
- 30 T_TDROP_RANGE_INCL - Drop timer range value included indicator.
 31 The base station shall set this field to '1' if the
 32 T_TDROP_RANGE field is included in this message; otherwise,
 33 the base station shall set this field to '0'.
- 34 T_TDROP_RANGE - Drop timer range value.
 35 Timer range value to use in association with the T_TDROP
 36 parameter when determining the drop timer expiration.
 37 If T_TDROP_RANGE_INCL is set to '0', the base station shall
 38 omit this field; otherwise, the base station shall set this field
 39 to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2
 40 corresponding to the timer expiration range value to be used
 41 by the mobile station.
- 42 FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.
 43 If the base station supports the Forward Packet Data Channel
 44 (F-PDCH), the base station shall set this field to ‘1’; otherwise,
 45 the base station shall set this field to ‘0’.

- 1 PDCH_CHM_SUPPORTED - PDCH Control Hold Mode supported indicator.
 2 If FOR_PDCH_SUPPORTED 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' to indicate that the
 6 base station supports the PDCH Control Hold Mode;
 7 otherwise, the base station shall set this field to '0'
- 8 PDCH_PARAMS_INCL - Forward Packet Data Channel related parameters included
 9 indicator.
 10 If FOR_PDCH_SUPPORTED 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 '1' if the following F-
 14 PDCH related fields are included in this message; otherwise,
 15 the base station shall set this field to '0'.
- 16 FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to
 17 reverse link adjustment gains included indicator.
 18 If PDCH_PARAMS_INCL is omitted, or if it is included and set
 19 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 '1' if the following F-
 22 PDCH gain related fields are included in this message;
 23 otherwise, the base station shall set this field to '0'.
- 24 RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.
 25 If FOR_PDCH_RLGAIN_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 the Reverse
 29 Acknowledgment Channel to pilot adjustment gain expressed
 30 as a two's complement value in units of 0.125 dB (see [2]).
- 31 RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot
 32 adjustment gain.
 33 If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and
 34 set 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 Reverse Channel
 37 Quality Indicator Channel to pilot adjustment gain expressed
 38 as a two's complement value in units of 0.125 dB (see [2]).
- 39 NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.
 40 If PDCH_PARAMS_INCL is not included, or is included and set
 41 to '0', the base station shall omit this field; otherwise, the
 42 base 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 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 different groups (see [3]).

6 NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer
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 period, in units of 20 ms, minus one, during which
13 the mobile station is to transmit the cell switch sequence on
14 the R-CQICH when it switches between two pilots which are
15 in the same group (see [3]).

16 NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.

17 If PDCH_PARMS_INCL is not included, or is included and set
18 to '0', the base station shall omit this field; otherwise, the
19 base station shall include this field and set it as follows:

20 The base station shall set this field to the duration of the cell
21 switching slots within a switching frame, in units of 1.25 ms
22 as specified in Table 3.7.2.3.2.21-10, during which the mobile
23 station is to transmit the cell switch indication by using
24 Walsh cover of target on the R-CQICH when it switches
25 between two pilots which are in different groups.

26 NUM_SOFTER_SWITCHING_SLOTS - Number of slots per frame for R-CQICH softer
27 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 slots within a switching frame, in units of 1.25 ms
33 as specified in Table 3.7.2.3.2.21-10, during which the mobile
34 station is to transmit the cell switch indication by using
35 Walsh cover of target on the R-CQICH when it switches
36 between two pilots which are in the same group.

37 PDCH_SOFT_SWITCHING_DELAY - F-PDCH soft 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 different groups (see [3]).

46 PDCH_SOFTER_SWITCHING_DELAY - F-PDCH softer switching delay.

- 1 If PDCH_PARAMS_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 include this field and set it as follows:
- 4 The base station shall set this field to the minimum
 5 interruption seen by the mobile station, in units of 10 ms,
 6 minus one, when the mobile station is to transmit the cell
 7 switch sequence on the R-CQICH channel when it switches
 8 between two pilots which are in the same group (see [3]).
- 9 WALSH_TABLE_ID - The index of the Walsh Table used.
- 10 If PDCH_PARAMS_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 The base station shall set this field to the index of the Walsh
 14 Table being used by the Packet Data Channel. (See [3]).
- 15 NUM_PDCCH - The number of Packet Data Control Channels supported.
- 16 If PDCH_PARAMS_INCL is not included, or is included and set
 17 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 '000' if the pilot
 20 supports one Packet Data Control Channel. The base station
 21 shall set this field to '001' if the pilot supports two Packet
 22 Data Control Channels. The base station shall not set this
 23 field to any other value.
- 24 The base station shall include *NUM_PDCCH+1* occurrences of the following one-field record:
- 25 FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code
 26 assignment.
- 27 If PDCH_PARAMS_INCL is not included, or is included and set
 28 to '0', the base station shall omit this field; otherwise, the
 29 base station shall include this field and set it as follows:
- 30 The base station shall set this field to the Walsh code
 31 assignment for the Forward Packet Data Control Channel.
- 32 If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
 33 shall be included first, followed by the Walsh code for
 34 PDCCH1.
- 35 IMSI_10_INCL - IMSI_10 included.
- 36 If CCH_INFO_INCL is set to '1', the base station shall include
 37 this field and set it as follows; otherwise, the base station
 38 shall omit this field.
- 39 If the MNC is a 3-digit number, the base station shall set this
 40 field to '1'; otherwise, the base station shall set this field to '0'.
- 41 IMSI_10 - The least significant digit of MNC when the MNC is a 3-digit
 42 number.

1		If IMSI_10_INCL is not included, or is included and set to '0',
2		the base station shall omit this field; otherwise, the base
3		station shall set this field to the least significant digit of MNC
4		converted to binary by the standard decimal-to-binary
5		conversion as shown in Table 2.3.1.1-1.
6	NEG_SLOT_CYCLE_INDEX_SUP	- Negative slot cycle index supported indicator.
7		The base station shall set this field to '1' if it supports
8		negative values of the preferred slot cycle index
9		(SLOT_CYCLE_INDEX _p); otherwise, the base station shall set
10		this field to '0'.
11	RER_MODE_SUPPORTED	- Radio environment reporting mode supported indicator.
12		If the base station supports radio environment reporting
13		mode, the base station shall set this field to '1'; otherwise, the
14		base station shall set this field to '0'.
15	AUTO_FCSO_ALLOWED	- Autonomous <i>Fast Call Setup Order</i> allowed indicator.
16		The base station shall set this field to '1' if the mobile station
17		is allowed to send an autonomous <i>Fast Call Setup Order</i> ;
18		otherwise, the base station shall set this field to '0'.
19	SENDING_BSPM	- <i>BCMC Service Parameters Message</i> indicator.
20		If the base station is sending the <i>BCMC Service Parameters</i>
21		<i>Message</i> on the Primary Broadcast Control Channel, it shall
22		set this field to '1'; otherwise, it shall set this field to '0'.
23	BSPM_PERIOD_INDEX	- BSPM Transmission Periodicity Index.
24		If the SENDING_BSPM field 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 the BSPM transmission
28		periodicity index corresponding to the periodicity with which
29		the BSPM with DIFF_BSPM equal to '0' is transmitted on the
30		Primary Broadcast Control Channel.
31	REV_PDCH_SUPPORTED	- Reverse Packet Data Channel supported indicator.
32		If FOR_PDCH_SUPPORTED 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		If the base station supports the Reverse Packet Data Channel
36		(R-PDCH), the base station shall set this field to '1'; otherwise,
37		the base station shall set this field to '0'.
38	REV_PDCH_PARAMS_INCL	- Reverse Packet Data Channel related parameters included
39		indicator.
40		If REV_PDCH_SUPPORTED is omitted, or if it is included and
41		set to '0', the base station shall omit this field; otherwise, the
42		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_PARAMS_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 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 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 and
21 set to '0', the base station shall omit this field; otherwise, the
22 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 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 Reverse Packet Data
32 Channel to pilot adjustment gain expressed as a two's
33 complement value in units of 0.125 dB (see [2]).
- 34 REV_PDCH_PARAMS_1_INCL - Reverse Packet Data Channel parameters subset included
35 indicator.
- 36 If REV_PDCH_PARAMS_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_PARAMS_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 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 '0'
 4 (see [3]).
- 5 SDB_IN_RCNM_IND - Short Data Burst allowed in *Reconnect Message* 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 *Reconnect Message*; otherwise, the base station shall set this
 12 field to '0'.
- 13 CAND_BAND_INFO_REQ - Candidate band class information request indicator
 14 If CCH_INFO_INCL is set to '1', the base station shall include
 15 this field and set it as shown below; otherwise, the base
 16 station shall omit this field.
 17 The base station shall set this field to '1' when requesting
 18 mobiles to report whether various candidate band class and
 19 band subclass (if applicable) combinations are supported;
 20 otherwise, the base station shall set this field to '0'.
 21 The base station shall not include more than 16 band class-
 22 band subclass queries in this message.
- 23 NUM_CAND_BAND_CLASS - Number of candidate band classes
 24 If CAND_BAND_INFO_REQ is not included, or is included and
 25 set 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 number of
 28 candidate band classes included in the record minus one.
 29 If CAND_BAND_INFO_REQ is included and set to '1', the base station shall include
 30 NUM_CAND_BAND_CLASS + 1 occurrences of the following record:
- 31 CAND_BAND_CLASS - Candidate band class
 32 The base station shall set this field to a band class (see [30])
 33 for which the mobile is to report it's capabilities upon system
 34 access. It may be used in conjunction with the
 35 BAND_SUBCLASS_IND fields to specify band subclass(es) for
 36 which the mobile is to report it's capabilities upon system
 37 access.
- 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 CAND_BAND_CLASS or if the
 41 base station requires only the band class capabilities of the
 42 mobile station. Otherwise, the base station shall set this field
 43 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 subclass indicator fields included
 8 depends on the highest band subclass being queried for
 9 mobile support for the associated CAND_BAND_CLASS (i.e. if
 10 the highest band subclass being queried 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 Nth field included corresponds to band subclass
 15 'N-1'.
- 16 BAND_SUBCLASS_IND - Band subclass indicator
 17 The base station shall set this field to '1' if it requires the
 18 mobile to report whether it supports this band subclass for
 19 the associated CAND_BAND_CLASS; otherwise, the base
 20 station shall set this field to '0'.
 21 The mobile station is to indicate its capability to support the
 22 candidate band class and band subclass (if applicable)
 23 combination in the *Registration Message*, *Origination Message*,
 24 and *Page Response Message*.
- 25 RESCAN - Rescan indicator.
 26 If mobile stations are to re-initialize and re-acquire the system
 27 upon receiving this message, the base station shall set this
 28 field to '1'; otherwise, the base station shall set this field to '0'.
- 29 TX_PWR_LIMIT_INCL - Transmit Power Limit inclusion for the current base station
 30 If the transmit power limit field is included in this message,
 31 the base station shall set this field to '1'; otherwise, the base
 32 station shall set this field to '0'.
- 33 TX_PWR_LIMIT - Transmit Power Limit for the current base station
 34 If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit
 35 this field; otherwise, the base station shall include this field
 36 and set to as follows.
 37 The base station shall set this field to thirty dB more than
 38 transmit power limit in dBm EIRP, in steps of 1 dB. This field
 39 can take the values 30 to 53 corresponding to maximum
 40 transmit power values 0 dBm to 23 dBm.
- 41 BYPASS_REG_IND - Indication to bypass the power up registration upon the
 42 change of bands, serving systems, and frequency blocks.
 43 The base station shall set this field to '00' if the mobile station
 44 is to perform a power up registration upon band, frequency
 45 block or serving system change.

1 The base station shall set this field to '01' if the mobile station
 2 is to bypass the power up registration requirement upon
 3 band, frequency block or serving system changes due to
 4 processing the *Extended CDMA Channel List Message*.
 5 The base station shall set this field to '10' if the mobile station
 6 is to bypass the power up registration requirement upon
 7 band, frequency block or serving system change when the SID
 8 remains the same.
 9 The base station shall set this field to '11' if the mobile station
 10 is to bypass the power up registration requirement upon
 11 band, frequency block or serving system change.

12 RC_BITMAP_CAPABILITY_EXT_ALLOWED -

13 RC bitmap and Capability Record Extension Indicator.

14 This bit indicates that the base station supports the following:

15 - Processing of Origination Message or Page Response
 16 Message or Status Response Message or Extended Status
 17 Response Message that contain FCH Type-specific Fields
 18 record, or DCCH Type-specific Fields record, or FOR_SCH
 19 Type-Specific Fields record, or REV_SCH Type-Specific
 20 Fields record with a value for FOR_FCH_LEN or
 21 FOR_DCCH_LEN or FOR_SCH_LEN greater than 3 and
 22 REV_FCH_LEN or REV_DCCH_LEN or REV_SCH_LEN
 23 greater than 2.

24 - Processing of any additional fields starting with the
 25 F_SCH_EARLY_TERM_SUPPORTED field in the Capability
 26 Information Record.

27 The base station shall include this field if any fields following
 28 this field are included. If included, the base station shall set
 29 this field to '1'.

30 CRRM_MSG_IND - *Call Recovery Request Message* supported indicator.

31 The base station shall omit this field if the base station does
 32 not need to include any fields following this field and does not
 33 support *Call Recovery Request Message*. Otherwise the base
 34 station shall include this field and set this field as follows:

35 The base station shall set this field to '0' if the mobile station
 36 is not allowed to send a *Call Recovery Request Message*;
 37 otherwise, the base station shall set this field to '1'.

38 APPIM_PERIOD_INDEX - *Access Point Pilot Information Message* transmission frequency.

39 If the AP_PILOT_INFO is not included or is included and set to
 40 0, the base station shall omit this field. Otherwise, the base
 41 station shall include this field if there are any fields following
 42 this field or if the base station needs to set this field to a value
 43 other than '000'.

1		The base station shall set this field to the period index value
2		of <i>Access Point Pilot Information Message</i> . The base station
3		shall set this field value in the range '000' – '101', both
4		inclusive.
5	GEN_OVHD_CYCLE_INDEX	– <i>General Overhead Information Message</i> transmission
6		frequency.
7		If the GEN_OVHD_INF_IND is not included or is included and
8		set to 0, the base station shall omit this field. Otherwise, the
9		base station shall include this field if there are any fields
10		following this field or if the base station needs to set this field
11		to a value other than '000'.
12		The base station shall set this field to the cycle index value of
13		<i>General Overhead Message</i> . The base station shall set this
14		field value in the range '000' – '101', both inclusive.
15	ATIM_CYCLE_INDEX	- <i>Alternative Technologies Information Message</i> transmission
16		frequency.
17		If the ATIM_IND is not included or is included and set to 0,
18		the base station shall omit this field. Otherwise, the base
19		station shall include this field if there are any fields following
20		this field or if the base station needs to set this field to a value
21		other than '000'.
22		The base station shall set this field to the cycle index value of
23		<i>Alternative Technologies Information Message</i> . The base station
24		shall set this field vale in the range '000' – '101', both
25		inclusive.
26	ADD_LOC_INFO_INCL	– Location information included.
27		The base station shall omit this field if the base station does
28		not need to include any fields following this field. Otherwise
29		the base station shall include this field and set this field as
30		follows:
31		The base station shall set this field to '1' to indicate if the
32		LOC_UNC_H, HEIGHT, and LOC_UNC_V fields are included in
33		this message and to indicate if the BASE_LAT and
34		BASE_LONG contain legitimate values, otherwise, the base
35		station shall set this field to '0'.
36	LOC_UNC_H	– Horizontal location uncertainty.
37		If ADD_LOC_INFO_INCL is included and set to '1', the base
38		station shall include this field and set it as shown below;
39		otherwise, the base station shall omit this field.
40		The base station shall set this field to the circular horizontal
41		location uncertainty, as specified in Table 3.7.2.3.2.1-2. The
42		value of this field indicates the radius of a circular 95%
43		confidence coverage area.
44	HEIGHT	– Height.
45		If ADD_LOC_INFO_INCL is included and set to '1', the base
46		station shall include this field and set it as shown below;
47		otherwise, the base station shall omit this field.

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
8 offset for this base station, in units of 64 PN chips.

9 ACC_MSG_SEQ - Enhanced Access Parameters Message sequence number.

10 The base station shall set this field to ACC_CONFIG_SEQ
11 (see 3.6.2.2).

12 RAND - Random challenge value.

13 The base station shall set this field to the random challenge
14 value to be used by mobile stations for authentication.

15

- 1 3.7.2.3.2.33 Enhanced Access Parameters Message
 2 MSG_TAG: EAPM

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)

3

4

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

(continues on next page)

2

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
3
4

PILOT_PN - Pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.

- 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_PARAMS_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_PARAMS_LEN - Length of persistence parameters record.
9 If PSIST_PARAMS_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_PARAMS_LEN and
13 RESERVED fields.
- 14 PSIST(0-9)_EACH - Persistence value for access overload classes 0 through 9.
15 If PSIST_PARAMS_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 '111111'.
- 24 PSIST(10)_EACH - Persistence value for access overload class 10 (test mobile
25 stations).
26 If PSIST_PARAMS_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_PARAMS_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 requests
38 on the Enhanced Access Channel, the base station shall set
39 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_PARAMS_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_PARAMS_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_PARAMS_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_PARAMS_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_PARAMS_LEN and RESERVED
32			fields.
33	ACC_TMO	-	Acknowledgment timeout.
34			The base station shall set this field to one less than the length
35			of time, in units of 20 ms, that a mobile station is to wait to
36			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			If EACH_PREAMBLE_ENABLED is set to '1', the base station shall set this field to the additional preamble duration on an Enhanced Access Channel, in units of 1.25 ms; otherwise, the base station shall omit this field.
2			
3			
4			
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 maximum number of slots a mobile station is to delay due to random backoff between consecutive enhanced access probes.
9			
10			
11			
12	EACH_BKOFF	-	Enhanced Access Channel probe sequence backoff range.
13			The base station shall set this field to one less than the maximum number of slots a mobile station is to delay due to random backoff between successive enhanced access probe sequences.
14			
15			
16			
17	EACH_SLOT	-	Slot duration for the Enhanced Access Channels.
18			The base station shall set this field to N where the slot duration of the Enhanced Access Channel is $(N+1) \times 1.25$ ms.
19			The base station shall set this field to a value between 0 and 63.
20			
21			
22	EACH_SLOT_OFFSET1	-	First slot offset for the Enhanced Access Channels.
23			The base station shall set this field so that the Enhanced Access Channel has a slot offset equal to $(EACH_ID \times EACH_SLOT_OFFSET2 + EACH_SLOT_OFFSET1) \bmod (EACH_SLOT+1)$, where EACH_ID is the Enhanced Access Channel Index. The base station shall set this field to a value between 0 and 63, in units of 1.25 ms.
24			
25			
26			
27			
28			
29	EACH_SLOT_OFFSET2	-	Relative slot offset for the Enhanced Access Channels.
30			The base station shall set this field so that the Enhanced Access Channel has a slot offset equal to $(EACH_ID \times EACH_SLOT_OFFSET2 + EACH_SLOT_OFFSET1) \bmod (EACH_SLOT+1)$, where EACH_ID is the Enhanced Access Channel Index. The base station shall set this field to a value between 0 and 63, in units of 1.25 ms.
31			
32			
33			
34			
35			
36	RESERVED	-	Reserved bits.
37			The base station shall include as many bits as required to make the length of the mode-specific parameters record an integral number of octets. The base station shall set each of these bits to '0'.
38			
39			
40			
41	BA_PARMS_LEN	-	Length of Basic Access Mode parameter record.

1 The base station shall set this field to the total length, in
 2 octets, of Basic Access Mode parameters record included in
 3 the message, excluding the BA_PARMS_LEN but including the
 4 RESERVED fields. If there are no fields other than the
 5 BA_PARMS_LEN in this record, the base station shall set this
 6 field to '000'.

7 NUM_EACH_BA - Number of Enhanced Access Channels used for the Basic
 8 Access Mode.

9 If BA_PARMS_LEN is equal to '000', the base station shall
 10 omit this field; otherwise, the base station shall include this
 11 field and set it to the number of Enhanced Access Channels
 12 used for the Basic Access mode minus one.

13 EACH_BA_RATES_SUPPORTED - Supported rate words for the Basic Access mode on
 14 the Enhanced Access Channels.

15 If BA_PARMS_LEN is equal to '000', the base station shall
 16 omit this field; otherwise, the base station shall include this
 17 field and set each subfield of the
 18 EACH_BA_RATES_SUPPORTED field as follows: the base
 19 station shall set the subfield to '1' if the corresponding mode
 20 in Table 3.7.2.3.2.33-3 is allowed; otherwise the base station
 21 shall set the subfield to '0'.

22

23

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

24

25 RESERVED - Reserved bits.

26 If BA_PARMS_LEN is equal to '000', the base station shall
 27 omit this field; otherwise, the base station shall include as
 28 many bits as required to make the length of the Basic Access
 29 Mode record (excluding the BA_PARMS_LEN field but
 30 including the RESERVED field) an integral number of octets.
 31 The base station shall set each of these bits to '0'.

32 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 station
31 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 field
43 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 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 Channel
 44 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 *R-EACH Header*, for which a mobile station is to wait for the
 6 *Early Acknowledgment Channel Assignment Message* 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 base station shall include this
 19 field; otherwise the base station shall omit this field.
 20 If included, the base station shall set this field to:
- 21
$$\lfloor -20 \times \log_{10} \textit{pilot_threshold} \rfloor$$
- 22 where *pilot_threshold* is the pilot E_c/I_0 threshold used to determine whether the mobile
 23 station requests Reverse Common Control Channel in soft handoff.
 24 This is a positive value in units of 0.5 dB.
- 25 EACAM_PCCAM_DELAY - Maximum time after an Enhanced Access Channel header
 26 transmission for receiving a response on the Common
 27 Assignment Channel when Reverse Common Control Channel
 28 soft handoff has been requested.
- 29 If RCCCH_HO_SUPPORTED is included and is set to '1', the
 30 base station shall include this field; otherwise the base
 31 station shall omit this field.
- 32 If included, the base station shall set this field to the number
 33 of complete Common Assignment Channel frames minus one,
 34 from the end of the *R-EACH Header*, for which a mobile
 35 station is to wait for the *Early Acknowledgment Channel*
 36 *Assignment Message* and *Power Control Channel Assignment*
 37 *Message* if the mobile station has requested Reverse Common
 38 Control Channel soft handoff (see [3]).
- 39 NUM_CPCCH - Number of Common Power Control 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 it to the number of Common Power Control
 43 Channels supported minus one.
- 44 CPCCH_RATE - Power control rate for the Common Power 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 to the value shown in Table 3.7.2.3.2.33-4
 4 corresponding to the power control rate for the Common
 5 Power Control Channels.

6
 7

Table 3.7.2.3.2.33-4. CPCCH Power Control Rate

CPCCH_RATE (Binary)	Power Control Rate
00	200 bps
01	400 bps
10	800 bps
11	Reserved

8

9 If RA_PARMS_LEN is not equal to '00000', the base station shall include (NUM_CPCCH + 1)
 10 occurrences of the following one field record:

- 11 CPCCH_CODE_CHAN - Code channel index for the Common Power Control Channel.
 12 The base station shall set this field to the code channel index
 13 (see [2]) in the range 1 to 127 inclusive that the mobile station
 14 is to use on the Common Power Control Channel.
- 15 NUM_PCSCH_RA - Number of Power Control Subchannels used for the
 16 Reservation Access Mode.
 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 to the number of Power Control Subchannels
 20 used for the Reservation Access Mode minus one.
- 21 RESERVED - Reserved bits.
 22 If RA_PARMS_LEN is equal to '00000', the base station shall
 23 omit this field; otherwise, the base station shall include as
 24 many bits as required to make the length of the Reservation
 25 Access Mode record (excluding the RA_PARMS_LEN but
 26 including the RESERVED field) an integral number of octets.
 27 The base station shall set each of these bits to '0'.
- 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 emergency
 37 calls indicator.

1 If ACCT_INCL is set to '0', the base station shall omit this
2 field; otherwise, the base station shall include this field and
3 set it as follows:

4 The base station shall set this field to '0' if the mobile station
5 is not to apply ACCT to a call that is recognized by the mobile
6 station to be an emergency call; otherwise, the base station
7 shall set this field to '1'.

8 ACCT_AOC_BITMAP_INCL - Access Control based on Call Type (ACCT) access overload
9 class bitmap included indicator.

10 If ACCT_INCL 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 '0' if all mobile stations
14 are to apply ACCT regardless of their access overload classes;
15 otherwise, the base station shall set this field to '1' to indicate
16 that the mobile station is to apply ACCT according to its
17 access overload class.

18 ACCT_SO_INCL - Access Control based on Call Type (ACCT) service option
19 included indicator.

20 If ACCT_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 '1' if at least one
24 occurrence of the ACCT_SO field is included in this message;
25 otherwise, the base station shall set this field to '0'.

26 NUM_ACCT_SO - Number of service options for Access Control based on Call
27 Type (ACCT).

28 If ACCT_SO_INCL is not included, or is included and set to '0',
29 then the base station shall omit this field; otherwise, the base
30 station shall include this field and set it to one less than the
31 number of occurrences of the ACCT_SO field included in this
32 message.

33 If ACCT_SO_INCL is included and set to '1', then the base station shall include
34 NUM_ACCT_SO + 1 occurrences of the following variable-field record:

35 ACCT_AOC_BITMAP1 - Access Control based on Call Type (ACCT) access overload
36 class bitmap.

37 If ACCT_AOC_BITMAP_INCL is set to '0', then the base station
38 shall omit this field; otherwise, the base station shall include
39 this field and set it as follows:

40 This field consists of the subfields defined in Table
41 3.7.2.3.2.2-1.

42 The base station shall set a subfield to '1' to indicate that
43 mobile stations having the corresponding access overload
44 class are not permitted to perform access attempts using the
45 associated service option ACCT_SO; otherwise, the base
46 station shall set the subfield to '0'.

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

RADIO_INTERFACE_TYP E (binary)	Descriptions
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 the Radio Interface Type-specific fields of this record.

4

5 If RADIO_INTERFACE_TYPE is equal to '0000', the base station shall include the following
6 fields:

Field	Length (bits)
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_NGHBR	6

NUM_NGHBR occurrences of the following subrecord:

{ (NUM_NGHBR)

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 × 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)
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PILOT_INC - Pilot PN sequence offset index increment.

A mobile station searches for Remaining-Set pilots at pilot PN sequence 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 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.

The base station shall set this field to a value in the range 1 to 15 inclusive.

NGHR_SRCH_MODE - Search mode.

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.

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

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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_NGHBR field is included in the following
11			records, the base station shall set this bit to '1'; otherwise, the
12			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 base
34			station shall omit this field.
35			The base station shall set this field to the duration of the base
36			station transmit window, during each period, in units of 80
37			ms. The base station should set this field to a value of 3 or
38			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

1 The base station shall include one occurrence of the following subrecord for each pilot that
 2 a mobile station is to place in its Neighbor Set.

3 NGHBR_CONFIG - Neighbor configuration.

4 The base station shall set this field to the value shown in
 5 Table 3.7.2.3.2.34-3 corresponding to the configuration of this
 6 neighbor.

7 **Table 3.7.2.3.2.34-3. Neighbor Configuration Field**

Value (binary)	Neighbor Configuration
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"> • If FREQ_INCL equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • If FREQ_INCL equals '1' for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ. <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 NGHBR_PILOT_REC_TYPE is included in this message, then neighbor pilot type is as specified in NGHBR_PILOT_REC_TYPE; otherwise, the neighbor pilot is a 1X common pilot.</p>

Value (binary)	Neighbor Configuration
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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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>

Value (binary)	Neighbor Configuration
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"> • 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. • 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>. <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"> • 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. • 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.

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"> • If <code>FREQ_INCL</code> equals '0' for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment. • 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>. <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.

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- `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.
- `BCCH_SUPPORT` - BCCH support indicator.

If the `NGHBR_CONFIG` field is not set to '011', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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'.
- `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 the NGHBR_PILOT_REC_TYPE and
 3 RECORD_LEN fields are included. The base station shall set
 4 this field to '0' if the corresponding pilot is the common pilot
 5 and there is no additional pilot information included.

6 NGHBR_PILOT_REC_TYPE - Neighbor Pilot record type

7 If ADD_PILOT_REC_INCL is set to '1', the base station shall
 8 set this field to the NGHBR_PILOT_REC_TYPE value shown in
 9 Table 3.7.2.3.2.34-4 corresponding to the type of Pilot Record
 10 specified by this record.

11

12

Table 3.7.2.3.2.34-4. Neighbor Pilot Record Types

Description	NGHBR_PILOT_REC_TYP E (binary)
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	

13

14 If ADD_PILOT_REC_INCL is set to '0', the base station shall
 15 omit this field.

16 RECORD_LEN - Pilot record length.

17 If ADD_PILOT_REC_INCL is set to '1', the base station shall
 18 set this field to the number of octets in the type-specific fields
 19 of this pilot record.

20 If ADD_PILOT_REC_INCL is set to '0', the base station shall
 21 omit this field.

22 Type-specific fields - Pilot record type-specific fields.

23 If ADD_PILOT_REC_INCL is set to '1', the base station shall
 24 include type-specific fields based on the
 25 NGHBR_PILOT_REC_TYPE of this pilot record.

26 If ADD_PILOT_REC_INCL is set to '0', the base station shall
 27 omit this field.

28

29 If NGHBR_PILOT_REC_TYPE is equal to '000', the base station shall include the following
 30 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 level relative to that of the Forward Pilot Channel as specified in Table 3.7.2.3.2.26-4.

5

6

7

TD_MODE - Transmit Diversity mode.

8

The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

9

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 fields:

13

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-orthogonal function (see [2]).

17

18

WALSH_LENGTH - Length of the Walsh Code.

19

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.

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AUX_PILOT_WALSH - Walsh Code for the Auxiliary Pilot.

24

The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot.

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RESERVED - Reserved bits.

27

The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

28

29

1 If NGHBR_PILOT_REC_TYPE is equal to '010', the base station shall include the following
2 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)

- 4
- 5 QOF - Quasi-orthogonal function index for the Auxiliary Transmit
6 Diversity Pilot.
7 The base station shall set this field to the index of the Quasi-
8 orthogonal function (see [2]).
- 9 WALSH_LENGTH - Length of the Walsh Code.
10 The base station shall set this field to the WALSH_LENGTH
11 value shown in 3.7.2.3.2.22-6 corresponding to the length of
12 the Walsh code for the pilots that are used as Auxiliary pilot
13 in the transmit diversity mode.
- 14 AUX_WALSH - Walsh Code for the Auxiliary Pilot.
15 The base station shall set this field to the Walsh code
16 corresponding to the Auxiliary Pilot.
- 17 AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot Power Level.
18 The base station shall set this field to the Auxiliary Transmit
19 Diversity Pilot transmit power level relative to that of the
20 Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.
- 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 all the bits of this field to '0' to
26 make the entire record octet-aligned.

27 If NGHBR_PILOT_REC_TYPE is equal to '011', the base station shall include the following
28 fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

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- 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.

If NGHBR_PILOT_REC_TYPE is equal to '100', the base station shall include the following 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.
- 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 frequency
15			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 of
31			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			

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Table 3.7.2.3.2.34-5. Search Priority Field

Value (binary)	Search Priority
00	Low
01	Medium
10	High
11	Very High

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SRCH_WIN_NGHBR - Neighbor pilot channel search window size.

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If NGHBR_SRCH_MODE = '10' or NGHBR_SRCH_MODE = '11', the base station shall include the field SRCH_WIN_NGHBR and shall set this field as described below; otherwise, the base station shall omit this field.

8

9

10

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.

11

SRCH_OFFSET_NGHBR - Neighbor pilot channel search window size offset.

12

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If SRCH_OFFSET_INCL equals to '1', then the base station shall include the field SRCH_OFFSET_NGHBR and shall set this field as described below; otherwise, the base station shall omit this field.

16

17

18

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.

19

FREQ_INCL - Frequency included indicator.

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21

22

23

If FREQ_FIELDS_INCL is set to '1', the base station shall include the field FREQ_INCL and shall set this field as described below; otherwise, the base station shall omit this field.

24

25

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28

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'.

29

NGHBR_BAND - Neighbor band class.

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33

If the FREQ_INCL field is included and is set to '1', the base station shall include the field NGHBR_BAND and shall set this field as described below; otherwise, the base station shall omit this field.

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38

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 Broadcast Control Channel/Forward Common Control Channel the mobile station is to search.

- 1 NGHBR_FREQ - Neighbor frequency assignment.
- 2 If the FREQ_INCL field is omitted or is set to '0', the base
- 3 station shall omit this field.
- 4 If the FREQ_INCL field is included and is set to '1' and the
- 5 corresponding neighbor has a 1X neighbor pilot record type,
- 6 the base station shall set this field to the CDMA Channel
- 7 number, in the specified CDMA band class, corresponding to
- 8 the CDMA frequency assignment for the CDMA Channel
- 9 containing the Broadcast Control Channel/Forward Common
- 10 Control Channel the mobile station is to search.
- 11 If the FREQ_INCL field is included and is set to '1' and the
- 12 corresponding neighbor has a 3X neighbor pilot record type,
- 13 the base station shall set this field to the CDMA Channel
- 14 number, in the specified CDMA band class, corresponding to
- 15 the center SR3 frequency assignment containing the
- 16 Broadcast Control Channel/Forward Common Control
- 17 Channel the mobile station is to search.
- 18 TIMING_INCL - Timing included indicator.
- 19 If USE_TIMING is set to '1', the base station shall include the
- 20 field TIMING_INCL and set this field as described below;
- 21 otherwise, the base station shall omit this field.
- 22 If base station timing information is included for this neighbor
- 23 base station, the base station shall set this field to '1';
- 24 otherwise, the base station shall set this field to '0'.
- 25 NGHBR_TX_OFFSET - Neighbor transmit time offset.
- 26 If TIMING_INCL is included and is set to '1', the base station
- 27 shall include the field NGHBR_TX_OFFSET and shall set this
- 28 field as described below; otherwise, the base station shall
- 29 omit this field.
- 30 The base station shall set this field to the time offset, in units
- 31 of 80 ms, from the beginning of the neighbor timing period to
- 32 the beginning of the first base station transmit window within
- 33 the period. The beginning of the neighbor timing period
- 34 occurs when $\lfloor t/4 \rfloor \bmod (16384) = 0$.
- 35 NGHBR_TX_DURATION - Neighbor transmit time duration.
- 36 If TIMING_INCL is included and is set to '1' and
- 37 GLOBAL_TIMING_INCL is set to '0', the base station shall
- 38 include the field NGHBR_TX_DURATION and shall set this
- 39 field as described below; otherwise, the base station shall
- 40 omit this field.
- 41 The base station shall set this field to duration of the base
- 42 station transmit window, during each period, in units of
- 43 80 ms. The base station should set this field to a value of 3 or
- 44 greater.
- 45 NGHBR_TX_PERIOD - Neighbor transmit time period.

1 If TIMING_INCL is included and is set to '1' and
 2 GLOBAL_TIMING_INCL is set to '0', the base station shall
 3 include the field NGHBR_TX_PERIOD and shall set this field
 4 as described below; otherwise, the base station shall omit this
 5 field.

6 The base station shall set this field to duration of the period,
 7 in units of 80 ms.

8 ACCESS_ENTRY_HO - Access entry handoff permitted when entering the System
 9 Access State.

10 If NGHBR_SET_ENTRY_INFO is equal to '1', the base station
 11 shall include the field ACCESS_ENTRY_HO and shall set this
 12 field as described below; otherwise, the base station shall
 13 omit this field.

14 The base station shall set this field to '1' if the mobile station
 15 is permitted to perform an access entry handoff to the base
 16 station associated with the corresponding pilot between the
 17 time it receives a message on the Paging Channel when in the
 18 *Mobile Station Idle State* and it enters the *System Access State*
 19 to respond to the message; otherwise, the base station shall
 20 set this field to '0'.

21 ACCESS_HO_ALLOWED - Access handoff and access probe handoff permitted for the
 22 corresponding pilot while in the *System Access State*.

23 If NGHBR_SET_ACCESS_INFO is equal to '1', the base station
 24 shall include the field ACCESS_HO_ALLOWED and shall set
 25 this field as described below; otherwise, the base station shall
 26 omit this field.

27 The base station shall set this field to '1' if the mobile station
 28 is permitted to perform an access handoff or access probe
 29 handoff to the base station associated with the corresponding
 30 pilot when the mobile station is in the *System Access State*
 31 (see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall
 32 set this field to '0'.

33 The base station shall set this field to '0' if this pilot does not
 34 support a Reverse Enhanced Access Channel (R-EACH).

35 RESQ_ENABLED - Call rescue feature enabled indicator.

36 The base station shall set this field to '1' if the call rescue
 37 feature is enabled and there is at least one occurrence of
 38 NGHBR_RESQ_CONFIGURED set to '1' in this message;
 39 otherwise, the base station shall set this field to '0'.

40 RESQ_DELAY_TIME - Call rescue delay timer value.

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 as follows:

- 1 The base station shall set this field to the value of the call
2 rescue delay timer to be used by the mobile station, in units
3 of 80 ms.
- 4 RESQ_ALLOWED_TIME – Call rescue allowed timer value.
5 If RESQ_ENABLED is set to '0', the base station shall omit
6 this field; otherwise, the base station shall include this field
7 and set it as follows:
8 The base station shall set this field to the value of the call
9 rescue allowed timer to be used by the mobile station, in
10 units of 80 ms.
- 11 RESQ_ATTEMPT_TIME – Call rescue attempt timer value.
12 If RESQ_ENABLED 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 call
16 rescue attempt timer to be used by the mobile station, in
17 units of 40 ms.
- 18 RESQ_CODE_CHAN – Code channel index for the Rescue Channel.
19 If RESQ_ENABLED 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 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 Fundamental Channel when attempting Call Rescue Soft
25 Handoff with the associated neighbor pilot.
26 If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
27 station shall set this field in the range 1 to 63 inclusive. If
28 Radio Configuration 4, 6, 8, 11, or 12 is used, the base
29 station shall set this field in the range 1 to 127 inclusive. If
30 Radio Configuration 7 or 9 is used, the base station shall set
31 this field in the range 1 to 255 inclusive.
- 32 RESQ_QOF – Quasi-Orthogonal Function mask identifier for the Rescue
33 Channel.
34 If RESQ_ENABLED is 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 quasi-orthogonal
38 function mask identifier (see [2]) that the mobile station is to
39 use on the Forward Fundamental Channel when attempting
40 Call Rescue Soft Handoff with the associated neighbor pilot.
- 41 RESQ_MIN_PERIOD_INCL – Minimum time between consecutive rescues included
42 indicator.
43 If RESQ_ENABLED 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 '1' if the
2 RESQ_MIN_PERIOD field is included in this message;
3 otherwise, the base station shall set this field to '0'.

4 This field is set to '0' if there is no minimum time restriction
5 between consecutive rescues.

6 RESQ_MIN_PERIOD – Minimum time between consecutive rescues.

7 If RESQ_MIN_PERIOD_INCL is not included, or is included
8 and set to '0', the base station shall omit this field; otherwise,
9 the base station shall include this field and set it as follows:

10 The base station shall set this field to one less than the
11 minimum time after a successful call rescue (i.e. receipt of
12 N_{3m} good frames by the mobile station after the rescue
13 attempt timer is enabled) before any subsequent call rescue
14 attempts can be initiated, in units of 2 seconds.

15 RESQ_NUM_TOT_TRANS_INCL – The required number of transmissions before declaring
16 L2 Acknowledgment Failure when Call Rescue is enabled
17 included indicator.

18 If RESQ_ENABLED 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 If the required number of transmissions of a regular PDU and
22 mini PDU before declaring L2 Acknowledgment Failure when
23 Call Rescue is enabled is included in this message, the base
24 station shall set this field to '1'; otherwise, the base station
25 shall set this field to '0'.

26 RESQ_NUM_TOT_TRANS_20MS – The required number of transmissions of a regular
27 PDU before declaring L2 Acknowledgment Failure when Call
28 Rescue is enabled.

29 If RESQ_NUM_TOT_TRANS_INCL field is not included or is
30 included and is 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 the required number of
34 transmissions of a regular PDU before declaring L2
35 Acknowledgment Failure when Call Rescue is enabled.

36 The base station shall not set this field to a value greater than
37 N_{1m}.

38 RESQ_NUM_TOT_TRANS_5MS – The required number of transmissions of a mini PDU
39 before declaring L2 Acknowledgment Failure when Call
40 Rescue is enabled.

41 If RESQ_NUM_TOT_TRANS_INCL field is not included or is
42 included 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:

- 1 The base station shall set this field to the required number of
2 transmissions of a mini PDU before declaring L2
3 Acknowledgment Failure when Call Rescue is enabled.
- 4 The base station shall not set this field to a value greater than
5 N_{15m} .
- 6 RESQ_NUM_PREAMBLE_RC1_RC2 – The Traffic Channel preamble length for Call
7 Rescue Soft Handoff when operating in Radio Configuration 1
8 or 2.
- 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 to the length of Traffic Channel preamble, in 20 ms
12 units, that the mobile station is to send when performing a
13 call rescue soft handoff.
- 14 RESQ_NUM_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft
15 Handoff when operating in Radio Configuration greater than
16 2.
- 17 If RESQ_ENABLED is set to '0', the base station shall omit
18 this field; otherwise, the base station shall include this field
19 and set it to the length of Traffic Channel preamble that the
20 mobile station is to send when performing a call rescue soft
21 handoff, as follows:
- 22 The base station shall set this field to the value shown in
23 Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel
24 preamble length in 1.25 ms units.
- 25 RESQ_POWER_DELTA – The power level adjustment to be applied to the last closed-
26 loop power level when re-enabling the transmitter for call
27 rescue soft handoff.
- 28 If RESQ_ENABLED is set to '0', the base station shall omit
29 this field; otherwise, the base station shall set this field to a
30 value by which mobile stations are to adjust the last closed-
31 loop power level when re-enabling the transmitter for call
32 rescue, expressed as a two's complement value in units of
33 1 dB.
- 34 The base station shall include NUM_NGHBR occurrences of the following one-field record if
35 RESQ_ENABLED is set to '1'. The base station shall use the same order for the following
36 field as is used for the NGHBR_PN fields listed in this message.
- 37 NGHBR_RESQ_CONFIGURED – Neighbor Rescue Channel configured indicator.
- 38 The base station shall set this field to '1' if a Rescue Channel
39 is configured for this neighbor pilot; otherwise, the base
40 station shall set this field to '0'.
- 41 The base station shall include NUM_NGHBR occurrences of the following variable length
42 record. The base station shall use the same order for the following field as is used for the
43 NGHBR_PN fields listed in this message.
- 44 NGHBR_PDCH_SUPPORTED – Neighbor PDCH supported indicator.

1 The base station shall set this field to '1' if PDCH is
 2 configured for this neighbor pilot; otherwise, the base station
 3 shall set this field to '0'.

4 RESERVED - Reserved bits.

5 The base station shall add reserved bits as needed in order to
 6 make the length of the entire RADIO_INTERFACE_TYPE
 7 record equal to an integer number of octets. The base station
 8 shall set these bits to '0'.

9

10 If RADIO_INTERFACE_TYPE is equal to '0010', the base station shall include the following
 11 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)

12 NUM_HRPD_NGHBR - Number of neighbor pilot PN sequences.

13 The base station shall set this field to the number of HRPD
 14 neighbors included in the message.

15 The base station shall include one occurrence of the following subrecord for each pilot that
 16 a mobile station is to place in its HRPD Neighbor Set.

17 HRPD_NGHBR_REC_LEN - HRPD neighbor record length

18 The base station shall set this field to one less than the
 19 number of octets included in this HRPD neighbor record
 20 including this field.

21 NGHBR_PN - Neighbor pilot PN sequence offset index.

22 The base station shall set this field to the pilot PN sequence
 23 offset for this neighbor, in units of 64 PN chips.

24 NGHBR_FREQ_INCL - Neighbor frequency information included indicator.

1 The base station shall set this field to '1' if the neighbor
2 frequency information is included in this message; otherwise,
3 the base station shall set this field to '0'.

4 NGHBR_BAND - Neighbor band class.

5 If the NGHBR_FREQ_INCL field 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 the CDMA band class,
9 as specified in [30], corresponding to the CDMA frequency
10 assignment for the CDMA Channel containing this neighbor.

11 NGHBR_FREQ - Neighbor frequency assignment.

12 If the NGHBR_FREQ_INCL 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 the CDMA Channel
16 number, in the specified CDMA band class, corresponding to
17 the CDMA frequency assignment for this neighbor.

18 PN_ASSOCIATION_IND - Neighbor PN association indicator.

19 The base station shall set this field to '1' if the system identified by
20 this system record has the same PN assignment as the 1x system to
21 which this BS belongs; otherwise, the base station shall set this field
22 to '0'.

23 DATA_ASSOCIATION_IND - Neighbor data association indicator.

24 The base station shall set this field to '1' if the system identified by
25 this system record can reach the same set of PDSNs as the 1x
26 system to which this BS belongs; otherwise, the base station shall
27 set this field to '0'.

28 HRPD_NGHBR_REC_RESERVED - HRPD neighbor record reserved bits.

29 The base station shall add reserved bits as needed in order to make
30 the length of this record equal to an integer number of octets. The
31 base station shall set these bits to '0'.

32

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

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- C_SIG_ENCRYPT_MODE - Common channel encryption mode indicator.
 The base station shall set this field to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1.
- ENC_KEY_SIZE - Key size used for user information and signaling encryption
 If C_SIG_ENCRYPT_MODE is equal to '001', or '010', the base station shall include this field and set this field to the encryption key_size as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.
- MSG_INT_INFO_INCL - Message integrity information included indicator
 The base station shall set this field to '1' if the base station supports message integrity; otherwise, the base station shall set this field to '0'.
- CHANGE_KEYS - Change keys indicator
 If MSG_INT_INFO_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' to command the mobile station not to update the encryption key and integrity key. The base station shall set this field to '1' to command the mobile station to update the encryption key and integrity key to the latest being generated.
- USE_UAK - Use UAK indicator
 If MSG_INT_INFO_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:
 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.

1 3.7.2.3.2.36 Universal Page Message

2 MSG_TAG: UPM

3 When Layer 3 at the base station sends a PDU corresponding to the *Universal Page*
 4 *Message* to Layer 2, it also sends the UPM Common fields to Layer 2. These UPM Common
 5 fields and PDUs are used by Layer 2 to assemble the Layer 2 PDU or PDUs corresponding
 6 to the *Universal Page Message* (see [4]).

7 UPM Common Fields:

8

Field	Length (bits)
CONFIG_MSG_SEQ	6
ACC_MSG_SEQ	6
READ_NEXT_SLOT	1
READ_NEXT_SLOT_BCAST	1

9

10 PDU Format for a mobile station-addressed page:

11

Field	Length (bits)
SERVICE_OPTION	16
ADD_MS_RECORD	0 or 8 × EXT_MS_SDU- _LENGTH (see [4])

12

13 PDU Format for a mobile station-directed message announcement: There are no Layer 3
 14 fields associated with this record.

15

16 PDU Format for an enhanced broadcast page:

17

Field	Length (bits)
BCN	3
TIME_OFFSET	10
REPEAT_TIME_OFFSET	0 or 5
ADD_BCAST_RECORD	0 or 8 × EXT_BCAST_ SDU_LENGTH (see [4])

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- CONFIG_MSG_SEQ** - Configuration message sequence number.

The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).
- ACC_MSG_SEQ** - Access parameters message sequence number.

The base station shall set this field to ACC_CONFIG_SEQ (see 3.6.2.2).
- READ_NEXT_SLOT** - Pages carried into next slot indicator.

If all messages and records directed to mobile stations operating in the slotted mode and active in this slot, are included in this slot, the base station shall set this field to '0'; otherwise, the base station shall set this field to '1'.
- READ_NEXT_SLOT_BCAST** - Enhanced Broadcast Pages carried into next slot indicator.

If all enhanced broadcast pages directed to mobile stations operating in the slotted mode and active in this slot to receive enhanced broadcast pages are included in this slot, the base station shall set this field to '0'; otherwise, the base station shall set this field to '1'.
- SERVICE_OPTION** - Service option.

The base station shall set this field to the service option code shown in [30], corresponding to the requested service option.
- ADD_MS_RECORD** - Additional mobile station-addressed information record.

The base station shall omit this field if EXT_MS_SDU_LENGTH_INCL (see [4]) is set to '0'; otherwise, the base station shall include EXT_MS_SDU_LENGTH (see [4]) octets in this field.
- BCN** - Broadcast Control Channel Number.

If NUM_BCCH_BCAST is equal to '000', base station shall set this field to '000' and this field is to be ignored by the mobile station.

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)
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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_NGHBR	6

NUM_NGHBR occurrences of the following variable length record

{ (NUM_NGHBR)

NGHBR_RECORD_LEN	4
NGHBR_PN	9
NGHBR_BCMC_CONFIG	3
NGHBR_BSR_ID	0 or 3
NGHBR_FSCH_BAND_CLASS_INCL	0 or 1
NGHBR_FSCH_BAND_CLASS	0 or 5
NGHBR_FSCH_CDMA_FREQ_INCL	0 or 1
NGHBR_FSCH_CDMA_FREQ	0 or 11
NGHBR_FSCH_CODE_CHAN_INCL	0 or 1
NGHBR_FSCH_CODE_CHAN	0 or 11
NGHBR_FSCH_PARS_INCL	0 or 1
NGHBR_FSCH_PLCM_IND	0 or 1
NGHBR_FSCH_PLCM_INDEX	0 or 8
NGHBR_FSCH_MUX_OPTION	0 or 16
NGHBR_FSCH_RC	0 or 5
NGHBR_FSCH_CODING	0 or 1
NGHBR_FSCH_OUTERCODE_INCL	0 or 1
NGHBR_FSCH_OUTERCODE_RATE	0 or 3
NGHBR_FSCH_OUTERCODE_OFFSET	0 or 6
NGHBR_FSCH_NUM_BITS_INDX	0 or 4
NGHBR_FSCH_FRAME_40_USED	0 or 1
NGHBR_FSCH_FRAME_80_USED	0 or 1

1

Field	Length (bits)
NGHBR_RECORD_RESERVED	0-7 (as needed)
<i>} (NUM_NGHR)</i>	
<i>} (NUM_LPM_ENTRIES)</i>	
<i>} (NUM_FLOW_DISCRIMINATOR+1) or 1</i>	
<i>} (NUM_BCMC_PROGRAMS+1)</i>	
BCMC_NUM_BCCH_NGHR	3
<i>BCMC_NUM_BCCH_NGHR occurrences of the following variable length record</i>	
<i>{ (BCMC_NUM_BCCH_NGHR)</i>	
BCMC_BCCH_NGHR_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_NO N_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
<i>} (BCMC_NUM_BCCH_NGHR)</i>	

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

BSPM_MSG_SEQ - BSPM sequence number.

7

The base station shall set this field to the BCMC Service Parameters Message sequence number.

8

9

BSPM_COMMON_RECORD_LEN - BSPM common part record length.

1 **Table 3.7.2.3.2.38-1. Value of Frequency change registration timer**

FREQ_CHG_REG_TIMER Value (binary)	Timer Length (Minutes)
000	Reserved
001	1
010	2
011	5
100	10
101	20
110	30
111	60

2
3 **REGISTRATION_REQ_FLAG_INCL** - Registration Required Flag Included.

4 The base station shall set this field to '1' if the registration is
5 required for at least one BCMC flow listed in this
6 message; otherwise the base station shall set this field to '0'.

7 **REGISTRATION_REQ_TIMER_PERIOD** - Registration Required Timer Period.

8 If REGISTRATION_REQ_FLAG_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 to log (base 2) of the maximum
11 value of the BCMC registration required timer divided by 80
12 msec.

13 **BCMC_ON_TRAFFIC_SUP** - BCMC on traffic channel supported indicator.

14 The base station shall set this field to '1' to indicate that the
15 BCMC feature is supported on traffic channel; otherwise, the
16 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 Registration Message, Origination Message, or Page Response
21 Message for at least one of the BCMC flows included in this
22 message; otherwise, the base station shall set this field to '0'.

23 **NON_DEFAULT_VALUE_INCLUDED** - Non-default values for Authorization signature
24 included indicator.

25 If the AUTH_SIGNATURE_REQUIRED field is set to '0', the
26 base station shall omit this field; otherwise, the base station
27 shall include this field and set it as follows:

1 **Table 3.7.2.3.2.38-2. Forward Supplemental Channel PLCM scheme used**

FSCH_PLCM_SCHEME_IND (binary)	PLCM scheme used
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

2
3 NUM_BCMC_PROGRAMS- Number of BCMC Programs.

4 The base station shall set this field to the number of BCMC
5 programs available in this base station in any one of the
6 frequencies minus one.

7 USE_TIME - Use action time indicator.

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 '0', the base station shall omit
13 this field; otherwise, the base station shall include this field
14 and shall set it to the System Time in units of 80 ms (modulo
15 64) at which this message takes effect.

16 FRAMING_TYPE - Framing type.

17 The base station shall set this field as specified in Table
18 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

FRAMING_TYPE (binary)	Framing type used
00	HDLC-like
01	Segment-based
10	Reserved
11	Reserved

2

FCS_LENGTH - FCS Length.

3

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:

4

5

6

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.

7

8

9

Table 3.7.2.3.2.38-8. FCS_LENGTH values

FCS_LENGTH (binary)	Length of FCS (bits)
00	0
01	16
10	Reserved
11	Reserved

10

BSPM_COMMON_RECORD_RESERVED- BSPM common part record reserved bits.

11

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'.

12

13

14

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

The base station shall set this field to one less the number of octets included in this Forward Supplemental Channel record including this field.

19

20

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 Channel.
19			If the FSCH_CDMA_FREQ_INCL field is set to '0', 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 CDMA Channel
23			number corresponding to the CDMA frequency assignment for
24			the CDMA Channel containing this Forward Supplemental
25			Channel.
26	FSCH_CODE_CHAN	-	Code channel index of the Forward Supplemental Channel.
27			The base station shall set this field to the code channel index
28			of this Forward Supplemental Channel as specified in [2].
29	FSCH_PLCM_IND	-	Forward Supplemental Channel Public Long Code Mask
30			Scheme Indicator.
31			If the FSCH_PLCM_SCHEME_IND field is not set to '10', the
32			base station shall omit this field; otherwise, the base stations
33			shall include this field and set it as follows:
34			If the index to generate PLCM for this Forward Supplemental
35			Channel is signaled in this message, the base station shall set
36			this field to '1'; otherwise if the PLCM for this Forward
37			Supplemental Channel is autonomously generated from
38			BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow
39			on this Forward Supplemental Channel as specified in
40			2.6.13.10.1, the base station shall set this field to '0'.
41	FSCH_PLCM_INDEX	-	Index to generate the Forward Supplemental Channel public
42			long code mask.
43			If the FSCH_PLCM_SCHEME_IND field is set to '01', or the
44			FSCH_PLCM_IND field is included and is set to '1', the base
45			station shall include this field and set it as follows; otherwise,
46			the base station shall omit this field.

- 1 The base station shall set this field to the index from which
 2 the public long code mask for this Forward Supplemental
 3 Channel is generated as specified in 2.6.13.10.2.
- 4 **FSCH_MUX_OPTION** - Multiplex Option of the Forward Supplemental Channel.
 5 The base station shall set this field to the multiplex option of
 6 this Forward Supplemental Channel as specified in [3].
- 7 **FSCH_RC** - Radio configuration of the Forward Supplemental Channel.
 8 The base station shall set this field to the radio configuration
 9 of this Forward Supplemental Channel as specified in [2].
- 10 **FSCH_CODING** - Coding type of the Forward Supplemental Channel.
 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 will
 16 be used for all block sizes.
- 17 **FSCH_OUTERCODE_INCL** - Forward Supplemental Channel Outer Code included
 18 indicator.
 19 The base station shall set this field to '1' if the Forward
 20 Supplemental Channel outer code information is included in
 21 this message; otherwise, the base station shall set this field to
 22 '0'.
- 23 **FSCH_OUTERCODE_RATE** - Outer Code Rate of the Forward Supplemental Channel.
 24 If the **FSCH_OUTERCODE_INCL** field is set to '0', the base
 25 station shall omit this field; otherwise, the base station shall
 26 include this field and set it as follows:
 27 The base station shall set this field to specify the outer code
 28 rate of the Forward Supplemental Channel as specified in
 29 Table 3.7.2.3.2.38-3

30 **Table 3.7.2.3.2.38-3. Forward Supplemental Channel Outer Code Rate**

FSCH_OUTERCODE_RATE (binary)	FORWARD SUPPLEMENTAL CHANNEL Outer Code Rate	Length of TDM_SUPER_PE RIOD_MASK (bits)
000	11/16	11
001	12/16	12
010	13/16	13
011	14/16	14
100-111	Reserved	Reserved

- 1 FSCH_OUTERCODE_OFFSET - Outer Coding Buffer Offset of the Forward
2 Supplemental Channel.
- 3 If the FSCH_OUTERCODE_INCL field 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 specify the outer coding
7 buffer offset of the Forward Supplemental Channel in units of
8 20ms as specified in [2]. The base station shall set this field to
9 a value between 0 and 63 inclusive.
- 10 FSCH_NUM_BITS_INDX - Number of information bits index of the Forward
11 Supplemental Channel.
- 12 The base station shall set this field according to Table
13 3.7.3.3.2.37-4 to indicate the number of information bits per
14 frame and the length of the CRC field for this Forward
15 Supplemental Channel.
- 16 FSCH_FRAME_40_USED - Forward Supplemental Channel 40ms frame used indicator.
- 17 The base station shall set this field to '1' if 40ms frame is
18 used on this Forward Supplemental Channel; otherwise, the
19 base station shall set this field to '0'.
- 20 The base station shall not set both FSCH_FRAME_40_USED
21 and FSCH_FRAME_80_USED fields to '1'.
- 22 FSCH_FRAME_80_USED - Forward Supplemental Channel 80ms frame used indicator.
- 23 The base station shall set this field to '1' if 80ms frame is
24 used on this Forward Supplemental Channel; otherwise, the
25 base station shall set this field to '0'.
- 26 The base station shall not set both FSCH_FRAME_40_USED
27 and FSCH_FRAME_80_USED fields to '1'.
- 28 TDM_STRUCTURE_IND - TDM structure used indicator.
- 29 The base station shall set this field to '1' if a time-division
30 multiplexing structure (i.e. BCMC TDM Mode) is used on this
31 Forward Supplemental Channel; otherwise, the base station
32 shall set this field to '0'.
- 33 TDM_SLOT_LENGTH - TDM slot length.
- 34 If the TDM_STRUCTURE_IND field is set to '0' or if
35 FSCH_OUTERCODE_INCL field in this record is set to '1', the
36 base station shall omit this field; otherwise, the base station
37 shall include this field and shall set it as follows:
- 38 The base station shall set this field to the length of the TDM
39 slot as specified in Table 3.7.2.3.2.38-4.

1

Table 3.7.2.3.2.38-4. TDM_SLOT_LENGTH values

TDM_SLOT_LENGTH (binary)	Length of the TDM slot
00	20 ms
01	40 ms
10	80 ms
11	Reserved

2

3

TDM_SUPER_PERIOD_MASK_LEN - TDM super period mask length indicator.

4

5

6

7

8

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 '1', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

9

10

The base station shall set this field to the TDM super period mask length as specified in Table 3.7.2.3.2.38-5.

11

Table 3.7.2.3.2.38-5. TDM_SUPER PERIOD_MASK_LEN and TDM_MEGA_PERIOD_MASK_LEN values

12

TDM_SUPER_PERIOD_MASK_LEN or TDM_MEGA_PERIOD_MASK_LEN (binary)	Bits in TDM_SUPER_PERIOD_MASK or TDM_MEGA_PERIOD_MASK
00	4 bits
01	8 bits
10	16 bits
11	Reserved

13

TDM_MEGA_PERIOD_MASK_LEN - TDM mega period mask length indicator.

14

15

16

17

18

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:

19

20

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.

21

FSCH_RECORD RESERVED - Forward Supplemental Channel record reserved bits.

1 The base station shall add reserved bits as needed in order to
2 make the length of this Forward Supplemental Channel
3 record equal to an integer number of octets. The base station
4 shall set these bits to '0'.

5 The base station shall include NUM_BCMC_PROGRAMS plus one occurrences of the
6 following variable length record:

7 BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field.

8 The base station shall set this field to one less than the length
9 in bits of the BCMC_PROGRAM_ID of this program.

10 BCMC_PROGRAM_ID - BCMC program Identifier.

11 The length of this field shall be one more than the value of
12 BCMC_PROGRAM_ID_LEN bits.

13 The base station shall set this field to the BCMC program
14 identifier of this program.

15 BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field.

16 The base station shall set this field to the length in bits of the
17 BCMC_FLOW_DISCRIMINATOR of this program.

18 NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators.

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 base station shall set this field to the number of flow
25 discriminators included for this program minus one.

26 If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include
27 NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;
28 otherwise, the base station shall include 1 occurrence of the following variable length
29 record:

30 BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_LEN - BCMC flow discriminator
31 header record length.

32 The base station shall set this field to one less the number of
33 octets included in this BCMC flow discriminator header
34 record including this field.

35 BCMC_FLOW_DISCRIMINATOR - BCMC flow discriminator.

36 The length of this field shall be determined by the value of the
37 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
38 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
39 is omitted; otherwise, the length of this field shall be
40 BCMC_FLOW_DISCRIMINATOR_LEN bits.

41 The base station shall set this field to the BCMC flow
42 discriminator of this flow.

1 FLOW_INFO_ON_OTHER_FREQ - BCMC flow information on another frequency
2 indicator.

3 The base station shall set this field to '1' if the information on
4 this BCMC flow is available on another frequency; otherwise,
5 the base station shall set this field to '0'.

6 BSPM_CDMA_FREQ_SAME_AS_PREV - BSPM CDMA Frequency same as previous
7 indicator.

8 If the FLOW_INFO_ON_OTHER_FREQ field is set to '0', 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 '1' if the CDMA channel
12 number and band class where the BCMC Service Parameters
13 Message containing information on this BCMC flow is
14 transmitted is the same as the one for the previous BCMC
15 flow listed in this message.

16 BSPM_BAND_CLASS - BSPM band class.

17 If the BSPM_CDMA_FREQ_SAME_AS_PREV field is not
18 included or included and set to '1', 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 CDMA band class
22 where the BCMC Service Parameters Message containing
23 information on this BCMC flow is transmitted.

24 BSPM_CDMA_FREQ - BSPM Frequency.

25 If the BSPM_CDMA_FREQ_SAME_AS_PREV field is not
26 included or included and set to '1', 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 CDMA channel
30 number where the BCMC Service Parameters Message
31 containing information on this BCMC flow is transmitted.

32 REGISTRATION_REQ_FLAG - Registration Required Flag.

33 If FLOW_INFO_ON_OTHER_FREQ is set to '1' or
34 REGISTRATION_REQ_FLAG_INCL is set to '0', the base
35 station shall omit this field; otherwise, the base station shall
36 include this field and set it as follows:

37 The base station shall set this field to '1' if registration is
38 required for this BCMC flow. Otherwise, the base station shall
39 set this field to '0'.

40 AUTH_SIGNATURE_REQ_IND - Authorization signature required indicator.

41 If FLOW_INFO_ON_OTHER_FREQ is set to '1' or the
42 AUTH_SIGNATURE_REQUIRED 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 The base station shall set this field to '1' if the mobile station
 2 is to include the authorization signature in the Registration
 3 Message, Origination Message, or Page Response Message for
 4 this BCMC flow; otherwise, the base station shall set this field
 5 to '0'.

6 BCMC_FLOW_ON_TRAFFIC_IND - BCMC flow on traffic channel supported indicator.

7 If FLOW_INFO_ON_OTHER_FREQ is set to '1' or
 8 BCMC_ON_TRAFFIC_SUP 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 '1' if this BCMC flow is
 12 available on traffic channel; otherwise, the base station shall
 13 set this field to '0'.

14 NUM_LPM_ENTRIES - Number of Logical-to-Physical Mapping Entries.

15 If the FLOW_INFO_ON_OTHER_FREQ field is set to '1', the
 16 base station shall omit this field; otherwise, the base station
 17 shall include this field and set it as follows:

18 The base station shall set this field to the number of logical to
 19 physical mapping included for this BCMC flow.

20 BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_RESERVED - BCMC flow
 21 discriminator header record reserved bits.

22 The base station shall add reserved bits as needed in order to
 23 make the length of this BCMC flow discriminator header
 24 record equal to an integer number of octets. The base station
 25 shall set these bits to '0'.

26 The base station shall include NUM_LPM_ENTRIES occurrences of the following variable-
 27 length record:

28 FSCH_ID - Forward Supplemental Channel Identifier. The base station
 29 shall set this field to the identifier corresponding to the
 30 Forward Supplemental Channel on which the above BCMC
 31 flow is being transmitted. The Forward Supplemental Channel
 32 included first in this message is given the FSCH_ID of
 33 '0000000', the second one listed is given the FSCH_ID of
 34 '0000001', and so on.

35 TDM_USED_IND - TDM used indicator.

36 If the TDM_STRUCTURE_IND field for the Forward
 37 Supplemental Channel specified by this FSCH_ID is set to '0',
 38 the base station shall omit this field; otherwise, the base
 39 station shall include this field and set it as follows:

40 The base station shall set this field to '1' if a time-division
 41 multiplexing structure (i.e. BCMC TDM Mode) is used on the
 42 Forward Supplemental Channel for this flow; otherwise, the
 43 base station shall set this field to '0'.

44 TDM_MASK - TDM mask.

1 If the TDM_USED_IND field is not included or is included and
 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 If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID
 5 field included in this record is set to '1', the duration of a slot
 6 is 20 ms; otherwise, duration of a slot is indicated by
 7 TDM_SLOT_LENGTH. For each bit of this field, the base
 8 station set it to '1' if this flow is assigned to the corresponding
 9 slot. For each bit of this field, the base station shall set it to '0'
 10 if this flow is not assigned to the corresponding slot.

11 TDM_SUPER_PERIOD_MASK_INCL - TDM super period mask included indicator.

12 If the TDM_USED_IND field is not included or is included and
 13 is 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 set it to '1' if TDM_SUPER_PERIOD_MASK
 16 field is included in this message; otherwise, the base station
 17 shall set it to '0'.

18 TDM_SUPER_PERIOD_MASK - TDM super period mask.

19 If the TDM_SUPER_PERIOD_MASK_INCL field is not included
 20 or is included and 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 If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID
 24 field included in this record is set to '0', then number of bits
 25 included in this field is indicated by
 26 TDM_SUPER_PERIOD_MASK_LEN field. Otherwise, number
 27 of bits included in this field is set as specified in Table
 28 3.7.2.3.2.38-3, based on FSCH_OUTERCODE_RATE field
 29 corresponding to FSCH_ID field included in this record.

30 Duration of super slot is 4 slots. For each bit of this field, the
 31 base station set it to '1' if the TDM_MASK specified above
 32 applies to the corresponding super slot. For each bit of this
 33 field, the base station shall set it to '0' if the TDM_MASK
 34 specified above does not apply to the corresponding super
 35 slot.

36 If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID
 37 field included in this record is set to '1', the super period
 38 mask bits for parity frames (16 – bits included in this field)
 39 are not specified.

40 If TDM_SUPER_PERIOD_MASK is not included in this
 41 message, then it is considered equivalent to
 42 TDM_SUPER_PERIOD_MASK being implicitly included with
 43 all bits set to '1'.

44 TDM_MEGA_PERIOD_MASK_INCL - TDM mega period mask included indicator.

45 If the TDM_USED_IND field is not included or is included and
 46 is set to '0', the base station shall omit this field; otherwise,
 47 the base station shall include this field and set it as follows:

1 The base station set it to '1' if TDM_MEGA_PERIOD_MASK
 2 field is included in this message; otherwise, the base station
 3 shall set it to '0'.

4 TDM_MEGA_PERIOD_MASK - TDM mega period mask.

5 If the TDM_MEGA_PERIOD_MASK_INCL field is not included
 6 or is included and is set to '0', the base station shall omit this
 7 field; otherwise, the base station shall include this field and
 8 set it as follows:

9 If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID
 10 field included in this record is set to '1', then number of bits
 11 included in this field is indicated by
 12 TDM_MEGA_PERIOD_MASK_LEN field. Otherwise, number of
 13 bits included in this field is set as specified in Table
 14 3.7.2.3.2.38-6.

15 **Table 3.7.2.3.2.38-6. Length of TDM_MEGA_PERIOD_MASK**

TDM_SUPER_PERIOD_MASK_INCL (binary)	Length of TDM_MEGA_PERIOD_MASK (bits)
0	8
1	4

16
 17 If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID
 18 field included in this record is set to '1', duration of mega slot
 19 is 16 super slots. Otherwise, duration of mega slot is number
 20 of bits in TDM_SUPER_PERIOD_MASK times duration of
 21 super slot.

22 For each bit of this field, the base station set it to '1' if the
 23 TDM_SUPER_PERIOD_MASK specified above applies to the
 24 corresponding mega slot. For each bit of this field, the base
 25 station shall set it to '0' if the TDM_SUPER_PERIOD_MASK
 26 specified above does not apply to the corresponding mega
 27 slot.

28
 29 BSR_ID - BCMC Service Reference Identifier.

30 The base station shall set this field to the BCMC Service
 31 Reference identifier corresponding to this BCMC flow on this
 32 Forward Supplemental Channel.

33 The base station shall not set this field to a value of 0.

34 NUM_NGHR - Number of neighbor base stations.

35 The base station shall set this field to the number of neighbor
 36 base stations included in this message for this logical-to-
 37 physical mapping entry.

- 1 The base station shall include NUM_NGHR occurrences of the following variable length
 2 record.
- 3 NGHR_RECORD_LEN - Neighbor record length.
 4 The base station shall set this field to one less the number of
 5 octets included in this neighbor record including this field.
- 6 NGHR_PN - Neighbor pilot PN sequence offset index.
 7 The base station shall set this field to the pilot PN sequence
 8 offset for this neighbor base station, in units of 64 PN chips.
- 9 NGHR_BCMC_CONFIG - Neighbor BCMC Configuration.
 10 The base station shall set this field as specified in Table
 11 3.7.2.3.2.38-6a to indicate the configuration of this BCMC
 12 flow in this neighbor base station.

13 **Table 3.7.2.3.2.38-6a. Neighbor BCMC Configuration Field**

Value (binary)	Neighbor BCMC Configuration
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.

- 14
- 15 NGHR_BSR_ID - Neighbor BCMC Service Reference Identifier.
 16 If the NGHR_BCMC_CONFIG field is set to '000', '010', or
 17 '011', 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 BCMC Service
 20 Reference identifier corresponding to this BCMC flow in the
 21 neighbor base station.

1 The base station shall not set this field to a value of 0.

2 NGHBR_FSCH_BAND_CLASS_INCL - Neighbor Forward Supplemental Channel band
3 class included indicator.

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 If this F-SCH in the neighbor base station resides in the same
8 band class as in this base station, the base station shall set
9 this field to '0'; otherwise, the base station shall set this field
10 to '1'.

11 NGHBR_FSCH_BAND_CLASS - Band class of the Forward Supplemental Channel in
12 the neighbor base station.

13 If the NGHBR_FSCH_BAND_CLASS_INCL field is not included
14 in this message or is included and is set to '0', the base
15 station shall omit this field; otherwise, the base station shall
16 include this field and set it as follows:

17 The base station shall set this field to the CDMA band class,
18 as specified in [30], corresponding to the CDMA frequency
19 assignment containing this Forward Supplemental Channel in
20 the neighbor base station.

21 NGHBR_FSCH_CDMA_FREQ_INCL - Neighbor frequency included indicator.

22 If the NGHBR_BCMC_CONFIG field is set to '000', '010', or
23 '011', the base station shall omit this field; otherwise, the
24 base station shall include this field and set it as follows.

25 If this F-SCH in the neighbor base station resides in the same
26 frequency as in this base station, the base station shall set
27 this field to '0'; otherwise, the base station shall set this field
28 to '1'.

29 NGHBR_FSCH_CDMA_FREQ - Frequency assignment of the Forward Supplemental
30 Channel in the neighbor base station.

31 If the NGHBR_FSCH_CDMA_FREQ_INCL field is not included
32 in this message or is included and is set to '0', 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 CDMA Channel
36 number corresponding to the CDMA frequency assignment for
37 the CDMA Channel containing this Forward Supplemental
38 Channel in this neighbor base station.

39 NGHBR_FSCH_CODE_CHAN_INCL - Neighbor pilot Forward Supplemental Channel
40 Code Channel Index Included Indicator.

41 If the NGHBR_BCMC_CONFIG field is set to '000' or '011' the
42 base station shall omit this field; otherwise, the base station
43 shall include this field and set it as follows.

44 If this F-SCH in the neighbor base station uses the same code
45 channel as in this base station, the base station shall set this
46 field to '0'; otherwise, the base station shall set this field to '1'.

1 NGHBR_FSCH_CODE_CHAN - Neighbor pilot Forward Supplemental Channel Code
2 Channel Index.

3 If the NGHBR_FSCH_CODE_CHAN_INCL field is not included
4 in this message or is included and is set to '0', the base
5 station shall omit this field; otherwise, the base station shall
6 include this field and set it as follows.

7 The base station shall set this field to the code channel index
8 that the mobile station is to use for this Forward
9 Supplemental Channel on this neighbor base station.

10 NGHBR_FSCH_PARAMS_INCL - Neighbor Forward Supplemental Channel Parameters
11 Included Indicator.

12 If the NGHBR_BCMC_CONFIG field is set to '000', '010', or
13 '011', the base station shall omit this field; otherwise, the
14 base station shall include this field and set it as follows.

15 If this F-SCH in the neighbor base station uses the same
16 physical layer parameters as in this base station, the base
17 station shall set this field to '0'; otherwise, the base station
18 shall set this field to '1'.

19 NGHBR_FSCH_PLCM_IND - Neighbor Forward Supplemental Channel Public Long
20 Code Mask Scheme Indicator.

21 If the NGHBR_FSCH_PARAMS_INCL field is not included in this
22 message, or is included and 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 index to generate PLCM for this Forward Supplemental
26 Channel is signaled in this message, the base station shall set
27 this field to '1'; otherwise if the PLCM for this Forward
28 Supplemental Channel is autonomously generated from
29 BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow
30 on this Forward Supplemental Channel as specified in
31 2.6.13.10.1, the base station shall set this field to '0'.

32 NGHBR_FSCH_PLCM_INDEX - Index to generate the Forward Supplemental Channel
33 public long code mask.

34 If the NGHBR_FSCH_PLCM_IND field is not included or is
35 included and is set to '0', the base station shall omit this field;
36 otherwise, the base station shall include and set it as follows.

37 The base station shall set this field to the index from which
38 the public long code mask for this Forward Supplemental
39 Channel is generated as specified in 2.6.13.10.2.

40 NGHBR_FSCH_MUX_OPTION - Multiplex Option of the Forward Supplemental
41 Channel in the neighbor base station.

42 If the NGHBR_FSCH_PARAMS_INCL field is not included in this
43 message 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 If the FSCH_OUTERCODE_INCL field is not included or is
2 included and is 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 specify the outer coding
6 buffer offset of the Forward Supplemental Channel in units of
7 20ms as specified in [2]. The base station shall set this field to
8 a value between 0 and 63 inclusive.

9 NGHBR_FSCH_NUM_BITS_IDX - Number of Information bits index of the Forward
10 Supplemental Channel in the Neighbor Base Station.

11 If the NGHBR_FSCH_PARAMS_INCL field is not included in this
12 message or is included and is set to '0', the base station shall
13 omit this field; otherwise, the base station shall include this
14 field and set it as follows.

15 The base station shall set this field according to Table
16 3.7.3.3.2.37-4 to indicate the number of information bits per
17 frame and the length of the CRC field for this Forward
18 Supplemental Channel in this neighbor base station.

19 NGHBR_FSCH_FRAME_40_USED - Forward Supplemental Channel 40ms frame used
20 indicator in the Neighbor Base Station.

21 If the NGHBR_FSCH_PARAMS_INCL field is not included in this
22 message or is included and 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 '1' if 40ms frame is
26 used on this Forward Supplemental Channel in this neighbor
27 base station; otherwise, the base station shall set this field to
28 '0'.

29 The base station shall not set both
30 NGHBR_FSCH_FRAME_40_USED and
31 NGHBR_FSCH_FRAME_80_USED fields to '1'.

32 NGHBR_FSCH_FRAME_80_USED - Forward Supplemental Channel 80ms frame used
33 indicator in the Neighbor Base Station.

34 If the NGHBR_FSCH_PARAMS_INCL field is not included in this
35 message 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 '1' if 80ms frame is
39 used on this Forward Supplemental Channel in this neighbor
40 base station; otherwise, the base station shall set this field to
41 '0'.

42 The base station shall not set both
43 NGHBR_FSCH_FRAME_40_USED and
44 NGHBR_FSCH_FRAME_80_USED fields to '1'.

45 NGHBR_RECORD_RESERVED - Neighbor record reserved bits.

- 1 The base station shall add reserved bits as needed in order to
2 make the length of this neighbor record equal to an integer
3 number of octets. The base station shall set these bits to '0'.
- 4 BCMC_NUM_BCCH_NGHBR - Number of neighbor base stations that support
5 Broadcast Control Channel.
- 6 The base station shall set this field to the number of neighbor
7 base stations included in this message that support Primary
8 Broadcast Control Channel and support BCMC on idle state.
- 9 BCMC_BCCH_NGHBR_PN - Neighbor Pilot PN sequence offset index.
- 10 The base station shall set this field to the pilot PN sequence
11 offset for this neighbor base station, in units of 64 PN chips.
- 12 BCMC_SR1_BCCH_NON_TD_INCL - Common Channel in non TD mode on Spreading
13 Rate 1 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 shall
17 set this field to '0'.
- 18 BCMC_SR1_NON_TD_FREQ_INCL - Non Transmit Diversity frequency included
19 indicator.
- 20 If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
21 included and set to '0', the base station shall omit this field;
22 otherwise, the base station shall set this field as follows:
- 23 The base station shall set this field to '1' if
24 BCMC_SR1_CDMA_FREQ_NON_TD is included in the
25 message. Otherwise, base station shall set this field to '0'.
- 26 BCMC_SR1_CDMA_FREQ_NON_TD - Frequency assignment for non-transmit diversity
27 operation.
- 28 If BCMC_SR1_NON_TD_FREQ_INCL is not included, or is
29 included and set to '0', the base station shall omit this field;
30 otherwise, the base station shall set this field as follows:
- 31 The base station shall set this field to the CDMA Channel
32 number corresponding to the CDMA frequency assignment for
33 the CDMA Channel containing a Broadcast Control Channel
34 that does not support the TD operation.
- 35 BCMC_SR1_BRAT_NON_TD - BCCH data rate in non-TD mode for Spreading Rate 1.
- 36 If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
37 included and set to '0', the base station shall omit this field;
38 otherwise, the base station shall set this field as follows:
- 39 The base station shall set this field to the BRAT field value
40 shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
41 used by the Primary Broadcast Control Channel in the
42 system.
- 43 BCMC_SR1_CRAT_NON_TD - BCCH code rate in non Transmit Diversity mode for
44 Spreading Rate 1.

1 If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is
2 included and set to '0', the base station shall omit this field;
3 otherwise, the base station shall set this field as follows:

4 The base station shall set this field to '0' if the BCCH Code
5 Rate is 1/4 (see [2]). The base station shall set this field to '1'
6 if the BCCH code rate is 1/2 (see [2]).

7 BCMC_SR1_BCCH_CODE_CHAN_NON_TD - Walsh code for the Spreading Rate 1 BCCH
8 in non Transmit Diversity mode.

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 the Walsh code
13 corresponding to the Spreading Rate 1 BCCH in non Transmit
14 Diversity mode.

15 BCMC_SR1_TD_INCL - Spreading Rate 1 Transmit Diversity frequency information
16 included indicator.

17 The base station shall set this field to '1' if
18 BCMC_SR1_CDMA_FREQ_TD, BCMC_SR1_BRAT_TD,
19 BCMC_SR1_CRAT_TD, BCMC_SR1_TD_MODE, and
20 BCMC_SR1_TD_POWER_LEVEL are included in the message;
21 otherwise, the base station shall set this field to '0'.

22 BCMC_SR1_CDMA_FREQ_TD - Spreading Rate 1 frequency assignment for Transmit
23 Diversity operation.

24 If BCMC_SR1_TD_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 set this field as follows:

27 The base station shall set this field to the CDMA Channel
28 number corresponding to the CDMA frequency assignment for
29 the CDMA Channel containing a BCCH Channel that
30 supports the TD operation.

31 BCMC_SR1_BRAT_TD - BCCH data rate in Transmit Diversity mode for Spreading
32 Rate 1.

33 If BCMC_SR1_TD_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 set this field as follows:

36 The base station shall set this field to the BRAT field value
37 shown in Table 3.7.2.3.2.26-2 corresponding to the data rate
38 used by the Primary Broadcast Control Channel in the
39 system.

40 BCMC_SR1_CRAT_TD - BCCH code rate in Transmit Diversity mode for Spreading
41 Rate 1.

42 If BCMC_SR1_TD_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:

1 The base station shall set this field to '0' if the BCCH Code
2 Rate is 1/4 (see [2]). The base station shall set this field to '1'
3 if the BCCH Code Rate is 1/2 (see [2]).

4 BMC SR1 BCCH CODE CHAN TD - Walsh code for the Spreading Rate 1 BCCH in
5 Transmit Diversity mode.

6 If BMC SR1 TD INCL is not included, or is included and set
7 to '0', the base station shall omit this field; otherwise, the
8 base station shall set this field as follows:

9 The base station shall set this field to the Walsh code
10 corresponding to the Spreading Rate 1 BCCH in Transmit
11 Diversity mode.

12 BMC SR1 TD MODE - Spreading Rate 1 Transmit Diversity Mode.

13 If BMC 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 corresponding to Table
17 3.7.2.3.2.26-3.

18 BMC SR1 TD POWER LEVEL - Spreading Rate 1 TD transmit power level.

19 If BMC SR1 TD 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 set this field as follows:

22 The base station shall set this field to the TD transmit power
23 level relative to that of the Forward Pilot Channel, as specified
24 in Table 3.7.2.3.2.26-4.

25

26

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
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
HO_INFO_COUNT	3

4

~~One occurrence~~ HO_INFO_COUNT occurrences of the ~~TEXT~~ following field

HO_INFO_RECORD	Variable
----------------	----------

- 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 ASSTN_TYPE - Association Type.
 8 The base station shall set this field to the value shown in
 9 Table 3.7.2.3.2.39-1 corresponding to the configuration of the
 10 base station.

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.

- 12
- 13 SID - System identification.
 14 The base station shall set this field to the system
 15 identification number for this system (see 2.6.5.2).
- 16 NID - Network identification.
 17 This field serves as a sub-identifier of a system as defined by
 18 the owner of the SID.
 19 The base station shall set this field to the network
 20 identification number for this network (see 2.6.5.2).
- 21 AP_ID_LEN - Access Point identification length.
 22 The base station shall set this field to the length of the access
 23 point identification in units of 16 bits.
- 24 AP_ID - Access Point identification.
 25 The base station shall set this field to its access point
 26 identification number.
- 27 AP_ID_MASK - Access Point identification mask.
 28 The base station shall set this field to the number of
 29 consecutive bits (starting from the most significant bit) of
 30 AP_ID which identifies the group of access points.

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- HRPD_ACQ_REC_INCL - HRPD Acquisition Record Included.
The base station shall set this field to '1' if the message includes HRPD acquisition information. Otherwise, this field shall be set to '0'.
 - HRPD_PN - HRPD pilot PN sequence offset index.
If the HRPD_ACQ_REC_INCL field is set to '1', then this field is set to the pilot PN sequence offset corresponding to the HRPD pilot at this access point, in units of 64 PN chips. Otherwise, this field shall be omitted.
 - HRPD_BAND_CLASS - HRPD Band Class.
If the HRPD_ACQ_REC_INCL field is set to '1', then this field is set to the Band Class number corresponding to the frequency assignment of the channel allocated to the HRPD pilot at this access point. Otherwise, this field shall be omitted.
 - HRPD_CHANNEL - HRPD Channel.
If the HRPD_ACQ_REC_INCL field is set to '1', then this field is set to the channel number corresponding to the Band Class of the HRPD pilot at this access point. Otherwise, this field shall be omitted.
 - LOC_REC_TYPE - Location record type.
The base station shall set this field based on the type of the LOC_REC field included in this message.
 - LOC_REC_LEN - Location record length.
The base station shall set this field to the number of octets in the fields included in LOC_REC field. If LOC_REC_TYPE field is set to '000', then this field shall be set to zero.
 - LOC_REC - Location record.
The Location record fields are determined by the value of LOC_REC_TYPE, as described below.
- If LOC_REC_TYPE = '000', the LOC_REC field shall be omitted.
- If LOC_REC_TYPE = '001', the LOC_REC field shall be:

BASE_LAT	22
BASE_LONG	23
LOC_UNC_H	4
BASE_HEIGHT	14
LOC_UNC_V	4
Reserved	0-7

1 If LOC_REC_TYPE field is set to '001', the base station shall include the following
 2 sub-fields in LOC_REC field:

3 BASE_LAT - Base station latitude.
 4 The base station shall set this field to its latitude in units of
 5 0.25 second, expressed as a two's complement signed number
 6 with positive numbers signifying North latitudes. The base
 7 station shall set this field to a value in the range -1296000 to
 8 1296000 inclusive (corresponding to a range of -90° to +90°).
 9 The base station shall set this field to all zeros if its latitude
 10 is not known.

11 BASE_LONG - Base station longitude.
 12 The base station shall set this field to its longitude in units of
 13 0.25 second, expressed as a two's complement signed number
 14 with positive numbers signifying East longitude. The base
 15 station shall set this field to a value in the range -2592000 to
 16 2592000 inclusive (corresponding to a range of -180° to
 17 +180°). The base station shall set this field to all zeros if its
 18 longitude is not known.

19 LOC_UNC_H - Horizontal location uncertainty.
 20 The base station shall set this field to the circular horizontal
 21 location uncertainty, as specified in Table 3.7.2.3.2.39-2. The
 22 value of this field indicates the radius of a circular 95%
 23 confidence coverage area.

24 **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'	$70,000 \text{ m} \leq \text{LOC_UNC_H}$
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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'	$0 < \text{LOC_UNC_V} < 1 \text{ m}$
'0001'	$1 \text{ m} \leq \text{LOC_UNC_V} < 2 \text{ m}$
'0010'	$2 \text{ m} \leq \text{LOC_UNC_V} < 4 \text{ m}$
'0011'	$4 \text{ m} \leq \text{LOC_UNC_V} < 7 \text{ m}$
'0100'	$7 \text{ m} \leq \text{LOC_UNC_V} < 10 \text{ m}$
'0101'	$10 \text{ m} \leq \text{LOC_UNC_V} < 20 \text{ m}$
'0110'	$20 \text{ m} \leq \text{LOC_UNC_V} < 40 \text{ m}$
'0111'	$40 \text{ m} \leq \text{LOC_UNC_V} < 70 \text{ m}$
'1000'	$70 \text{ m} \leq \text{LOC_UNC_V} < 100 \text{ m}$
'1001'	$100 \text{ m} \leq \text{LOC_UNC_V} < 200 \text{ m}$
'1010'	$200 \text{ m} \leq \text{LOC_UNC_V} < 400 \text{ m}$
'1011'	$400 \text{ m} \leq \text{LOC_UNC_V} < 700 \text{ m}$
'1100'	$700 \text{ m} \leq \text{LOC_UNC_V} < 1,000 \text{ m}$
'1101'	$1,000 \text{ m} \leq \text{LOC_UNC_V} < 2,000 \text{ m}$
'1110'	$2,000 \text{ m} \leq \text{LOC_UNC_V} < 4,000 \text{ m}$
'1111'	$4,000 \text{ m} \leq \text{LOC_UNC_V}$

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.

- 1 INTRA_FREQ_HO_HYS_INCL - Intra-frequency idle handoff hysteresis included.
 2 The base station shall set this field to '1' if the message
 3 includes intra-frequency idle handoff hysteresis information.
 4 Otherwise, this field shall be set to '0'.
- 5 INTRA_FREQ_HO_HYS - Intra-frequency idle handoff hysteresis.
 6 If the INTRA_FREQ_HO_HYS_INCL field is set to '1', then the
 7 base station shall set this field to the intra-frequency idle
 8 handoff hysteresis value in units of dB (see 2.6.2.1.4.1),
 9 expressed as an unsigned binary number.
 10 If the INTRA_FREQ_HO_HYS_INCL field is set to '0', then this
 11 field shall be omitted.
- 12 INTRA_FREQ_HO_SLOPE_INCL - Intra-frequency idle handoff slope included.
 13 The base station shall set this field to '1' if the message
 14 includes intra-frequency idle handoff slope information.
 15 Otherwise, this field shall be set to '0'. This field shall not be
 16 set to '1' if INTRA_FREQ_HO_HYS_INCL field is not set to '1'.
- 17 INTRA_FREQ_HO_SLOPE - Intra-frequency idle handoff slope.
 18 If the INTRA_FREQ_HO_SLOPE_INCL field is set to '1', then
 19 the base station shall set this field to the slope in the intra-
 20 frequency idle handoff inequality criterion (see 2.6.2.1.4.1).
 21 The base station shall set this field as an unsigned binary
 22 number.
 23 If the INTRA_FREQ_HO_SLOPE_INCL field is set to '0', then
 24 this field shall be omitted.
- 25 INTER_FREQ_HO_HYS_INCL - Inter-frequency idle handoff hysteresis included.
 26 The base station shall set this field to '1' if the message
 27 includes inter-frequency idle handoff hysteresis information.
 28 Otherwise, this field shall be set to '0'.
- 29 INTER_FREQ_HO_HYS - Inter-frequency idle handoff hysteresis.
 30 If the INTER_FREQ_HO_HYS_INCL field is set to '1', then the
 31 base station shall set this field to the inter-frequency idle
 32 handoff hysteresis value in units of dB (see 2.6.2.1.4.1),
 33 expressed as an unsigned binary number.
 34 If the INTER_FREQ_HO_HYS_INCL field is set to '0', then this
 35 field shall be omitted.
- 36 INTER_FREQ_HO_SLOPE_INCL - Inter-frequency idle handoff slope included.
 37 The base station shall set this field to '1' if the message
 38 includes inter-frequency idle handoff slope information.
 39 Otherwise, this field shall be set to '0'. This field shall not be
 40 set to '1' if INTER_FREQ_HO_HYS_INCL field is not set to '1'.
- 41 INTER_FREQ_HO_SLOPE - Inter-frequency idle handoff slope.

1 If the INTER_FREQ_HO_SLOPE_INCL field is set to '1', then
 2 the base station shall set this field to the slope in the inter-
 3 frequency idle handoff inequality criterion (see 2.6.2.1.4.1).
 4 The base station shall set this field as an unsigned binary
 5 number.

6 If the INTER_FREQ_HO_SLOPE_INCL field is set to '0', then
 7 this field shall be omitted.

8 INTER_FREQ_SRCH_TH_INCL - Inter-frequency idle search threshold included.

9 The base station shall set this field to '1' if the message
 10 includes inter-frequency idle search threshold information.
 11 Otherwise, this field shall be set to '0'.

12 INTER_FREQ_SRCH_TH - Inter-frequency idle search threshold.

13 If the INTER_FREQ_SRCH_TH_INCL field is set to '1', then the
 14 base station shall set this field to the inter-frequency idle
 15 search threshold value (see 2.6.2.1.4.1) in 0.5 dB decrements
 16 as specified in Table 3.7.2.3.2.39-4.

17 **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

18 If the INTER_FREQ_SRCH_TH_INCL field is set to '0', then
 19 this field shall be omitted.

20 HO_INFO_COUNT - The base station shall set this field to the number of handoff
 21 information record following this field.

22 The base station shall include HO_INFO_COUNT occurrences
 23 of the following HO_INFO_RECORD.

24 HO_INFO_RECORD - The base station shall set this record as shown in Table
 25 3.7.2.3.2.39-5 corresponding to the information to assist
 26 handoff into the access point.

27 **Table 3.7.2.3.2.39-5. Handoff Information Record**

Field	Length (bits)
HO_INFO_TYPE	3
HO_INFO_LEN	8
HO_INFO_VALUE	HO_INFO_LEN

28 HO_INFO_TYPE - The base station shall set this field according to the
 29 HO_INFO_VALUE field in this record.

1 HO_INFO_LEN - The base station shall set this field to the length of the
 2 following HO_INFO_VALUE field.
 3 HO_INFO_VALUE - The access network shall set this field as follows:
 4 If the HO_INFO_TYPE field is set to '000', then this field shall
 5 be set as
 6

IOS_MSC_ID	24
IOS_CELL_ID	16

7 ~~IOSMSCID~~IOS_MSC_ID - MSC ID of the base station.
 8 The base station shall set this field to the MSC ID value that
 9 the other base station uses in the network (see [48]) for
 10 handoff into the base station.

11 ~~IOSCELLID~~IOS_CELL_ID - CELL ID of the base station.
 12 The base station shall set this field to the CELL ID value that
 13 the other base station uses in the network (see [48]) for
 14 handoff into the base station.
 15 If the HO_INFO_TYPE field is set to '001', then this field shall
 16 be set as
 17

PSMM_SIG_COUNT	3
----------------	---

PSMM_SIG_COUNT occurrences of the following field:

PSMM_SIGNATURE	21
----------------	----

18 PSMM_SIG_COUNT - The base station shall set this field to the number of
 19 occurrences of the PSMM_SIGNATURE field in this
 20 HO_INFO_RECORD.

21 PSMM_SIGNATURE - The base station shall set this field to the signature of the
 22 base station to be included in Pilot Strength Measurement
 23 Message during handoff. The 15 MSBs are used in
 24 PILOT_PN_PHASE field and the 6 LSBs are used in
 25 PILOT_STRENGTH field.
 26 If the HO_INFO_TYPE field is set to '010', then this field shall
 27 be set as
 28

RUP_SIG_COUNT	3
---------------	---

RUP_SIG_COUNT ~~occurrences~~occurrences of the following field:

RUP_SIGNATURE	21
---------------	----

29 RUP_SIG_COUNT - The base station shall set this field to the number of
 30 occurrences of the RUP_SIGNATURE field in this
 31 HO_INFO_RECORD.

1 RUP_SIGNATURE - The base station shall set this field to the signature to be
2 included in the Route Update message during handoff from
3 another HRPD access network to the HRPD access network
4 associated with the base station. The 15 MSBs are used in
5 PilotPNPhase field and the 6 LSBs are used in PilotStrength
6 field.
7

1 3.7.2.3.2.40 Access Point Identification Text Message
 2 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

{

CHAR _i	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			The base station shall not set this field to either '01001' or
9			'01010'.
10	NUM_FIELDS	-	Number of fields.
11			If the MSG_ENCODING field is set to '00101' (Shift-JIS) or
12			'00110' (Korean), this field indicates the total length in bytes
13			of the CHARi field; otherwise this field shall be set to the
14			number of characters included in this occurrence of the
15			encoding-specific-fields.
16	CHARi	-	Character.
17			NUM_FIELDS occurrences of this field shall be included. The
18			base station shall set each occurrence of this field to
19			represent the character string that identifies this base station.
20			The character string shall be included in the order of
21			appearance.
22	RESERVED	-	Reserved bits.
23			This field shall contain the number of bits required to make
24			the entire AP_ID_TEXT field an integer number of octets in
25			length. All bits of this field shall be set to zeros.
26			

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. The duration
 15 is set to $2^{\text{LifeTime}} - 1$ minutes. If the field is set to the maximum
 16 value, the information in this message does not expire.
- 17 NUM_APPI_REC - Number of access point pilot information record.
 18 The base station shall set this field based on the number of
 19 access point pilot information record included in this
 20 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 8
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

Value (binary)	Access Point 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.
011-110	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 class
 12 value in the previous record. Otherwise, the base station shall
 13 set this field to '0'.
- 14 AP_FREQ_SAME_AS_PREVIOUS -
 15 The base station shall set this field to '1' if the CDMA Channel
 16 number associated with this record is identical to the CDMA
 17 Channel number in the previous record. Otherwise, the base
 18 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, the
 27 base station shall set this field to the system identification
 28 number (see 2.6.5.2) that the following pilot information
 29 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 Type¹¹³.

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

¹¹³ If there are only a few PN offsets assigned to the femto base stations in the system, then the AP_PN_REC_TYPE field can be set to 000. If there are many PN offsets assigned to the femto base stations in the system, then the AP_PN_REC_TYPE field can be set to 001 to reduce the size of the message.

1

AP_PN_COUNT	8
AP_PN_START	9
AP_PN_INC	4

2

AP_PN_COUNT - Access Point PN Count.

3

The base station shall set this field to the number of pilot PN sequence offset in the series listed in this record.

4

5

AP_PN_START - Access point pilot PN sequence offset index.

6

The base station shall set this field to the smallest pilot PN sequence offset, in units of 64 PN chips, in the series listed in this record allocated for access points in this area.

7

8

9

AP_PN_INC - Access Point Pilot PN sequence offset index increment.

10

The base station shall set this field to the pilot PN sequence increment, in units of 64 PN chips, that such that the pilot PN sequence offsets in the series allocated to the access points in this area are: $AP_PN_START + (k \times PILOT_INC)$ where $k = 0, \dots, AP_PN_COUNT - 1$.

11

12

13

14

15

16

RESERVED - Reserved bits.

17

The base station shall add reserved bits as needed in order to make the total length of the APPI_REC through this RESERVED field equal to an integer number of octets. The base station shall set these bits to '0'.

18

19

20

21

1 3.7.2.3.2.42 General Overhead Information Message
 2 MSG_TAG: GOIM

3 The support for General Overhead Information Message and the individual General
 4 Overhead Information Record Types is optional at the base station.

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

}

- 5 PILOT_PN - Pilot PN sequence offset index.
 6 The base station shall set this field to the pilot PN sequence
 7 offset for this base station, in units of 64 PN chips.
- 8 CONFIG_MSG_SEQ - Configuration message sequence number.
 9 The base station shall set this field to CONFIG_SEQ
 10 (see 3.6.2.2).
- 11 NUM_GOI_REC - Number of GOI records included in this message.
 12 The base station shall set this field to the number of *General*
 13 *Overhead Information Message* records included in this
 14 message. The base station shall include atleast one General
 15 Overhead Information record in this message.
- 16 GOI_REC_TYPE - GOI record type.
 17 The base station shall set this field to the type of the *General*
 18 *Overhead Information Message* record according to table
 19 3.7.2.3.2.42-1 and [30]¹¹⁴.

¹¹⁴ Further record types may be defined in [30].

Table 3.7.2.3.2.42-1. General Overhead Information Record Type Field

Value (binary)	Record Type Description	Transmission Allowed on GOIM	Transmission Allowed on FGOIM
0000000 0	Operator Name.	Y	N
0000000 1	Cell ID ¹¹⁵ .	Y	N
0000001 0	Other networks available ¹¹⁶ .	N	Y
0000001 1- 1111111 1	Reserved.	NA	NA

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 fields¹¹⁷:

TEXT_ENCODING	5
NUM_FIELDS	8

NUM_FIELDS occurrences of the following field

{

CHARi	Variable – see [30]
-------	---------------------

}

Reserved	0-7
----------	-----

TEXT_ENCODING - Text encoding.
See [30].

¹¹⁵ For example, the base station may include a text string identifying the region.

¹¹⁶ Mobile station may use the information included in this record to scan for preferred networks.

¹¹⁷ Future GOI records may be defined in [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 the text is
 5 comprised entirely of characters from a supported subset of a
 6 character set, it can be displayed. If the text contains an
 7 unsupported character of a character set, it can be discarded.
 8 The base station shall not set this field to either '01001' or
 9 '01010'.
- 10 NUM_FIELDS - Number of fields.
 11 If the TEXT_ENCODING field is set to '00101' (Shift-JIS) or
 12 '00110' (Korean), this field indicates the total length in bytes
 13 of the CHARi field; otherwise this field shall be set to the
 14 number of characters included in this occurrence of the
 15 encoding-specific-fields.
- 16 CHARi - Character.
 17 NUM_FIELDS occurrences of this field shall be included. The
 18 base station shall set each occurrence of this field to
 19 represent the character string as per GOI_REC_TYPE. The
 20 character string shall be included in the order of appearance.
- 21 RESERVED - Reserved bits.
 22 This field shall contain the number of bits required to make
 23 the entire GOI_REC field an integer number of octets in
 24 length. All bits of this field shall be set to zeros.
- 25 If the GOI_REC_TYPE is set to '00000010' the GOI_REC field shall include the following
 26 fields:

Field	Length (bits)
NUM_NETWORKS	3

NUM_NETWORKS occurrences of the following field:

{ (NUM_NETWORKS)

SID_INCL	1
SID	0 or 15
NID_INCL	1
NID	0 or 16
MCC_MNC_INCL	1
MCC	0 or 10
IMSI_11_12	0 or 7
IMSI_10_INCL	0 or 1
IMSI_10	0 or 4
BAND_CHANNEL_INFO_INCL	1
BAND_CLASS	0 or 5
CDMA_CHAN	0 or 11

}(NUM_NETWORKS)

RESERVED	0-7 (as needed)
----------	-----------------

1

2 NUM_NETWORKS - Number of Networks.

3 The base station shall set this field to the number of networks for which
4 information is included in this General Overhead Information record. The
5 base station shall set this to a value greater than zero.

6 SID_INCL - SID indicator.

7 The base station shall set this field to '1' if the SID is included for this
8 record; Otherwise the base station shall set this field to '0'.

9 SID - SID for the network.

10 The base station shall include this field if SID_INCL is set to '1'; Otherwise
11 the base station shall omit this field.

12 The base station shall set this field to the SID [18] of the network for which
13 information is carried in this record.

14 NID_INCL - NID indicator.

15 The base station shall set this field to '1' if the NID is included for this
16 record; Otherwise the base station shall set this field to '0'.

17 NID - NID for the network.

1 The base station shall include this field if NID_INCL is set to '1'; Otherwise
2 the base station shall omit this field.

3 The base station shall set this field to the NID of the network for which
4 information is carried in this record.

5 MCC_MNC_INCL - MCC and MNC indicator

6 The base station shall set this field to '1' if the MCC and MNC fields are to be
7 included for this record; Otherwise, the base station shall set this field to '0'.

8 MCC - MCC of the network.

9 The base station shall include this field if MCC_MNC_INCL is set to '1';
10 Otherwise, the base station shall omit this field.

11 The base station shall set this field to the MCC (see 2.3.1) of the network for
12 which information is carried in this record.

13 IMSI_11_12 - 11th and 12th digit of the IMSI.

14 The base station shall include this field if MCC_MNC_INCL is set to '1';
15 Otherwise, the base station shall omit this field.

16 The base station shall set this field to the IMSI_11_12 (see section 2.3.1) of
17 the network for which information is carried in this record.

18 IMSI_10_INCL - IMSI_10 included.

19 The base station shall include this field if MCC_MNC_INCL is set to '1';
20 Otherwise, the base station shall omit this field.

21 If the MNC for the network for which information is carried in this record is
22 a 3-digit number the base station shall set this field to '1'. Otherwise, the
23 base station shall set this field to '0'.

24 IMSI_10 - The least significant digit of the MNC when the MNC is a 3-digit number.

25 The base station shall omit this field if IMSI_10_INCL is not included or is
26 included and is set to '0'; Otherwise, the base station shall set this field to
27 the least significant digit of MNC converted to binary by the standard
28 decimal-to-binary conversion as shown in Table 2.3.1.1-1.

29 ~~OPERATOR_NAME_INCL - Operator Name Inclusion Indicator.~~

30 ~~The base station shall set this field to '1' if the operator name for the~~
31 ~~network is included in this record; otherwise, the base station shall set this~~
32 ~~field to '0'.~~

33 BAND_CHANNEL_INFO_INCL - Band and Channel indicator.

34 The base station shall set this field to '1' if the BAND_CLASS and
35 NUM_CHAN fields are to be included for this record; Otherwise, the base
36 station shall set this field to '0'.

37 BAND_CLASS - Band class.

1 The base station shall include this field if BAND_CHANNEL_INFO_INCL is set to
2 '1'; Otherwise the base station shall omit this field.

3 The base station shall set this field to the CDMA band class [30] of the network
4 for which information is being carried in this record.

5 CDMA_CHAN - CDMA Channel number.

6 The base station shall include this field if BAND_CHANNEL_INFO_INCL is set to
7 '1'; Otherwise the base station shall omit this field.

8 The base station shall specify the associated CDMA Channel number on which a
9 roaming mobile station may attempt to acquire a CDMA system.

10 RESERVED - Reserved bits.

11 This field shall contain the number of bits required to make the entire GOI_REC
12 field an integer number of octets in length. All bits of this field shall be set to
13 zeros.

14

- 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)

3

4

PILOT_PN - Pilot PN sequence offset index.

- 1 The base station shall omit this field if
 2 CAND_BAND_INFO_REQ is set to '0'. Otherwise the base
 3 station shall set this field as follows:
- 4 The base station shall set this field to '0' when no band
 5 subclasses are associated with CAND_BAND_CLASS or if the
 6 base station requires only the band class capabilities of the
 7 mobile station. Otherwise, the base station shall set this field
 8 to '1'.
- 9 SUBCLASS_REC_LEN - Band subclass subrecord length
- 10 If SUBCLASS_INFO_INCL field is not included or is included
 11 but is set to '0', the base station shall omit this field;
 12 otherwise, the base station shall set this field as follows:
- 13 The base station shall set this field to the number of band
 14 subclass indicator fields included in the subrecord minus
 15 one. The number of subclass indicator fields included
 16 depends on the highest band subclass being queried for
 17 mobile support for the associated CAND_BAND_CLASS (i.e. if
 18 the highest band subclass being queried is K, then
 19 SUBCLASS_REC_LEN = K).
- 20 If the SUBCLASS_REC_LEN field is included, the base station shall include
 21 SUBCLASS_REC_LEN +1 occurrences of the following subrecord. The first field included
 22 corresponds to band subclass '0' and the Nth field included corresponds to band subclass
 23 'N-1'.
- 24 BAND_SUBCLASS_IND - Band subclass indicator
- 25 The base station shall set this field to '1' if it requires the
 26 mobile to report whether it supports this band subclass for
 27 the associated CAND_BAND_CLASS; otherwise, the base
 28 station shall set this field to '0'.
- 29 The mobile station is to indicate its capability to support the
 30 candidate band class and band subclass (if applicable)
 31 combination in the General Extension Message that carries a
 32 *Registration Message, Origination Message, or a Page*
 33 *Response Message* and a Supported Band Class - Subclass
 34 record.
- 35 TD_MODE - Transmit Diversity Mode.
- 36 If TD_SEL_INCL is set to '0', the base station shall omit this
 37 field; otherwise, the base station shall include this field and
 38 set it as follows:
- 39 The base station shall set this field to the Transmit Diversity
 40 mode on the CAND_BAND_CLASS, as specified in Table
 41 3.7.2.3.2.26-3.
- 42 BYPASS_SYS_DET_IND - Direct to idle allowed indicator.
- 43 The base station shall set this field to '1' if the mobile station
 44 is allowed to go directly to idle state on any CDMA channel
 45 belonging to the CAND_BAND_CLASS included in this record.
- 46 NUM_FREQ - Number of additional CDMA Frequencies

1 The base station shall set this field to the number of
 2 occurrences of the CDMA_FREQ field included hereafter in this
 3 record.

4 The base station shall include NUM_FREQ occurrences of the following record:

5 CDMA_FREQ - CDMA Channel frequency assignment.

6 Each occurrence of this field shall correspond to a CDMA
 7 Channel containing a Paging Channel that is supported by
 8 this base station.

9 If this message is sent on the Paging Channel:

10 The base station shall set this field to the CDMA channel
 11 number corresponding to the CDMA frequency
 12 assignment for a CDMA Channel containing a Paging
 13 Channel (see [2]).

14 This CDMA channel shall reside in the band class listed in
 15 this CAND_BAND_CLASS record. If
 16 SUBCLASS_INFO_INCL is equal to '1', this CDMA channel
 17 shall also reside in at least one supported
 18 CDMA_SUBCLASS included in this CAND_BAND_CLASS
 19 record.

20 If this message is sent on the Primary Broadcast Control
 21 Channel:

22 The base station shall set this field to the CDMA Channel
 23 number corresponding to the CDMA frequency
 24 assignment for a CDMA Channel containing a Primary
 25 Broadcast Control Channel and Forward Common Control
 26 Channel (see [2]).

27 This CDMA channel resides in the band class listed in this
 28 CAND_BAND_CLASS record. If SUBCLASS_INFO_INCL is
 29 equal to '1', this CDMA channel shall also reside in at
 30 least one supported CDMA_SUBCLASS included in this
 31 CAND_BAND_CLASS record.

32 If the base station supports a CDMA frequency
 33 assignment without transmit diversity, the base station
 34 should not set the first occurrence of this field to a CDMA
 35 channel number corresponding to a transmit diversity
 36 frequency assignment.

37 REMAINING_FIELD_INCL - Remaining fields included.

38 If the base station is sending *Extended CDMA Channel List*
 39 *Message* that includes this CDMA_FREQ and
 40 CAND_BAND_CLASS, the base station shall set this bit to '0'.
 41 Otherwise, the base station shall set bit to '1'

42 REV_CDMA_FREQ - If REMAINING_FIELD_INCL is set to '0', the base station shall
 43 omit this field. Otherwise, the base station shall set this field
 44 to the CDMA channel number corresponding to the CDMA
 45 frequency assignment for the Reverse CDMA Channel (see [2])
 46 that is paired with the CDMA_FREQ contained in this record.

1 This Reverse CDMA channel resides in the band class listed
2 in this CAND_BAND_CLASS record. If SUBCLASS_INFO_INCL
3 is equal to '1', this CDMA channel shall also reside in at least
4 one supported CDMA_SUBCLASS included in this
5 CAND_BAND_CLASS record.

6 RC_QPCH_HASH_IND - RC QPCH channel hashing indicator

7 If REMAINING_FIELD_INCL is set to '0' or if
8 RC_QPCH_SEL_INCL is set to '0', the base station shall omit
9 this field; otherwise, the base station shall include this field
10 and set it as follows:

11 The base station shall set this field to '1', if the corresponding
12 CDMA channel is to be selected for channel hashing by
13 mobile stations capable of Radio Configurations greater than
14 two or capable of supporting Quick Paging Channel.

15 TD_HASH_IND - Transmit diversity hash indicator.

16 If REMAINING_FIELD_INCL is set to '0' or if TD_SEL_INCL is
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 If the associated CDMA_FREQ is to be selected for CDMA
20 channel hashing by mobile stations capable of supporting
21 transmit diversity [TD_MODE], the base station shall set the
22 field to '1'; otherwise, the base station shall set this field to '0'.

23 TD_POWER_LEVEL - Transmit diversity power level.

24 If REMAINING_FIELD_INCL is set to '0', or if TD_HASH_IND is
25 set to '0', the base station shall omit this field; otherwise, the
26 base station shall include this field and set it to the transmit
27 diversity transmission power level relative to that of the
28 Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

29 CDMA_FREQ_WEIGHT - CDMA frequency weight

30 If REMAINING_FIELD_INCL is set to '0' or if
31 CDMA_FREQ_WEIGHT_INCL is set to '0', the base station
32 shall omit this field; otherwise, the base station shall include
33 this field and set it as follows:

34 The base station shall set this field to one less than the weight
35 for this CDMA channel to be used in channel hashing by the
36 mobile station.

37

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
5 The base station shall set this field to the number of general
6 extension records included in this message. Base station shall set
7 this field to a value greater than 0.
- 7 GE_REC_TYPE - Type of General Extension Record.
8
9 The base station shall set this field based on the type of record as
specified in Table 3.7.2.3.2.44-1.

1

Table 3.7.2.3.2.44-1. General Extension Record Type values

GE_REC_TYPE (binary)	Description
00000000	Reverse Channel Information.
00000001	Radio Configuration Parameters Record ¹¹⁸
00000010	Delayed ARQ Record ¹¹⁹
00000011-11111111	Reserved

2

GE_REC_LEN - Length of the General Extension Record.

3

The base station shall set this field to the length in octets of the general extension record following the GE_REC_LEN field.

4

5

GE_REC - General Extension Record.

6

The base station shall set this field according to the previous occurrence of the GE_REC_TYPE in this message.

7

8

If the GE_REC_TYPE is set to '00000000' then the base station shall set the GE_REC to the following:

9

10

BAND_CLASS	5
REV_CHAN	11

11

BAND_CLASS - Band Class of the Reverse Channel.

12

The base station shall set this this field to the Band Class of the Reverse CDMA channel as specified in [30].

13

14

REV_CHAN - Channel number of the reverse link frequency.

15

The base station shall set this this field to the CDMA channel number corresponding to the CDMA frequency assignment for the reverse CDMA channel (see [2]) that is paired with the forward CDMA channel included in message carried in the General Extension Message.

16

17

18

19

¹¹⁸ Base station may use this record to extend CAM/ECAM/MECAM or UHDM/GHDM/EHDM/MUHDM/ESCAM messages instead of sending a RCPM message separately to the mobile station.

¹¹⁹ Base station may use this record to extend the ESCAM or CAM/ECAM/MECAM in order to enable delayed ARQ on the supplementary channel.

1 If the GE_REC_TYPE is set to '00000001' then the base station shall set the GE_REC to the
 2 fields of the Radio Configuration Parameters Message defined in
 3 3.7.3.3.2.51; followed by a variable length RESERVED field to make
 4 length of the entire GE_REC record an integer number of octets, with
 5 all bits of the RESERVED field set to 0.

6 If the GE_REC_TYPE is set to '00000010' then the base station shall set the GE_REC to the
 7 following:

8

FOR_SCH_DELAYED_ACK_MASK_INCL	1
FOR_SCH_DELAYED_ACK_MASK	3
REV_SCH_DELAYED_ACK_MASK_INCL	1
REV_SCH_DELAYED_ACK_MASK	3
RESERVED	0-7 (as needed)

9 FOR_SCH_DELAYED_ACK_MASK_INCL - Delayed ACK Mask for the Forward
 10 Supplemental Channel Inclusion indicator.

11 The base station shall set this field to '1' if
 12 FOR_SCH_DELAYED_ACK_MASK field is to be included in this record.
 13 Otherwise, the base station shall set this field to '0'.

14 FOR_SCH_DELAYED_ACK_MASK - Delayed ACK Mask for the Forward Supplemental
 15 Channel.

16 The base station shall omit this field if
 17 FOR_SCH_DELAYED_ACK_MASK_INCL is set to '0'. Otherwise the
 18 base station shall include this field and set it as follows:

19 This field consists of the subfields shown in Table 3.7.3.3.2.44-2. The
 20 base station shall set the subfields corresponding to the PCGs of
 21 frame n+1 where delayed Ack for frame n can be sent to '1', and shall
 22 set the remaining subfields to '0'.

23

24

Table 3.7.2.3.2.44-2. Delayed Ack Mask For F-SCH

Subfield	Length(bits)	Subfield Description
DELAYED_ACK_MASK_0	1	Delayed Ack allowed in PCG 3
DELAYED_ACK_MASK_1	1	Delayed Ack allowed in PCG 4
DELAYED_ACK_MASK_2	1	Delayed Ack allowed in Delayed PCG 5

REV_SCH_DELAYED_ACK_MASK_INCL - Delayed ACK Mask for the Reverse Supplemental Channel Inclusion indicator.

The base station shall set this field to '1' if REV_SCH_DELAYED_ACK_MASK field is to be included in this record. Otherwise, the base station shall set this field to '0'.

REV_SCH_DELAYED_ACK_MASK - Delayed ACK Mask for the Reverse Supplemental Channel.

The base station shall omit this field if REV_SCH_DELAYED_ACK_MASK_INCL is set to '0'. Otherwise the base station shall include this field and set it as follows:

This field consists of the subfields shown in Table 3.7.3.3.2.44-3. The base station shall set the subfields corresponding to the PCGs of frame n+1 where delayed Ack for frame n can be sent to '1', and shall set the remaining subfields to '0'.

Table 3.7.2.3.2.44-3. Delayed Ack Mask for R-SCH

Subfield	Length (bits)	Subfield Description
DELAYED_ACK_MASK_0	1	Delayed Ack allowed in PCG 1
DELAYED_ACK_MASK_1	1	Delayed Ack allowed in PCG 2
DELAYED_ACK_MASK_2	1	Delayed Ack allowed in PCG 3

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire GE_REC record equal to an integer number of octets. The mobile station shall set these bits to '0'.

MESSAGE_TYPE - Message type of the message included in the General Extension Message.

This field shall contain the message type value for the message following this field. When transmitting the general

1 extension message over f-csch, then base station shall set the
2 first 2 MSB of this field to '00'. The base station shall set this
3 field according to [4].

4 MESSAGE_REC - Message extended through the General Extension message.
5 The base station shall set this field to the message that is
6 being extended using the *General Extension Message*.
7

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_LEN

} (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 3.5-1¹²⁰.

¹²⁰ New RADIO_INTERFACE_TYPE values may be defined in [30].

Table 3.5-1. Radio Interface Type

RADIO_INTERFACE_TYPE (binary)	Descriptions
0010	HRPD
0011	E-UTRAN
0100	WiMAX
Other	Reserved

RADIO_INTERFACE_LEN - The length of the Radio Interface Type-specific fields.

The base station shall set this field to the number of octets in the Radio Interface Type-specific fields of this record.

If RADIO_INTERFACE_TYPE is equal to '0010', the base station may include the following 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
----------------	---

NUM_HRPD_NGHBR occurrences of the following subrecord:

{ (NUM_HRPD_NGHBR)

HRPD_NGHBR_REC_LEN	5
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_IND	2
NGHBR_SUBNET_COLOR_CODE	0 or 8
HRPD_NGHBR_REC_RESERVED	0-7 (as needed)

} (NUM_HRPD_NGHBR)

COMMON_RECORD_LEN - Length of the common record part.

The base station shall set this field to the length of the common record in octets, including this field.

SUBNET_COLOR_CODE_INCL - HRPD Subnet Color Code Included Indicator.

1 If the Subnet Color Code (see [1]) associated with the HRPD
2 sector corresponding to this pilot is included in this message,
3 the base station shall set this field to '1'; otherwise, the base
4 station shall set this field to '0'.

5 SUBNET_COLOR_CODE - HRPD Subnet Color Code.

6 If the SUBNET_COLOR_CODE_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 Subnet Color Code (see
10 [1]) associated with the HRPD sector corresponding to this
11 pilot.

12 COMMON_RECORD_RESERVED - Common record part reserved bits.

13 The base station shall add reserved bits as needed in order to
14 make the length of the common record equal to an integer
15 number of octets. The base station shall set these bits to '0'.

16 NUM_HRPD_NGHRBR - Number of HRPD neighbor pilot PN sequences.

17 The base station shall set this field to the number of HRPD
18 neighbors included in the message.

19 HRPD_NGHRBR_REC_LEN - HRPD neighbor record length

20 The base station shall set this field to one less than the
21 number of octets included in ~~each~~this HRPD neighbor
22 ~~records~~record including this field.

23 The base station shall include one occurrence of the following
24 subrecord for each pilot that a mobile station is to place in its
25 HRPD Neighbor Set.

26 NGHRBR_PN - Neighbor pilot PN sequence offset index.

27 The base station shall set this field to the pilot PN sequence
28 offset for this neighbor, in units of 64 PN chips.

29 NGHRBR_FREQ_SAME_AS_PREV - Neighbor frequency information is same as previous
30 indicator.

31 The base station shall set this field to '1' if the neighbor
32 frequency information for this record is the same as the
33 neighbor frequency information for the previous record
34 included in this message; otherwise, the base station shall set
35 this field to '0'.

36 NGHRBR_BAND - Neighbor band class.

37 If the NGHRBR_FREQ_SAME_AS_PREV field is set to '1', the
38 base station shall omit this field; otherwise, the base station
39 shall include this field and set it as follows:

40 The base station shall set this field to the CDMA band class,
41 as specified in [5], corresponding to the CDMA frequency
42 assignment for the CDMA Channel containing this neighbor.

43 NGHRBR_FREQ - Neighbor frequency assignment.

1 If the NGHBR_FREQ_SAME_AS_PREV field is set to '1', 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 the CDMA Channel
5 number, in the specified CDMA band class, corresponding to
6 the CDMA frequency assignment for this neighbor.

7 **PN_ASSOCIATION_IND** - Neighbor PN association indicator.

8 The base station shall set this field to '1' if the system
9 identified by this system record has the same PN assignment
10 as the MC system to which this base station belongs;
11 otherwise, the base station shall set this field to '0'.

12 **DATA_ASSOCIATION_IND** - Neighbor data association indicator.

13 The base station shall set this field to '1' if the system
14 identified by this system record can reach the same set of
15 PDSNs as the MC system to which this base station belongs;
16 otherwise, the base station shall set this field to '0'.

17 **NGHBR_SUBNET_COLOR_CODE_IND** - Neighbor HRPD Subnet Color Code Indicator.

18 If the Subnet Color Code (see [1]) information for this
19 neighbor is not included, the base station shall set this field
20 to '00'.

21 If the Subnet Color Code information for this neighbor is
22 included and is the same value as included in the
23 **SUBNET_COLOR_CODE** field above, the base station shall set
24 this field to '01'.

25 If the Subnet Color Code (see [1]) information for this
26 neighbor is included below, the base station shall set this field
27 to '10'.

28 **NGHBR_SUBNET_COLOR_CODE** - Neighbor HRPD Subnet Color Code.

29 If the **NGHBR_SUBNET_COLOR_CODE_IND** field is not set to
30 '10', 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 Subnet Color Code
33 (see [1]) for this neighbor.

34 **HRPD_NGHBR_REC_RESERVED** - HRPD neighbor record reserved bits.

35 The base station shall add reserved bits as needed in order to
36 make the length of this record equal to an integer number of
37 octets. The base station shall set these bits to '0'.

38 If **RADIO_INTERFACE_TYPE** is equal to '0011', the base
39 station may include the radio interface type-specific fields
40 specified in [49].

41 If **RADIO_INTERFACE_TYPE** is equal to '0100', the base
42 station may include the radio interface type-specific fields
43 specified in [50].

44

1 3.7.2.3.2.46 Frequent General Overhead Information Message
 2 MSG_TAG: FGOIM

3 The support for Frequent General Overhead Information Message and the individual
 4 General Overhead Information Record Types is optional at the
 5 base station.

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_LE N

}

- 6 PILOT_PN - Pilot PN sequence offset index.
 7 The base station shall set this field to the pilot PN sequence
 8 offset for this base station, in units of 64 PN chips.
- 9 CONFIG_MSG_SEQ - Configuration message sequence number.
 10 The base station shall set this field to CONFIG_SEQ
 11 (see 3.6.2.2).
- 12 NUM_GOI_REC - Number of GOI records included in this message.
 13 The base station shall set this field to the number of *General*
 14 *Overhead Information Message* records included in this
 15 message. The base station shall include atleast one General
 16 Overhead Information record in this message.
- 17 GOI_REC_TYPE - GOI record type.
 18 The base station shall set this field to the type of the *General*
 19 *Overhead Information Message* record allowed for
 20 transmission in the *Frequent General Overhead Message*
 21 according to table 3.7.2.3.2.42-1 and [30]¹²¹.
- 22 GOI_REC_LEN - The length of the GOI record length.
 23 The base station shall set this field to the number of octets in
 24 the GOI_REC field following the GOI_REC_LEN.

¹²¹ Further record types may be defined in [30].

1	GOI_REC	-	General Overhead Information record.
2			The base station shall set this record based on the record
3			types defined in table 3.7.2.3.2.42-1.
4	RESERVED	-	Reserved bits.
5			This field shall contain the number of bits required to make
6			the entire GOI_REC field an integer number of octets in
7			length. All bits of this field shall be set to zeros.
8			

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

Message Name	MSG_TAG	Section Number	P_REV_IN_USE¹²²
<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
Reserved (Previously: <i>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

¹²² P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

Message Name	MSG_TAG	Section Number	P_REV_IN_USE
<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
<i>Radio Configuration Parameters Message</i>	RCPM	3.7.3.3.2.51	≥ 12

Message Name	MSG_TAG	Section Number	P_REV_IN_USE
<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 × 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 specified
7 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 $FRAME_OFFSET_S \times 1.25$
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 specified
25 in 3.7.4.

26 CON_REF_INCL - Connection reference included indicator.

1
2
3
4
5
6
7
8
9
10
11
12
13

If the order carried by this message is not a Call Control order (see 3.6.8), 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 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 not included or is included but 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 value of the connection reference assigned to the service option connection of the call, to which this message corresponds.

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

1 3.7.3.3.2.3 Alert With Information Message
 2 MSG_TAG: AWIM

3

Field	Length (bits)
-------	---------------

Zero 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 in
 6 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 3.7.3.3.2.4 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 _i	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_i fields of
 12 this message equal to the
 13 EXTENDED_BURST_TYPE_INTERNATIONAL field as
 14 described in the definition of CHAR_i below. If the base
 15 station sets this field equal to '111111', it shall set the first
 16 two CHAR_i fields of this message equal to the
 17 EXTENDED_BURST_TYPE as described in the definition of
 18 CHAR_i 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_i field included in this message.

25 CHAR_i - 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.

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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 × (NUM_FIELDS – 2)

16
17
18
19
20
21
22

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 × (NUM_FIELDS – 2)

23

1 3.7.3.3.2.5 Reserved

2

3

- 1 3.7.3.3.2.6 Reserved
- 2
- 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_IN D	0 or 1
REV_PDCH_SUPPORTED	0 or 1
MAX_ADD_SERV_INSTANCE	0 or 3
USE_CH_CFG_RRM	1

1

2

SID - System identification.

3

The base station shall set this field to the system identification number for this wireless system (see 2.6.5.2).

4

5

NID - Network identification.

6

This field serves as a sub-identifier of a system as defined by the owner of the SID.

7

1			The base station shall set this field to the network
2			identification number for this network (see 2.6.5.2).
3	SRCH_WIN_A	-	Search window size for the Active Set and Candidate Set.
4			The base station shall set this field to the window size
5			parameter shown in Table 2.6.6.2.1-1 corresponding to the
6			number of PN chips that the mobile station is to search for
7			pilots in the Active Set and Candidate Set.
8	SRCH_WIN_N	-	Search window size for the Neighbor Set.
9			The base station shall set this field to the window size
10			parameter shown in Table 2.6.6.2.1-1 corresponding to the
11			number of PN chips that the mobile station is to search for
12			pilots in the Neighbor Set.
13	SRCH_WIN_R	-	Search window size for the Remaining Set.
14			The base station shall set this field to the window size
15			parameter shown in Table 2.6.6.2.1-1 corresponding to the
16			number of PN chips that the mobile station is to search for
17			pilots in the Remaining Set.
18	T_ADD	-	Pilot detection threshold.
19			This value is used by the mobile station to trigger the transfer
20			of a pilot from the Neighbor Set or Remaining Set to the
21			Candidate Set (see 2.6.6.2.6) and to trigger the sending of the
22			<i>Pilot Strength Measurement Message</i> or <i>Extended Pilot Strength</i>
23			<i>Measurement Message</i> initiating the handoff process (see
24			2.6.6.2.5.2).
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	T_DROP	-	Pilot drop threshold.
29			This value is used by the mobile station to start a handoff
30			drop timer for pilots in the Active Set and the Candidate Set
31			(see 2.6.6.2.3).
32			The base station shall set this field to the pilot drop threshold,
33			expressed as an unsigned binary number equal to
34			$\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
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 an <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			The base station shall set this field to the threshold Candidate
41			Set pilot to Active Set pilot ratio, in units of 0.5 dB.
42	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_TDROD 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 Supplemental
23			Code Channel following an autonomous suspension of
24			transmission on an allocated Supplemental Code Channel.
25	T_SLOTTED_INCL	-	Slotted timer value included indicator.
26			The base station shall set this field to '1' if the slotted timer
27			value is included; otherwise, the base station shall set this
28			field to '0'.
29	T_SLOTTED	-	Slotted timer value
30			If T_SLOTTED_INCL is set to '1', the base station shall include
31			this field and set this field to the value of the T _{MS_Slotted}
32			timer to be used by the mobile station in units of 80 ms;
33			otherwise, the base station shall omit this field.
34	ENC_SUPPORTED	-	Encryption fields included.
35			The base station shall set this field to '1' in the encryption
36			related fields are included; otherwise the base station shall
37			set this field to '0'.
38	SIG_ENCRYPT_SUP	-	Signaling Encryption supported indicator.
39			If ENC_SUPPORTED is equal to '1', the base station shall
40			include this field; otherwise, the base station shall omit this
41			field. If this field is included, this field indicates which
42			signaling encryption algorithms are supported by the base
43			station.

1 This field consists of the subfields shown in Table 2.7.1.3.2.1-
2 5.

3 If this field is included, the base station shall set the subfields
4 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 2.7.1.3.2.4-
18 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 *CDMA Off Time Report Message*,
34 the base station shall set this field to '1'; otherwise, the base
35 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; otherwise,
12			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 determination
2 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 $x \times 8^y$ seconds
41 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 $x \times 8^y$ seconds
5		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'; otherwise,
28		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		

1 3.7.3.3.2.8 Neighbor List Update Message
 2 MSG_TAG: NLUM

3

Field	Length (bits)
PILOT_INC	4

One or more occurrences of the following field:

{

NGHBR_PN	9
----------	---

}

4

5 PILOT_INC - Pilot PN sequence offset index increment.

6 The mobile station searches for Remaining Set pilots at pilot
 7 PN sequence offset index values that are multiples of this
 8 value.

9 The base station shall set this field to the pilot PN sequence
 10 increment, in units of 64 PN chips, that the mobile station is
 11 to 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 NGHBR_PN - Neighbor pilot PN sequence offset index.

16 The base station shall include one occurrence of this field for
 17 each pilot in its neighbor list. The base station shall set this
 18 field to the pilot's PN sequence offset, in units of 64 PN chips.
 19 The base station shall include no more than 20 occurrences
 20 of this field.

21

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 _i	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 digits included in this message.

7

8

DTMF_ON_LENGTH - DTMF pulse width code.

9

The base station shall set this field to the DTMF_ON_LENGTH value shown in Table 2.7.2.3.2.7-1 corresponding to the requested pulse width of the DTMF pulse to be generated by the mobile station.

10

11

12

13

DTMF_OFF_LENGTH - DTMF interdigit interval code.

14

The base 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 interdigit interval between DTMF pulses to be generated by the mobile station.

15

16

17

18

DIGIT_i - DTMF digit.

19

The base station shall include one occurrence of this field for each DTMF digit to be generated by the mobile station. The base 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.

20

21

22

23

24

CON_REF_INCL - Connection reference included indicator.

25

The base 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'.

26

27

28

CON_REF - Connection reference.

1
2
3
4
5
6

If the CON_REF_INCL 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 value of the connection reference assigned to the service option connection of the call, to which this message corresponds.

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
 16
$$\lfloor 2^{(PWR_REP_FRAMES/2)} \times 5 \rfloor$$
 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 counting
 34 for power control purposes.

1
2
3

The base station shall set this field to the power report delay 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

1 3.7.3.3.2.12 Set Parameters Message
 2 MSG_TAG: STPM

3

Field	Length (bits)
-------	---------------

One or more occurrences of the following record:

{

PARAMETER_ID	16
PARAMETER_LEN	10
PARAMETER	PARAMETER_LEN + 1

}

4

5 The base station shall include one occurrence of the following three-field record for each
 6 parameter to be set.

7 PARAMETER_ID - Parameter identification.

8 The base station shall set this field to the identification shown
 9 in Table E-1 corresponding to the settable parameter to be
 10 set.

11 PARAMETER_LEN - Parameter length.

12 The base station shall set this field to the length shown in
 13 Table E-1 corresponding to the parameter to be set.

14 PARAMETER - Parameter value.

15 The base station shall set this field to the value of the
 16 parameter specified by the PARAMETER_ID field.

17

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 in
 6 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 identification number for this system.

7

8

NID - Network identification.

9

This field serves as a sub-identifier of a system as defined by the owner of the SID.

10

11

The base station shall set this field to the network identification number for this network. The NID value of 65,535 is reserved.

12

13

14

REG_ZONE - Registration zone.

15

The base station shall set this field to its registration zone number (see 2.6.5.1.5).

16

17

TOTAL_ZONES - Number of registration zones to be retained.

18

The base station shall set this field to the number of registration zones the mobile station is to retain for purposes of zone-based registration (see 2.6.5.1.5).

19

20

21

If zone-based registration is to be disabled, the base station shall set this field to '000'.

22

23

ZONE_TIMER - Zone timer length.

24

The base station shall set this field to the ZONE_TIMER value shown in Table 3.7.2.3.2.1-1 corresponding to the length of the zone registration timer to be used by mobile stations.

25

26

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 number
13			with positive numbers signifying North latitudes. The base
14			station shall set this field to a value in the range -1296000 to
15			1296000 inclusive (corresponding to a range of -90° to +90°).
16	BASE_LONG	-	Base station longitude.
17			The base station shall set this field to its longitude in units of
18			0.25 second, expressed as a two's complement signed number
19			with positive numbers signifying East longitude. The base
20			station shall set this field to a value in the range -2592000 to
21			2592000 inclusive (corresponding to a range of -180° to
22			+180°).
23	REG_DIST	-	Registration distance.
24			If mobile stations are to perform distance-based registration,
25			the base station shall set this field to the non-zero "distance"
26			beyond which the mobile station is to re-register (see
27			2.6.5.1.4). If mobile stations are not to perform distance-
28			based registration, the base station shall set this field to 0.
29			

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 × 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-specific
 20 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-specific
 24 fields:

Type-specific Field	Length (bits)
BAND_CLASS	5
OP_MODE	8
RESERVED	3

1
2
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4
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19
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21

BAND_CLASS - Band class.
The base station shall set this field to the CDMA band class, as specified in [30].

OP_MODE - Operating mode.
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.

RESERVED - Reserved bits.
The base station shall set this field to '000'.

NUM_FIELDS - Number of requested record fields in this message.
The base station shall set this field to the number of occurrences of RECORD_TYPE in this message.

The base station shall only request the status information records qualified by the included qualification information (see Table 2.7.4-1) in this message. The base station shall include one occurrence of the following field for each information record that is requested:

RECORD_TYPE - Information record type.
The base station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the information record requested.

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

(continues on next page)

4

5

1

Field	Length (bits)
ADD_LENGTH	3
Additional fields	8 × 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 $FRAME_OFFSET_s \times 1.25$ 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
 5 *Measurement Message* initiating the handoff process (see
 6 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 detection
 9 threshold, expressed as an unsigned binary number equal to
 10 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$; otherwise, the base station shall omit
 11 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 *Pilot Strength Measurement*
 23 *Message* or an *Extended Pilot Strength Measurement Message*
 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_TDROP - 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 *Pilot Strength Measurement Message* or an *Extended Pilot*
 36 *Strength Measurement Message* 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_TDROP and set this field to the T_TDROP
 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 '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 HARD_INCLUDED is set to '1', the base station shall
 38 include the field RESET_FPC and set it 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 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:

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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

NUM_PREAMBLE or RESQ_NUM_PREAM BLE (binary)	Preamble Length in 1.25 ms Increments
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
3
4
5
6
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29

P_REV - Protocol revision level.

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.

The base station shall include one occurrence of the following three-field record for each member of the mobile station's new Active Set.

PILOT_PN - Pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this pilot in units of 64 PN chips.

PWR_COMB_IND - Power control symbol combining indicator.

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'.

CODE_CHAN - Code channel index.

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.

1 3.7.3.3.2.18 Service Request Message
 2 MSG_TAG: SRQM

3

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

4

5 SERV_REQ_SEQ - Service request sequence number.

6

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.

7

8

9 REQ_PURPOSE - Request purpose.

10

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.

11

12

13

14

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.	

15

16

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			

1 3.7.3.3.2.19 Service Response Message
 2 MSG_TAG: SRPM

3

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

4

5 SERV_REQ_SEQ - Service request sequence number.

6

The base station shall set this field to the value of the
 7 SERV_REQ_SEQ field in the *Service Request Message* to
 8 which it is responding.

9

9 RESP_PURPOSE - Response purpose.

10

The base station shall set this field to the appropriate
 11 RESP_PURPOSE code from Table 3.7.3.3.2.19-1 to indicate
 12 the purpose of the message.

11

12

13

14

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.	

15

16

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_IN CL	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 specified in this message.

4

5

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'.

6

7

8

ACTION_TIME - Action time.

9

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 specified service configuration is to take effect. If the USE_TIME field is set to '0', the base station shall set this field to '000000'.

10

11

12

13

14

SERV_CON_SEQ - Connect sequence number.

15

The base station shall set this field to the connect sequence number pertaining to this connect message as specified in 3.6.4.1.2.1.2.

16

17

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
3 This field may be used by the base station to instruct the
4 mobile station to use the stored service configuration (that is,
5 both the Service Configuration information record and the
6 Non-negotiable Service Configuration information record).
7
8 If MOB_P_REV is less than seven, the base station shall set
9 this field to '00'.
10
11 If the base station had sent an *Extended Channel Assignment*
12 *Message* with GRANTED_MODE set to '11' or a service
13 configuration has been sent successfully to the mobile station
14 upon entering the *Traffic Channel Substate*, the base station
shall not set this field to '01' or '10'; otherwise, the base
station shall set this field according to Table 3.7.3.3.2.20-1.

1

Table 3.7.3.3.2.20-1. USE_OLD_SERV_CONFIG values

USE_OLD_SERV_CONFIG Field (binary)	Description
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:
32			The base station shall set this field to the length (in octets) of
33			the SYNC_ID field included in this message. The base station
34			shall set this field to a value larger than zero.
35	SYNC_ID	-	Service Configuration synchronization identifier.
36			If the SYNC_ID_INCL 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 synchronization
40			identifier corresponding to the service configuration conveyed
41			by this message.
42	RECORD_TYPE	-	Information record type.

1			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base station shall omit this field; otherwise the base station shall include this field and set it as follows.
2			
3			
4			The base station shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Service Configuration information record.
5			
6			
7	RECORD_LEN	-	Information record length.
8			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base station shall omit this field; otherwise the base station shall include this field and set it as follows.
9			
10			
11			The base station shall set this field to the number of octets included in the type-specific fields of the Service Configuration information record.
12			
13			
14	Type-specific fields	-	Type-specific fields.
15			If USE_OLD_SERV_CONFIG is equal to '01' or '11', 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 these fields as specified in 3.7.5.7 for the Service Configuration information record.
19			
20	RECORD_TYPE	-	Information record type.
21			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base station shall omit this field; otherwise the base station shall include this field and set it as follows.
22			
23			
24			The base station 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.
25			
26			
27	RECORD_LEN	-	Information record length.
28			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base station shall omit this field; otherwise the base station shall include this field and set it as follows.
29			
30			
31			The base station shall set this field to the number of octets included in the type-specific fields of the Non-Negotiable Service Configuration information record.
32			
33			
34	Type-specific fields	-	Type-specific fields.
35			If USE_OLD_SERV_CONFIG is equal to '01' or '11', the base station shall omit this field; otherwise the base station shall include this field and set it as follows.
36			
37			
38			The base station shall set these fields as specified in 3.7.5.20 for the Non-Negotiable Service Configuration information record.
39			
40			
41	CC_INFO_INCL	-	Call Control information included indicator.
42			If the USE_OLD_SERV_CONFIG field is set to '01', '10', or '11', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
43			
44			

1 The base station shall set this field to '1' if Call Control related
2 parameters (to assign new call(s)) are included in this
3 message; otherwise, the base station shall set this field to '0'.

4 NUM_CALLS_ASSIGN - Number of call assignments.
5 If the CC_INFO_INCL field is not included or is included but is
6 set to '0', the base station shall omit this field; otherwise, the
7 base station shall include this field and set it as follows:
8 The base station shall set this field to the number of new call
9 assignments included in this message.

10 The base station shall include NUM_CALLS_ASSIGN occurrences of the following variable
11 length record.

12 CON_REF - Connection reference.
13 The base station shall set this field to the connection
14 reference of the service option connection corresponding to
15 this call.

16 RESPONSE_IND - Response indicator.
17 The base station shall set this field to '1' if this call
18 assignment is a response to an *Enhanced Origination Message*
19 from the mobile station; otherwise, the base station shall set
20 this field to '0'.

21 TAG - Transaction identifier.
22 If the RESPONSE_IND 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 value of the TAG
26 field received in the *Enhanced Origination Message* to which
27 this call assignment is the response.

28 BYPASS_ALERT_ANSWER - Bypass alert indicator.
29 If the RESPONSE_IND field is set to '1', the base station shall
30 omit this field; otherwise, the base station shall include this
31 field and set it as follows:
32 If the mobile station is to bypass the Waiting for Order
33 Substate and the Waiting for Mobile Station Answer Substate
34 for this call, the base station shall set this field to '1';
35 otherwise, the base station shall set this field to '0'.

36 USE_TYPE0_PLCM - Use TYPE0 PLCM indicator.
37 If the mobile station is to start using the PLCM defined by
38 PLCM_TYPE of '0000' when P_REV_IN_USE is less than 11 or
39 '0100' when P_REV_IN_USE is greater than or equal to 11 (see
40 Table 3.7.2.3.2.21-5), the base station shall set this field to
41 '1'. If the mobile station is to continue using the current long
42 code mask, the base station shall set this field to '0'.

1 SYNC_ID_BS_INITIATED_IND - SYNC_ID base station initiated indicator.

2 If the SYNC_ID_INCL field is set to '1' and the
3 USE_OLD_SERV_CONFIG field is included and is set to '10',
4 then the base station shall include this field and set it as
5 follows; otherwise, the base station shall omit this field.

6 If the SYNC_ID included in this message is initiated by the
7 base station and is to be used by mobile station to restore the
8 stored configuration, then the base station shall set this field
9 to '1'; otherwise the base station shall set this field to '0'.

10 SR_ID_RELEASE_BITMAP_INCL - SR_ID release bitamp included indicator.

11 If the USE_OLD_SERV_CONFIG field is not set to '11', the
12 base station shall omit this field; otherwise, the base station
13 shall include this field and set it as follows:

14 If SR_ID_RELEASE_BITMAP is included, base station shall set
15 this field to '1'; otherwise, base station shall set this field to
16 '0'.

17 SR_ID_RELEASE_BITMAP - SR_ID release bitmap.

18 If the SR_ID_RELEASE_BITMAP_INCL field is not included or
19 is included and is set to '0', the base station shall omit this
20 field; otherwise, the base station shall include this field and
21 set it as follows:

22 This field consists of the subfields defined in Table
23 3.7.3.3.2.20-2. The base station shall set a subfield to '1' to
24 indicate that the mobile station is to release the service option
25 connection of the corresponding service reference identifier;
26 otherwise, the base station shall set the subfield to '0' to
27 indicated that the service option connection of the
28 corresponding service reference identifier is not affected.

29 The base station shall not indicate the mobile station to
30 restore and release the same SR_ID using this message.

31 **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

32

33

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 × CTL_REC_LEN

4

5 USE_TIME - Use action time indicator.
 6 This field indicates whether an explicit action time is specified
 7 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 $FRAME_OFFSET_s \times 1.25$
 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 × 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:

7

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_PARS_INCLUDED	1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3

}

FOR_INCLUDED	1
--------------	---

4

(continues on next page)

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 - *Supplemental Channel Request Message* 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 *Supplemental Channel Request Message*.
 11 The base station shall set RETRY_DELAY to '11111111' to
 12 indicate that the mobile station is to refrain from sending
 13 *Supplemental Channel Request Messages* 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 Reverse
 31 Supplemental Code Channel at any time within the reverse
 32 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 *Supplemental Channel*
17 *Assignment Message* or a *General Handoff Direction Message*
18 that specifies an updated REV_DURATION or an updated
19 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 *General Handoff Direction Message* 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 *General Handoff*
31 *Direction Message*; 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 *General Handoff*
35 *Direction Message*.
- 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 *General Handoff Direction Message* (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 *Supplemental Channel Request Message* sequence
2 number indicator.
- 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 - *Supplemental Channel Request Message* sequence number.
7
8 If USE_SCRM_SEQ_NUM is set to '1', the base station shall
9 set this field to the sequence number corresponding to the
10 SCRM_SEQ_NUM field in a *Supplemental Channel Request*
11 *Message* to which the mobile station is to match this
12 message; otherwise, the base station shall omit this field.
- 12 REV_PARAMS_INCLUDED - Reverse additional parameters included flag.
13
14 The base station shall set this field to '1' if the following three
15 fields (T_MULCHAN, BEGIN_PREAMBLE, and
16 RESUME_PREAMBLE) are included in this message;
17 otherwise, the base station shall set this field to '0'.
- 17 T_MULCHAN - *Supplemental Channel Request Message* pilot strength
18 reporting offset.
- 19 If REV_PARAMS_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 *Supplemental Channel Request*
23 *Message*. 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_PARAMS_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_PARAMS_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 the
 13 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 Supplemental
 31 Code Channel start time is specified in this message.
- 32 The base station shall include this field only if
 33 FOR_SUP_CONFIG is set to '01' or '11'. If a FOR_START_TIME
 34 is specified in this message, the base station shall set this
 35 field to '1'; otherwise, the base station shall set this field to '0'.
 36 If EXPL_FOR_START_TIME is set to '1', then the base station
 37 shall set USE_FOR_HDM_SEQ to '0'.
- 38 The following field is included only if EXPL_FOR_START_TIME is included and set to '1':
- 39 FOR_START_TIME - Start time of the Forward Supplemental Code Channel
 40 assignment.
- 41 The base station shall include this field only if
 42 FOR_SUP_CONFIG is set to '01' or '11'. If the
 43 EXPL_FOR_START_TIME field is set to '1', the base station
 44 shall set this field to the System Time, in units of 80 ms
 45 (modulo 64), at which the mobile station is to start processing
 46 the Forward Supplemental Code Channels. If
 47 EXPL_FOR_START_TIME is set to '0', the base station shall
 48 omit this field.

- 1 USE_FOR_DURATION - Use forward duration indicator.
- 2 The base station shall set this field to '1' if FOR_DURATION is
- 3 included in the message; otherwise, the base station shall set
- 4 this field to '0'.
- 5 If FOR_SUP_CONFIG is set to '01' or '11', then the base
- 6 station may set this field to '0' to indicate that the mobile
- 7 station is to be assigned an infinite Forward Supplemental
- 8 Code Channel assignment duration (i.e., the mobile station is
- 9 to continue processing Forward Supplemental Code Channels
- 10 until it receives a subsequent *Supplemental Channel*
- 11 *Assignment Message* or a *General Handoff Direction Message*
- 12 that specifies an updated FOR_DURATION). Otherwise, the
- 13 base station may set this field to '1' to indicate that the mobile
- 14 station is to be given a Forward Supplemental Code Channel
- 15 assignment for the duration specified by the FOR_DURATION
- 16 field.
- 17 If FOR_SUP_CONFIG is set to '00' or '10', then the base
- 18 station shall set USE_FOR_DURATION to '0'.
- 19 FOR_DURATION - Duration of Forward Supplemental Code Channel
- 20 assignment.
- 21 The base station shall include this field only if
- 22 USE_FOR_DURATION is included and set to '1'. If this field is
- 23 included, this field indicates allocated duration, in units of 80
- 24 ms, during which the mobile station is to process the Forward
- 25 Supplemental Code Channels.
- 26 USE_FOR_HDM_SEQ - Use Forward *General Handoff Direction Message* sequence
- 27 number indicator.
- 28 This field indicates whether processing of the Forward
- 29 Supplemental Code Channels shall take effect at the same
- 30 time as a corresponding *General Handoff Direction Message*.
- 31 The base station shall include this field only if
- 32 FOR_SUP_CONFIG is equal to '01' or '11'. If this message is
- 33 linked with a *General Handoff Direction Message*, the base
- 34 station shall set this field to '1'; otherwise, the base station
- 35 shall set this field to '0'. If USE_FOR_HDM_SEQ is set to '1',
- 36 then the base station shall set EXPL_FOR_START_TIME to '0'.
- 37 FOR_LINKED_HDM_SEQ - Sequence number of the *General Handoff Direction Message*.
- 38 If the USE_FOR_HDM_SEQ field is included and set to '1', the
- 39 base station shall set this field to the sequence number of the
- 40 *General Handoff Direction Message* (HDM_SEQ) to which this
- 41 Forward Supplemental Code Channel assignment is linked;
- 42 otherwise, if USE_FOR_HDM_SEQ is not included or is set to
- 43 '0', then base station shall omit this field.
- 44 NUM_SUP_PILOTS - Number of pilots in the Active Set which have at least one
- 45 associated Supplemental Code Channel.

1 If FOR_SUP_CONFIG is included and is set to '10' or '11', the
 2 base station shall include this field and shall set this field to
 3 the number of pilots for which there is at least one associated
 4 Supplemental Code Channel. This field shall not be included
 5 if FOR_SUP_CONFIG is omitted or is set to '01' or '00'.

6 NUM_FOR_SUP - Number of Forward Supplemental Code Channels.

7 If FOR_SUP_CONFIG is included and is set to '10' or '11', the
 8 base station shall include this field and shall set this field to
 9 the number of Forward Supplemental Code Channels
 10 assigned to the mobile station. NUM_FOR_SUP shall not
 11 exceed the maximum number of Forward Supplemental Code
 12 Channels for the negotiated multiplex option. This field shall
 13 not be included if FOR_SUP_CONFIG is omitted or is set to
 14 '01' or '00'.

15 If FOR_SUP_CONFIG is included and is set to '10' or '11', the base station shall include
 16 NUM_SUP_PILOTS occurrences of the following record, one for each pilot for which there is
 17 at least one associated Supplemental Code Channel:

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 pilot in units of 64 PN chips.

21 EXPL_CODE_CHAN - Explicit code channel indicator

22 The base station shall set this field to '1' to indicate explicit
 23 assignment of each Forward Supplemental Code Channel.
 24 The base station shall set this field to '0' if the mobile station
 25 is to use NUM_FOR_SUP successive code channels beginning
 26 with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN
 27 through BASE_CODE_CHAN + NUM_FOR_SUP - 1). In both
 28 cases (i.e., the explicit code channel list format and range
 29 format), the order of the code channel indices is the same for
 30 all the pilots specified in this message (i.e., the *i*th code
 31 channel index in the list for each pilot PN sequence offset
 32 indicates the appropriate code channel to be used for the *i*th
 33 Forward Supplemental Code Channel).

34 If EXPL_CODE_CHAN is set to '1', then the base station shall include NUM_FOR_SUP
 35 occurrences of the following field, one for each pilot which has been included:

36 SUP_CODE_CHAN - Supplemental Code Channel index.

37 The base station shall set this field to the code channel index
 38 (see [2]) in the range 1 to 63 inclusive of the Supplemental
 39 Code Channel associated with this pilot.

40 If EXPL_CODE_CHAN is set to '0', then the base station shall include the following field:

41 BASE_CODE_CHAN - Base code channel index.

1 If EXPL_CODE_CHAN is equal to '0', the base station shall
2 include this field and set it to the base code channel index
3 (see [2]) in the range of 1 to (63 – NUM_FOR_SUP + 1),
4 inclusive, that the mobile station is to use as the first Forward
5 Supplemental Code Channel associated with this pilot. The
6 mobile station is to use NUM_FOR_SUP successive code
7 channels beginning with index BASE_CODE_CHAN (i.e.,
8 BASE_CODE_CHAN through BASE_CODE_CHAN +
9 NUM_FOR_SUP – 1) for the Forward Supplemental Code
10 Channels associated with this pilot.

11 The base station shall not include this field if
12 EXPL_CODE_CHAN is equal to '1' or if EXPL_CODE_CHAN is
13 not included.

14

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
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(continues on next page)

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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

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3

PWR_CNTL_STEP - Power control step size

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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. The base station should not set this field to '011' or '100' if base station has not assigned RC8 for the reverse link.

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Table 3.7.3.3.2.25-1. Closed Loop Power Control Step Size

PWR_CNTL_STEP (binary)	Power Control Step Size (dB nominal)
000	1
001	0.5
010	0.25
011	1.5
100	2.0
All other PWR_CNTL_STEP values are reserved. The base station should not use PWR_CNTL_STEP values of '011' or '100' if base station has not assigned RC8 for the reverse link.	

- 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 $FRAME_OFFSET_S \times 1.25$ 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.

1 If only the 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_OLPC_FCH_INCL - Fundamental Channel Outer Loop Power Control parameter
 12 included indicator.

13 If FPC_INCL is set to '0', the base station shall omit this field;
 14 otherwise, the base station shall set this field as follows:

15 If the forward link fundamental channel outer loop power
 16 control parameters are included in this message, the base
 17 station shall set this field to '1'; otherwise, the base station
 18 shall set this field to '0'.

19 FPC_FCH_FER - Fundamental channel target Frame Error Rate.

20 If FPC_OLPC_FCH_INCL is included and set to '1', the base
 21 station shall set this field to the target Frame Error Rate on
 22 the Forward Fundamental Channel, as specified in Table
 23 3.7.3.3.2.25-2; otherwise, the base station shall omit this
 24 field.

25 **Table 3.7.3.3.2.25-2. Target Frame Error Rate**

FER (Binary)	Frame Error Rate
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

26 FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint
 27 If FPC_OLPC_FCH_INCL is included and set to '1', the base
 28 station shall set this field to minimum Fundamental Channel
 29 Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise,
 30 the base station shall omit this field.

31 The base station shall set this field to '11111111', when it
 32 directs the mobile station to set this Eb/Nt setpoint to the
 33 current setpoint used at the mobile station on this channel.

34 FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint

1 If FPC_OLPC_FCH_INCL is included and set to '1', the base
2 station shall set this field to maximum Fundamental Channel
3 Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise,
4 the base station shall omit this field.

5 The base station shall set this field to '11111111', when it
6 directs the mobile station to set this Eb/Nt setpoint to the
7 current setpoint used at the mobile station on this channel.

8 FPC_OLPC_DCCH_INCL - Dedicated Control Channel Outer Loop Power Control
9 parameter included indicator.

10 If FPC_INCL is set to '0', the base station shall omit this field;
11 otherwise, the base station shall set this field as follows:

12 If the forward link Dedicated Control Channel outer loop
13 power control parameters are included in this message, the
14 base station shall set this field to '1'; otherwise, the base
15 station shall set this field to '0'.

16 FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.

17 If FPC_OLPC_DCCH_INCL is included and set to '1', the base
18 station shall set this field to the target Frame Error Rate on
19 the Forward Dedicated Control Channel, as specified in Table
20 3.7.3.3.2.25-2; otherwise, the base station shall omit this
21 field.

22 FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop Eb/Nt
23 setpoint.

24 If FPC_OLPC_DCCH_INCL is included and set to '1', the base
25 station shall set this field to minimum Dedicated Control
26 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB;
27 otherwise, the base station shall omit this field.

28 The base station shall set this field to '11111111', when it
29 directs the mobile station to set this Eb/Nt setpoint to the
30 current setpoint used at the mobile station on this channel.

31 FPC_DCCH_MAX_SETPT - Maximum Dedicated Control Channel Outer Loop Eb/Nt
32 setpoint.

33 If FPC_OLPC_DCCH_INCL is included and set to '1', the base
34 station shall set this field to maximum Dedicated Control
35 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB;
36 otherwise, the base station shall omit this field.

37 The base station shall set this field to '11111111', when it
38 directs the mobile station to set this Eb/Nt setpoint to the
39 current setpoint used at the mobile station on this channel.

40 FPC_SEC_CHAN - Master Supplemental channel index.

41 If FPC_INCL is set to '1' and FPC_MODE is set to '001', '010',
42 '101', or '110', the base station shall set this field to the
43 master Supplemental Channel index; otherwise, the base
44 station shall omit this field.

- 1 NUM_SUP - Number of Supplemental Channels.
2 If FPC_INCL is set to '0', the base station shall omit this field;
3 otherwise, the base station shall set this field to the total
4 number of the Supplemental Channels.
- 5 The base station shall include NUM_SUP occurrences of the following record:
- 6 SCH_ID - Supplemental channel index.
7 The base station shall set this field to the Supplemental
8 Channel index.
- 9 FPC_SCH_FER - Supplemental channel target Frame Error Rate.
10 The base station shall set this field to the target Frame Error
11 Rate on the Supplemental Channel, as specified in Table
12 3.7.3.3.2.25-2.
- 13 FPC_SCH_MIN_SETPT - Minimum Supplemental Channel outer loop Eb/Nt setpoint.
14 The base station shall set this field to minimum Supplemental
15 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.
16 The base station shall set this field to '11111111', when it
17 directs the mobile station to set this Eb/Nt setpoint to the
18 current setpoint used at the mobile station on this channel.
- 19 FPC_SCH_MAX_SETPT - Maximum Supplemental Channel outer loop Eb/Nt setpoint.
20 The base station shall set this field to maximum
21 Supplemental Channel Outer Loop Eb/Nt setpoint, in units of
22 0.125 dB.
23 The base station shall set this field to '11111111', when it
24 directs the mobile station to set this Eb/Nt setpoint to the
25 current setpoint used at the mobile station on this channel.
- 26 FPC_THRESH_INCL - Setpoint Report Threshold included indicator.
27 If FPC_INCL is set to '0', the base station shall omit this field;
28 otherwise, the base station shall set this field as follows:
29 If FPC_SETPT_THRESH is included in this message, the base
30 station shall set this field to '1'; otherwise, the base station
31 shall set this field to '0'.
- 32 FPC_SETPT_THRESH - Setpoint Report Threshold.
33 If FPC_THRESH_INCL is set to '1', the base station shall set
34 the value to FPC_SETPT_THRESH (in units of 0.125 dB) above
35 which the outer loop report message will be sent by the
36 mobile station; otherwise, the base station shall omit this
37 field.
- 38 FPC_THRESH_SCH_INCL- SCH Setpoint Report Threshold included indicator.
39 If FPC_INCL is set to '0', the base station shall omit this field;
40 otherwise, the base station shall set this field as follows:
41 If FPC_SETPT_THRESH_SCH is included in this message, the
42 base station shall set this field to '1'; otherwise, the base
43 station shall set this field to '0'.

- 1 FPC_SETPT_THRESH_SCH - SCH Setpoint Report Threshold.
 2 If FPC_THRESH_SCH_INCL is set to '1', the base station shall
 3 set the value to FPC_SETPT_THRESH_SCH (in units of 0.125
 4 dB) above which the outer loop report message will be sent by
 5 the mobile station; otherwise, the base station shall omit this
 6 field.
- 7 RPC_INCL - Reverse Link Power Control parameter included indicator.
 8 If the reverse 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 RPC_NUM_REC - Number of records for Reverse Link Power Control.
 12 If RPC_INCL is set to '0', the base station shall omit this field;
 13 otherwise, the base station shall set this field to one less than
 14 the number of records included in this message.
- 15 If RPC_NUM_REC is included in this message, the base station shall include
 16 RPC_NUM_REC occurrences of the following record:
- 17 RPC_ADJ_REC_TYPE - Reverse Link Power Control adjustment record type.
 18 The base station shall set this field to the value shown in
 19 Table 3.7.3.3.2.25-3 corresponding to the type of adjustment
 20 that is to be used.

21 **Table 3.7.3.3.2.25-3. RPC_ADJ_REC_TYPE and RPC_ADJ_REC_LEN fields**

Description	RPC_ADJ_REC_TYPE (binary)	RPC_ADJ_REC_LEN
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.

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 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)

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6

FCH_INCL - FCH channel adjustment gain included indicator.

7

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'.

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FCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Fundamental Channel.

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If FCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set each field to the value of the gain adjustment that the mobile station is to make for the Reverse Fundamental Channel. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB. The base station shall set the value in the range from -48 to 48 inclusive.

18

DCCH_INCL - DCCH channel adjustment gain included indicator.

19

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21

If DCCH_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'.

22

DCCH_CHAN_ADJ_GAIN - Channel adjustment gain for the Reverse Dedicated Control Channel.

23

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 as
6 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 as
20 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 Acknowledgment
42 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 as
 6 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. The
 20 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.

1

Table 3.7.3.3.2.25-5. Type Specific Fields for RECORD_TYPE = '0001'

Fields	Length (Bits)
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)

2

3

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)
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2

3 RL_ATT_ADJ_GAIN_TYPE- Reverse Link Attribute Adjustment Gain value type indicator.

4 If the following fields are set to the nominal attribute gain
 5 adjustment values that the mobile station is to use for the
 6 transmission attributes (relative to Nominal_Attribute_Gain
 7 specified in [2]), the base station shall set this field to '0'. If
 8 the following fields are set to the pilot reference level
 9 adjustment values that the mobile station is to use for the
 10 transmission attributes (relative to Pilot_Reference_Level
 11 specified in [2]), the base station shall set this field to '1'.

12 RC3_RC5_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
 13 Configuration 3 or 5 of 20 ms frame included indicator.

14 If Reverse Link Attribute adjustment Gain for Radio
 15 Configuration 3 or 5 of 20 ms frame is included 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 RL_ATT_ADJ_GAIN_1500 - Reverse Link Attribute Adjustment Gain for the transmission
 19 rate 1500 bits/s.

20 If RC3_RC5_20MS_INCL is set to '0', the base station shall
 21 omit this field.

22 If RC3_RC5_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 1500 bits/s,
 27 convolutional code and 20ms frame. The base station shall
 28 set the value in the range from -48 to 48 inclusive.

29 If RC3_RC5_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 1500 bits/s,
 34 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.

1

Table 3.7.3.3.2.25-6. Type Specific Fields for RECORD_TYPE = '0010'

Fields	Length (Bits)
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)

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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)
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CODE_TYPE - Coding type indicator.

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If the following corresponding gain adjustment fields apply for the convolutional code, the base station shall set this field to '0'. If the following corresponding gain adjustment fields apply for the Turbo code, the base station shall set this field to '1'.

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RL_ATT_ADJ_GAIN_TYPE- Reverse Link Attribute adjustment Gain value type indicator.

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If the following corresponding gain adjustment fields are set to the value of the nominal attribute gain adjustment that the mobile station is to make for the corresponding transmission attributes (relative to Nominal_Attribute_Gain specified in [2]), the base station shall set this field to '0'. If the following corresponding gain adjustment fields are set to the value of the pilot reference level adjustment that the mobile station is to use for the corresponding transmission attributes (relative to Pilot_Reference_Level specified in [2]), the base station shall set this field to '1'.

20

RC3_RC5_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20ms frame included indicator.

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If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20ms 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'.

26

RL_ATT_ADJ_GAIN_19200 - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

27

1 If RC3_RC5_20MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC3_RC5_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 19200 bits/s,
8 and 20ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC3_RC5_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 19200 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_38400 - Reverse Link Attribute Adjustment Gain for the
19 transmission rate 38400 bits/s.

20 If RC3_RC5_20MS_INCL is set to '0', the base station shall
21 omit this field.

22 If RC3_RC5_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 38400 bits/s,
27 and 20ms frame. The base station shall set the value in the
28 range from -48 to 48 inclusive.

29 If RC3_RC5_20MS_INCL is set to '1' and
30 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
31 this field to the value of the pilot reference level adjustment
32 that the mobile station is to make for the transmission
33 attributes with transmission rate 38400 bits/s and 20ms
34 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_76800 - Reverse Link Attribute Adjustment Gain for the
38 transmission rate 76800 bits/s.

39 If RC3_RC5_20MS_INCL is set to '0', the base station shall
40 omit this field.

41 If RC3_RC5_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 76800 bits/s,
46 and 20ms frame. The base station shall set the value in the
47 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 76800 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_153600 - Reverse Link Attribute Adjustment Gain for the
10 transmission rate 153600 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 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 153600 bits/s,
18 and 20ms frame. The base station shall set the value in the
19 range from -48 to 48 inclusive.

20 If RC3_RC5_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 153600 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_307200 - Reverse Link Attribute Adjustment Gain for the
29 transmission rate 307200 bits/s.

30 If RC3_RC5_20MS_INCL is set to '0', the base station shall
31 omit this field.

32 If RC3_RC5_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 307200 bits/s,
37 and 20ms frame. The base station shall set the value in the
38 range from -48 to 48 inclusive.

39 If RC3_RC5_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 307200 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_614400 - Reverse Link Attribute Adjustment Gain for the
48 transmission rate 614400 bits/s.

1 If RC3_RC5_20MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC3_RC5_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 614400 bits/s,
8 and 20ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC3_RC5_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 614400 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 RC4_RC6_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
19 Configuration 4 or 6 of 20ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio
21 Configuration 4 or 6 of 20ms 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 - Reverse Link Attribute Adjustment Gain for the
25 transmission rate 28800 bits/s.

26 If RC4_RC6_20MS_INCL is set to '0', the base station shall
27 omit this field.

28 If RC4_RC6_20MS_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 20ms frame. The base station shall set the value in the
34 range from -48 to 48 inclusive.

35 If RC4_RC6_20MS_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 20ms
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 - Reverse Link Attribute Adjustment Gain for the
44 transmission rate 57600 bits/s.

45 If RC4_RC6_20MS_INCL is set to '0', the base station shall
46 omit this field.

1 If RC4_RC6_20MS_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 20ms frame. The base station shall set the value in the
 7 range from -48 to 48 inclusive.

8 If RC4_RC6_20MS_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 20ms
 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 - Reverse Link Attribute Adjustment Gain for the
 17 transmission rate 115200 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 115200 bits/s,
 25 and 20ms frame. The base station shall set the value in the
 26 range from -48 to 48 inclusive.

27 If RC4_RC6_20MS_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 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_230400 - Reverse Link Attribute Adjustment Gain for the
 36 transmission rate 230400 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 attribute gain
 42 adjustment that the mobile station is to make for the
 43 transmission attributes with transmission rate 230400 bits/s,
 44 and 20ms frame. The base station shall set the value in the
 45 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 230400 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_460800 - Reverse Link Attribute Adjustment Gain for the
 10 transmission rate 460800 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 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 460800 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 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 460800 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 RL_ATT_ADJ_GAIN_1036800- Reverse Link Attribute Adjustment Gain for the
 29 transmission rate 1036800 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 1036800
 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 1306800
 44 bits/s 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 RC3_RC5_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
 48 Configuration 3 or 5 of 40ms frame included indicator.

1 If Reverse Link Attribute Adjustment Gain for Radio
 2 Configuration 3 or 5 of 40ms 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_19200_40MS - Reverse Link Attribute Adjustment Gain for the
 6 transmission rate 19200 bits/s.

7 If RC3_RC5_40MS_INCL is set to '0', the base station shall
 8 omit this field.

9 If RC3_RC5_40MS_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 19200 bits/s,
 14 and 40ms frame. The base station shall set the value in the
 15 range from -48 to 48 inclusive.

16 If RC3_RC5_40MS_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 19200 bits/s
 21 and 40ms 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_38400_40MS - Reverse Link Attribute Adjustment Gain for the
 25 transmission rate 38400 bits/s.

26 If RC3_RC5_40MS_INCL is set to '0', the base station shall
 27 omit this field.

28 If RC3_RC5_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 38400 bits/s,
 33 and 40ms frame. The base station shall set the value in the
 34 range from -48 to 48 inclusive.

35 If RC3_RC5_20MS_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 38400 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_76800_40MS - Reverse Link Attribute Adjustment Gain for the
 44 transmission rate 76800 bits/s.

45 If RC3_RC5_40MS_INCL is set to '0', the base station shall
 46 omit this field.

1 If RC3_RC5_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 76800 bits/s,
 6 and 40ms frame. The base station shall set the value in the
 7 range from -48 to 48 inclusive.

8 If RC3_RC5_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 76800 bits/s
 13 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_153600_40MS - Reverse Link Attribute Adjustment Gain for the
 17 transmission rate 153600 bits/s.

18 If RC3_RC5_40MS_INCL is set to '0', the base station shall
 19 omit this field.

20 If RC3_RC5_40MS_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 bits/s,
 25 and 40ms frame. The base station shall set the value in the
 26 range from -48 to 48 inclusive.

27 If RC3_RC5_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 153600 bits/s and 40ms
 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_40MS - Reverse Link Attribute Adjustment Gain for the
 36 transmission rate 307200 bits/s.

37 If RC3_RC5_40MS_INCL is set to '0', the base station shall
 38 omit this field.

39 If RC3_RC5_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 307200 bits/s,
 44 and 40ms frame. The base station shall set the value in the
 45 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 307200 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 RC4_RC6_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
10 Configuration 4 or 6 of 40ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio
12 Configuration 4 or 6 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_28800_40MS - Reverse Link Attribute Adjustment Gain for the
16 transmission rate 28800 bits/s.

17 If RC4_RC6_40MS_INCL is set to '0', the base station shall
18 omit this field.

19 If RC4_RC6_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 28800 bits/s,
24 and 40ms frame. The base station shall set the value in the
25 range from -48 to 48 inclusive.

26 If RC4_RC6_40MS_INCL is set to '1' and
27 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
28 this field to the value of the pilot reference level adjustment
29 that the mobile station is to make for the transmission
30 attributes with transmission rate 28800 bits/s and 40ms
31 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_57600_40MS - Reverse Link Attribute Adjustment Gain for the
35 transmission rate 57600 bits/s.

36 If RC4_RC6_40MS_INCL is set to '0', the base station shall
37 omit this field.

38 If RC4_RC6_40MS_INCL is set to '1' and
39 NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
40 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 57600 bits/s,
43 and 40ms frame. The base station shall set the value in the
44 range from -48 to 48 inclusive.

1 If RC4_RC6_40MS_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 57600 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_115200_40MS - Reverse Link Attribute Adjustment Gain for the
 10 transmission rate 115200 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 115200 bits/s,
 18 and 40ms frame. The base station shall set the value in the
 19 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 115200 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_230400_40MS - Reverse Link Attribute Adjustment Gain for the
 29 transmission rate 230400 bits/s.

30 If RC4_RC6_40MS_INCL is set to '0', the base station shall
 31 omit this field.

32 If RC4_RC6_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 230400 bits/s,
 37 and 40ms frame. The base station shall set the value in the
 38 range from -48 to 48 inclusive.

39 If RC4_RC6_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 230400 bits/s
 44 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_518400_40MS - Reverse Link Attribute Adjustment Gain for the
 48 transmission rate 518400 bits/s.

1 If RC4_RC6_40MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC4_RC6_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 518400 bits/s,
8 and 40ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC4_RC6_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 518400 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 RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
19 Configuration 3 or 5 of 80ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio
21 Configuration 3 or 5 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_19200_80MS - Reverse Link Attribute Adjustment Gain for the
25 transmission rate 19200 bits/s.

26 If RC3_RC5_80MS_INCL is set to '0', the base station shall
27 omit this field.

28 If RC3_RC5_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 19200 bits/s,
33 and 80ms frame. The base station shall set the value in the
34 range from -48 to 48 inclusive.

35 If RC3_RC5_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 19200 bits/s
40 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_38400_80MS - Reverse Link Attribute Adjustment Gain for the
44 transmission rate 38400 bits/s.

45 If RC3_RC5_80MS_INCL is set to '0', the base station shall
46 omit this field.

1 If RC3_RC5_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 38400 bits/s,
 6 and 80ms frame. The base station shall set the value in the
 7 range from -48 to 48 inclusive.

8 If RC3_RC5_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 38400 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_76800_80MS - Reverse Link Attribute Adjustment Gain for the
 17 transmission rate 76800 bits/s.

18 If RC3_RC5_80MS_INCL is set to '0', the base station shall
 19 omit this field.

20 If RC3_RC5_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 76800 bits/s,
 25 and 80ms frame. The base station shall set the value in the
 26 range from -48 to 48 inclusive.

27 If RC3_RC5_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 76800 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_153600_80MS - Reverse Link Attribute Adjustment Gain for the
 36 transmission rate 153600 bits/s.

37 If RC3_RC5_80MS_INCL is set to '0', the base station shall
 38 omit this field.

39 If RC3_RC5_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 153600 bits/s,
 44 and 80ms frame. The base station shall set the value in the
 45 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 153600 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 RC4_RC6_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
10 Configuration 4 or 6 of 80ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio
12 Configuration 4 or 6 of 80ms 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_28800_80MS - Reverse Link Attribute Adjustment Gain for the
16 transmission rate 28800 bits/s.

17 If RC4_RC6_80MS_INCL is set to '0', the base station shall
18 omit this field.

19 If RC4_RC6_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 28800 bits/s,
24 and 80ms frame. The base station shall set the value in the
25 range from -48 to 48 inclusive.

26 If RC4_RC6_80MS_INCL is set to '1' and
27 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
28 this field to the value of the pilot reference level adjustment
29 that the mobile station is to make for the transmission
30 attributes with transmission rate 28800 bits/s and 80ms
31 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_57600_80MS - Reverse Link Attribute Adjustment Gain for the
35 transmission rate 57600 bits/s.

36 If RC4_RC6_80MS_INCL is set to '0', the base station shall
37 omit this field.

38 If RC4_RC6_80MS_INCL is set to '1' and
39 NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
40 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 57600 bits/s,
43 and 80ms frame. The base station shall set the value in the
44 range from -48 to 48 inclusive.

1 If RC4_RC6_80MS_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 57600 bits/s and 80ms
 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_115200_80MS - Reverse Link Attribute Adjustment Gain for the
 10 transmission rate 115200 bits/s.

11 If RC4_RC6_80MS_INCL is set to '0', the base station shall
 12 omit this field.

13 If RC4_RC6_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 115200 bits/s,
 18 and 80ms frame. The base station shall set the value in the
 19 range from -48 to 48 inclusive.

20 If RC4_RC6_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 115200 bits/s
 25 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_259200_80MS - Reverse Link Attribute Adjustment Gain for the
 29 transmission rate 259200 bits/s.

30 If RC4_RC6_80MS_INCL is set to '0', the base station shall
 31 omit this field.

32 If RC4_RC6_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 259200 bits/s,
 37 and 80ms frame. The base station shall set the value in the
 38 range from -48 to 48 inclusive.

39 If RC4_RC6_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 259200 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 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'.

RL_CQICH_ATT_ADJ_GAIN_HIGH - Attribute adjustment gain for Reverse Channel Quality Indicator Channel for the high Channel Quality Indicator gain power level.

If RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field 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 attribute
 3 gain adjustment that the mobile station is to make for the
 4 transmission attributes for the high power level of R-CQICH.
 5 The base station shall set the value in the range from -40 to
 6 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 - Reverse Channel Quality Indicator Channel
 14 attribute adjustment gain for the low power level included
 15 indicator.

16 If the attribute adjustment gain for the low power level of
 17 Reverse Channel Quality Indicator Channel transmission is
 18 included in this message, the base station shall set this field
 19 to '1'; otherwise, the base station shall set this field to '0'.

20 RL_CQICH_ATT_ADJ_GAIN_LOW - Attribute adjustment gain for Reverse Channel
 21 Quality Indicator Channel for the low Channel Quality
 22 Indicator gain power level.

23 If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is set to '0', the base
 24 station shall omit this field; otherwise, the base station shall
 25 set this field 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 attribute
 28 gain adjustment that the mobile station is to make for the
 29 transmission attributes for the low power level of R-CQICH.
 30 The base station shall set the value in the range from -16 to
 31 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 If RPC_ADJ_REC_TYPE is equal to '0100', the base station shall set type-specific fields as
 39 specified in Table 3.7.3.3.2.25-8.

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Table 3.7.3.3.2.25-8. Type Specific Fields for RECORD_TYPE = '0100'

Fields	Length (Bits)
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
<i>{ (REV_PDCCH_EP_SIZE_NUM + 1)</i>	
<i>{ (2)</i>	
REV_PDCCH_ATTRIBUTE_ADJ_GAIN	8
<i>} (2)</i>	
<i>} (REV_PDCCH_EP_SIZE_NUM + 1)</i>	
REV_PDCCH_BOOST_ADJ_INCL	1
<i>{ (2)</i>	
REV_PDCCH_BOOST_ADJ_GAIN	0 or 8
<i>} (2)</i>	
REV_PDCCH_PAYLOAD_ADJ_INCL	1
REV_PDCCH_EP_SIZE_NUM_1	0 or 4
<i>{ (REV_PDCCH_EP_SIZE_NUM_1 + 1)</i>	
REV_PDCCH_PAYLOAD_ADJ_GAIN	8
<i>} (REV_PDCCH_EP_SIZE_NUM_1 + 1)</i>	
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
<i>{ (REV_PDCH_EP_SIZE_NUM + 1)</i>	
REV_PDCH_PAYLOAD_ADJ_GAIN	8
<i>} (REV_PDCH_EP_SIZE_NUM + 1)</i>	
REV_PDCH_BOOST_ADJ_INCL	1
<i>{ (2)</i>	

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)

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- REV_REQCH_ADJ_INCL - Reverse Request Channel Adjustment included field.
If the attribute adjustment gains for the Reverse Request Channel are included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.
- REV_REQCH_ADJ_GAIN - Reverse Request Channel Adjustment Gain.
If REV_REQCH_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 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-REQCH. The base station shall set the value in the range from -24 to 40 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_SPICH_ADJ_INCL - Reverse Secondary Pilot Channel Adjustment included field.

- 1 If the attribute adjustment gains for the Reverse Secondary
 2 Pilot Channel are included in this message, the base station
 3 shall set this field to '1'; otherwise, the base station shall set
 4 this field to '0'.
- 5 REV_SPICH_ADJ_GAIN - Reverse Secondary Pilot Channel Adjustment Gain.
 6 If REV_SPICH_ADJ_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 the value of the nominal
 10 attribute gain adjustment that the mobile station is to make
 11 for the transmission attributes for the power level of R-SPICH.
 12 The base station shall set the value in the range from -16 to
 13 48 inclusive.
 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 REV_SPICH_EP_SIZE - Minimum Encoder Packet Size for which the Reverse
 17 Secondary Pilot Channel is used.
 18 If REV_SPICH_ADJ_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 the minimum encoder
 22 packet size for which the Reverse Secondary Pilot Channel is
 23 used (see [2] and [3]).
 24 The base station shall set this field to a value in the range 0 to
 25 10 inclusive, corresponding to the encoder packet sizes 192,
 26 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and
 27 18456 bits respectively.
- 28 REV_PDCCH_ADJ_INCL - Reverse Packet Data Control Channel Adjustment included
 29 field.
 30 If the attribute adjustment gains for the Reverse Packet Data
 31 Control Channel are included in this message, the base
 32 station shall set this field to '1'; otherwise, the base station
 33 shall set this field to '0'.
- 34 REV_PDCCH_ADJ_GAIN - Reverse Packet Data Control Channel Adjustment Gain.
 35 If REV_PDCCH_ADJ_INCL 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 value of the nominal
 39 attribute gain adjustment that the mobile station is to make
 40 for the transmission attributes for the power level of R-
 41 PDCCH. The base station shall set the value in the range from
 42 -32 to 32 inclusive.
 43 The base station shall set this field to the correction factor
 44 expressed as a two's complement value in units of 0.125 dB.
- 45 REV_PDCCH_ATTRIBUTE_ADJ_INCL - Reverse Packet Data Control Channel
 46 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 '0'.

5 REV_PDCCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Control
 6 Channel Attribute Adjustment Gains.

7 If REV_PDCCH_ATTRIBUTE_ADJ_INCL 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 The base station shall set this field to one less than half the
 11 number of occurrences of the field included hereafter. The
 12 records are listed per encoder packet size, in the following
 13 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,
 14 9240, 12312, 15384, 18456 bits.

15

16 If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to '1', the base station shall include
 17 REV_PDCCH_EP_SIZE_NUM+1 occurrences of the following record:

18 The base station shall include 2 occurrences of the following field. The first occurrence of
 19 this field is for the non-boosted mode, while the second is for the boosted mode.

20 REV_PDCCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Control Channel Attribute
 21 Adjustment Gain.

22 The base station shall set this field to the value of the nominal
 23 attribute gain adjustment that the mobile station is to make
 24 for the transmission attributes for the power level of R-
 25 PDCCH, for the i-th encoder packet size, and for the non-
 26 boosted and boosted modes.

27 The base station shall set the value in the range from -32 to
 28 32 inclusive.

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 REV_PDCCH_BOOST_ADJ_INCL - Reverse Packet Data Control Channel Boost
 32 Adjustment included field.

33 If the attribute adjustment gains for the Reverse Packet Data
 34 Control Channel per boosted mode are 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

38 If REV_PDCCH_BOOST_ADJ_INCL is set to '1", the base station shall include two
 39 occurrences of the following record:

40 REV_PDCCH_BOOST_ADJ_GAIN - Reverse Packet Data Control Channel Boost
 41 Adjustment Gains.

1 The base station shall set this field to the value of the nominal
 2 attribute gain adjustment that the mobile station is to make
 3 for the transmission attributes for the power level of R-
 4 PDCCH, for the appropriate mode. The base station shall set
 5 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 two's
 9 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 $(\text{REV_PDCCH_EP_SIZE_NUM_1} + 1) \times 2$ 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 nominal
 32 attribute gain adjustment that the mobile station is to make
 33 for the transmission attributes for the power level of R-
 34 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 nominal
 6 attribute gain adjustment that the mobile station is to make
 7 for the transmission attributes for the power level of R-PDCH.
 8 The base station shall set the value in the range from -40 to
 9 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 nominal
 33 attribute gain adjustment that the mobile station is to make
 34 for the transmission attributes for the power level of R-PDCH,
 35 for the i-th encoder packet size. The base station shall set the
 36 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 nominal
 7 attribute gain adjustment that the mobile station is to make
 8 for the transmission attributes for the power level of R-PDCH.
 9 The base station shall set the value in the range from -40 to
 10 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 two's
 14 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 Channel
 22 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 nominal
 33 attribute gain adjustment that the mobile station is to make
 34 for the transmission attributes for the power level of R-PDCH,
 35 on the i-th transmission round. The base station shall set the
 36 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 nominal
27 attribute gain adjustment that the mobile station is to make
28 for the transmission attributes for the power level of R-PDCH,
29 for the i-th encoder packet size on a j-th transmission round,
30 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_PARAMS_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_PARAMS_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, 1,
4 or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

5 REV_PDCH_NUM_ARQ_ROUNDS_BOOST - Maximum number of allowed HARQ
6 retransmissions on the Reverse PDCH in the boosted mode.

7 If REV_PDCH_PARAMS_INCL 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 one less the maximum
11 number of allowed ARQ rounds on the Reverse PDCH in the
12 boosted mode. The base station shall set this field to 0, 1, or 2
13 corresponding to 1, 2, or 3 rounds respectively (See [3]).

14 FPC_BCMC_CHAN - Channel used for secondary power control subchannel.

15 If FPC_INCL is set to '1' and FPC_MODE is set to '001', '010',
16 '101', or '110', the base station shall include this field and set
17 it as follows; otherwise, the base station shall omit this field.

18 If F-FCH is associated with secondary power control
19 subchannel, the base station shall set this field to '1';
20 otherwise, base station shall set this field to '0' to indicate
21 that FPC_SEC_CHAN points to the channel associated with
22 secondary power control subchannel.

23 RESERVED - Reserved bits.

24 The base station shall add reserved bits as needed in order to
25 make the length of the entire record equal to an integer
26 number of octets. The base station shall set these bits to '0'.
27

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_NGHBR	6

NUM_NGHBR occurrences of the following field:

{ (NUM_NGHBR)

NGHBR_PN	9
SEARCH_PRIORITY	0 or 2
SRCH_WIN_NGHBR	0 or 4
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)

SRCH_OFFSET_INCL	1
------------------	---

NUM_NGHBR occurrences of the following record:

{ (NUM_NGHBR)

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
SRCH_OFFSET_NGHBR	0 or 3

} (NUM_NGHBR)

(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 sequence index values that are multiples of this value.

4

5

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.

6

7

8

9

10

11

The base station shall set this field to a value in the range 1 to 15 inclusive.

12

13

NGHBR_SRCH_MODE - Search mode.

14

The base station shall set this field to the value specified in Table 3.7.3.3.2.26-1 corresponding to the search mode.

15

16

1

Table 3.7.3.3.2.26-1. NGHBR_SRCH_MODE Field

Value (binary)	Description
00	No search priorities or search windows
01	Search priorities
10	Search windows
11	Search windows and search priorities

2

3

SRCH_WIN_N - Default search window size for the Neighbor Set.

4

5

6

7

8

9

10

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').

11

USE_TIMING - Use timing indicator.

12

13

14

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'.

15

GLOBAL_TIMING_INCL - Global timing included.

16

17

18

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.

19

20

21

22

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'.

23

GLOBAL_TX_DURATION - Global neighbor transmit time duration.

24

25

26

27

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.

28

29

30

31

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.

32

GLOBAL_TX_PERIOD - Global neighbor transmit time period.

33

34

35

36

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_NGHBR - 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 NGHBR_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 NGHBR_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 NGHBR_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_NGHBR - Neighbor pilot channel search window size.

22 If NGHBR_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 NGHBR_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 neighbor
33 base station, the base station shall set this field to '1';
34 otherwise, the base station shall set this field to '0'.

35 NGHBR_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 this
 4 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 or
 19 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_NGHR field is included in the following
 31 records, the base station shall set this bit to '1'; otherwise, the
 32 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
3
4
5
6
7
8
9
10
11
12
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15
16
17
18

- QOF - Quasi-orthogonal function index.
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 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.
- AUX_PILOT_WALSH - Walsh code for the Auxiliary Pilot.
The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.
- 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 '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)

19
20
21
22
23
24

- 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.

- 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-orthogonal function (see [2]) on the frequency of the primary pilot.
2			
3			
4	WALSH_LENGTH	-	Length of the Walsh Code.
5			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 frequency of the primary pilot.
6			
7			
8			
9	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
10			The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the frequency of the primary pilot.
11			
12			
13	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.
14			
15			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 shall set this field to '0'; otherwise, the base station shall set this field to '1'.
16			
17			
18			
19			
20		QOF1	- Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.
21			
22			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
23			
24			
25			The base 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.
26			
27			
28	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.
29			
30			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
31			
32			
33			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 lower frequency of the two remaining SR3 frequencies.
34			
35			
36			
37			
38	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.
39			
40			If ADD_INFO_INCL1 is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
41			
42			
43			The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the lower frequency of the two remaining SR3 frequencies.
44			
45			

- 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_{3m} 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 declaring
25 L2 Acknowledgment Failure when Call Rescue is enabled
26 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 field;
40 otherwise, the base station shall include this field and set it
41 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 than
46 N_{1m} .

- 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 field;
 6 otherwise, the base station shall include this field and set it
 7 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 than
 12 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 if
 36 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 specified
 7 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 $FRAME_OFFSET_s \times 1.25$
 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.
 24 The base station shall set this field to the *Candidate*
 25 *Frequency Search Request Message* sequence number, as
 26 specified in 2.6.6.2.2.3.

- 1 SEARCH_TYPE - Search command.
 2 The base station shall set this field to the appropriate
 3 SEARCH_TYPE code from Table 3.7.3.3.2.27-1 to indicate the
 4 purpose of the message.

5

6

Table 3.7.3.3.2.27-1. SEARCH_TYPE Codes

SEARCH_TYP E(binary)	Meaning
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.

7

- 8 SEARCH_PERIOD - Time between successive searches on the Candidate
 9 Frequency for periodic searches.
 10 The base station shall set this field to the SEARCH_PERIOD
 11 value shown in Table 2.6.6.2.8.3.2-1 corresponding to the
 12 search period to be used by the mobile station, i.e., the time
 13 between the beginning of successive searches on the
 14 Candidate Frequency.

- 15 SEARCH_MODE - Search mode.
 16 The base station shall set this field to the SEARCH_MODE
 17 value specified in Table 3.7.3.3.2.27-2 corresponding to the
 18 type of search specified by this message.

19

1

Table 3.7.3.3.2.27-2. SEARCH_MODE Types

SEARCH_MODE (binary)	Description
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 the mode-specific fields of this message.

5

6

Mode-specific fields - Search mode-specific fields.

7

The base station shall include mode-specific fields based on the SEARCH_MODE field.

8

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

2

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 × 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 of the Candidate Frequency.

5

6

CDMA_FREQ - Frequency assignment.

7

The base station shall set this field to the CDMA frequency assignment for the Candidate Frequency.

8

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 of the pilots in the Serving Frequency Active Set in the Candidate Frequency periodic search procedure, the base station shall set this field to '11111'; otherwise, the base station shall set this field to

11

12

13

14

15

$$\lceil (10 \times \log_{10} (total_ec_thresh) + 120) / 2 \rceil$$

16

where *total_ec_thresh* is defined by the following rule: The mobile station is not to visit the CDMA Candidate Frequency to search for pilots if the total E_c of the pilots in the Serving Frequency Active Set is greater than *total_ec_thresh*.

17

18

19

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 E_c/I_0 of the pilots in the Serving Frequency Active Set in the Candidate Frequency periodic search procedure, the base station shall set this field to '11111'; otherwise, the base station shall set this field to

22

23

24

25

26

$$\lfloor -20 \times \log_{10} (total_ec_i0_thresh) \rfloor$$

- 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 *serv_freq_pwr*) is less than *minimum_power_diff* (in dB),
 19 where *cand_freq_pwr* is the received power on the CDMA
 20 Candidate Frequency, in dBm / 1.23 MHz, and
 21 *serv_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* - *serv_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 *serv_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 *total_pilot_threshold* is defined by the following rule:
 2 The mobile station is not to send the *Candidate Frequency*
 3 *Search Report Message* if the sum of E_c/I_0 of all pilots in
 4 the mobile station's Candidate Frequency Search Set that
 5 measure above CF_T_ADD is less than
 6 *total_pilot_threshold*.

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
$$\lfloor -20 \times \log_{10} \textit{total_pilot_threshold} \rfloor$$

15 where *total_pilot_threshold* is defined by the following rule:
 16 The mobile station is not to attempt to demodulate the
 17 Forward Traffic Channels if the sum of E_c/I_0 of all pilots
 18 in the mobile station's Active Set is less than
 19 *total_pilot_threshold*.

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 *Candidate Frequency Search Report Message* 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 Frequency.
 29 The base station shall set this field to the maximum wait
 30 time, in units of 80 ms, that the mobile station is to spend
 31 waiting for a period of $(N_{11m} \times 20)$ ms with sufficient signal
 32 quality (e.g. good frames) on the CDMA Target Frequency.

33 CF_PILOT_INC - Pilot PN sequence offset index increment to be used on the
 34 CDMA Candidate Frequency after handoff.
 35 The base station shall set this field to the pilot PN sequence
 36 increment, in units of 64 PN chips, that the mobile station is
 37 to use for searching the Remaining Set, after a handoff to the
 38 CDMA Candidate Frequency is successfully completed. The
 39 base station should set this field to the largest increment
 40 such that the pilot PN sequence offsets of all its neighbor base
 41 stations are integer multiples of that increment.

42 CF_SRCH_WIN_N - Default search window size for the Candidate Frequency
 43 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 for
7		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 '0000'.
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_{8m} ,
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.

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 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** 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.
- 5
- 6
- 7
- 8 **AUX_PILOT_WALSH** - Walsh code for the Auxiliary Pilot.
- 9 The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.
- 10
- 11 **RESERVED** - Reserved bits.
- 12 The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.
- 13

14 If **NGHBR_PILOT_REC_TYPE** is equal to '010', the base station shall include the following fields:

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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 Diversity Pilot.
- 19 The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).
- 20
- 21
- 22 **WALSH_LENGTH** - Length of the Walsh code.
- 23 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.
- 24
- 25
- 26
- 27 **AUX_WALSH** - Walsh code for the Auxiliary Pilot.
- 28 The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.
- 29
- 30 **AUX_TD_POWER_LEVEL** - Auxiliary Transmit Diversity Pilot power level.
- 31 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.
- 32
- 33

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)

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- 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.
- QOF – Quasi-orthogonal function index.
- The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the frequency of the primary 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 frequency
15			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 of
31			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_NGHBR	-	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 integer
44			number of octets. The base station shall set these bits to '0'.
45	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 specified
 7 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 $FRAME_OFFSET_s \times 1.25$
 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.
 30 If the base station requests that the mobile station offset the
 31 start of the first search from the action time of this message
 32 by a delay specified by the SEARCH_OFFSET field of the last
 33 Candidate Frequency Search Request Message sent to the
 34 mobile station, the base station shall set this field to '1';
 35 otherwise, the base station shall set this field to '0'.

36

1 3.7.3.3.2.29 Power Up Function Message
 2 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 $FRAME_OFFSET_s \times 1.25$ 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 the
13 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 positive
- 20 numbers signifying North latitudes. The base station shall set
- 21 this field to a value in the range -1296000 to 1296000
- 22 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 positive
- 28 numbers signifying East longitude. The base station shall set
- 29 this field to a value in the range -2592000 to 2592000
- 30 inclusive (corresponding to a range of -180° to +180°).
- 31 Otherwise, the base station shall not include this field.
- 32 MS_LOC_TSTAMP - Time stamp.

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If LOC_IND is equal to '1', the base station shall set this field to the time at which the mobile station's location parameters were received; otherwise, the base station shall not include this field.

This field is formatted as shown below.

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'.	

- HOURS - Current hour (UTC).
The base station shall set this field to the current hour (UTC), in the range 0-23.
- MINUTES - Current minutes (UTC).
The base station shall set this field to the current minutes (UTC), in the range 0-59.
- SECONDS - Current seconds (UTC).
The base station shall set this field to the current seconds (UTC), in the range 0-59.

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

(continues on next page)

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Field	Length (bits)
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 × RECORD_LEN
SUP_CHAN_PARAMS_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_PARAMS_INCLUDED	0 or 1
T_MULCHAN	0 or 3
BEGIN_PREAMBLE	0 or 3
RESUME_PREAMBLE	0 or 3

(continues on next page)

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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 $FRAME_OFFSET_s \times 1.25$ 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.

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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.

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32

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 window
 10 size parameter shown in Table 2.6.6.2.1-1 corresponding to
 11 the search window size to be used by mobile stations for the
 12 Remaining Set after completion of the handoff; otherwise, the
 13 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
 19 *Measurement Message* initiating the handoff process (see
 20 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 detection
 23 threshold, expressed as an unsigned binary number equal to
 24 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$; otherwise, the base station shall omit
 25 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 *Pilot Strength Measurement*
 37 *Message* or *Extended Pilot Strength Measurement Message*
 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
- 7 *Measurement Message* is issued. If the pilot is a member of
- 8 the Candidate Set, it will be moved to the Neighbor Set.
- 9 If SEARCH_INCLUDED is set to '1', the base station shall
- 10 include the field T_TDROP and set this field to the T_TDROP
- 11 value shown in Table 2.6.6.2.3-1 corresponding to the drop
- 12 timer value to be used by the mobile station; otherwise, the
- 13 base station shall omit this field.
- 14 SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the
- 15 active set, or dropping a pilot from the active set (see 2.6.6.2.3
- 16 and 2.6.6.2.5.2).
- 17 If SEARCH_INCLUDED is set to '1', the base station shall
- 18 include the field SOFT_SLOPE in the additional fields and set
- 19 this field as an unsigned binary number; otherwise, the base
- 20 station shall omit this field.
- 21 ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to
- 22 the active set (see 2.6.6.2.5.2).
- 23 If SEARCH_INCLUDED is set to '1', the base station shall
- 24 include the field ADD_INTERCEPT in the additional fields and
- 25 set this field as a two's complement signed binary number in
- 26 units of 0.5 dB; otherwise, the base station shall omit this
- 27 field.
- 28 DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot
- 29 from the active set (see 2.6.6.2.3).
- 30 If SEARCH_INCLUDED is set to '1', the base station shall
- 31 include the field DROP_INTERCEPT in the additional fields
- 32 and set this field as a two' complement signed binary number
- 33 in units of 0.5 dB; otherwise, the base station shall omit this
- 34 field.
- 35 EXTRA_PARMS - Extra parameters included.
- 36 If the mobile station is to change FRAME_OFFSET,
- 37 PRIVATE_LCM, ENCRYPT_MODE, NOM_PWR, BAND_CLASS,
- 38 or CDMA_FREQ, or the mobile station is to perform a reset of
- 39 the acknowledgment procedures, or the mobile station is to
- 40 reset Forward Traffic Channel power control counters, the
- 41 base station shall set this field to '1'; otherwise, the base
- 42 station shall set this field to '0'.
- 43 P_REV - Protocol revision level.
- 44 If EXTRA_PARMS is set to '1', the base station shall set this
- 45 field to the base station protocol revision level that the mobile
- 46 station is to use after completion of the handoff; otherwise,
- 47 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 × 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 '0'.
36	RESET_FPC	-	Reset Forward Traffic Channel power control.
37			This field is used to reset the Forward Traffic Channel power
38			control counters.
39			If EXTRA_PARMS is set to '1', the base station shall include
40			the field RESET_FPC and set this field as described below;
41			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 it
29 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 this
 28 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_PARAMS_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_PARAMS_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_PARAMS_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 its
 17 Code Channel List, CODE_CHAN_LIST_s.
- 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_s, and to
 22 update the CODE_CHAN_LIST_s, 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_s, 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 an
 3 indefinite duration (i.e., the mobile station is to continue
 4 processing Forward Supplemental Code Channels until it
 5 receives a subsequent *Supplemental Channel Assignment*
 6 *Message* or a *General Handoff Direction Message* that specifies
 7 a different Forward Supplemental Code Channel assignment.
- 8 FOR_DURATION - Duration of Forward Supplemental Code Channel
 9 assignment.
- 10 If USE_FOR_DURATION is included and is set to '1', the base
 11 station shall include the field FOR_DURATION and set this
 12 field to the allocated duration, in units of 80 ms, for which the
 13 mobile station is to process the Forward Supplemental Code
 14 Channels; otherwise, the base station shall omit this field.
- 15 REV_INCLUDED - Reverse assignment information included indicator.
- 16 If SUP_CHAN_PARMS_INCLUDED is set to '1', the base
 17 station shall include the field REV_INCLUDED and set this
 18 field as described below; otherwise, the base station shall
 19 omit this field.
- 20 If the base station includes this field, it shall set this field to
 21 '1' if Reverse Supplemental Code Channel assignment
 22 information is included in the message; otherwise, the base
 23 station shall set this field to '0'.
- 24 REV_DTX_DURATION - Reverse Discontinuous Transmission Duration.
- 25 If REV_INCLUDED is included and is set to '1', the base
 26 station shall include the field REV_DTX_DURATION;
 27 otherwise the base station shall omit this field.
- 28 If the base station includes this field, it shall set this field to
 29 the maximum duration of time in units of 20 ms that the
 30 mobile station is allowed to stop transmission on a Reverse
 31 Supplemental Code Channel within the reverse assignment
 32 duration. The base station shall set this field to '0000' if the
 33 mobile station is to stop using a Reverse Supplemental Code
 34 Channel once it has stopped transmitting on that Reverse
 35 Supplemental Code Channel. The base station shall set this
 36 field to '1111' if the mobile station is allowed to resume
 37 transmission on a Reverse Supplemental Code Channel at
 38 any time within the reverse assignment duration.
- 39 CLEAR_RETRY_DELAY - Clear retry delay indicator.
- 40 If REV_INCLUDED is included and is set to '1', the base
 41 station shall include the field CLEAR_RETRY_DELAY and set
 42 this field as described below; otherwise the base station shall
 43 omit this field.
- 44 The base station shall set this field to '1' to indicate that the
 45 mobile station is to clear any existing retry delay which it has
 46 stored (see 2.6.6.2.5.1); otherwise, the base station shall set
 47 this field to '0'.
- 48 USE_REV_DURATION - Use reverse duration indicator.

- 1 If REV_INCLUDED is included and is set to '1', the base
 2 station shall include the field USE_REV_DURATION and set
 3 this field as described below; otherwise the base station shall
 4 omit this field.
- 5 The base station shall set this field to '1' if the
 6 REV_DURATION field is included in the message and the
 7 mobile station is allowed to transmit on the Reverse
 8 Supplemental Code Channels for a time duration indicated by
 9 REV_DURATION.
- 10 The base station shall set this field to '0' if the mobile station
 11 is allowed to transmit on the Reverse Supplemental Code
 12 Channels for an indefinite duration (i.e., the mobile station
 13 may continue to transmit on the Reverse Supplemental Code
 14 Channels until it receives a subsequent *Supplemental Channel*
 15 *Assignment Message* or a *General Handoff Direction Message*
 16 that specifies a different Reverse Supplemental Code Channel
 17 assignment.
- 18 REV_DURATION - Duration of Reverse Supplemental Code Channel Assignment.
 19 If USE_REV_DURATION is included and is set to '1', the base
 20 station shall include the field REV_DURATION and set this
 21 field to the allocated duration, in units of 80 ms, for which the
 22 mobile station may transmit on Reverse Supplemental Code
 23 Channels; otherwise the base station shall omit this field.
- 24 NUM_REV_CODES - Number of Reverse Supplemental Code Channels.
 25 If REV_INCLUDED is included and is set to '1', the base
 26 station shall include the field NUM_REV_CODES and set this
 27 field to the number of Reverse Supplemental Code Channels
 28 which are assigned to the mobile station; otherwise the base
 29 station shall omit this field.
- 30 USE_T_ADD_ABORT - Reverse use T_ADD abort indicator.
 31 If REV_INCLUDED is included and is set to '1', the base
 32 station shall include the field USE_T_ADD_ABORT and set
 33 this field as described below; otherwise the base station shall
 34 omit this field.
- 35 The base station shall set this field to '1' to indicate that the
 36 mobile station is to use the T_ADD Reverse Supplemental
 37 Code Channel abort feature for this reverse assignment;
 38 otherwise, the base station shall set this field to '0'.
- 39 REV_PARAMS_INCLUDED - Reverse assignment parameters included indicator.
 40 If SUP_CHAN_PARAMS_INCLUDED is set to '1', the base
 41 station shall include the field REV_PARAMS_INCLUDED and
 42 set this field as described below; otherwise, the base station
 43 shall omit this field.
- 44 If the base station includes this field, it shall set this field to
 45 '1' if the following three fields are included in the message;
 46 otherwise, the base station shall set this field to '0'.

1 The base station shall include one occurrence of the following four-part record for each of
 2 the NUM_PILOTS pilots included in the message:

- 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 pilot in units of 64 PN chips.
- 6 PWR_COMB_IND - Power control symbol combining indicator.
 7 If the Forward Traffic Channel associated with this pilot will
 8 carry the same closed-loop power control subchannel bits as
 9 that of the previous pilot in this message, the base station
 10 shall set this field to '1'; otherwise, the base station shall set
 11 this field to '0'. The base station shall set this field to '0' in
 12 the first record in the pilot list.
- 13 FOR_FUND_CODE_CHAN - Forward Fundamental Channel.
 14 The base station shall set this field to the code channel index
 15 to be used for the Forward Fundamental Channel associated
 16 with this pilot.
- 17 FOR_SUP_INCLUDED - Forward Supplemental Code Channel included.
 18 The base station shall include this field if FOR_SUP_CONFIG
 19 is included and is set to '10' or '11'. If included, the base
 20 station shall set this field to '1' if there are Supplemental Code
 21 Channels associated with this pilot.
- 22 FOR_SUP_CHAN_REC - Forward Supplemental Code Channel record
 23 If FOR_SUP_INCLUDED is set to '1', the base station shall
 24 include the record FOR_SUP_CHAN_REC and set its fields as
 25 described below; otherwise, the base station shall omit this
 26 record.
 27 FOR_SUP_CHAN_REC contains information about Forward
 28 Supplemental Code Channels associated with this pilot, and
 29 consists of the field EXPL_CODE_CHAN, and either the
 30 BASE_CODE_CHAN field or NUM_FOR_SUP occurrences of
 31 the FOR_SUP_CODE_CHAN field, as shown below.

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)

- 34 EXPL_CODE_CHAN - Explicit code channel indicator.

1 The base station shall set this field to '1' to indicate explicit
2 assignment of each Forward Supplemental Code Channel by
3 means of the field FOR_SUP_CODE_CHAN. The base station
4 shall set this field to '0' if the mobile station is to use
5 NUM_FOR_SUP adjacent code channels beginning with index
6 BASE_CODE_CHAN (i.e., BASE_CODE_CHAN through
7 BASE_CODE_CHAN + NUM_FOR_SUP - 1).

8 In both cases (i.e., the explicit code channel list format and
9 range format), the order of the code channel indices is the
10 same for all pilots specified in this message (i.e., for each
11 pilot, the i^{th} entry in the list indicates the code channel index
12 to be used for the i^{th} Forward Supplemental Code Channel
13 associated with that pilot).

14 **BASE_CODE_CHAN** - Base code channel index.

15 If the EXPL_CODE_CHAN field is included and is set to '0', the
16 base station shall include the field BASE_CODE_CHAN and
17 set this field as described below; otherwise the base station
18 shall omit this field.

19 The base station shall set this field to the base code channel
20 index (see [2]) in the range of 1 to (63 - NUM_FOR_SUP + 1),
21 inclusive, that the mobile station is to use as the first Forward
22 Supplemental Code Channel associated with this pilot. The
23 mobile station is to use code channel index
24 (BASE_CODE_CHAN + i - 1), where i ranges from 1 to
25 NUM_FOR_SUP, for the i^{th} Forward Supplemental Code
26 Channel associated with this pilot.

27 **FOR_SUP_CODE_CHAN** - Forward Supplemental Code Channel.

28 If EXPL_CODE_CHAN is included and is set to '1', the base
29 station shall include NUM_FOR_SUP occurrences of the field
30 FOR_SUP_CODE_CHAN and set this field as described below;
31 otherwise the base station shall omit this field.

32 The base station shall set the i^{th} occurrence of this field to the
33 code channel index (see [2]), in the range 1 to 63 inclusive,
34 that the mobile station is to use for the i^{th} Forward Code
35 Channel associated with this pilot.

36 **FPC_SUBCHAN_GAIN** - Forward power control subchannel relative gain.

37 The base station shall set FPC_SUBCHAN_GAIN equal to the
38 power level of the forward link power control subchannel
39 relative to that of 20 ms frames at a 9600 bps or 14400 bps
40 rate on the Forward Fundamental Channel or the Forward
41 Dedicated Control Channel indicated by FPC_PRI_CHAN_s.
42 The base station shall set the value in units of 0.25 dB.

43 **USE_PC_TIME** - Use power control action time indicator.

- 1 This field indicates whether an explicit time
2 [PC_ACTION_TIME] at which a new value for Power Control
3 Subchannel to traffic ratio (FPC_SUBCHAN_GAIN) takes effect
4 is specified in the 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 PC_ACTION_TIME - Power Control Subchannel gain action time.
- 9 If the USE_PC_TIME field is set to '1', the base station shall
10 set this field to the System Time minus FRAME_OFFSET_S ×
11 1.25 ms, in units of 80 ms (modulo 64), at which
12 FPC_SUBCHAN_GAIN specified in this message is to take
13 effect. If the USE_PC_TIME field is set to '0', the base station
14 shall omit this field.
- 15 RLGAIN_TRAFFIC_PILOT - Gain adjustment of the Reverse Traffic Channel relative to the
16 Reverse Pilot Channel power for Radio Configurations greater
17 than 2.
- 18 If EXTRA_PARMS is set to '1', the base station shall include
19 this field and set it to the correction factor to be used by
20 mobile stations in setting the power of a code channel,
21 expressed as a two's complement value in units of 0.125 dB
22 (see [2]); otherwise, the base station shall omit this field.
- 23 DEFAULT_RLAG - Default reverse link attribute gain used indicator.
- 24 If EXTRA_PARMS is set to '0', the base station shall omit this
25 field; otherwise, the base station shall set this field as follows.
- 26 If the mobile station is to use the default values for the
27 reverse link attribute gain, as specified in [2] after completion
28 of handoff, the base station shall set this field to '1';
29 otherwise, the base station shall set this field to '0'.
- 30 NNSCR_INCLUDED - Non-negotiable Service Configuration Record included
31 indicator.
- 32 The base station shall omit this field, if EXTRA_PARMS is set
33 to '0'; otherwise, the base station shall include this field and
34 set this field as described below:
- 35 The base station shall set this field to '1', if the Non-negotiable
36 Service Configuration record is included in this message;
37 otherwise, the base station shall set this field to '0'.
- 38 If NNSCR_INCLUDED is included and is set to '1', the base station shall include one
39 occurrence of the following three-field record to specify the non-negotiable service
40 configuration parameters.
- 41 RECORD_TYPE - Information record type.
- 42 If NNSCR_INCLUDED is included and is set to '1', the base
43 station shall include the field RECORD_TYPE and shall set
44 this field to the record type value shown in Table 3.7.5-1
45 corresponding to the Non-Negotiable Service Configuration
46 information record.

1 3.7.3.3.2.32 Resource Allocation Message
 2 MSG_TAG: RAM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
FPC_PRI_CHAN	1

4

5 USE_TIME - Use action time indicator.

6 This field indicates whether an explicit action time is specified
 7 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 this message is to
 15 take effect. If the USE_TIME field is set to '0', the base station
 16 shall omit this field.

17 FPC_PRI_CHAN - Power Control Subchannel indicator.

18 The base station shall set this field to '0' if the mobile station
 19 is to perform the primary inner loop estimation on the
 20 received Forward Fundamental Channel. The base station
 21 shall set this field to '1' if the mobile station is to perform the
 22 primary inner loop estimation on the received Forward
 23 Dedicated Control Channel.

24 If the F-CPCCH is assigned, the base station will multiplex
 25 the Power Control Subchannel on the F-CPCCH; otherwise:

26 If this field is set to '0', the base station will multiplex the
 27 Power Control Subchannel on the Forward Fundamental
 28 Channel; otherwise, the base station will multiplex the Power
 29 Control Subchannel on the Forward Dedicated Control
 30 Channel.

31

32

1 3.7.3.3.2.33 Resource Allocation Mini Message
 2 MSG_TAG: RAMM

3

Field	Length (bits)
USE_TIME	1
ACTION_TIME	0 or 6
FPC_PRI_CHAN	1

4

5 USE_TIME - Use action time indicator.

6

7 This field indicates whether an ACTION_TIME is specified in
 8 this message.

9

10 If an ACTION_TIME is specified in this message, the base
 11 station shall set this field to '1'; otherwise, the base station
 12 shall set this field to '0'.

13

14 ACTION_TIME - Action time.

15

16 If the USE_TIME field is set to '1', the base station shall set
 17 this field to the System Time minus $\text{FRAME_OFFSET}_s \times 1.25$
 18 ms, in units of 80 ms (modulo 64), at which the message is to
 19 take effect. If the USE_TIME field is set to '0', the base station
 20 shall omit this field.

21

22

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26

27 FPC_PRI_CHAN - Power Control Subchannel indicator.

28

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31 The base station shall set this field to '0' if the mobile station
 32 is to perform the primary inner loop estimation on the
 33 received Forward Fundamental Channel. The base station
 34 shall set this field to '1' if the mobile station is to perform the
 35 primary inner loop estimation on the received Forward
 36 Dedicated Control Channel.

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55 If the F-CPCCH is assigned, the base station will multiplex
 56 the Power Control Subchannel on the F-CPCCH; otherwise:

57 If this field is set to '0', the base station will multiplex the
 58 Power Control Subchannel on the Forward Fundamental
 59 Channel; otherwise, the base station will multiplex the Power
 60 Control Subchannel on the Forward Dedicated Control
 61 Channel.

62

63

- 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_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_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) or 1

} (NUM_BCMC_PROGRAMS + 1)

1

2

USE_TIME - Use action time indicator.

1 This field indicates whether an explicit action time is specified
 2 in this message.

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 $FRAME_OFFSET_s \times 1.25$
 9 ms, in units of 80 ms (modulo 64), at which the message is to
 10 take effect. If the USE_TIME field is set to '0', the base station
 11 shall omit this field.

12 CH_IND - Channel Indicator.

13 The base station shall set this field as shown in Table
 14 3.7.3.3.2.34-1, to release physical resources.

15 **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

16
 17 GATING_RATE_INCL - Reverse pilot gating rate included flag.

18 The base station shall set this field to '1' if the
 19 PILOT_GATING_RATE field is included, otherwise it shall set
 20 this field to '0'.

21 PILOT_GATING_RATE - Actual Reverse Pilot gating Rate.

22 If the GATING_RATE_INCL field is set to '1', then the base
 23 station shall set this field to the PILOT_GATING_RATE field
 24 shown in Table 3.7.3.3.2.34-2 corresponding to the actual
 25 gating rate on the Reverse Pilot Channel; otherwise, the base
 26 station shall omit this field.

1

2

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

3

4

USE_EXT_CH_IND - Use EXT_CH_IND to set channel configuration

5

6

7

8

The base station shall set this field to '1' if the EXT_CH_IND field is included in this message and is used to set the channel configuration; otherwise, the base station shall set this field to '0'.

9

EXT_CH_IND - Extended Channel Indicator.

10

11

12

If the USE_EXT_CH_IND 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

The base station shall set this field to the desired channel configuration shown in Table 2.7.1.3.2.4-11.

15

PDCH_CONTROL_HOLD - Packet Data Channel Control Hold mode indication.

16

17

18

If the USE_EXT_CH_IND 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:

19

20

21

The base station shall set this field to '1' to instruct the mobile station to transition to the Packet Data Channel Control Hold Mode.

22

23

If EXT_CH_IND signals the allocation of F-FCH, this field shall be set to '0'.

24

Table 3.7.3.3.2.34-3 shows the valid combinations of CH_IND, EXT_CH_IND, and

25

PDCH_CONTROL_HOLD.

1 **Table 3.7.3.3.2.34-3. Valid CH_IND, EXT_CH_IND, and PDCH_CONTROL_HOLD**

Current EXT_CH_IN D (binary)	CH_IN D (binary)	EXT_C H_IND (binary)	PDCH_ CONTR OL_HO LD (binary)	Physical Resource(s) Released
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

Current EXT_CH_IN D (binary)	CH_IN D (binary)	EXT_C H_IND (binary)	PDCH_ CONTR OL_HO LD (binary)	Physical Resource(s) Released
01100	000	Omit	Omit	F-PDCH, R-CQICH, R-PDCH
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

Current EXT_CH_IN D (binary)	CH_IN D (binary)	EXT_C H_IND (binary)	PDCH_ CONTR OL_HO LD (binary)	Physical Resource(s) Released
10010	XXX	00011	Omit	F-DCCH, R-DCCH, F-CPCCH
10010	XXX	00010	Omit	F-FCH, R-FCH, F-DCCH
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_PARMS_INCL - R-CQICH switching parameters included indicator.
 2
 3 If the USE_EXT_CH_IND or the GATING_RATE_INCL field is
 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
 7 The base station shall set this field to '1' if the parameters for
 8 R-CQICH soft and softer switching are included in this
 9 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
 11 If SWITCHING_PARMS_INCL is not included or included and
 12 set to '0', then the base station shall omit this field; otherwise,
 13 the base station shall include this field and set it as follows:
 14
 15 The base station shall set this field to the duration of the cell
 16 switching period, in units of 20 ms, minus one, during which
 17 the mobile station, while in Control Hold, is to transmit the
 18 cell switch sequence on the R-CQICH when it switches
 19 between two pilots which are in different groups.
- 18 NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer
 19 switching while in Control Hold.
 20
 21 If SWITCHING_PARMS_INCL is not included or included and
 22 set to '0', then the base station shall omit this field; otherwise,
 23 the base station shall include this field and set it as follows:
 24
 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.
- 28 DIRECT_TO_IDLE_INFO_INCL - Direct to Idle information included.
 29
 30 If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to
 31 '111' or the physical channels indicated by the two least
 32 significant bits of CH_IND includes all the physical channels
 33 (FCH, DCCH, or both) currently being processed by the
 34 mobile station, the base station shall set this field as follows:
 35
 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
 40 Otherwise the base station shall set this field to '0'.
- 38 RELEASE_TYPE - Release type.
 39
 40 If DIRECT_TO_IDLE_INFO_INCL is set to '0', the base station
 41 shall omit this field; otherwise, the base station shall include
 42 this field and shall set it as follows:
 43
 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

Value (binary)	Release Type/Usage
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 of the Mobile Station Initialization State</i> .
100- 111	Reserved.

2

3

SID - System identification.

4

5

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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 <code>FREQ_INCL</code> 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	<code>BAND_CLASS</code>	-	Band class.
8			If the <code>FREQ_INCL</code> 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	<code>PAGE_CH</code>	-	Paging Channel.
15			If <code>RELEASE_TYPE</code> 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	<code>PRAT</code>	-	Paging Channel data rate.
20			If <code>RELEASE_TYPE</code> field is included and equals '000', the base
21			station shall set this field to the <code>PRAT</code> 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	<code>SR1_BCCH_CODE_CHAN_NON_TD</code>	-	Walsh code for the Spreading Rate 1 BCCH in non
26			Transmit Diversity mode.
27			If <code>RELEASE_TYPE</code> 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	<code>SR1_CRAT_NON_TD</code>	-	BCCH code rate in non Transmit Diversity mode for
34			Spreading Rate 1.
35			If <code>RELEASE_TYPE</code> 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	<code>SR1_BRAT_NON_TD</code>	-	BCCH data rate in non Transmit Diversity mode for Spreading
42			Rate 1.
43			If <code>RELEASE_TYPE</code> 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; otherwise,
 43 the base station shall include this field and shall set it as
 44 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 *Radio Environment Messages*
 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 *Radio Environment Messages* 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 *Radio*
 39 *Environment Message*, then the base station shall set this field
 40 to '111'.
- 41 RER_TIME - Radio environment report timer value.

1 If RER_MODE_ENABLED 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 radio-
 5 environment report timer, expressed as 2^{RER_TIME} where $0 \leq$
 6 $RER_TIME \leq 6$ and in units of RER_TIME_UNIT. If the value
 7 of the radio-environment report timer is infinite, then the base
 8 station shall set this field to '111'.

9 RER_TIME_UNIT - Radio environment report timer value units.

10 If RER_MODE_ENABLED is set to '1' and RER_TIME is not set
 11 to '111', the base station shall include this field and shall set
 12 it according to Table 3.7.3.3.2.34-5; otherwise, the base
 13 station shall omit this field.

14 **Table 3.7.3.3.2.34-5 RER_TIME_UNIT values**

RER TIME UNIT (binary)	Meaning
00	Seconds
01	Minutes
10	Hours
11	Reserved

15 MAX_RER_PILOT_LIST_SIZE - Maximum number of pilots to maintain in RER_PILOT_LIST.

16 If RER_MODE_ENABLED is set to '0', the base station shall omit
 17 this 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 maximum number of
 20 pilots that the mobile station is to maintain in RER_PILOT_LIST
 21 (see [4]). The base station shall set this field to a value in the
 22 range 1 to 6 inclusive.

23 RSC_MODE_SUPPORTED - Reduced slot cycle mode supported indicator.

24 If USE_EXT_CH_IND is equal to '0' and CH_IND is equal to
 25 '111', or the physical channels indicated by the two least
 26 significant bits of CH_IND includes all the physical channels
 27 (FCH, DCCH, or both) currently being processed by the
 28 mobile station, the base station shall set this field as follows:

- 29 • If the fields related to reduced slot cycle mode are
 30 included in this message, the base station shall set this
 31 field to '1'; otherwise, the base station shall set this field to
 32 '0'.

33 Otherwise, the base station shall set this field to '0'.

1	TKZ_ID	-	Tracking zone identifier.
2			If TKZ_MODE_ENABLED is set to '0', the base station shall
3			omit this field; otherwise, the base station shall set this field
4			to its tracking zone identifier.
5	TKZ_MAX_NUM_MSG_IDX	-	Maximum number of <i>Radio Environment Messages</i>
6			permitted while in tracking zone mode index.
7			If TKZ_MODE_ENABLED 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 maximum number
11			of <i>Radio Environment Messages</i> that the mobile station is
12			allowed to transmit while in tracking zone mode, expressed as
13			$2^{TKZ_MAX_NUM_MSG_IDX}$ where $0 \leq TKZ_MAX_NUM_MSG_IDX \leq$
14			6. If the mobile station is allowed to transmit an unlimited
15			number of <i>Radio Environment Messages</i> , then the base station
16			shall set this field to '111'.
17	TKZ_UPDATE_PRD	-	Tracking zone update period.
18			If TKZ_MODE_ENABLED 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 such that the desired
22			tracking zone update timer value is $2^{TKZ_UPDATE_PRD+6}$
23			seconds. If the value of the timer is infinite, then the base
24			station shall set this field to '1111'.
25	TKZ_LIST_LEN	-	Tracking zone list length.
26			If TKZ_MODE_ENABLED 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 length of the
30			tracking zone list minus one.
31	TKZ_TIMER	-	Tracking zone timer.
32			If TKZ_MODE_ENABLED 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 value of the tracking
36			zone timer (in units of seconds) minus one.
37	TBR_RAND_SUPPR_ENABLE	-	Timer Based Registration Randomization Suppression
38			enable indicator.
39			The base station shall set this field to '1', if the mobile station
40			is allowed to suppress timer-based registration randomization
41			in order to eliminate unnecessary timer-based registrations
42			(see 2.6.5.1.3.1); otherwise, the base station shall set this
43			field to '0'.

- 1 TBR_RAND_WINDOW - Timer-based registration randomization window.
 2
 3 The base station shall set this field to the value shown in
 4 Table 2.6.5.1.3-1 corresponding to the randomization for
 5 timer-based registration (see 2.6.5.1.3).
- 6 BCMC_INFO_INCL - BCMC information Included Indicator
 7
 8 If RELEASE_TYPE field is not included or is included and is
 9 equal to '011', the base station shall omit this field; otherwise,
 10 the base station shall include this field and shall set it as
 11 follows:
 12
 13 The base station shall set this field to '1' if BCMC information
 14 is included in this message; otherwise, the base station shall
 15 set this field to '0'.
 16
 17 The BCMC information included in this message is applicable
 18 to all the pilots indicated by the DIRECT TO IDLE record in
 19 this message.
- 20 NUM_FSCH - Number of Forward Supplemental Channels.
 21
 22 If BCMC_INFO_INCL field is not included or is included and is
 23 equal to '0', the base station shall omit this field; otherwise,
 24 the base station shall include this field and shall set it as
 25 follows:
 26
 27 The base station shall set this field to the number of Forward
 28 Supplemental Channels for which information is included in
 29 this message minus one.
- 30 NUM_BCMC_PROGRAMS- Number of BCMC Programs
 31
 32 If BCMC_INFO_INCL field is not included or is included and is
 33 equal to '0', the base station shall omit this field; otherwise,
 34 the base station shall include this field and shall set it as
 35 follows:
 36
 37 The base station shall set this field to the number of BCMC
 38 programs for which information is included in this message
 39 minus one.
- 40 If NUM_FSCH field is included, the base station shall include NUM_FSCH plus one
 41 occurrences of the following variable length record:
- 42 FSCH_RECORD_LEN - Forward Supplemental Channel record length.
 43
 44 The base station shall set this field to the number of octets
 45 included in this Forward Supplemental Channel record
 46 including this field.
- 47 FSCH_CODE_CHAN - Code channel index of the Forward Supplemental Channel.
 48
 49 The base station shall set this field to the code channel index
 50 of this Forward Supplemental Channel as specified in [2].
- 51 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 will
12			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 to
18			'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 length
16 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 the
27 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 the
39 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 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 this message.

7

8

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'.

9

10

11

ACTION_TIME - Action time.

12

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.

13

14

15

16

17

CH_IND - Channel Indicator.

18

The base station shall set this field as shown in Table 3.7.3.3.2.34-1, to release physical resources.

19

20

GATING_RATE_INCL - Reverse pilot gating rate included flag.

21

The base station shall set this field to '1' if the PILOT_GATING_RATE field is included, otherwise it shall set this field to '0'.

22

23

24

PILOT_GATING_RATE - Actual Reverse Pilot gating Rate.

25

If the GATING_RATE_INCL field is set to '1', then the base station shall set this field to the PILOT_GATING_RATE field shown in Table 3.7.3.3.2.34-2 corresponding to the actual gating rate on the Reverse Pilot Channel; otherwise, the base station shall omit this field.

26

27

28

29

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 is
2 included in this message and is used to set the channel
3 configuration; otherwise, the base station shall set this field to
4 '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 shall
19 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

(continues on next page)

4

5

1

Field	Length (bits)
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 × RECORD_LEN
NNSCR_INCLUDED	0 or 1
RECORD_TYPE	0 or 8
RECORD_LEN	0 or 8
Type-specific fields	0 or 8 × RECORD_LEN

(continues on next page)

2

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

Field	Length (bits)
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)

1

2

Field	Length (bits)
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_IN D	0 or 1

Field	Length (bits)
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_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

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

Field	Length (bits)
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 × 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_BCMC_IND	1
---------------------	---

NUM_PILOTS occurrence of the following record:

{ (NUM_PILOTS)

FOR_CPCCH_WALSH	7
FOR_CPCSCH	5
<i>} (NUM_PILOTS)</i>	
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 × 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)

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_SOFTER_SWITCHING_FRAMES	0 or 4
NUM_SOFT_SWITCHING_SLOTS	0 or 2
NUM_SOFTER_SWITCHING_SLOTS	0 or 2
CHM_SWITCHING_PARMS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFTER_SWITCHING_FRAMES_CHM	0 or 4
NUM_SOFT_SWITCHING_SLOTS_CHM	0 or 2
NUM_SOFTER_SWITCHING_SLOTS_CHM	0 or 2
PDCH_SOFT_SWITCHING_DELAY	0 or 8
PDCH_SOFTER_SWITCHING_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: <i>{ (NUM_PDCCH+1)</i>	
FOR_PDCCH_WALSH	0 or 6
<i>} (NUM_PDCCH+1)</i>	
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

Field	Length (bits)
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 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

Field	Length (bits)
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

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.

- 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 - *Universal Handoff Direction Message* sequence number.
7 This field is used by the mobile station in the *Power*
8 *Measurement Report Message* 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 field
18 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 window
36 size parameter shown in Table 2.6.6.2.1-1 corresponding to
37 the number of PN chips that the mobile station is to search
38 for pilots in the Active Set and the Candidate Set; otherwise,
39 the base station shall omit this field.
- 40 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 window
 10 size parameter shown in Table 2.6.6.2.1-1 corresponding to
 11 the search window size to be used by mobile stations for the
 12 Remaining Set after completion of the handoff; otherwise, the
 13 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
 19 *Measurement Message* initiating the handoff process (see
 20 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 detection
 23 threshold, expressed as an unsigned binary number equal to
 24 $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$; otherwise, the base station shall omit
 25 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 *Pilot Strength Measurement*
 37 *Message* or *Extended Pilot Strength Measurement Message*
 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 *Pilot Strength Measurement Message* or *Extended Pilot Strength*
7 *Measurement Message* is issued. If the pilot is a member of
8 the Candidate Set, it will be moved to the Neighbor Set.
- 9 If SEARCH_INCLUDED is set to '1', the base station shall
10 include the field T_TDROP and set this field to the T_TDROP
11 value shown in Table 2.6.6.2.3-1 corresponding to the drop
12 timer value to be used by the mobile station; otherwise, the
13 base station shall omit this field.
- 14 SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the
15 Active Set, or dropping a pilot from the Active Set (see
16 2.6.6.2.3 and 2.6.6.2.5.2).
- 17 If SEARCH_INCLUDED is set to '1', the base station shall
18 include the field SOFT_SLOPE in the additional fields and set
19 this field as an unsigned binary number; otherwise, the base
20 station shall omit this field.
- 21 ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to
22 the Active Set (see 2.6.6.2.5.2).
- 23 If SEARCH_INCLUDED is set to '1', the base station shall
24 include the field ADD_INTERCEPT in the additional fields and
25 set this field as a two's complement signed binary number in
26 units of 0.5 dB; otherwise, the base station shall omit this
27 field.
- 28 DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot
29 from the Active Set (see 2.6.6.2.3).
- 30 If SEARCH_INCLUDED is set to '1', the base station shall
31 include the field DROP_INTERCEPT in the additional fields
32 and set this field as a two's complement signed binary
33 number in units of 0.5 dB; otherwise, the base station shall
34 omit this field.
- 35 EXTRA_PARMS - Extra parameters included.
- 36 If the base station includes the fields PACKET_ZONE_ID,
37 FRAME_OFFSET, PRIVATE_LCM, RESET_L2, RESET_FPC,
38 SERV_NEG_TYPE, ENCRYPT_MODE, NOM_PWR_EXT,
39 NOM_PWR, RLGAIN_TRAFFIC_PILOT, DEFAULT_RLAG,
40 NUM_PREAMBLE, BAND_CLASS, PERIODIC_SEARCH, or
41 CDMA_FREQ in this message, the base station shall set this
42 field to '1'; otherwise, the base station shall set this field to '0'.
- 43 PACKET_ZONE_ID - Packet data services zone identifier.
- 44 If EXTRA_PARMS is set to '1', the base station shall include
45 the field PACKET_ZONE_ID and set this field as described
46 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 $\text{FRAME_OFFSET} \times 1.25$ 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 '0'.
- 33 **RESET_FPC** - Reset Forward Traffic Channel power control.
- 34 This field is used to reset the Forward Traffic Channel power
 35 control counters.
- 36 If EXTRA_PARMS is set to '1', the base station shall include
 37 the field RESET_FPC and set this field as described below;
 38 otherwise, the base station shall omit this field.
- 39 The base station shall set this field to '0' if the Forward Traffic
 40 Channel power control counters are to be maintained after
 41 completion of the handoff. If the counters are to be initialized
 42 as specified in 2.6.4.1.1.1, then the base station shall set this
 43 field to '1'.

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 this
 39 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
2 indicator
- 3 The base station shall omit this field, if EXTRA_PARMS is set
4 to '0'; otherwise, the base station shall include this field and
5 set this field as described below:
- 6 The base station shall set this field to '1', if the Non-negotiable
7 Service Configuration record is included in this message;
8 otherwise, the base station shall set this field to '0'.
- 9 If NNSCR_INCLUDED is included and is set to '1', the base station shall include one
10 occurrence of the following three-field record to specify the non-negotiable service
11 configuration.
- 12 RECORD_TYPE - Information record type.
- 13 If NNSCR_INCLUDED is included and is set to '1', the base
14 station shall include the field RECORD_TYPE and shall set
15 this field to the record type value shown in Table 3.7.5-1
16 corresponding to the Non-Negotiable Service Configuration
17 information record.
- 18 RECORD_LEN - Information record length.
- 19 If NNSCR_INCLUDED is included and is set to '1', the base
20 station shall include the field RECORD_LEN and shall set this
21 field to the number of octets included in the type-specific
22 fields of the Non-Negotiable Service Configuration information
23 record.
- 24 Type-specific fields - Type-specific fields.
- 25 If NNSCR_INCLUDED is included and is set to '1', the base
26 station shall include the type specific fields and shall set
27 these fields as specified in 3.7.5.20 for the Non-Negotiable
28 Service Configuration information record.
- 29 USE_PWR_CNTL_STEP - Power control step size indicator.
- 30 The base station shall set this field to '1' if the field
31 PWR_CNTL_STEP is included in the message.
- 32 PWR_CNTL_STEP - Power control step size.
- 33 If USE_PWR_CNTL_STEP is set to '1', then the base station
34 shall include the field PWR_CNTL_STEP and set this field to
35 the step size that the mobile station is to use for closed loop
36 power control, according to Table 3.7.3.3.2.25-1; otherwise,
37 the base station shall omit this field.
- 38 CLEAR_RETRY_DELAY - Clear retry delay indicator.
- 39 The base station shall set this field to '1' if the mobile station
40 is to clear any existing retry delay which it has stored (see
41 2.6.6.2.5.1); otherwise, the base station shall set this field to
42 '0'.
- 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 mobile
19 station is to process the Forward Supplemental Channel.
20 The base station shall set this field to '0000' to indicate that
21 the mobile station should stop processing the Forward
22 Supplemental Channel starting at the explicit start time of the
23 message specified by FOR_SCH_START_TIME or at the
24 implicit start time if FOR_SCH_START_TIME_INCL is set to '0'.
25 The base station shall set this field to '1111' to indicate that
26 the mobile station should process the Forward Supplemental
27 Channel, starting at the start time of the message specified by
28 FOR_SCH_START_TIME, until the start time specified by a
29 subsequent Forward Supplemental Channel assignment
30 corresponding to the same forward Supplemental Channel
31 (see 2.6.6.2.5.1.1).
- 32 FOR_SCH_START_TIME_INCL - Start time included indicator.
33 If FOR_SCH_DURATION is not equal to '0000', the base
34 station shall set this field to '1'. If FOR_SCH_DURATION is
35 equal to '0000', the base station shall set this field as follows:
36 The base station shall set this field to '1' if
37 FOR_SCH_START_TIME is included in this message;
38 otherwise, the base station shall set this field to '0'.
- 39 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
- $$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{FOR_SCH_START_TIME} \bmod 32 = 0,$$
- 10
 11
 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 may
 46 transmit on the Reverse Supplemental Channel specified by
 47 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
$$\lfloor t / (\text{START_TIME_UNIT}_s + 1) \rfloor - \text{REV_SCH_START_TIME} \bmod 32 = 0,$$

 20 where t is the System Time in units of 20 ms.
- 21
- 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_s.
 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_s ×
 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

CH_IND (Binary)	Physical Resource(s) Allocated
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 set
13 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
 3 If REV_PWR_CNTL_DELAY_INCL is not included, or is
 4 included and set to '0', then the base station shall omit this
 5 field; otherwise, the base station shall include this field and
 6 set it as follows:
 7
 8 The base station shall set this field to the closed-loop reverse
 9 power control delay minus one (the closed-loop reverse power
 10 control delay is the time between the end of a gated-on
 11 reverse PCG and the beginning of the reverse PCG where the
 corresponding feedback is sent on the Forward Power Control
 Subchannel, see [2]), in units of 1.25 ms.
- 12 D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.
 13
 14 If ENCRYPT_MODE is included and is set to '11', the base station
 15 shall include this field and shall set it to the dedicated channel
 16 signaling encryption mode, as shown in Table 3.7.4.5-1;
 otherwise the base station shall omit this field.
- 17 ENC_KEY_SIZE - Encryption key size indication.
 18
 19 If ENCRYPT_MODE is included and is set to '10' or '11', the
 20 base station shall include this field and set it to the
 21 encryption key size, as shown in Table 3.7.4.5-2; otherwise,
 the base station shall omit this field.
- 22 3XFL_1XRL_INCL - 3X Forward Link and 1X Reverse Link indicator.
 23
 24 The base station shall set this field to '1' if the base station is
 25 assigning 3X traffic channel on the Forward Link and 1X
 26 traffic channel on the Reverse Link; otherwise, the base
 station shall set this field to '0'.
- 27 1XRL_FREQ_OFFSET - 1X Reverse Link frequency offset.
 28
 29 If 3XFL_1XRL_INCL is set to '0', the base station shall omit
 30 this field; otherwise, the base station shall set this field as
 follows:
 31
 32 The base station shall set this field to the value shown in
 33 Table 3.7.2.3.2.21-8 corresponding to the frequency offset of
 the 1X reverse link.

- 1 The base station shall set this field to the number of new call
2 assignments included in this message.
- 3 The base station shall include NUM_CALLS_ASSIGN occurrences of the following variable
4 length record (CON_REF, RESPONSE_IND, TAG, BYPASS_ALERT_ANSWER as per the
5 following requirements).
- 6 CON_REF – Connection reference.
- 7 The base station shall set this field to the connection
8 reference of the service option connection corresponding to
9 this call.
- 10 RESPONSE_IND – Response indicator.
- 11 The base station shall set this field to ‘1’ if this call
12 assignment is a response to an *Enhanced Origination Message*
13 from the mobile station; otherwise, the base station shall set
14 this field to ‘0’.
- 15 TAG – Transaction identifier.
- 16 If the RESPONSE_IND field 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 the value of the TAG
20 field received in the *Enhanced Origination Message* to which
21 this call assignment is the response.
- 22 BYPASS_ALERT_ANSWER – Bypass alert indicator.
- 23 If the RESPONSE_IND field is set to ‘1’, 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 mobile station is to bypass the *Waiting for Order*
27 *Substate* and the *Waiting for Mobile Station Answer Substate*
28 for this call, the base station shall set this field to ‘1’;
29 otherwise, the base station shall set this field to ‘0’.
- 30 CS_SUPPORTED – Concurrent Services supported indicator.
- 31 If the base station supports concurrent services, the base
32 station shall set this field to ‘1’; otherwise, the base station
33 shall set this field to ‘0’.
- 34 CHM_SUPPORTED – Control Hold Mode supported indicator.
- 35 The base station shall set this field to ‘1’ to indicate that the
36 base station supports the Control Hold Mode; otherwise, the
37 base station shall set this field to ‘0’.
- 38 CDMA_OFF_TIME_REP_SUP_IND – CDMA off time report supported indicator.

- 1 If the base station supports mobile station report for CDMA
2 off time information using the *CDMA Off Time Report Message*,
3 the base station shall set this field to '1'; otherwise, the base
4 station shall set this field to '0'.
- 5 CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit
- 6 If CDMA_OFF_TIME_REP_SUP_IND 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 time unit used in
10 CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table
11 3.7.2.3.2.13-5
- 12 CDMA_OFF_TIME_REP_THRESHOLD – CDMA off time report threshold
- 13 If CDMA_OFF_TIME_REP_SUP_IND is set to '0', the base
14 station shall omit this field; otherwise, the base station shall
15 include this field and set it as follows:
- 16 The base station shall set this field to the time in units of
17 CDMA_OFF_TIME_REP_THRESHOLD_UNIT such that if the
18 mobile station goes away from the CDMA traffic channel
19 longer than this value, the mobile station is to send a *CDMA*
20 *Off Time Report Message*.
- 21 RELEASE_TO_IDLE_IND - Release to Idle State allowed indicator.
- 22 If the mobile station is allowed to return to the *Mobile Station*
23 *Idle State* upon call release, the base station shall set this field
24 to '1'; otherwise, the base station shall set this field to '0'.
- 25 MSG_INTEGRITY_SUP - Message integrity supported indicator.
- 26 If the base station supports message integrity, the base
27 station shall set this field to '1'; otherwise, the base station
28 shall set this field to '0'.
- 29 GEN_2G_KEY - Generate 2G encryption key indicator.
- 30 If the base station is to generate a new CMEAKEKEY from the
31 current CK, the base station shall set this field to '1' to order
32 the mobile station to perform similar procedures; otherwise,
33 the base station shall set this field to '0'.
- 34 REGISTER_IN_IDLE - Register in idle state indicator.
- 35 If the mobile station is to perform registration after
36 transitioning back to the *Mobile Station Idle State*, the base
37 station shall set this field to '1'; otherwise, the base station
38 shall set this field to '0'.
- 39 PLCM_TYPE_INCL - The Public Long Code Mask type Included Indicator.
- 40 If the mobile station is to change its public long code mask
41 after handoff, the base station shall set this field to '1';
42 otherwise, the base station shall set this field to '0'.
- 43 PLCM_TYPE - The Public Long Code Mask Type.

- 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 Public Long Code
 5 Mask type to be used by the mobile station after the handoff
 6 as specified in Table 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 mobile
 12 station is different from the MCC or MNC of this base station).
- 13 PLCM_39 - The 39 LSBs of the Public Long Code Mask.
- 14 If PLCM_TYPE is included and set to '0001', the base station
 15 shall include this field and set it to the 39 least significant
 16 bits of the public long code mask to be used by the mobile
 17 station after the handoff as defined in Table 3.6.4.1.10;
 18 otherwise, the base station shall omit this field.
- 19 T_TDROP_RANGE_INCL - Drop timer range value included indicator.
- 20 If SEARCH_INCLUDED 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 '1' if the
 24 T_TDROP_RANGE field is included in this message; otherwise,
 25 the base station shall set this field to '0'.
- 26 T_TDROP_RANGE - Drop timer range value.
- 27 Timer range value to use in association with the T_TDROP
 28 parameter when determining the drop timer expiration.
- 29 If T_TDROP_RANGE_INCL is not included, or included and set
 30 to '0', the base station shall omit this field; otherwise, the
 31 base station shall set this field to the T_TDROP_RANGE value
 32 shown in Table 2.6.6.2.3-2 corresponding to the timer
 33 expiration range value to be used by the mobile station.
- 34 FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.
- 35 If the base station supports Forward Packet Data Channel,
 36 the base station shall set this field to '1'; otherwise, the base
 37 station shall set this field to '0'.
- 38 PDCH_CHM_SUPPORTED - PDCH Control Hold Mode supported indicator.
- 39 If FOR_PDCH_SUPPORTED is set to '0', the base station shall
 40 omit this field; otherwise, the base station shall include this
 41 field and set it as follows:
- 42 The base station shall set this field to '1' to indicate that the
 43 base station supports the PDCH Control Hold Mode; otherwise,
 44 the base station shall set this field to '0'.
- 45 PILOT_INFO_REQ_SUPPORTED - Pilot information request supported indicator.

1 If the base station supports mobile station request for pilot
2 information using the “Pilot Information” record in the *Base*
3 *Station Status Request Message*, the base station shall set this
4 field to ‘1’; otherwise, the base station shall set this field to ‘0’.

5 ENC_SUPPORTED – Encryption fields included.
6 The base station shall set this field to ‘1’ if the encryption
7 related fields are included; otherwise, the base station shall
8 set this field to ‘0’.

9 SIG_ENCRYPT_SUP – Signaling Encryption supported indicator.
10 If ENC_SUPPORTED is equal to ‘1’, the base station shall
11 include this field; otherwise, the base station shall omit this
12 field. If this field is included, this field indicates which
13 signaling encryption algorithms are supported by the base
14 station.
15 This field consists of the subfields shown in Table 2.7.1.3.2.1-
16 5.
17 If this field is included, the base station shall set the subfields
18 as follows:
19 The base station shall set the CMEA subfield to ‘1’.
20 The base station shall set each other subfield to ‘1’ if the
21 corresponding signaling algorithm is supported by the base
22 station; otherwise, the base station shall set the subfield to
23 ‘0’.
24 The base station shall set the RESERVED subfield to ‘00000’.

25 UI_ENCRYPT_SUP – User information Encryption supported indicator.
26 If ENC_SUPPORTED is equal to ‘1’, the base station shall
27 include this field; otherwise, the base station shall omit this
28 field. If this field is included, the base station shall set this
29 field to indicate the supported user information encryption
30 algorithms.
31 This field consists of the subfields shown in Table 2.7.1.3.2.4-
32 9.
33 The base station shall set each subfield to ‘1’ if the
34 corresponding user information encryption algorithm is
35 supported by the base station; otherwise, the base station
36 shall set the subfield to ‘0’.

37 USE_SYNC_ID – Sync ID supported indicator.
38 The base station shall set this field to ‘1’ to indicate that the
39 mobile station is permitted to include the SYNC_ID field in the
40 *Page Response Message*, the *Reconnect Message*, the
41 *Origination Message*, and the *Enhanced Origination Message*;
42 otherwise, the base station shall set this field to ‘0’.

43 SID_INCL – SID included indicator.

1			If the SID field is included in this message, the base station
2			shall set this field to '1'; otherwise, the base station shall set
3			this field to '0'.
4	SID	-	System identification.
5			If the SID_INCL field is set to '0', the base station shall omit
6			this field; otherwise, the base station shall include this field
7			and set it as follows:
8			The base station shall set this field to the system
9			identification number for this wireless system (see 2.6.5.2).
10	NID_INCL	-	NID included indicator.
11			If the NID field 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'.
14	NID	-	Network identification.
15			If the NID_INCL field is set to '0', the base station shall omit
16			this field; otherwise, the base station shall include this field
17			and set it as follows:
18			This field serves as a sub-identifier of a system as defined by
19			the owner of the SID.
20			The base station shall set this field to the network
21			identification number for this network (see 2.6.5.2).
22	SDB_SUPPORTED	-	Short Data Burst supported indicator.
23			The base station shall set this field to '1' if the mobile station
24			is permitted to send a Short Data Burst; otherwise, the base
25			station shall set this field to '0'.
26	MOB_QOS	-	Indicator granting permission to the mobile station to request
27			QoS parameter settings in the <i>Origination Message</i> ,
28			<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
29			<i>Message</i> .
30			If CS_SUPPORTED is equal to '0', the base station shall omit
31			this field; otherwise the base station shall include this field
32			and shall set it as follows:
33			The base station shall set this field to '1', if the mobile station
34			is allowed to include a QoS record in the <i>Origination Message</i> ,
35			<i>Origination Continuation Message</i> , or <i>Enhanced Origination</i>
36			<i>Message</i> ; otherwise, the base station shall set this field to '0'.
37	MS_INIT_POS_LOC_SUP_IND	-	Mobile station initiated position location determination
38			supported indicator.
39			If the target base station supports mobile station initiated
40			position determination, the base station shall set this field to
41			'1'; otherwise, the base station shall set this field to '0'.
42	REV_PDCH_SUPPORTED	-	Reverse Packet Data Channel supported indicator.
43			If FOR_PDCH_SUPPORTED 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			If the base station supports the Reverse Packet Data Channel
2			(R-PDCH), the base station shall set this field to '1'; otherwise,
3			the base station shall set this field to '0'.
4	PZ_HYST_ENABLED	-	Packet zone hysteresis enabled.
5			If the PACKET_ZONE_ID field is set to '00000000', the base
6			station shall omit this field; otherwise, the base station shall
7			include this field and set it as follows:
8			If the packet zone hysteresis feature is to be enabled at the
9			mobile station, the base station shall set this field to '1';
10			otherwise, the base station shall set this field to '0'.
11	PZ_HYST_INFO_INCL	-	Packet zone hysteresis information included indicator.
12			If the PZ_HYST_ENABLED field is included and is set to '1',
13			the base station shall include this field and set it as follows;
14			otherwise, the base station shall omit this field.
15			If the base includes the PZ_HYST_LIST_LEN,
16			PZ_HYST_ACT_TIMER and packet zone hysteresis timer
17			related fields, the base station shall set this field to '1';
18			otherwise, the base station shall set this field to '0'.
19	PZ_HYST_LIST_LEN	-	Packet zone hysteresis list length.
20			If the PZ_HYST_INFO_INCL field is included and is set to '1',
21			the base station shall include this field and set it as follows;
22			otherwise, the base station shall omit this field.
23			The base station shall set this field to the length of the packet
24			zone hysteresis list. This field shall be within the range '0001'
25			through '1111', inclusive.
26	PZ_HYST_ACT_TIMER	-	Packet zone hysteresis activation timer.
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 to the value of the packet zone
31			hysteresis activation timer (in units of seconds). This field
32			shall be within the range '00000001' through '11111111',
33			inclusive.
34	PZ_HYST_TIMER_MUL	-	Packet zone hysteresis timer multiplier.
35			If the PZ_HYST_INFO_INCL field is included and is set to '1',
36			the 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 the field to x, where $x \times 8^y$ seconds
39			is the value of the hysteresis timer and y is the value
40			indicated in the PZ_HYST_TIMER_EXP field. The base station
41			shall set this field to a value that is between 1 and 7
42			inclusive. The value 0 is reserved.
43	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 $x \times 8^y$ seconds
 5 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 channel; otherwise, the base station
 21 shall set this field to '0'.
- 22 **SCH_BCMC_IND** - BCMC on supplemental channel Indicator.
- 23 If the BCMC_ON_TRAFFIC_SUP field is set to '0', or if
 24 NUM_FOR_ASSIGN field is not included or is included and is
 25 set to '00', the base station shall omit this field; otherwise, the
 26 base station shall include this field and set it as follows:
- 27 If the channel assignment in this message contains a Forward
 28 Supplemental Channel used for BCMC transmission, the base
 29 station shall set this field to '1'; otherwise, the base station
 30 shall set this field to '0'.
- 31 **ADD_PLCM_FOR_SCH_INCL** - Additional PLCM for forward SCH included indicator.
- 32 If the SCH_BCMC_IND field is not included or is included and
 33 is 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 If the additional PLCM for forward SCH is 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 **ADD_PLCM_FOR_SCH_TYPE** - The Additional Public Long Code Mask for forward SCH
 39 type indicator.
- 40 If ADD_PLCM_FOR_SCH_INCL is not included or is included
 41 and is set to '0', the base station shall omit this field;
 42 otherwise, the base station shall include this field and set it
 43 as follows:

- 1 The base station shall set this field to the maximum number
 2 of additional service reference identifiers that can be included
 3 in the *Origination Message* or *Enhanced Origination Message*.
- 4 USE_CH_CFG_RRM - Channel configuration request allowed indicator.
 5 The base station shall set this field to '1' to indicate that the
 6 mobile station is permitted to include the CH_IND and
 7 EXT_CH_IND fields in the *Resource Request Message*, and the
 8 *Resource Request Mini Message*; otherwise, the base station
 9 shall set this field to '0'.
- 10 TX_PWR_LIMIT_INCL - Transmit Power Limit inclusion for the current base station
 11 If TX_PWR_LIMIT_DEFAULT is included in this message, the
 12 base station shall set this field to '1'; otherwise, the base
 13 station shall set this field to '0'.
- 14 TX_PWR_LIMIT_DEFAULT - Use the Default Transmit Power Limit
 15 If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit
 16 this field; otherwise, the base station shall include this field
 17 and set to as follows.
 18 The base station shall set this field to '1' if the mobile station
 19 is to limit its transmission power in the 1915MHz – 1920MHz
 20 block of the PCS band to no more than the default value
 21 defined in [11]; otherwise, the base station shall set this field
 22 to '0' if the mobile station is to limit its transmission power to
 23 no more than the value indicated by TX_PWR_LIMIT.
- 24 TX_PWR_LIMIT - Transmit Power Limit for the current base station
 25 If TX_PWR_LIMIT_DEFAULT is omitted, or if it is included and
 26 set to '1', the base station shall omit this field; otherwise, the
 27 base station shall include this field and set to as follows.
 28 The base station shall set this field to thirty dB more than
 29 transmit power limit in dBm EIRP, in steps of 1 dB. This field
 30 can take the values 30 to 53 corresponding to maximum
 31 transmit power values 0 dBm to 23 dBm.
- 32 If the CH_IND field is set to '101', the base station shall include the following fields:
- 33 NUM_FOR_SCH - Number of Forward Supplemental Channel records.
 34 If SCH_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 number of the
 37 Forward Supplemental Channel records need to be updated.
- 38 If NUM_FOR_SCH is included and not equal to '00000', the base station shall include
 39 NUM_FOR_SCH occurrence of the following three fields:
- 40 FOR_SCH_ID - Forward Supplemental Channel identifier.
 41 The base station shall set this field to the identifier of the
 42 Forward Supplemental Channel.
- 43 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_s 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 FOR_SCH_ID
 21 to be
 22 CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SC
 23 H_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 set
 41 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 CRC bits per
 7 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 NUM_PILOTS - Number of pilots included in the message.
 20 The base station shall set this field to the number of pilots
 21 included in the message. The base station shall set this field
 22 to an integer that is equal to or greater than 1.
- 23 SRCH_OFFSET_INCL - Target pilot channel search window offset included.
 24 If the SRCH_OFFSET field is included in the following records,
 25 the base station shall set this field to '1'; otherwise, the base
 26 station shall set this field to '0'.
- 27 The base station shall include one occurrence of the following record for each of the
 28 NUM_PILOTS pilots included in the message:
- 29 PILOT_PN - Pilot PN sequence offset index.
 30 The base station shall set this field to the pilot PN sequence
 31 offset for this pilot in units of 64 PN chips.
- 32 SRCH_OFFSET - Target pilot channel search window offset.
 33 If SRCH_OFFSET_INCL equals to '1', then the base station
 34 shall set this field to the value shown in Table 2.6.6.2.1-2
 35 corresponding to the search window offset to be used by the
 36 mobile station for this target pilot. Otherwise, the base
 37 station shall omit this field.
- 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 PILOT_REC_TYPE and RECORD_LEN
 41 fields are included. The base station shall set this field to '0'
 42 if the corresponding pilot is the common pilot and there is no
 43 additional pilot information included.
- 44 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 the Forward Traffic Channel associated with this pilot will
21			carry the same closed-loop power control subchannel bits as
22			that of the previous pilot in this message, the base station
23			shall set this field to '1'; otherwise, the base station shall set
24			this field to '0'. The base station shall set this field to '0' in
25			the first record in the pilot list.
26	CODE_CHAN_FCH	-	Code channel on the Fundamental Channel.
27			If a Radio Configuration associated with Spreading Rate 1 is
28			used, the base station shall set this field to the code channel
29			index (see [2]) that the mobile station is to use on the
30			Fundamental Channel of the Forward Traffic Channel. If a
31			Radio Configuration associated with Spreading Rate 3 is used,
32			the base station shall set this field to the code channel index
33			that the mobile station is to use for the Fundamental Channel
34			on the center SR3 frequency.
35			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
36			station shall set this field in the range 1 to 63 inclusive. If
37			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
38			station shall set this field in the range 1 to 127 inclusive. If
39			Radio Configuration 7 or 9 is used, the base station shall set
40			this field in the range 1 to 255 inclusive.
41	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
42			Channel.

1	CODE_CHAN_FCH_HIGH-	Code channel for the Fundamental Channel on the highest
2		SR3 frequency.
3		If 3X_FCH_HIGH_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 Fundamental
8		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 '0'.
30	QOF_MASK_ID_SCH_LOW	- QOF index for the Supplemental Channel on the lowest
31		SR3 frequency.
32		If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
33		this field; otherwise, the base station shall set this field as
34		follows:
35		The base station shall set this field to the index of the Quasi-
36		orthogonal function (see [2]) corresponding to the QOF index
37		for the Supplemental Channel on the lowest SR3 frequency.
38	CODE_CHAN_SCH_LOW	- Code channel for the Supplemental Channel on the lowest
39		SR3 frequency.
40		If 3X_SCH_LOW_INCL is set to '0', the base station shall omit
41		this field; otherwise, the base station shall set this field as
42		follows:

1 If the USE_CCSH_ENCODER_TIME field is included and set
 2 to '1', the base station shall set this field to the System Time
 3 minus $\text{FRAME_OFFSET}_s \times 1.25$ ms, in units of 80ms (modulo
 4 64), at which Turbo Encoder types included in this message
 5 are to take effect; otherwise, the base station shall omit this
 6 field.

7 If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of
 8 the following one field for each of the Forward Supplemental Channel records (as specified
 9 by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall use
 10 the same order for the following field as is used for the Forward Supplemental Channel
 11 records.

12 CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

13 The base station shall set this field to '0' if the Turbo Encoder
 14 type to be used on the Forward Supplemental Channel
 15 identified by FOR_SCH_ID and SCCL_INDEX is the default
 16 encoder type. The base station shall set this field to '1' if the
 17 Turbo Encoder to be used is the complementary type.

18 RESERVED - Reserved bits.

19 The base station shall add reserved bits as needed in order to
 20 make the length of the ACTIVE_SET_REC_FIELDS record
 21 equal to an integer number of octets. The base station shall
 22 set these bits to '0'.

23 If the CH_IND field is set to '010' or '110', the base station shall include the following fields:

24 NUM_FOR_SCH - Number of Forward 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 Forward Supplemental Channel records need to be updated.

29 If NUM_FOR_SCH is included and not equal to '00000', the base station shall include
 30 NUM_FOR_SCH occurrence of the following three fields:

31 FOR_SCH_ID - Forward Supplemental Channel identifier.

32 The base station shall set this field to identifier of the Forward
 33 Supplemental Channel.

34 SCCL_INDEX - Supplemental Channel Code list index.

35 The base station shall set this field to the index of the record
 36 in the Supplemental Channel Code list.

37 FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information
 38 bits index.

1 If USE_FLEX_NUM_BITS is equal to '0' or if
 2 USE_FLEX_NUM_BITS is equal to '1' and
 3 FSCH_NBIT_TABLE_ID for FOR_SCH_ID is equal to '0000',
 4 then the base station shall set this field according to Table
 5 3.7.3.3.2.37-4 to indicate the number of information bits per
 6 frame and the length of the CRC field for the Forward
 7 Supplemental Channel identified by FOR_SCH_ID
 8 corresponding to SCCL_INDEX.

9 If USE_FLEX_NUM_BITS_s is equal to '1' and
 10 FSCH_NBIT_TABLE_ID[FOR_SCH_ID] is not equal to '0000',
 11 then the base station shall set this field to indicate that the
 12 number of information bits per frame for the Forward
 13 Supplemental channel identified by FOR_SCH_ID to be
 14 NUM_BITS[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SCH_
 15 NUM_BITS_IDX] and the number of CRC bits per frame for
 16 the Forward Supplemental channel identified by FOR_SCH_ID
 17 to be
 18 CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SC
 19 H_NUM_BITS_IDX].

20 NUM_REV_SCH - Number of Reverse Supplemental Channel records.
 21 If SCH_INCL is set to '0', the base station shall omit this field;
 22 otherwise, the base station shall set this field as follows:
 23 The base station shall set this field to the number of the
 24 Reverse Supplemental Channels need to be updated.

25 If NUM_REV_SCH is included and not equal to '00000', the base station shall include
 26 NUM_REV_SCH occurrence of the following three fields:

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_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.
 31 The base station shall set this field according to Table
 32 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
 33 station is to use when transmitting at the rate specified by
 34 REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
 35 Channel specified by REV_SCH_ID. If only one reverse
 36 supplemental channel is assigned, the base station should set
 37 this field to the default value for the REV_WALSH_ID as
 38 specified in 2.6.4.2.

39 REV_SCH_NUM_BITS_IDX - Reverse Supplemental Channel number of bits per frame
 40 index.

41 If USE_FLEX_NUM_BITS is equal to '0' or if
 42 USE_FLEX_NUM_BITS is equal to '1' and
 43 RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
 44 the base station shall set this field according to Table
 45 3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
 46 number of information bits per frame and the number of CRC
 47 bits per frame, corresponding to REV_WALSH_ID field.

- 1 If USE_FLEX_NUM_BITS is equal to '1' and
 2 RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
 3 then the base station shall set the REV_SCH_NUM_BITS_IDX
 4 field to indicate the Reverse Supplemental Channel number of
 5 information bits per frame, corresponding to REV_WALSH_ID
 6 field to be NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
 7 [REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
 8 Channel number of CRC bits per frame, corresponding to
 9 REV_WALSH_ID field to be
 10 CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
 11 [REV_SCH_NUM_BITS_IDX].
- 12 NUM_PILOTS - Number of pilots included in the message.
 13 The base station shall set this field to the number of pilots
 14 included in the message. The base station shall set this field
 15 to an integer that is equal to or greater than 1.
- 16 SRCH_OFFSET_INCL - Target pilot channel search window offset included.
 17 If the SRCH_OFFSET field is included in the following records,
 18 the base station shall set this field to '1'; otherwise, the base
 19 station shall set this field to '0'.
- 20 The base station shall include one occurrence of the following record for each of the
 21 NUM_PILOTS pilots included in the message:
- 22 PILOT_PN - Pilot PN sequence offset index.
 23 The base station shall set this field to the pilot PN sequence
 24 offset for this pilot in units of 64 PN chips.
- 25 SRCH_OFFSET - Target pilot channel search window offset.
 26 If SRCH_OFFSET_INCL equals to '1', then the base station
 27 shall set this field to the value shown in Table 2.6.6.2.1-2
 28 corresponding to the search window offset to be used by the
 29 mobile station for this target pilot. Otherwise, the base
 30 station shall omit this field.
- 31 ADD_PILOT_REC_INCL - Additional pilot information included indicator.
 32 The base station shall set this field to '1' if additional pilot
 33 information listed in PILOT_REC_TYPE and RECORD_LEN
 34 fields are included. The base station shall set this field to '0'
 35 if the corresponding pilot is the common pilot and there is no
 36 additional pilot information included.
- 37 PILOT_REC_TYPE - Pilot record type.
 38 If ADD_PILOT_REC_INCL is set to '1', the base station shall
 39 set this field to the PILOT_REC_TYPE value shown in Table
 40 3.7.2.3.2.21-9 corresponding to the type of Pilot Record
 41 specified by this record.
 42 If ADD_PILOT_REC_INCL is set to '0', the base station shall
 43 omit this field.
- 44 RECORD_LEN - Pilot record length.

1			If ADD_PILOT_REC_INCL is set to '1', the base station shall
2			set this field to the number of octets in the type-specific fields
3			of this pilot record.
4			If ADD_PILOT_REC_INCL is set to '0', the base station shall
5			omit this field.
6	Type-specific fields	-	Pilot record type-specific fields.
7			If ADD_PILOT_REC_INCL is set to '1', the base station shall
8			include type-specific fields based on the PILOT_REC_TYPE of
9			this pilot record as described in 3.7.6.1.
10			If ADD_PILOT_REC_INCL is set to '0', the base station shall
11			omit this field.
12	PWR_COMB_IND	-	Power control symbol combining indicator.
13			If this pilot will carry the same closed-loop power control
14			subchannel bits as that of the previous pilot in this message,
15			the base station shall set this field to '1'; otherwise, the base
16			station shall set this field to '0'. The base station shall set
17			this field to '0' in the first record in the pilot list.
18	CODE_CHAN_DCCH	-	Code channel on the Dedicated Control Channel.
19			If a Radio Configuration associated with Spreading Rate 1 is
20			used, the base station shall set this field to the code channel
21			index (see [2]), in the range of 1 to 127 inclusive, that the
22			mobile station is to use on the Dedicated Control Channel of
23			the Forward Traffic Channel. If a Radio Configuration
24			associated with Spreading Rate 3, the base station shall set
25			this field to the code channel index (see [2]), in the range of 1
26			to 255 inclusive, that the mobile station is to use for the
27			Dedicated Control Channel on the center SR3 frequency.
28			If Radio Configuration 3 or 5 (see [2]) is used, the base station
29			shall set this field in the range 1 to 63 inclusive. If Radio
30			Configuration 4, 6 or 8 is used, the base station shall set this
31			field in the range 1 to 127 inclusive. If Radio Configuration 7
32			or 9 is used, the base station shall set this field in the range 1
33			to 255 inclusive.
34	QOF_MASK_ID_DCCH	-	Quasi-orthogonal function index on the Dedicated Control
35			Channel.
36			If a Radio Configuration associated with Spreading Rate 1 is
37			used, the base station shall set this field to the index of the
38			Quasi-orthogonal function (see [2]). If a Radio Configuration
39			associated with Spreading Rate 3 is used, the base station
40			shall set this field to the index of the Quasi-orthogonal
41			function (see [2]).
42	NUM_SCH	-	Number of Supplemental Channel records.
43			If SCH_INCL is set to '0', the base station shall omit this field;
44			otherwise, the base station shall set this field as follows:
45			The base station shall set this field to the number of the
46			Supplemental Channel records need to be updated.

1 If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH
2 occurrence of the following five fields:

- 3 FOR_SCH_ID - Forward Supplemental Channel identifier
4 The base station shall set this field to the identifier of the
5 Forward Supplemental Channel pertaining to this record.
- 6 SCCL_INDEX - Supplemental Channel Code list index.
7 The base station shall set this field to the index of the record
8 in the Supplemental Channel Code list.
- 9 PILOT_INCL - The corresponding pilot included in Supplemental Channel
10 Active Set indicator.
11 The base station shall set this field to '1' if the corresponding
12 pilot is included in the Active Set of Supplemental Channel;
13 otherwise, the base station shall set this field to '0'.
- 14 CODE_CHAN_SCH - Code channel on the Supplemental Channel.
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 Supplemental
17 Channel of the Forward Traffic Channel indexed by
18 SCCL_INDEX.
- 19 QOF_MASK_ID_SCH - Quasi-orthogonal function index on the Supplemental
20 Channel.
21 If SCH_INCL is set to '0', the base station shall omit this field;
22 otherwise, the base station shall set this field as follows:
23 The base station shall set this field to the index of the Quasi-
24 orthogonal function (see [2]).
- 25 3X_DCCH_INFO_INCL - 3X Dedicated Control Channel information included indicator.
26 If the 3X Dedicated Control Channel information is included,
27 the base station shall set this field to '1'; otherwise, the base
28 station shall set this field to '0'.

29 The base station shall include NUM_PILOTS occurrences of the following record if
30 3X_DCCH_INFO_INCL is set to '1'. The base station shall use the same order for the
31 following fields as is used for the PILOT_PN fields listed in this message.

- 32 3X_DCCH_LOW_INCL - DCCH code channel on the lowest SR3 frequency included
33 indicator.
34 If the Dedicated Control Channel on the lowest SR3
35 frequencies has a different code channel than the Dedicated
36 Control Channel on the center SR3 frequency, the base
37 station shall set this field to '1'; otherwise, the base station
38 shall set this field to '0'.
- 39 QOF_MASK_ID_DCCH_LOW - QOF index for the Dedicated Control Channel on the
40 lowest SR3 frequency.
41 If 3X_DCCH_LOW_INCL 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 the index of the Quasi-
2 orthogonal function (see [2]) corresponding to the QOF index
3 for the Dedicated Control Channel on the lowest SR3
4 frequency.

5 CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the
6 lowest SR3 frequency.

7 If 3X_DCCH_LOW_INCL is set to '0', the base station shall
8 omit this field; otherwise, the base station shall set this field
9 as follows:

10 The base station shall set this field to the code channel index
11 (see [2]) that the mobile station is to use on the Dedicated
12 Control Channel on the lowest SR3 frequency. If Radio
13 Configuration 6 or 8 is used, the base station shall set this
14 field in the range 1 to 127 inclusive. If Radio Configuration 7
15 or 9 is used, the base station shall set this field in the range 1
16 to 255 inclusive.

17 3X_DCCH_HIGH_INCL - DCCH code channel on the highest SR3 frequency included
18 indicator.

19 If the Dedicated Control Channel on the highest SR3
20 frequencies has a different code channel than the Dedicated
21 Control Channel on the center SR3 frequency, the base
22 station shall set this field to '1'; otherwise, the base station
23 shall set this field to '0'.

24 QOF_MASK_ID_DCCH_HIGH - QOF index for the Dedicated Control Channel on the
25 highest SR3 frequency.

26 If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
27 omit this field; otherwise, the base station shall set this field
28 as follows:

29 The base station shall set this field to the index of the Quasi-
30 orthogonal function (see [2]) corresponding to the QOF index
31 for the Dedicated Control Channel on the highest SR3
32 frequency.

33 CODE_CHAN_DCCH_HIGH - Code channel for the Dedicated Control Channel on the
34 highest SR3 frequency.

35 If 3X_DCCH_HIGH_INCL is set to '0', the base station shall
36 omit this field; otherwise, the base station shall set this field
37 as follows:

38 The base station shall set this field to the code channel index
39 (see [2]) that the mobile station is to use on the Dedicated
40 Control Channel on the highest SR3 frequency. If Radio
41 Configuration 6 or 8 is used, the base station shall set this
42 field in the range 1 to 127 inclusive. If Radio Configuration 7
43 or 9 is used, the base station shall set this field in the range 1
44 to 255 inclusive.

45 3X_SCH_INFO_INCL - 3X Supplemental Channel information included indicator.

46 If SCH_INCL is set to '0', the base station shall omit this field;
47 otherwise, the base station shall set this field as 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 highest SR3 frequency.

4 CODE_CHAN_SCH_HIGH - Code channel for the Supplemental Channel on the highest
5 SR3 frequency.

6 If 3X_SCH_HIGH_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 highest SR3 frequency. If Radio
12 Configuration 6 or 8 is used, the base station shall set this
13 field in the range 1 to 127 inclusive. If Radio Configuration 7
14 or 9 is used, the base station shall set this field in the range 1
15 to 255 inclusive.

16 CESH_INCLUDED - Code Combining Soft Handoff information included indicator.

17 The base station shall set this field to '1' if Code Combining
18 Soft Handoff information is included in this message;
19 otherwise, the base station shall set this field to '0'.

20 USE_CESH_ENCODER_TIME - Use Code Combining Soft Handoff Turbo Encoder
21 swapping action time indicator.

22 If the CESH_INCLUDED field is set 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 If an explicit action time at which Turbo Encoder types
26 (CESH_ENCODER_TYPE) included in this message takes
27 effect is specified, the base station shall set this field to '1';
28 otherwise, the base station shall set this field to '0'.

29 CESH_ENCODER_ACTION_TIME - Code Combining Soft Handoff Turbo Encoder
30 swapping action time.

31 If the USE_CESH_ENCODER_TIME field is included and set
32 to '1', the base station shall set this field to the System Time
33 minus $FRAME_OFFSET_s \times 1.25$ ms, in units of 80ms (modulo
34 64), at which Turbo Encoder types included in this message
35 are to take effect; otherwise, the base station shall omit this
36 field.

37 If the CESH_INCLUDED field is set to '1', the base station shall include one occurrence of
38 the following one field for each of the Forward Supplemental Channel records (as specified
39 by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall use
40 the same order for the following field as is used for the Forward Supplemental Channel
41 records.

42 CESH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

- 1 The base station shall set this field to '0' if the Turbo Encoder
 2 type to be used on the Forward Supplemental Channel
 3 identified by FOR_SCH_ID and SCCL_INDEX is the default
 4 encoder type. The base station shall set this field to '1' if the
 5 Turbo Encoder to be used is the complementary type.
- 6 FUNDICATED_BCMC_IND - BCMC on fundicated channel Indicator.
- 7 If the channel assignment in this message contains a Forward
 8 Fundicated Channel used for BCMC transmission, the base
 9 station shall set this field to '1'; otherwise, the base station
 10 shall set this field to '0'.
- 11 If FUNDICATED_BCMC_IND field is set to '1', the base station shall include NUM_PILOT
 12 occurrences of the following record:
- 13 FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code
 14 assignment.
 15 The base station shall set this field to the Walsh code
 16 assignment for the Forward Common Power Control Channel.
- 17 FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.
 18 The base station shall set this field to the Forward Common
 19 Power Control Channel Subchannel associated with this base
 20 station.
- 21 RESERVED - Reserved bits.
 22 The base station shall add reserved bits as needed in order to
 23 make the length of the ACTIVE_SET_REC_FIELDS record
 24 equal to an integer number of octets. The base station shall
 25 set these bits to '0'.
- 26 If the CH_IND field is set to '111', the base station shall include the following fields:
- 27 NUM_FOR_SCH - Number of Forward Supplemental Channel records.
 28 If SCH_INCL is set to '0', the base station shall omit this field;
 29 otherwise, the base station shall set this field as follows:
 30 The base station shall set this field to the number of the
 31 Forward Supplemental Channel records need to be updated.
- 32 If NUM_FOR_SCH is included and not equal to '00000', the base station shall include
 33 NUM_FOR_SCH occurrence of the following three fields:
- 34 FOR_SCH_ID - Forward Supplemental Channel identifier.
 35 The base station shall set this field to the identifier of the
 36 Forward Supplemental Channel.
- 37 SCCL_INDEX - Supplemental Channel Code list index.
 38 The base station shall set this field to the index of the record
 39 in the Supplemental Channel Code list.
- 40 FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information
 41 bits index.

1 If USE_FLEX_NUM_BITS is equal to '0' or if
 2 USE_FLEX_NUM_BITS is equal to '1' and
 3 FSCH_NBIT_TABLE_ID for FOR_SCH_ID is equal to '0000',
 4 then the base station shall set this field according to Table
 5 3.7.3.3.2.37-4 to indicate the number of information bits per
 6 frame and the length of the CRC field for the Forward
 7 Supplemental Channel identified by FOR_SCH_ID
 8 corresponding to SCCL_INDEX.

9 If USE_FLEX_NUM_BITS_s is equal to '1' and
 10 FSCH_NBIT_TABLE_ID[FOR_SCH_ID] is not equal to '0000',
 11 then the base station shall set this field to indicate that the
 12 number of information bits per frame for the Forward
 13 Supplemental channel identified by FOR_SCH_ID to be
 14 NUM_BITS[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SCH_
 15 NUM_BITS_IDX] and the number of CRC bits per frame for
 16 the Forward Supplemental channel identified by FOR_SCH_ID
 17 to be
 18 CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SC
 19 H_NUM_BITS_IDX].

20 NUM_REV_SCH - Number of Reverse Supplemental Channel records.
 21 If SCH_INCL is set to '0', the base station shall omit this field;
 22 otherwise, the base station shall set this field as follows:
 23 The base station shall set this field to the number of the
 24 Reverse Supplemental Channels need to be updated.

25 If NUM_REV_SCH is included and not equal to '00000', the base station shall include
 26 NUM_REV_SCH occurrence of the following three fields:

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_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.
 31 The base station shall set this field according to Table
 32 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
 33 station is to use when transmitting at the rate specified by
 34 REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
 35 Channel specified by REV_SCH_ID. If only one reverse
 36 supplemental channel is assigned, the base station should set
 37 this field to the default value for the REV_WALSH_ID as
 38 specified in 2.6.4.2.

39 REV_SCH_NUM_BITS_IDX - Reverse Supplemental Channel number of bits per frame
 40 index.

41 If USE_FLEX_NUM_BITS is equal to '0' or if
 42 USE_FLEX_NUM_BITS is equal to '1' and
 43 RSCH_NBIT_TABLE_ID[REV_SCH_ID] is equal to '0000', then
 44 the base station shall set this field according to Table
 45 3.7.3.3.2.37-2 to indicate the Reverse Supplemental Channel
 46 number of information bits per frame and the number of CRC
 47 bits per frame, corresponding to REV_WALSH_ID field.

- 1 If USE_FLEX_NUM_BITS is equal to '1' and
 2 RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000',
 3 then the base station shall set the REV_SCH_NUM_BITS_IDX
 4 field to indicate the Reverse Supplemental Channel number of
 5 information bits per frame, corresponding to REV_WALSH_ID
 6 field to be NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
 7 [REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
 8 Channel number of information bits per frame, corresponding
 9 to REV_WALSH_ID field to be to be
 10 CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
 11 [REV_SCH_NUM_BITS_IDX].
- 12 NUM_PILOTS - Number of pilots included in the message.
 13 The base station shall set this field to the number of pilots
 14 included in the message. The base station shall set this field
 15 to an integer that is equal to or greater than 1.
- 16 SRCH_OFFSET_INCL - Target pilot channel search window offset included.
 17 If the SRCH_OFFSET field is included in the following records,
 18 the base station shall set this field to '1'; otherwise, the base
 19 station shall set this field to '0'.
- 20 The base station shall include one occurrence of the following record for each of the
 21 NUM_PILOTS pilots included in the message:
- 22 PILOT_PN - Pilot PN sequence offset index.
 23 The base station shall set this field to the pilot PN sequence
 24 offset for this pilot in units of 64 PN chips.
- 25 SRCH_OFFSET - Target pilot channel search window offset.
 26 If SRCH_OFFSET_INCL equals to '1', then the base station
 27 shall set this field to the value shown in Table 2.6.6.2.1-2
 28 corresponding to the search window offset to be used by the
 29 mobile station for this target pilot. Otherwise, the base
 30 station shall omit this field.
- 31 ADD_PILOT_REC_INCL - Additional pilot information included indicator.
 32 The base station shall set this field to '1' if additional pilot
 33 information listed in PILOT_REC_TYPE and RECORD_LEN
 34 fields are included. The base station shall set this field to '0'
 35 if the corresponding pilot is the common pilot and there is no
 36 additional pilot information included.
- 37 PILOT_REC_TYPE - Pilot record type.
 38 If ADD_PILOT_REC_INCL is set to '1', the base station shall
 39 set this field to the PILOT_REC_TYPE value shown in Table
 40 3.7.2.3.2.21-9 corresponding to the type of Pilot Record
 41 specified by this record.
 42 If ADD_PILOT_REC_INCL is set to '0', the base station shall
 43 omit this field.
- 44 RECORD_LEN - Pilot record length.

1			If ADD_PILOT_REC_INCL is set to '1', the base station shall
2			set this field to the number of octets in the type-specific fields
3			of this pilot record.
4			If ADD_PILOT_REC_INCL is set to '0', the base station shall
5			omit this field.
6	Type-specific fields	-	Pilot record type-specific fields.
7			If ADD_PILOT_REC_INCL is set to '1', the base station shall
8			include type-specific fields based on the PILOT_REC_TYPE of
9			this pilot record as described in 3.7.6.1.
10			If ADD_PILOT_REC_INCL is set to '0', the base station shall
11			omit this field.
12	PWR_COMB_IND	-	Power control symbol combining indicator.
13			If this pilot will carry the same closed-loop power control
14			subchannel bits as that of the previous pilot in this message,
15			the base station shall set this field to '1'; otherwise, the base
16			station shall set this field to '0'. The base station shall set
17			this field to '0' in the first record in the pilot list.
18	CODE_CHAN_FCH	-	Code Channel on the Fundamental Channel.
19			If a Radio Configuration associated with Spreading Rate 1 is
20			used, the base station shall set this field to the code channel
21			index (see [2]) that the mobile station is to use on the
22			Fundamental Channel of the Forward Traffic Channel. If a
23			Radio Configuration associated with Spreading Rate 3 is used,
24			the base station shall set this field to the code channel index
25			that the mobile station is to use for the Fundamental Channel
26			on the center SR3 frequency.
27			If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
28			station shall set this field in the range 1 to 63 inclusive. If
29			Radio Configuration 4, 6, 8, 11, or 12 is used, the base
30			station shall set this field in the range 1 to 127 inclusive. If
31			Radio Configuration 7 or 9 is used, the base station shall set
32			this field in the range 1 to 255 inclusive.
33	QOF_MASK_ID_FCH	-	Quasi-orthogonal function index on the Fundamental
34			Channel.
35			If a Radio Configuration associated with Spreading Rate 1 is
36			used, the base station shall set this field to the index of the
37			Quasi-orthogonal function (see [2]). If a Radio Configuration
38			associated with Spreading Rate 3 is used, the base station
39			shall set this field to the index of the Quasi-orthogonal
40			function on the center SR3 frequency.

- 1 CODE_CHAN_DCCH - Code channel on the Dedicated Control Channel.
- 2 If a Radio Configuration associated with Spreading Rate 1 is
- 3 used, the base station shall set this field to the code channel
- 4 index (see [2]), in the range of 1 to 127 inclusive, that the
- 5 mobile station is to use on the Dedicated Control Channel of
- 6 the Forward Traffic Channel. If a Radio Configuration
- 7 associated with Spreading Rate 3 is used, the base station
- 8 shall set this field to the code channel index in the range of 1
- 9 to 255 inclusive, that the mobile station is to use for the
- 10 Dedicated Control Channel on the center SR3 frequency.
- 11 If Radio Configuration 3 or 5 (see [2]) is used, the base station
- 12 shall set this field in the range 1 to 63 inclusive. If Radio
- 13 Configuration 4, 6 or 8 is used, the base station shall set this
- 14 field in the range 1 to 127 inclusive. If Radio Configuration 7
- 15 or 9 is used, the base station shall set this field in the range 1
- 16 to 255 inclusive.
- 17 QOF_MASK_ID_DCCH - Quasi-orthogonal function index on the Dedicated Control
- 18 Channel.
- 19 If a Radio Configuration associated with Spreading Rate 1 is
- 20 used, the base station shall set this field to the index of the
- 21 Quasi-orthogonal function (see [2]). If a Radio Configuration
- 22 associated with Spreading Rate 1 is used, the base station
- 23 shall set this field to the index of the Quasi-orthogonal
- 24 function on the center SR3 frequency.
- 25 NUM_SCH - Number of Supplemental Channel records.
- 26 The base station shall set this field to the number of the
- 27 Supplemental Channel records need to be updated.
- 28 If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH
- 29 occurrence of the following fields:
- 30 FOR_SCH_ID - Forward Supplemental Channel identifier.
- 31 The base station shall set this field to the identifier of the
- 32 Forward Supplemental Channel pertaining to this 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 Table.
- 36 PILOT_INCL - The corresponding pilot included in Supplemental Channel
- 37 Active Set indicator.
- 38 The base station shall set this field to '1' if the corresponding
- 39 pilot is included in the Active Set of Supplemental Channel;
- 40 otherwise, the base station shall set this field to '0'.
- 41 CODE_CHAN_SCH - Code Channel on the Supplemental Channel.
- 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 code channel index
2 (see [2]) that the mobile station is to use on the Supplemental
3 Channel of the Forward Traffic Channel indexed by
4 SCCL_INDEX.

5 QOF_MASK_ID_SCH - Quasi-orthogonal function index on the Supplemental
6 Channel.

7 If SCH_INCL is set to '0', the base station shall omit this field;
8 otherwise, the base station shall set this field as follows:

9 The base station shall set this field to the index of the Quasi-
10 orthogonal function (see [2]).

11 3X_FCH_INFO_INCL - 3X Fundamental Channel information included indicator.

12 If the 3X Fundamental Channel information is included, the
13 base station shall set this field to '1'; otherwise, the base
14 station shall set this field to '0'.

15 3X_DCCH_INFO_INCL - 3X Dedicated Control Channel information included indicator.

16 If the 3X Dedicated Control Channel information is included,
17 the 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_PILOTS occurrences of the following record if
20 3X_FCH_INFO_INCL or 3X_DCCH_INFO_INCL is set to '1'. The base station shall use the
21 same order for the following fields as is used for the PILOT_PN fields listed in this message.

22 3X_FCH_LOW_INCL - FCH code channel on the lowest SR3 frequency included
23 indicator.

24 If 3X_FCH_INFO_INCL is set to '0', the base station shall set
25 omit this field; otherwise, the base station shall set this field
26 as follows:

27 If the Fundamental Channel on the lowest SR3 frequencies
28 has a different code channel than the Fundamental Channel
29 on the center SR3 frequency, the base station shall set this
30 field to '1'; otherwise, the base station shall set this field to '0'.

31 QOF_MASK_ID_FCH_LOW - QOF index for the Fundamental Channel on the lowest
32 SR3 frequency.

33 If 3X_FCH_LOW_INCL is included and set to '1', the base
34 station shall set this field as follows; otherwise, the base
35 station shall omit this field:

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 Fundamental Channel on the lowest SR3 frequency.

39 CODE_CHAN_FCH_LOW - Code channel for the Fundamental Channel on the lowest
40 SR3 frequency.

41 If 3X_FCH_LOW_INCL is included and set to '1', the base
42 station shall set this field as follows; otherwise, the base
43 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 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 inclusive.
7	3X_FCH_HIGH_INCL	– FCH code channel on the highest SR3 frequency included
8		indicator.
9		If 3X_FCH_INFO_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		If the Fundamental Channel on the highest 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 '0'.
16	QOF_MASK_ID_FCH_HIGH	– QOF index for the Fundamental Channel on the
17		highest SR3 frequency.
18		If 3X_FCH_HIGH_INCL is included and set to '1', the base
19		station shall set this field as follows; otherwise, the base
20		station shall omit this field:
21		The base station shall set this field to the index of the Quasi-
22		orthogonal function (see [2]) corresponding to the QOF index
23		for the Fundamental Channel on the highest SR3 frequency.
24	CODE_CHAN_FCH_HIGH	– Code channel for the Fundamental Channel on the highest
25		SR3 frequency.
26		If 3X_FCH_HIGH_INCL is included and set to '1', the base
27		station shall set this field as follows; otherwise, the base
28		station shall omit this field:
29		The base station shall set this field to the code channel index
30		(see [2]) that the mobile station is to use on the Fundamental
31		Channel on the highest SR3 frequency. If Radio
32		Configuration 6 or 8 is used, the base station shall set this
33		field in the range 1 to 127 inclusive. If Radio Configuration 7
34		or 9 is used, the base station shall set this field in the range 1
35		to 255 inclusive.
36	3X_DCCH_LOW_INCL	– DCCH code channel on the lowest SR3 frequency included
37		indicator.
38		If 3X_DCCH_INFO_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		If the Dedicated Control Channel on the lowest SR3
42		frequencies has a different code channel than the Dedicated
43		Control Channel on the center SR3 frequency, the base
44		station shall set this field to '1'; otherwise, the base station
45		shall set this field to '0'.
46	QOF_MASK_ID_DCCH_LOW	– QOF index for the Dedicated Control Channel on the
47		lowest SR3 frequency.

1 If 3X_DCCH_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 Dedicated Control Channel on the lowest SR3
7 frequency.

8 CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the
9 lowest SR3 frequency.

10 If 3X_DCCH_LOW_INCL is included and set to '1', the base
11 station shall set this field as follows; otherwise, the base
12 station shall omit this field:

13 The base station shall set this field to the code channel index
14 (see [2]) that the mobile station is to use on the Dedicated
15 Control Channel on the lowest SR3 frequency. If Radio
16 Configuration 6 or 8 is used, the base station shall set this
17 field in the range 1 to 127 inclusive. If Radio Configuration 7
18 or 9 is used, the base station shall set this field in the range 1
19 to 255 inclusive.

20 3X_DCCH_HIGH_INCL - DCCH code channel on the highest SR3 frequency included
21 indicator.

22 If 3X_DCCH_INFO_INCL is set to '0', the base station shall
23 omit this field; otherwise, the base station shall set this field
24 as follows:

25 If the Dedicated Control Channel on the highest SR3
26 frequencies has a different code channel than the Dedicated
27 Control Channel on the center SR3 frequency, the base
28 station shall set this field to '1'; otherwise, the base station
29 shall set this field to '0'.

30 QOF_MASK_ID_DCCH_HIGH - QOF index for the Dedicated Control Channel on the
31 highest SR3 frequency.

32 If 3X_DCCH_HIGH_INCL is included and set to '1', the base
33 station shall set this field as follows; otherwise, the base
34 station shall omit this field:

35 The base station shall set this field to the index of the Quasi-
36 orthogonal function (see [2]) corresponding to the QOF index
37 for the Dedicated Control Channel on the highest SR3
38 frequency.

39 CODE_CHAN_DCCH_HIGH - Code channel for the Dedicated Control Channel on the
40 highest SR3 frequency.

41 If 3X_DCCH_HIGH_INCL is included and set to '1', the base
42 station shall set this field as follows; otherwise, the base
43 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 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 **3X_SCH_INFO_INCL** - 3X Supplemental Channel information included indicator.
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 If the 3X Supplemental Channel information is included, the
12 base station shall set this field to '1'; otherwise, the base
13 station shall set this field to '0'.
- 14 The base station shall include NUM_SCH occurrences of the following seven fields record if
15 3X_SCH_INFO_INCL is included and set to '1'.
- 16 **FOR_SCH_ID** - Forward Supplemental Channel identifier.
17 The base station shall set this field the identifier of the
18 Forward Supplemental Channel pertaining to this record.
- 19 **3X_SCH_LOW_INCL** - SCH code channel on the lowest SR3 frequency included
20 indicator.
21 If the Supplemental Channel on the lowest SR3 frequencies
22 has a different code channel than the Supplemental Channel
23 on the center SR3 frequency, the base station shall set this
24 field to '1'; otherwise, the base station shall set this field to '0'.
- 25 **QOF_MASK_ID_SCH_LOW** - QOF index for the Supplemental Channel on the lowest
26 SR3 frequency.
27 If 3X_SCH_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 index of the Quasi-
31 orthogonal function (see [2]) corresponding to the QOF index
32 for the Supplemental Channel on the lowest SR3 frequency.
- 33 **CODE_CHAN_SCH_LOW** - Code channel for the Supplemental Channel on the lowest
34 SR3 frequency.
35 If 3X_SCH_LOW_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 code channel index
39 (see [2]) that the mobile station is to use on the Supplemental
40 Channel on the lowest SR3 frequency. If Radio Configuration
41 6 or 8 is used, the base station shall set this field in the range
42 1 to 127 inclusive. If Radio Configuration 7 or 9 is used, the
43 base station shall set this field in the range 1 to 255 inclusive.
- 44 **3X_SCH_HIGH_INCL** - SCH code channel on the highest SR3 frequency included
45 indicator.

1 If the Supplemental Channel on the highest SR3 frequencies
2 has a different code channel than the Supplemental 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 '0'.

5 QOF_MASK_ID_SCH_HIGH – QOF index for the Supplemental Channel on the highest
6 SR3 frequency.

7 If 3X_SCH_HIGH_INCL is set to '0', the base station shall omit
8 this field; otherwise, the base station shall set this field as
9 follows:

10 The base station shall set this field to the index of the Quasi-
11 orthogonal function (see [2]) corresponding to the QOF index
12 for the Supplemental Channel on the highest SR3 frequency.

13 CODE_CHAN_SCH_HIGH– Code channel for the Supplemental Channel on the highest
14 SR3 frequency.

15 If 3X_SCH_HIGH_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 code channel index
19 (see [2]) that the mobile station is to use on the Supplemental
20 Channel on the highest SR3 frequency. If Radio
21 Configuration 6 or 8 is used, the base station shall set this
22 field in the range 1 to 127 inclusive. If Radio Configuration 7
23 or 9 is used, the base station shall set this field in the range 1
24 to 255 inclusive.

25 CCSH_INCLUDED - Code Combining Soft Handoff information included indicator.

26 The base station shall set this field to '1' if Code Combining
27 Soft Handoff information is included in this message;
28 otherwise, the base station shall set this field to '0'.

29 USE_CCSH_ENCODER_TIME - Use Code Combining Soft Handoff Turbo Encoder
30 swapping action time indicator.

31 If the CSH_INCLUDED field is set to '0', the base station
32 shall omit this field; otherwise, the base station shall include
33 this field and set it as follows.

34 If an explicit action time at which Turbo Encoder types
35 (CCSH_ENCODER_TYPE) included in this message takes
36 effect is specified, the base station shall set this field to '1';
37 otherwise, the base station shall set this field to '0'.

38 CCSH_ENCODER_ACTION_TIME - Code Combining Soft Handoff Turbo Encoder
39 swapping action time.

40 If the USE_CCSH_ENCODER_TIME field is included and set
41 to '1', the base station shall set this field to the System Time
42 minus $FRAME_OFFSET_s \times 1.25$ ms, in units of 80ms (modulo
43 64), at which Turbo Encoder types included in this message
44 are to take effect; otherwise, the base station shall omit this
45 field.

1 If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of
 2 the following one field for each of the Forward Supplemental Channel records (as specified
 3 by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall use
 4 the same order for the following field as is used for the Forward Supplemental Channel
 5 records.

6 CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

7 The base station shall set this field to '0' if the Turbo Encoder
 8 type to be used on the Forward Supplemental Channel
 9 identified by FOR_SCH_ID and SCCL_INDEX is the default
 10 encoder type. The base station shall set this field to '1' if the
 11 Turbo Encoder to be used is the complementary type.

12 FUNDICATED_BCMC_IND - BCMC on fundicated channel Indicator.

13 If the channel assignment in this message contains a Forward
 14 Fundicated Channel used for BCMC transmission, the base
 15 station shall set this field to '1'; otherwise, the base station
 16 shall set this field to '0'.

17 REV_FCH_ASSIGNED - Reverse FCH channel assigned indicator.

18 If the FUNDICATED_BCMC_IND field 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 If the reverse FCH is assigned in this message, the base
 22 station shall set this field to '1'; otherwise, the base station
 23 shall set this field to '0'.

24 ADD_PLCM_FOR_FCH_INCL - Additional PLCM for forward FCH included indicator.

25 If the FUNDICATED_BCMC_IND field is set to '0', the base
 26 station shall omit this field; otherwise, the base station shall
 27 include this field and set it as follows:

28 If the additional PLCM for forward FCH is included in this
 29 message, the base station shall set this field to '1'; otherwise,
 30 the base station shall set this field to '0'.

31 ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH
 32 type indicator.

33 If ADD_PLCM_FOR_FCH_INCL not included or is included
 34 and is 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' to indicate PLCM
 38 specified by the base station. The field value '0' is reserved.

39 ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask
 40 for forward FCH.

41 If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
 42 '1', the base station shall include this field and set it to the 39
 43 least significant bits of the public long code mask used by the
 44 mobile station; otherwise, the base station shall omit this
 45 field.

- 1 FOR_CPCCH_INFO_INCL – CPCCH information included indicator.
 2 If the FUNDICATED_BCNC_IND field 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 If the F-CPCCH information is 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 If FOR_CPCCH_INFO_INCL field is included and is set to ‘1’, the base station shall include
 9 NUM_PILOT occurrences of the following record:
- 10 FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code
 11 assignment.
 12 The base station shall set this field to the Walsh code
 13 assignment for the Forward Common Power Control Channel.
- 14 FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.
 15 The base station shall set this field to the Forward Common
 16 Power Control Channel Subchannel associated with this base
 17 station.
- 18 RESERVED - Reserved bits.
 19 The base station shall add reserved bits as needed in order to
 20 make the length of the ACTIVE_SET_REC_FIELDS record
 21 equal to an integer number of octets. The base station shall
 22 set these bits to ‘0’.
- 23 If the CH_IND field is set to ‘000’, the base station shall include the following fields:
- 24 EXT_CH_IND - Extended Channel Indicator.
 25 The base station shall set this field as shown in
 26 Table2.7.1.3.2.4-11.
- 27 RESERVED - Reserved bits for octet alignment.
 28 Reserved bits to align the octets between ACTIVE_SET-
 29 _REC_FIELDS and EXT_ACTIVE_SET_REC_FIELDS so that
 30 the latter has a length of ACTIVE_SET_REC_LEN-1 bytes.
- 31 EXT_ACTIVE_SET_REC_FIELDS - Extended Active Set record fields.
 32 The Active Set record fields are determined by the value of
 33 EXT_CH_IND, as described below.
- 34 The EXT_ACTIVE_SET_REC_FIELDS shall be:
- 35 PDCH_CONTROL_HOLD - Packet Data Channel Control Hold mode indication.
 36 The base station shall set this field to ‘1’ to instruct the
 37 mobile station to transition to the Packet Data Channel
 38 Control Hold Mode.
 39 If EXT_CH_IND signals the allocation of a F-FCH this field
 40 shall be set to ‘0’.
- 41 FULL_CI_FEEDBACK_IND - Full C/I feedback rate indicator.

- 1 If the mobile station is to send full C/I feedback every 1.25
 2 ms, the base station shall set this field to '1'. If the mobile
 3 station is to transmit full C/I feedback every 20 ms, the base
 4 station shall set this field to '0'.
- 5 **FOR_CPCCH_RATE** - The Forward Common Power Control Channel Rate.
 6 If EXT_CH_IND equals '01000', the base station shall include
 7 this field and shall set it as follows; otherwise, the base
 8 station shall omit this field.
 9 The base station shall set this field to the rate of the Forward
 10 Common Power Control Channel as specified in Table
 11 3.7.2.3.2.21-12. See [2].
- 12 **FOR_CPCCH_UPDATE_RATE** - Forward Common Power Control update rate.
 13 If EXT_CH_IND equals '01000', the base station shall include
 14 this field and shall set it as follows; otherwise, the base
 15 station shall omit this field.
 16 The base station shall set this field to the update rate of the
 17 Forward Common Power Control as specified in Table
 18 3.7.2.3.2.21-13. See [2].
- 19 **REV_CQICH_FRAME_OFFSET** - Reverse Channel Quality Indicator Channel Frame
 20 Offset.
 21 The C/I feedback reports on the Reverse Channel Quality
 22 Indicator Channel are delayed REV_CQICH_FRAME_OFFSET
 23 × 1.25 ms relative to system timing (see [2]).
 24 The base station shall set this field to the Reverse Channel
 25 Quality Indicator Channel frame offset.
- 26 **REV_CQICH_REPS** - Reverse Channel Quality Indicator Channel repetition factor.
 27 The base station shall set this field according to Table
 28 3.7.3.3.2.49-1.
- 29 **REV_ACKCH_REPS** - Reverse Acknowledgment Channel repetition factor.
 30 The base station shall set this field according to Table
 31 3.7.3.3.2.49-2.
- 32 **NUM_FOR_SCH** - Number of Forward Supplemental Channel records.
 33 If EXT_CH_IND does not signal the allocation of neither a F-
 34 FCH nor a F-DCCH, or if SCH_INCL is set to '0', the base
 35 station shall omit this field; otherwise, the base station shall
 36 include this field and shall set it as follows:
 37 The base station shall set this field to the number of Forward
 38 Supplemental Channel records that 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 the identifier of the
 43 Forward Supplemental Channel.

- 1 SCCL_INDEX - Supplemental Channel Code list index.
2 The base station shall set this field to the index of the record
3 in the Supplemental Channel Code list.
- 4 FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information
5 bits index.
6 If USE_FLEX_NUM_BITS is equal to '0' or if
7 USE_FLEX_NUM_BITS is equal to '1' and
8 FSCH_NBIT_TABLE_ID for FOR_SCH_ID is equal to '0000',
9 then the base station shall set this field according to Table
10 3.7.3.3.2.37-4 to indicate the number of information bits per
11 frame and the length of the CRC field for the Forward
12 Supplemental Channel identified by FOR_SCH_ID
13 corresponding to SCCL_INDEX.
14 If USE_FLEX_NUM_BITS_s is equal to '1' and
15 FSCH_NBIT_TABLE_ID[FOR_SCH_ID] is not equal to '0000',
16 then the base station shall set this field to indicate that the
17 number of information bits per frame for the Forward
18 Supplemental channel identified by FOR_SCH_ID to be
19 NUM_BITS[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SCH_
20 NUM_BITS_IDX] and the number of CRC bits per frame for
21 the Forward Supplemental channel identified by FOR_SCH_ID
22 to be
23 CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID]][FOR_SC
24 H_NUM_BITS_IDX].
- 25 NUM_REV_SCH - Number of Reverse Supplemental Channel records.
26 If SCH_INCL is set to '0', the base station shall omit this field;
27 otherwise, the base station shall include this field and shall
28 set it as follows:
29 The base station shall set this field to the number of the
30 Reverse Supplemental Channels need to be updated.
31 If NUM_REV_SCH is included and not equal to '00000', the base station shall include
32 NUM_REV_SCH occurrence of the following three fields:
- 33 REV_SCH_ID - Reverse Supplemental Channel identifier.
34 The base station shall set this field to the identifier of the
35 Reverse Supplemental Channel.
- 36 REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.
37 The base station shall set this field according to Table
38 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
39 station is to use when transmitting at the rate specified by
40 REV_SCH_NUM_BITS_IDX on the Reverse Supplemental
41 Channel specified by REV_SCH_ID. If only one reverse
42 supplemental channel is assigned, the base station should set
43 this field to the default value for the REV_WALSH_ID as
44 specified in 2.6.4.2.
- 45 REV_SCH_NUM_BITS_IDX - Reverse Supplemental Channel number of bits per frame
46 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 CRC bits per
7 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 NUM_PILOTS - Number of pilots included in the message.
20 The base station shall set this field to the number of pilots
21 included in the message. The base station shall set this field
22 to an integer that is equal to or greater than 1.
- 23 SRCH_OFFSET_INCL - Target pilot channel search window offset included.
24 If the SRCH_OFFSET field is included in the following records,
25 the base station shall set this field to '1'; otherwise, the base
26 station shall set this field to '0'.
- 27 PDCH_GROUP_IND_INCL- Packet Data Channel Group Indicator included flag.
28 The base station shall set this field to '1' if the
29 PDCH_GROUP_IND fields are included; otherwise, the base
30 station shall set this field to '0'.
31 If this field is set to '0', the mobile station is to use
32 PWR_COMB_IND to determine whether the softer or soft
33 reselection parameters are used when re-pointing between
34 pilots in its Active Set (see [3]).
- 35 FOR_PDCH_PARMS_INCL - Indicator of the inclusion of Forward Packet Data Channel
36 configuration fields.
37 The base station shall set this field to '1' if the Forward Packet
38 Data Channel configuration fields are included; otherwise, the
39 base station shall set this field to '0'.
- 40 FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to
41 reverse link adjustment gains included indicator.
42 If FOR_PDCH_PARMS_INCL is omitted, or if it is included and
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.
45 The base station shall set this field to '1' if the following F-
46 PDCH gain related fields are included in this message;
47 otherwise, the base station shall set this field to '0'.

- 1 RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.
 2 If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and
 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 the Reverse
 6 Acknowledgment Channel to pilot adjustment gain expressed
 7 as a two's complement value in units of 0.125 dB (see [2]).
- 8 RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot
 9 adjustment gain.
 10 If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and
 11 set to '0', the base station shall omit this field; otherwise, the
 12 base station shall include this field, and set it as follows.
 13 The base station shall set this field to the Reverse Channel
 14 Quality Indicator Channel to pilot adjustment gain expressed
 15 as a two's complement value in units of 0.125 dB (see [2]).
- 16 NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.
 17 If FOR_PDCH_PARAMS_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 duration of the cell
 21 switching period, in units of 20 ms, minus one, during which
 22 the mobile station is to transmit the cell switch sequence on
 23 the R-CQICH channel when it switches between two pilots
 24 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 NUM_SOFTSWITCHING_FRAMES - Number of frames for R-CQICH softer
 29 switching.
 30 If FOR_PDCH_PARAMS_INCL is equal to '0', the base station
 31 shall omit this field; otherwise, the base station shall include
 32 this field and set it as follows:
 33 The base station shall set this field to the duration of the cell
 34 switching period, in units of 20 ms, minus one, during which
 35 the mobile station is to transmit the cell switch sequence on
 36 the R-CQICH channel when it switches between two pilots
 37 which are in the same group.
 38 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 39 indicated by PDCH_GROUP_IND; otherwise, they are
 40 indicated by PWR_COMB_IND.
- 41
- 42 NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.
 43 If FOR_PDCH_PARAMS_INCL is equal to '0', the base station
 44 shall omit this field; otherwise, the base station shall include
 45 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 is to transmit the cell switch indication by using
 5 Walsh cover of target on the R-CQICH when it switches
 6 between two pilots which are in different groups.

7 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 8 indicated by PDCH_GROUP_IND; otherwise, they are
 9 indicated by PWR_COMB_IND.

10 NUM_SOFTEN_SWITCHING_SLOTS - Number of slots per frame for R-CQICH softer
 11 switching.

12 If FOR_PDCH_PARAMS_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 duration of the cell
 16 switching slots within a switching frame, in units of 1.25 ms
 17 as specified in Table 3.7.2.3.2.21-10, during which the mobile
 18 station is to transmit the cell switch indication by using
 19 Walsh cover of target on the R-CQICH when it switches
 20 between two pilots which are in the same group.

21 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 22 indicated by PDCH_GROUP_IND; otherwise, they are
 23 indicated by PWR_COMB_IND.

24 CHM_SWITCHING_PARAMS_INCL - Control Hold Mode fields included indicator.

25 If FOR_PDCH_PARAMS_INCL is equal 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 the switching
 29 parameters for Control Hold Mode are included; otherwise,
 30 the base station shall set this field to '0'.

31 NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft
 32 switching while in Control Hold.

33 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',
 34 the base station shall omit this field; otherwise, the base
 35 station shall include this field and set it as follows:

36 The base station shall set this field to the duration of the cell
 37 switching period, in units of 20 ms, minus one, during which
 38 the mobile station, while in Control Hold, is to transmit the
 39 cell switch sequence on the R-CQICH when it switches
 40 between two pilots which are in different groups.

41 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 42 indicated by PDCH_GROUP_IND; otherwise, they are
 43 indicated by PWR_COMB_IND.

44 NUM_SOFTEN_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer
 45 switching while in Control Hold.

1 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',
2 the base station shall omit this field; otherwise, the base
3 station shall include this field and set it as follows:

4 The base station shall set this field to the duration of the cell
5 switching period, in units of 20 ms, minus one, during which
6 the mobile station, while in Control Hold, is to transmit the
7 cell switch sequence on the R-CQICH when it switches
8 between two pilots which are in the same group.

9 If PDCH_GROUP_IND_INCL is set to '1', these groups are
10 indicated by PDCH_GROUP_IND; otherwise, they are
11 indicated by PWR_COMB_IND.

12 NUM_SOFT_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH soft
13 switching while in Control Hold.

14 If CHM_SWITCHING_PARAMS_INCL is omitted or equal to '0',,
15 the base station shall omit this field; otherwise, the base
16 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, while in Control Hold, is to transmit the cell switch
21 indication by using Walsh cover of target on the R-CQICH
22 when it switches between two pilots which are in different
23 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_SLOTS_CHM - Number of slots per frame for R-CQICH
28 softer switching while in Control Hold.

29 If CHM_SWITCHING_PARAMS_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 the same
38 group.

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 PDCH_SOFT_SWITCHING_DELAY - F-PDCH Soft Switching Delay.

43 If FOR_PDCH_PARAMS_INCL is equal to '0', the base station
44 shall omit this field; otherwise, the base station shall include
45 this field and set it as follows:

- 1 The base station shall set this field to the minimum
 2 interruption seen by the mobile station, in units of 10 ms,
 3 minus one, when the mobile station is to transmit the cell
 4 switch sequence on the R-CQICH when it switches between
 5 two pilots which are in different groups.
- 6 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 7 indicated by PDCH_GROUP_IND; otherwise, they are
 8 indicated by PWR_COMB_IND.
- 9 PDCH_SOFTEN_SWITCHING_DELAY - F-PDCH Soft Switching Delay.
- 10 If FOR_PDCH_PARMS_INCL is equal to '0', the base station
 11 shall omit this field; otherwise, the base station shall include
 12 this field and set it as follows:
- 13 The base station shall set this field to the minimum
 14 interruption seen by the mobile station, in units of 10 ms,
 15 minus one, when the mobile station is to transmit the cell
 16 switch sequence on the R-CQICH when it switches between
 17 two pilots which are in the same group.
- 18 If PDCH_GROUP_IND_INCL is set to '1', these groups are
 19 indicated by PDCH_GROUP_IND; otherwise, they are
 20 indicated by PWR_COMB_IND.
- 21 FOR_PDCH_COMMON_PARMS - Common Forward Packet Data Channel configuration
 22 fields indicator.
- 23 If FOR_PDCH_PARMS_INCL is set to '1', the base station shall
 24 include this field and set it as follows; otherwise, the base
 25 station shall omit this field.
- 26 The base station shall set this field to '1' if the following
 27 Forward Packet Data Channel configuration fields
 28 (WALSH_TABLE_ID, NUM_PDCCH, and FOR_PDCCH_WALSH)
 29 are common for all the pilots in the Active Set; otherwise, it
 30 shall be set to '0'.
- 31 WALSH_TABLE_ID - The index of the Walsh Table used.
- 32 If FOR_PDCH_COMMON_PARMS is included and 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 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_COMMON_PARMS is included and 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.

1 The base station shall set this field to '000' if the pilot
 2 supports one Packet Data Control Channel. The base station
 3 shall set this field to '001' if the pilot supports two Packet
 4 Data Control Channels. The base station shall not set this
 5 field to any other value.

6 The base station shall include NUM_PDCCH+1 occurrences of the following one-field
 7 record:

8 FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code
 9 assignment.

10 If FOR_PDCH_COMMON_PARMS is included and set to '1',
 11 the base station shall include this field and set it as follows;
 12 otherwise, the base station shall omit this field.

13 The base station shall set this field to the Walsh code
 14 assignment for the Forward Packet Data Control Channel.

15 If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
 16 shall be included first, followed by the Walsh code for
 17 PDCCH1.

18 TX_DISABLED_TIMER_INCL - Transmitter disabled timer included flag.

19 The base station shall set this field to '1' if the following
 20 TX_DISABLED_TIMER field is included; otherwise, the base
 21 station shall set this field to '0'.

22 TX_DISABLED_TIMER - Transmitter disabled timer.

23 If TX_DISABLED_TIMER_INCL is equal to '0', the base station
 24 shall omit this field; otherwise, the base station shall include
 25 this field and set it as follows:

26 The base station shall set this field to the maximum time, in
 27 units of 20ms, the mobile station's transmitter can be
 28 disabled before the MAC Layer is to perform Forward Packet
 29 Data Channel initialization (see [3]).

30 FOR_GCH_ASSIGNED - Forward Grant Channel assignment indicator.

31 If EXT_CH_IND signals the allocation of a R-PDCH, the base
 32 station shall include this field and shall set it as follows;
 33 otherwise, the base station shall omit this field.

34 The base station shall set this field to '1' if the mobile station
 35 is to listen to grants on the Forward Grant Channel;
 36 otherwise, the base station shall set this field to '0' (see [3]).

37 FOR_RCCH_ASSIGNED - Forward Rate Control Channel assignment indicator.

38 If EXT_CH_IND signals the allocation of a R-PDCH, the base
 39 station shall include this field and shall set it as follows;
 40 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 follow rate control indicators on the Forward Rate
3		Control Channel; otherwise, the base station shall set this
4		field to '0' (see [3]).
5	FOR_RCCH_DRC_MODE -	Forward Rate Control Channel Dedicated Rate Control Mode
6		Indicator.
7		If FOR_RCCH_ASSIGNED is omitted, or if it is included and
8		set 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 '1' if the dedicated rate
11		control mode is being used on the Forward Rate Control
12		Channel; otherwise, the base station shall set this field to '0' if
13		the common rate control mode is being used (see [3]).
14	FOR_RCCH_REPETITION -	Forward Rate Control Subchannel repetition factor.
15		If FOR_RCCH_ASSIGNED 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 the subchannel
19		repetition factor of the Rate Control Subchannel on all pilots
20		as specified in Table 3.7.2.3.2.21-11 (see [2]).
21	FOR_RCCH_UPDATE_RATE -	Forward Rate Control Subchannel update rate.
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 the update rate of the
26		Rate Control Subchannel on all pilots as specified in Table
27		3.7.2.3.2.21-13. See [2].
28	FOR_ACKCH_ASSIGNED -	Forward Acknowledgment Channel assignment indicator.
29		If EXT_CH_IND signals the allocation of a R-PDCH, the base
30		station shall include this field and shall set it as follows;
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 to listen to acknowledgments on the Forward
34		Acknowledgment Channel; otherwise, the base station shall
35		set this field to '0' (see [2] and [3]).
36	FOR_ACKCH_MODE -	Forward Acknowledgment Channel Mode.
37		If FOR_ACKCH_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 Acknowledgement
41		Channel mode identifier that governs how the
42		Acknowledgment channel is demodulated. See [2] and [3] for
43		the details.

1 The base station shall set this field to '00' if the mobile station
2 is to attempt the reception of the Forward Acknowledgment
3 Channel from all members of the reduced active set of the
4 Forward Packet Data Channel.

5 The base station shall set this field to '01' if the mobile station
6 is to attempt reception of the Forward Acknowledgment
7 Channel from all members of the reduced active set, and is to
8 combine the acknowledgments from all sectors in the same
9 combining indicator set.

10 The base station shall set this field to '10' if the mobile station
11 is to attempt reception of the Forward Acknowledgment
12 Channel from the serving sector only.

13 The base station shall set this field to '11' if the mobile station
14 is to combine the Forward Acknowledgment Channel from all
15 sectors in the same combining indicator set as the serving
16 sector.

17 FOR_ACKCH_COMB_SEL- Forward Acknowledgment Channel Combining method
18 selector.

19 If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
20 set to '0', or if FOR_ACKCH_MODE is omitted, or if it is
21 included and set to '00' or '10', or if PDCH_GROUP_IND_INCL
22 is set to '0', the base station shall omit this field; otherwise, it
23 shall include it and set it as follows.

24 The base station shall set this field to '0' if the mobile station
25 is to use PWR_COMB_IND as a combining indicator when
26 receiving the Forward Acknowledgment Channel; otherwise, it
27 shall set it to '1' if the mobile station is to use
28 PDCH_GROUP_IND as the indicator for combining sectors.

29 REV_PDCH_PARAMS_INCL - Reverse Packet Data Channel related parameters included
30 indicator.

31 If EXT_CH_IND signals the allocation of a R-PDCH, the base
32 station shall include this field and shall set it as follows;
33 otherwise, the base station shall omit this field.

34 The base station shall set this field to '1' if the following R-
35 PDCH parameters are included in this message; otherwise,
36 the base station shall set this field to '0'.

37 REV_PDCH_RLGAIN_INCL - Reverse Packet Data Channel parameters related to
38 reverse link adjustment gains included indicator.

39 If REV_PDCH_PARAMS_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 gain related fields are included in this message;
44 otherwise, the base station shall set this field to '0'.

45 RLGAIN_SPICH_PILOT - Reverse Secondary Pilot Channel to pilot adjustment gain.

- 1 If REV_PDCH_RLGAIN_INCL is omitted, or if it 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 Reverse Secondary
 5 Pilot Channel to pilot adjustment gain expressed as a two's
 6 complement value in units of 0.125 dB (see [2]).
- 7 RLGAIN_REQCH_PILOT - Reverse Request Channel to pilot adjustment gain.
- 8 If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and
 9 set 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 Reverse Request
 12 Channel to pilot adjustment gain expressed as a two's
 13 complement value in units of 0.125 dB (see [2]).
- 14 RLGAIN_PDCCH_PILOT - Reverse Packet Data Control Channel to pilot adjustment
 15 gain.
- 16 If REV_PDCH_RLGAIN_INCL is omitted, or if it 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 Reverse Packet Data
 20 Channel to pilot adjustment gain expressed as a two's
 21 complement value in units of 0.125 dB (see [2]).
- 22 REV_PDCH_PARAMS_1_INCL - Reverse Packet Data Channel parameters subset included
 23 indicator.
- 24 If REV_PDCH_PARAMS_INCL is omitted, or if it is included and
 25 set 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 '1' if the following R-
 28 PDCH parameters are included in this message; otherwise,
 29 the base station shall set this field to '0'.
- 30 REV_PDCH_TABLE_SEL - Reverse Packet Data Channel Table selector.
- 31 If REV_PDCH_PARAMS_1_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 Data
 35 Channel Table selector (see [2]).
- 36 REV_PDCH_MAX_AUTO_TPR- Reverse Packet Data Channel maximum traffic to pilot
 37 ratio for autonomous transmission.
- 38 If REV_PDCH_PARAMS_1_INCL is omitted, or if it is included
 39 and 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 The base station shall set this field to the maximum traffic to
 42 pilot ratio for autonomous transmission on the Reverse
 43 Packet Data Channel (see [2] and [3]).
- 44 The base station shall set this field to a value in the range 0 to
 45 18 dB inclusive in units of 0.125 dB.

- 1 The base station shall include NUM_PILOTS occurrences of the following record:
- 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 SRCH_OFFSET - Target pilot channel search window offset.
- 6 If SRCH_OFFSET_INCL equals to '1', then the base station
7 shall include this field and set it to the value shown in Table
8 2.6.6.2.1-2 corresponding to the search window offset to be
9 used by the mobile station for this target pilot; otherwise, the
10 base station shall omit this field.
- 11 ADD_PILOT_REC_INCL - Additional pilot information included indicator.
- 12 The base station shall set this field to '1' if additional pilot
13 information listed in PILOT_REC_TYPE and RECORD_LEN
14 fields are included. The base station shall set this field to '0'
15 if the corresponding pilot is the common pilot and there is no
16 additional pilot information included.
- 17 PILOT_REC_TYPE - Pilot record type.
- 18 If ADD_PILOT_REC_INCL is set to '1', the base station shall
19 set this field to the PILOT_REC_TYPE value shown in Table
20 3.7.2.3.2.21-9 corresponding to the type of Pilot Record
21 specified by this record.
- 22 If ADD_PILOT_REC_INCL is set to '0', the base station shall
23 omit this field.
- 24 RECORD_LEN - Pilot record length.
- 25 If ADD_PILOT_REC_INCL is set to '1', the base station shall
26 set this field to the number of octets in the type-specific fields
27 of this pilot record.
- 28 If ADD_PILOT_REC_INCL is set to '0', the base station shall
29 omit this field.
- 30 Type-specific fields - Pilot record type-specific fields.
- 31 If ADD_PILOT_REC_INCL is set to '1', the base station shall
32 include type-specific fields based on the PILOT_REC_TYPE of
33 this pilot record as described in 3.7.6.1.
- 34 If ADD_PILOT_REC_INCL is set to '0', the base station shall
35 omit this field.
- 36 FOR_PDCH_INCL - Forward Packet Data Channel configuration field included
37 indicator.
- 38 The base station shall set this field to '1' if the MS is assigned
39 resources on the PDCH channel; otherwise, the base station
40 shall set this field to '0'. This field shall be set to '1' for at least
41 one of the pilots included in this message.
- 42 WALSH_TABLE_ID - The index of the Walsh Table used.

- 1 If FOR_PDCH_INCL is set to '1', and if
 2 FOR_PDCH_COMMON_PARMS is included and set to '0', the
 3 base station shall include this field and set it as follows;
 4 otherwise, the base station shall omit this field.
- 5 The base station shall set this field to the index of the Walsh
 6 Table being used by the Packet Data Channel. (See [3]).
- 7 NUM_PDCCH - The number of Packet Data Control Channels supported.
- 8 If FOR_PDCH_INCL is set to '1', and if
 9 FOR_PDCH_COMMON_PARMS is included and set to '0', the
 10 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 this field to '000' if the pilot
 13 supports one Packet Data Control Channel. The base station
 14 shall set this field to '1' if the pilot supports two Packet Data
 15 Control Channels. The base station shall not set this field to
 16 any other value.
- 17 The base station shall include *NUM_PDCCH+1* occurrences of the following one-field record:
- 18 FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code
 19 assignment.
- 20 If FOR_PDCH_INCL is set to '1', and if
 21 FOR_PDCH_COMMON_PARMS is included and set to '0', the
 22 base station shall include this field and set it as follows;
 23 otherwise, the base station shall omit this field.
- 24 The base station shall set this field to the Walsh code
 25 assignment for the Forward Packet Data Control Channel.
- 26 If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
 27 shall be included first, followed by the Walsh code for
 28 PDCCH1.
- 29 MAC_ID - Medium Access Control index.
- 30 If FOR_PDCH_INCL is set to '0', the base station shall omit
 31 this field; otherwise, the base station shall include this field
 32 and set it as follows:
- 33 The base station shall set this field to the MAC index assigned
 34 to the mobile station by this pilot.
- 35 The base station shall set this field to an integer value larger
 36 than 63.
- 37 REV_CQICH_COVER - Reverse Channel Quality Indicator Channel cover.
- 38 If FOR_PDCH_INCL 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 index of the R-
 42 CQICH cover associated with this pilot.

- 1 If this pilot is a member of the mobile station's current Active
2 Set, the base station should assign the same value for the
3 Walsh cover that is in the mobile station's current Active Set.
- 4 If this pilot is not a member of the mobile station's current
5 Active Set, the base station should assign a value for the
6 Walsh cover that was not recently assigned (See [2]).
- 7 **FOR_CPCCH_WALSH** - The Forward Common Power Control Channel Walsh code
8 assignment.
- 9 If EXT_CH_IND signals the allocation of a F-CPCCH, and
10 either of the following conditions is true:
- 11 - EXT_CH_IND signals the allocation of a F-FCH or a F-
12 DCCH
 - 13 - all of the following conditions are true:
 - 14 + FOR_PDCH_INCL is set to '1'
 - 15 + EXT_CH_IND does not signal allocation of a F-FCH
 - 16 + EXT_CH_IND does not signal allocation of a F-DCCH
- 17 the base station shall include this field and shall set it as
18 follows; otherwise, the base station shall omit this field
- 19 The base station shall set this field to the Walsh code
20 assignment for the Forward Common Power Control Channel.
- 21 **FOR_CPCSCH** - The Forward Common Power Control Channel Subchannel.
- 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 Forward Common
33 Power Control Channel Subchannel associated with this base
34 station.
- 35 If FOR_CPCCH_RATE is omitted, or if it is included and set to
36 '00', the base station shall set this field to a value in the range
37 0 to 23 inclusive. If FOR_CPCCH_RATE is included and set
38 set to '01', the base station shall set this field to a value in the
39 range 0 to 47 inclusive. If FOR_CPCCH_RATE is included and
40 set set to '10', the base station shall set this field to a value in
41 the range 0 to 95 inclusive.
- 42 **PWR_COMB_IND** - Power control symbol combining indicator.

- 1 If the Forward Traffic Channel or Forward Common Power
 2 Control Channel associated with this pilot will carry the same
 3 closed-loop power control subchannel bits as that of the
 4 previous pilot in this message, the base station shall set this
 5 field to '1'; otherwise, the base station shall set this field to '0'.
 6 The base station shall set this field to '0' in the first record in
 7 the pilot list.
- 8 PDCH_GROUP_IND - Packet Data Channel Group Indicator.
- 9 If PDCH_GROUP_IND_INCL is set to '1', the base station shall
 10 include this field and shall set it as follows; otherwise, the
 11 base station shall omit this field.
- 12 If the mobile station is to use the softer reselection
 13 parameters when re-pointing between this pilot and the
 14 previous pilot in this message that has a F-PDCH assigned to
 15 this mobile station (i.e. FOR_PDCH_INCL is set to '1'), the
 16 base station shall set this field to '1' (See [3]).
- 17 If the mobile station is to use the soft reselection parameters
 18 when re-pointing between this pilot and the previous pilot in
 19 this message that has a F-PDCH assigned to this mobile
 20 station (i.e. FOR_PDCH_INCL is set to '1'), the base station
 21 shall set this field to '0' (See [3]).
- 22 The base station shall set this field to '0' in the first record in
 23 the pilot list that has a F-PDCH assigned to this mobile
 24 station (i.e. FOR_PDCH_INCL is set to '1').
- 25 CODE_CHAN_FCH - Code channel on the Fundamental Channel.
- 26 If EXT_CH_IND signals the allocation of a F-FCH, 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 code channel index
 30 (see [2]) that the mobile station is to use on the Fundamental
 31 Channel of the Forward Traffic Channel.
- 32 If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
 33 station shall set this field in the range 1 to 63 inclusive. If
 34 Radio Configuration 4, 11, or 12 is used, the base station
 35 shall set this field in the range 1 to 127 inclusive.
- 36 QOF_MASK_ID_FCH - Quasi-orthogonal function index on the Fundamental
 37 Channel.
- 38 If EXT_CH_IND signals the allocation of a F-FCH, the base
 39 station shall include this field and shall set it as follows;
 40 otherwise it shall be omitted.
- 41 The base station shall set this field to the index of the Quasi-
 42 orthogonal function (see [2]).
- 43 CODE_CHAN_DCCH - Code channel on the Dedicated Control Channel.
- 44 If EXT_CH_IND signals the allocation of a F-DCCH, the base
 45 station shall include this field and shall set it as follows;
 46 otherwise it shall be omitted.

1 The base station shall set this field to the code channel index
2 (see [2]), in the range of 1 to 127 inclusive, that the mobile
3 station is to use on the Dedicated Control Channel of the
4 Forward Traffic Channel.

5 If Radio Configuration 3 or 5 (see [2]) is used, the base station
6 shall set this field in the range 1 to 63 inclusive. If Radio
7 Configuration 4 is used, the base station shall set this field in
8 the range 1 to 127 inclusive.

9 QOF_MASK_ID_DCCH - Quasi-orthogonal function index on the Dedicated Control
10 Channel.

11 If EXT_CH_IND signals the allocation of a F-DCCH', the base
12 station shall include this field and shall set it as follows;
13 otherwise it shall be omitted.

14 The base station shall set this field to the index of the Quasi-
15 orthogonal function (see [2]).

16 FOR_ACKCH_WALSH_INDEX - Walsh Code for the Forward Acknowledgment
17 Channel.

18 If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
19 set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
20 does not signal the allocation of a R-PDCH, the base station
21 shall omit this field; otherwise, it shall include it and set it as
22 follows.

23 The base station shall set this field to the Walsh code of the
24 Forward Acknowledgment Channel (see [2]).

25 FOR_ACKSCH_INDEX - Forward Acknowledgment Subchannel Index.

26 If FOR_ACKCH_ASSIGNED is omitted, or if it is included and
27 set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND
28 does not signal the allocation of a R-PDCH, the base station
29 shall omit this field; otherwise, it shall include it and set it as
30 follows.

31 The base station shall set this field to the subchannel index of
32 the Forward Acknowledgment Channel (see [2]). The base
33 station should not use FOR_ACKSCH_INDEX = 0, 1, 2, 96,
34 97, or 98.

35 FOR_RCCH_INCL - Forward Rate Control Subchannel included flag.

36 If FOR_PDCH_INCL is set to '0', or if FOR_RCCH_ASSIGNED
37 is omitted, or if it is included and set 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 '1' if a Forward Rate
41 Control Channel Subchannel is allocated on this pilot (see
42 [2]); otherwise, the base station shall set this field to '0'.

43 The base station shall set this field to a non zero value for at
44 least one pilot in this message.

45 FOR_RCCH_WALSH_INDEX - Walsh Code for the Forward Rate Control Channel
46 Subchannel.

- 1 If FOR_RCCH_INCL is omitted, or if it is included and set to
2 '0', the base station shall omit this field; otherwise, the base
3 station shall include this field and set it as follows.
- 4 The base station shall set this field to the Walsh code of the
5 Forward Rate Control Channel Subchannel (see [2]).
- 6 **FOR_RCCH_INDEX** - Forward Rate Control Subchannel.
- 7 If FOR_RCCH_INCL is omitted, or if it is included and set to
8 '0', the base station shall omit this field; otherwise, the base
9 station shall include this field and set it as follows.
- 10 The base station shall set this field to the subchannel index of
11 the Rate Control Subchannel on this pilot (see [2]).
- 12 If FOR_RCCH_REPETITION is set to '00' this field shall take
13 values in the range 0 to 96. If FOR_RCCH_REPETITION is set
14 to '01' this field shall take values in the range 0 to 48. If
15 FOR_RCCH_REPETITION is set to '10' this field shall take
16 values in the range 0 to 24.
- 17 **NUM_FOR_GCH** - Number of Forward Grant Channels
- 18 If FOR_PDCH_INCL is set to '0', or if FOR_GCH_ASSIGNED is
19 omitted, or if it is included and 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 number of assigned
23 Forward Grant Channels on this pilot. The base station shall
24 set this field to 0, 1, or 2.
- 25 The base station shall set this field to a non zero value for at
26 least one pilot in this message.
- 27 If FOR_PDCH_INCL is set to '1', and if FOR_GCH_ASSIGNED is included and set to '1', the
28 base station shall include NUM_FOR_GCH occurrences of the field
29 **FOR_GCH_WALSH_INDEX**:
- 30 **FOR_GCH_WALSH_INDEX** - Walsh Code for the Forward Grant Channel.
- 31 The base station shall set this field to the Walsh code of the
32 Forward Grant Channels (see [2]).
- 33 **NUM_SCH** - Number of Supplemental Channel records.
- 34 If SCH_INCL is set to '0', the base station shall omit this field;
35 otherwise, the base station shall include this field and shall
36 set it as follows:
- 37 The base station shall set this field to the number of the
38 Supplemental Channel records need to be updated.
- 39 If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH
40 occurrence of the following five fields:
- 41 **FOR_SCH_ID** - Forward Supplemental Channel identifier.
- 42 The base station shall set this field the identifier of the
43 Forward Supplemental Channel pertaining to this record.

1	SCCL_INDEX	-	Supplemental Channel Code list index.
2			The base station shall set this field to the index of the record
3			in the Supplemental Channel Code list.
4	PILOT_INCL	-	The corresponding pilot included in Supplemental Channel
5			Active Set indicator.
6			The base station shall set this field to '1' if the corresponding
7			pilot is included in the Active Set of Supplemental Channel;
8			otherwise, the base station shall set this field to '0'.
9	CODE_CHAN_SCH	-	Code channel on the Supplemental Channel.
10			If PILOT_INCL is included and set to '1', the base station shall
11			include this field and shall set it as follows; otherwise, the
12			base station shall omit this field.
13			The base station shall set this field to the code channel index
14			(see [2]) that the mobile station is to use on the Supplemental
15			Channel of the Forward Traffic Channel indexed by
16			SCCL_INDEX.
17	QOF_MASK_ID_SCH	-	Quasi-orthogonal function index on the Supplemental
18			Channel.
19			If PILOT_INCL is included and set to '1', the base station shall
20			include this field and shall set it as follows; otherwise, the
21			base station shall omit this field.
22			The base station shall set this field to the index of the Quasi-
23			orthogonal function (see [2]).
24	CCSH_INCLUDED	-	Code Combining Soft Handoff information included indicator.
25			The base station shall set this field to '1' if Code Combining
26			Soft Handoff information is included in this message;
27			otherwise, the base station shall set this field to '0'.
28	USE_CCSH_ENCODER_TIME	-	Use Code Combining Soft Handoff Turbo Encoder
29			swapping action time indicator.
30			If the CCSH_INCLUDED field 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.
33			If an explicit action time at which Turbo Encoder types
34			(CCSH_ENCODER_TYPE) included in this message takes
35			effect is specified, the base station shall set this field to '1';
36			otherwise, the base station shall set this field to '0'.
37	CCSH_ENCODER_ACTION_TIME	-	Code Combining Soft Handoff Turbo Encoder
38			swapping action time.
39			If the USE_CCSH_ENCODER_TIME field is included and set
40			to '1', the base station shall set this field to the System Time
41			minus $FRAME_OFFSET_s \times 1.25$ ms, in units of 80ms (modulo
42			64), at which Turbo Encoder types included in this message
43			are to take effect; otherwise, the base station shall omit this
44			field.

1 If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of
 2 the following one field for each of the Forward Supplemental Channel records (as specified
 3 by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall use
 4 the same order for the following field as is used for the Forward Supplemental Channel
 5 records.

6 CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

7 The base station shall set this field to '0' if the Turbo Encoder
 8 type to be used on the Forward Supplemental Channel
 9 identified by FOR_SCH_ID and SCCL_INDEX is the default
 10 encoder type. The base station shall set this field to '1' if the
 11 Turbo Encoder to be used is the complementary type.

12 FUNDICATED_BCNC_IND - BCNC on fundicated channel Indicator.

13 If the channel assignment in this message contains a Forward
 14 Fundicated Channel used for BCNC transmission, the base
 15 station shall set this field to '1'; otherwise, the base station
 16 shall set this field to '0'.

17 ADD_PLCM_FOR_FCH_INCL - Additional PLCM for forward FCH included indicator.

18 If the FUNDICATED_BCNC_IND field 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 If the additional PLCM for forward FCH 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 ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH
 25 type indicator.

26 If ADD_PLCM_FOR_FCH_INCL not included or is included
 27 and is 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 '1' to indicate PLCM
 31 specified by the base station. The field value '0' is reserved.

32 ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask
 33 for forward FCH.

34 If ADD_PLCM_FOR_FCH_TYPE field is included and is set to
 35 '1', the base station shall include this field and set it to the 39
 36 least significant bits of the public long code mask used by the
 37 mobile station; otherwise, the base station shall omit this
 38 field.

39 RESERVED - Reserved bits.

40 The base station shall add reserved bits as needed in order to
 41 make the length of the ACTIVE_SET_REC_FIELDS record
 42 equal to an integer number of octets. The base station shall
 43 set these bits to '0'.

44

- 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

(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 × 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

1

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

Field	Length (bits)
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 *Extended Supplemental Channel*
5 *Assignment Message*, *Forward Supplemental Channel*
6 *Assignment Mini Message*, *Reverse Supplemental Channel*
7 *Assignment Mini Message*, and *Universal Handoff Direction*
8 *Message*. 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 set
35 this field to the sequence number corresponding to the
36 SCRM_SEQ_NUM field in a *Supplemental Channel Request*
37 *Message* to which the mobile station is to match this message;
38 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 following
44 conditions holds:

- 1 - The message does not contain any Supplemental Channel
2 assignment.
- 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
6 omit this field; otherwise, the base station shall set this field
7 as follows:
- 8 The base station shall set this field to '0' if the mobile station
9 is to perform the primary inner loop estimation on the
10 received Forward Fundamental Channel. The base station
11 shall set this field to '1' if the mobile station is to perform the
12 primary inner loop estimation on the received Forward
13 Dedicated Control Channel If the F-CPCCH is
14 assigned, the base station shall multiplex the Power Control
15 Subchannel on the F-CPCCH; otherwise:
- 16 If this field is set to '0', the base station shall multiplex the
17 Power Control Subchannel on the Forward Fundamental
18 Channel; otherwise, the base station shall multiplex the
19 Power Control Subchannel on the Forward Dedicated Control
20 Channel.
- 21 REV_CFG_INCLUDED - Reverse Supplemental Channel configuration included.
22 The base station shall set this field to '1' if this message
23 contains a Reverse Supplemental Channel configuration.
24 Otherwise, the base station shall set this field to '0'.
- 25 NUM_REV_CFG_RECS - Number of the Reverse Supplemental Channel configuration
26 Records.
27 If REV_CFG_INCLUDED is set to '1', the base station shall set
28 this field to one less than the number of reverse supplemental
29 channel configuration records consisting of the following three
30 fields that are included in this message; otherwise, the base
31 station shall omit this field.
- 32 The base station shall include NUM_REV_CFG_RECS+1 occurrences of the following three
33 fields only if the REV_CFG_INCLUDED field is set to '1'.
- 34 REV_SCH_ID - Reverse Supplemental Channel Identifier.
35 The base station shall set this field to the identifier of the
36 Reverse Supplemental Channel.
- 37 REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.
38 The base station shall set this field according to Table
39 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile
40 station is to use when transmitting number of bits per frame
41 specified by REV_NUM_BITS_IDX on the Reverse
42 Supplemental Channel specified by REV_SCH_ID. If only one
43 reverse supplemental channel is assigned, the base station
44 should set this field to the default value for the
45 REV_WALSH_ID as specified in 2.6.4.2.

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

REV_SCH_NUM_BITS_IDX	Number of information bits per frame		Number of CRC bits per frame
0111	Reserved	Reserved	Reserved
1000	Reserved	20,712	16
RESERVED	All other values are reserved		

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

NUM_REV_SCH - Number of Reverse Supplemental Channels assigned.
 The base station shall set this field to the number of Reverse Supplemental Channel assigned. The base station shall set this field to '00' if the assignment of Supplemental Channel is not included.

The base station shall include NUM_REV_SCH occurrences of the following five fields (REV_SCH_ID, REV_SCH_DURATION, REV_SCH_START_TIME_INCL, REV_SCH_START_TIME, and REV_SCH_NUM_BITS_IDX).

REV_SCH_ID - Reverse Supplemental Channel Identifier.
 The base station shall set this field to the identifier of the Reverse Supplemental Channel.

REV_SCH_DURATION - Duration of Reverse Supplemental Channel assignment
 The base station shall set this field to '0000' to indicate that the mobile station is to stop transmitting on the Reverse Supplemental Channel specified by REV_SCH_ID at the explicit start time specified by REV_SCH_START_TIME or at the implicit start time if REV_SCH_START_TIME_INCL is set to '0'. The base station shall set this field to '1111' to indicate that the mobile station may transmit on the Reverse Supplemental Channel specified by REV_SCH_ID, starting at the explicit start time specified by REV_SCH_START_TIME in this message, until the start time specified by a subsequent Reverse Supplemental Channel assignment corresponding to the same Supplemental Channel (see 2.6.6.2.5.1.1). The base station shall set this field to the duration according to Table 3.7.3.3.2.37-3, starting at the start time specified by REV_SCH_START_TIME, during which the mobile station may transmit on the Reverse Supplemental Channel specified 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
0100	4

FOR_SCH_DURATION REV_SCH_DURATION (binary)	Duration in 20 ms
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 where t is the System Time in units of 20 ms.
- 21
- 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_s 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 mobile
 11 station is to process the Forward Supplemental Channel.

12 The base station shall set this field to '0000' to indicate that
 13 the mobile station should stop processing the Forward
 14 Supplemental Channel starting at the explicit start time of the
 15 message specified by FOR_SCH_START_TIME or at the
 16 implicit start time if FOR_SCH_START_TIME_INCL is set to '0'.

17 The base station shall set this field to '1111' to indicate that
 18 the mobile station should process the Forward Supplemental
 19 Channel, starting at the start time of the message specified by
 20 FOR_SCH_START_TIME, until the start time specified by a
 21 subsequent Forward Supplemental Channel assignment
 22 corresponding to the same Supplemental Channel (see
 23 2.6.6.2.5.1.1).

24 FOR_SCH_START_TIME_INCL - Start time included indicator.

25 If FOR_SCH_DURATION is not equal to '0000', the base
 26 station shall set this field to '1'. If FOR_SCH_DURATION is
 27 equal to '0000', the base station shall set this field as follows:

28 The base station shall set this field to '1' if
 29 FOR_SCH_START_TIME is included in this message;
 30 otherwise, the base station shall set this field to '0'.

31 FOR_SCH_START_TIME - Start time for Forward Supplemental Channel assignment.

32 If FOR_SCH_START_TIME_INCL is set to '0', the base station
 33 shall omit this field; otherwise, the base station shall set this
 34 field to the System Time, in units of time specified by
 35 START_TIME_UNIT, (modulo 32) at which the mobile station
 36 is to start processing (if FOR_SCH_DURATION is not equal to
 37 '0000') or stop processing (if FOR_SCH_DURATION is equal to
 38 '0000') the Forward Supplemental Channel specified in this
 39 message. The explicit start time to start or stop processing
 40 the Forward Supplemental Channels is the time for which
 41
$$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{FOR_SCH_START_TIME} \pmod{32} = 0,$$

42 where t is the System Time in units of 20 ms.

43

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 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 signed
8 number.
- 9 FPC_SCH_MIN_SETPT - Minimum Supplemental Channel outer loop Eb/Nt setpoint.
10 The base station shall set this field to minimum Supplemental
11 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.
- 12 FPC_SCH_MAX_SETPT - Maximum Supplemental Channel outer loop Eb/Nt setpoint.
13 The base station shall set this field to maximum
14 Supplemental Channel Outer Loop Eb/Nt setpoint, in units of
15 0.125 dB.
- 16 FPC_THRESH_SCH_INCL- Supplemental Channel Setpoint Report Threshold Included
17 Indicator.
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 If Supplemental Channel setpoint report threshold is included
21 in this message, the base station shall set this field to '1';
22 otherwise, the base station shall set this field to '0'.
- 23 FPC_SETPT_THRESH_SCH - Supplemental Channel Setpoint Report Threshold.
24 If FPC_THRESH_SCH_INCL is set to '1', the base station shall
25 set this field to the value of the Supplemental Channel
26 setpoint threshold (in units of 0.125 dB) above which the
27 outer loop report message will be sent by the mobile station;
28 otherwise, the base station shall omit this field.
- 29 RPC_INCL - Reverse Power Control parameter included indicator.
30 The base station shall set this field to '1' if RPC_NUM_SUP is
31 included in this message; otherwise the base station shall set
32 this field to '0'.
- 33 RPC_NUM_SUP - Number of Supplemental Channels.
34 If RPC_INCL is set to '1', the base station shall set this field to
35 the total number of the Supplemental Channels minus one;
36 otherwise, the base station shall omit this field.
- 37 The base station shall include RPC_NUM_SUP +1 occurrences of the following record:
- 38 SCH_ID - Supplemental Channel index.
39 The base station shall set this field to the Supplemental
40 Channel index.
- 41 RLGAIN_SCH_PILOT - Supplemental Channel power offset adjustment relative to
42 Reverse Pilot Channel power for radio configurations greater
43 than 2.

1		If 3X_SCH_LOW_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 Supplemental Channel on the lowest SR3 frequency.
7	CODE_CHAN_SCH_LOW -	Code channel for the Supplemental Channel on the lowest
8		SR3 frequency.
9		If 3X_SCH_LOW_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 Supplemental
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 inclusive.
18	3X_SCH_HIGH_INCL -	SCH code channel on the highest SR3 frequency included
19		indicator.
20		If the Supplemental Channel on the highest SR3 frequencies
21		has a different code channel than the Supplemental Channel
22		on the center SR3 frequency, the base station shall set this
23		field to '1'; otherwise, the base station shall set this field to '0'.
24	QOF_MASK_ID_SCH_HIGH -	QOF index for the Supplemental Channel on the highest
25		SR3 frequency.
26		If 3X_SCH_HIGH_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		The base station shall set this field to the index of the Quasi-
30		orthogonal function (see [2]) corresponding to the QOF index
31		for the Supplemental Channel on the highest SR3 frequency.
32	CODE_CHAN_SCH_HIGH -	Code channel for the Supplemental Channel on the highest
33		SR3 frequency.
34		If 3X_SCH_HIGH_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 code channel index
38		(see [2]) that the mobile station is to use on the Supplemental
39		Channel on the highest 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	CCSH_INCLUDED -	Code Combining Soft Handoff information included indicator.
45		The base station shall set this field to '1' if Code Combining
46		Soft Handoff information is included in this message;
47		otherwise, the base station shall set this field to '0'.

1 If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of
 2 the following one field for each of the Forward Supplemental Channel records included in
 3 this message (as specified by NUM_FOR_CFG_RECS and NUM_SUP_SHO). The base station
 4 shall use the same order for the following field as is used for the Forward Supplemental
 5 Channel records.

6 CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.
 7
 8 The base station shall set this field to '0' if the Turbo Encoder
 9 type to be used on the Forward Supplemental Channel
 10 indexed by FOR_SCH_ID and SCCL_INDEX is the default
 11 encoder type. The base station shall set this field to '1' if the
 Turbo Encoder to be used is the complementary type.

12 FOR_SCH_CC_INCL - Channel configuration for the Forward Supplemental Channel
 13 included indicator.

14 The base station shall set this field to '1' if the channel
 15 configuration information for the Forward Supplemental
 16 Channel is included; otherwise, the base station shall set this
 17 field to '0'.

18 The base station shall set FOR_SCH_CC_INCL to '0' if
 19 NUM_FOR_SCH is set to '00' or if FOR_SCH_DURATION is set
 20 to '0000'.

21 If FOR_SCH_CC_INCL is set to '1', the base station shall include NUM_FOR_SCH
 22 occurrences of the following three-field record.

23 FOR_SCH_ID - Forward Supplemental Channel Identifier.

24 The base station shall set this field to the identifier of the
 25 Forward Supplemental Channel pertaining to this record.

26 The base station shall set this field to the Supplemental
 27 Channel identifier, shown in Table 3.7.5.7-5.

28 FOR_SCH_MUX - Forward Supplemental Channel Multiplex Option.

29 The base station shall set this field to the Multiplex Option
 30 associated with the maximum data rate for this Forward
 31 Supplemental Channel (see [3]).

32 SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

33 The base station shall set this field as defined in 3.7.5.7.1 for
 34 this Forward Supplemental Channel.

35 REV_SCH_CC_INCL - Channel configuration for the Reverse Supplemental Channel
 36 included indicator.

37 The base station shall set this field to '1' if the channel
 38 configuration information for the Reverse Supplemental
 39 Channel is included; otherwise, the base station shall set this
 40 field to '0'.

41 The base station shall set REV_SCH_CC_INCL to '0' if
 42 NUM_REV_SCH is set to '00' or if REV_SCH_DURATION is set
 43 to '0000'.

- 1 If REV_SCH_CC_INCL is set to '1', the base station shall include NUM_REV_SCH
2 occurrences of the following three-field record.
- 3 REV_SCH_ID - Reverse Supplemental Channel Identifier.
4 The base station shall set this field to the identifier of the
5 Reverse Supplemental Channel pertaining to this record.
6 The base station shall set this field to the Supplemental
7 Channel identifier, shown in Table 3.7.5.7-5.
- 8 REV_SCH_MUX - Reverse Supplemental Channel Multiplex Option.
9 The base station shall set this field to the Multiplex Option
10 associated with the maximum data rate for this Reverse
11 Supplemental Channel (see [3]).
- 12 SCH_CC_Type-specific field - Supplemental Channel Configuration Information.
13 The base station shall set this field as defined in 3.7.5.7.1 for
14 this Reverse Supplemental Channel
- 15 SCH_BCMC_IND - BCMC on supplemental channel Indicator.
16 If NUM_FOR_SCH field is set to '00', the base station shall
17 omit this field; otherwise, the base station shall include this
18 field and set it as follows:
19 If the channel assignment in this message contains a Forward
20 Supplemental Channel used for BCMC transmission, the base
21 station shall set this field to '1'; otherwise, the base station
22 shall set this field to '0'.
- 23 ADD_PLCM_FOR_SCH_INCL - Additional PLCM for forward SCH included indicator.
24 If the SCH_BCMC_IND field is not included or is included and
25 is set to '0', the base station shall omit this field; otherwise,
26 the base station shall include this field and set it as follows:
27 If the additional PLCM for forward SCH is included in this
28 message, the base station shall set this field to '1'; otherwise,
29 the base station shall set this field to '0'.
- 30 ADD_PLCM_FOR_SCH_TYPE - The Additional Public Long Code Mask for forward SCH
31 type indicator.
32 If ADD_PLCM_FOR_SCH_INCL is not included or is included
33 and is 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' to indicate PLCM
37 specified by the base station. The field value '0' is reserved.
- 38 ADD_PLCM_FOR_SCH_35 - The 35 LSB bits of the additional Public Long Code Mask
39 for forward SCH.
40 If ADD_PLCM_FOR_SCH_TYPE field is included and is set to
41 '1', the base station shall include this field and set it to the 35
42 least significant bits of the public long code mask used by the
43 mobile station; otherwise, the base station shall omit this
44 field.

- 1 If SCH_BCMC_IND field is included and is set to '1', the base station shall include
2 NUM_FOR_SCH occurrences of the following record:
- 3 USE_ADD_PLCM_FOR_SCH - Use additional PLCM for forward SCH indicator.
4
5 The base station shall set this field to '1' if the additional
6 PLCM for forward SCH included in this message is to be used
7 for this Forward Supplemental Channel; otherwise, the base
8 station shall set this field to '0'.
- 8 FSCH_OUTERCODE_INCL - Forward Supplemental Channel Outer Code included
9 indicator.
10
11 The base station shall set this field to '1' if the Forward
12 Supplemental Channel outer code information is included in
13 this message; otherwise, the base station shall set this field to
14 '0'.
- 14 FSCH_OUTERCODE_RATE - Outer Code Rate of the Forward Supplemental Channel.
15
16 If the FSCH_OUTERCODE_INCL field is not included or is
17 included and is 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
21 The base station shall set this field to the outer code rate of
22 the Forward Supplemental Channel as specified in Table
23 3.7.2.3.2.38-3.
- 22 FSCH_OUTERCODE_OFFSET - Outer Coding Buffer Offset of the Forward
23 Supplemental Channel.
24
25 If the FSCH_OUTERCODE_INCL field is not included or is
26 included and is 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
30 The base station shall set this field to the outer coding buffer
31 offset of the Forward Supplemental Channel in units of 20ms
32 as specified in [2].
- 31 FPC_BCMC_CHAN - Channel used for secondary power control subchannel.
32
33 If FPC_INCL is set to '1' and FPC_MODE_SCH is set to '001',
34 '010', '101', or '110', the base station shall include this field
35 and set it as follows; otherwise, the base station shall omit
36 this field.
37
38 If F-FCH is associated with secondary power control
39 subchannel, the base station shall set this field to '1';
40 otherwise, base station shall set this field to '0' to indicate
41 that FPC_SEC_CHAN points to the channel associated with
secondary power control subchannel.

- 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
$$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{FOR_SCH_START_TIME} \pmod{32}$$
- 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 corresponding
- 33 to the FOR_SCH_ID. The base station shall include an
- 34 SCCL_INDEX whose SCH Active Set is a subset of the Active
- 35 Set of the Fundamental Channel, Dedicated Control Channel,
- 36 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

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REV_SCH_ID - Reverse Supplemental Channel identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel.

REV_SCH_DURATION - Duration of Reverse Supplemental Channel assignment.

The base station shall set this field to '0000' to indicate that the mobile station is to stop transmitting on the Reverse Supplemental Channel specified by REV_SCH_ID at the start time specified by START_TIME. The base station shall set this field to '1111' to indicate that the mobile station may transmit on the Reverse Supplemental Channel specified by REV_SCH_ID, starting at the start time specified by REV_SCH_START_TIME in this message, until the start time specified by a subsequent Reverse Supplemental Channel assignment corresponding to the same Supplemental Channel (see 2.6.6.2.5.1.1). The base station shall set this field to the duration according to Table 3.7.3.3.2.37-3, starting at the explicit start time specified by REV_SCH_START_TIME, during which the mobile station may transmit on the Reverse Supplemental Channel specified by REV_SCH_ID.

REV_SCH_START_TIME - Start time for *Reverse Supplemental Channel Assignment Mini Message*.

The base station shall set this field to the System Time, in units of time specified by START_TIME_UNIT, (modulo 32) at which the mobile station may start transmitting on the Reverse Supplemental Channel specified in this message. The explicit start time for transmitting on the Reverse Supplemental Channel is the time for which

$$\lfloor t / (\text{START_TIME_UNIT} + 1) \rfloor - \text{REV_SCH_START_TIME} \pmod{32} = 0,$$

where t is the System Time in units of 20 ms.

REV_SCH_NUM_BITS_IDX - Reverse Supplemental Channel number of information 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, that the mobile station may transmit on the reverse Supplemental Channel identified by REV_SCH_ID.

If USE_FLEX_NUM_BITS_s is equal to '1' and RSCH_NBIT_TABLE_ID[REV_SCH_ID] is not equal to '0000', then the base station shall set the REV_SCH_NUM_BITS_IDX field to indicate the Reverse Supplemental Channel number of information bits per frame that the mobile station may

1 transmit on the Reverse Supplemental Channel identified by
2 REV_SCH_ID to be
3 NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
4 [REV_SCH_NUM_BITS_IDX] and the Reverse Supplemental
5 Channel number of CRC bits per frame that the mobile station
6 may transmit on the Reverse Supplemental Channel identified
7 by REV_SCH_ID to be
8 CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]
9 [REV_SCH_NUM_BITS_IDX].
10
11

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
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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 *Pilot Strength Measurement Mini*
 5 *Messages* 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 *Pilot Strength*
 9 *Measurement Mini Message* 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 *Pilot Strength Measurement Mini Messages* 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 *Pilot Strength Measurement Mini*
 21 *Messages* 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 record:

25 NUM_PILOTS - Number of pilots.

26 The base station shall set this field to the number of pilots for
 27 which the mobile station is to send *Pilot Strength Measurement*
 28 *Mini Messages* when the periodic mode is enabled.

29 PERIODIC_INTERVAL - Periodic interval.

30 The base station shall set this field to the interval (in 20 ms
 31 units) between *Pilot Strength Measurement Mini Messages*
 32 when the periodic mode is enabled.

33 THRESHOLD_FLAG - Threshold reporting flag.

34 The base station shall set this field to '1' to indicate that the
 35 mobile station is to send *Pilot Strength Measurement Mini*
 36 *Messages* whenever a measured pilot crosses below a lower
 37 bound or exceeds an upper bound during Supplemental
 38 channel burst operations; otherwise the base station shall set
 39 this field to '0'.

40 If THRESHOLD_FLAG is set to '1', the base station shall include the following five-field
 41 record:

42 PS_FLOOR_HIGH - Lower bound reporting high water mark.

43 The base station shall set this field to the high water mark for
 44 the lower bound below which the mobile station is to send
 45 *Pilot Strength Measurement Mini Messages* when the threshold
 46 mode is enabled.

1			The base station shall set this field as an unsigned binary
2			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
3	PS_FLOOR_LOW	-	Lower bound reporting low water mark.
4			The base station shall set this field to the low water mark for
5			the lower bound below which the mobile station is to send
6			<i>Pilot Strength Measurement Mini Messages</i> when the threshold
7			mode is enabled.
8			The base station shall set this field as an unsigned binary
9			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
10	PS_CEILING_HIGH	-	Upper bound reporting high water mark.
11			The base station shall set this field to the high water mark for
12			the upper bound above which the mobile station is to send
13			<i>Pilot Strength Measurement Mini Messages</i> when the threshold
14			mode is enabled.
15			The base station shall set this field as an unsigned binary
16			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
17	PS_CEILING_LOW	-	Upper bound reporting low water mark.
18			The base station shall set this field to the low water mark for
19			the upper bound above which the mobile station is to send
20			<i>Pilot Strength Measurement Mini Messages</i> when the threshold
21			mode is enabled.
22			The base station shall set this field as an unsigned binary
23			number equal to $\lfloor -2 \times 10 \times \log_{10} E_c/I_0 \rfloor$.
24	THRESHOLD_INTERVAL	-	Threshold reporting interval.
25			The base station shall set this field to the interval (in 20 ms
26			units) between <i>Pilot Strength Measurement Mini Messages</i>
27			when the threshold reporting mode is enabled.
28			

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 rejection
 9 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 supported by the base station.

6

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)

- 3
 4 RESPONSE_IND – Response indicator.

1			The base station shall set this field to '1' if this message is a
2			response to an <i>Enhanced Origination Message</i> from the mobile
3			station; otherwise, the base station shall set this field to '0'.
4	TAG	–	Transaction identifier.
5			If the RESPONSE_IND 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 value of the TAG or
9			ADD_TAG field of the <i>Enhanced Origination Message</i> to which
10			this message is the response.
11	ACCEPT_IND	–	Accepted indicator.
12			If the RESPONSE_IND field is set to '0', the base station shall
13			omit this field; otherwise, the base station shall include this
14			field and shall set it as follows:
15			If the base station accepts the call request from the mobile
16			station, the base station shall set this field to '1'; otherwise,
17			the base station shall set this field to '0'.
18	REJECT_PKTDATA_IND	–	Packet data service option rejection indicator.
19			If the ACCEPT_IND field is not included or is included and is
20			set to '1', the base station shall omit this field; otherwise, the
21			base station shall include this field and shall set it as follows:
22			The base station shall set this field to '1' to indicate rejection
23			of the packet data service option requested by the mobile
24			station; otherwise, the base station shall set this field to '0'.
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 shall set it as follows:
29			If the mobile station is to bypass the <i>Waiting for Order</i>
30			<i>Substate</i> and the <i>Waiting for Mobile Station Answer Substate</i>
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	SO_INCL	–	Service option included indicator.
34			The base station shall set this field to '1' if the SO field is
35			included in this message; otherwise, it the base station shall
36			set this field to '0'.
37			If the USE_OLD_SERV_CONFIG is included and is set to '1',
38			the base station shall set this field to '0'.
39	SO	–	Service option.
40			If the SO_INCL field is set to '0', the base station shall omit
41			this field; otherwise, the base station shall include this field
42			and shall set it to the value of the service option number (as
43			specified in [30]) that the base station proposes for this call.
44	CON_REF_INCL	–	Connection reference included indicator.

1 If the ACCEPT_IND field is not included or is included but is
2 set to '1', the base station shall set this field to '1'; otherwise,
3 the base station shall set this field to '0'.

4 If the USE_OLD_SERV_CONFIG is included and is set to '1',
5 the base station shall set this field to '0'.

6 CON_REF - Connection reference.

7 If the CON_REF_INCL field is set to '0', the base station shall
8 omit this field; otherwise, the base station shall include this
9 field and shall set it to the value of the connection reference
10 that was/will be assigned to the service option connection
11 corresponding to this call.

12 USE_OLD_SERV_CONFIG - Use stored service option connection record(s) indicator.

13 This field may be used by the base station to instruct the
14 mobile station to use the stored service option connection
15 record(s).

16 If the ACCEPT_IND field is included and is set to '0', the base
17 station shall omit this field; otherwise, the base station shall
18 include this field and shall set it as follows:

19 If the mobile station is to restore one or more service option
20 connection record(s) from the stored service configuration, the
21 base station shall set this field to '1'; otherwise, the base
22 station shall set this field to '0'.

23 SR_ID - Service reference identifier.

24 If the USE_OLD_SERV_CONFIG field is not included or is
25 included and is set to '0', the base station shall omit this field;
26 otherwise, the base station shall include this field and set it
27 as follows.

28 If the mobile station is to restore all remaining service option
29 connections record from the stored service configuration, the
30 base station shall set this field to '111'; if the mobile station is
31 to restore more than one but not all remaining service option
32 connections from the stored service configuration, the base
33 station shall set this field to '000'; otherwise, the base station
34 shall set this field to the service reference identifier
35 corresponding to the service option connection to be restored.

36 SR_ID_RESTORE_BITMAP - Bitmap of service reference identifiers to be restored.

37 If the SR_ID field is included and set to '000', the base station
38 shall include this field and set it as follows; otherwise, the
39 base station shall omit this field.

40 This field consists of the subfields defined in Table
41 3.7.2.3.2.21-6. The base station shall set a subfield to '1' to
42 indicate that the mobile station is to restore the service option
43 connection of the corresponding service reference identifier;
44 otherwise, the base station shall set the subfield to '0'.

- 1 ADD_CALL_INFO_INCLUDED – Additional call information included indicator.
- 2 If USE_OLD_SERV_CONFIG is not included, or is included
3 and is set to '1', the base station shall omit this field;
4 otherwise, the base station shall include this field and set it
5 as follows:
- 6 If at least one occurrence of the additional call record is
7 included in this message, the base station shall set this field
8 to '1'; otherwise, the base station shall set this field to '0'.
- 9 NUM_ADD_CALL_RECORDS – Number of additional call records included.
- 10 If ADD_CALL_INFO_INCLUDED is not included or is included
11 and set to '0', the base station shall omit this field; otherwise,
12 the base station shall include this field and set it to one less
13 than the number of occurrences of the call records included
14 in this message.
- 15 If NUM_ADD_CALL_RECORDS is included, the base station shall include
16 NUM_ADD_CALL_RECORDS + 1 occurrences of the following variable-field record:
- 17 ADD_TAG – Additional transaction identifier.
- 18 If the RESPONSE_IND 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 value of the TAG or
22 ADD_TAG field of the *Enhanced Origination Message* to which
23 this message is the response.
- 24 ADD_ACCEPT_IND – Additional accepted indicator.
- 25 If the RESPONSE_IND field is set to '0', the base station shall
26 omit this field; otherwise, the base station shall include this
27 field and set it as follows:
- 28 If the base station accepts the call request from the mobile
29 station, the base station shall set this field to '1'; otherwise,
30 the base station shall set this field to '0'.
- 31 ADD_REJECT_PKTDATA_IND – Additional packet data service option rejection
32 indicator.
- 33 If the ADD_ACCEPT_IND field is not included or is included
34 and is set to '1', the base station shall omit this field;
35 otherwise, the base station shall include this field and shall
36 set it as follows:
- 37 The base station shall set this field to '1' to indicate rejection
38 of the packet data service option requested by the mobile
39 station; otherwise, the base station shall set this field to '0'.
- 40 ADD_SO_INCL – Additional service option included indicator.
- 41 The base station shall set this field to '1' if the ADD_SO field
42 is included in this message; otherwise, it the base station
43 shall set this field to '0'.
- 44 ADD_SO – Additional service option.

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 in
 19 3.7.5.

20 RECORD_TYPE – Information record type.
 21 The base station shall set this field as specified in 3.7.5.

- 1 RECORD_LEN - Information record length.
- 2 The base station shall set this field to the number of octets in
- 3 the type-specific fields included in this record.
- 4 Type-specific fields - Type-specific fields.
- 5 The base station shall include type-specific fields as specified
- 6 in 3.7.5.
- 7

1 3.7.3.3.2.45 Extended Flash With Information Message
 2 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 in
 19 3.7.5.

20 RECORD_TYPE – Information record type.
 21 The base station shall set this field as specified in 3.7.5.

22 RECORD_LEN – Information record length.
 23 The base station shall set this field to the number of octets in
 24 the type-specific fields included in this record.

- 1 Type-specific fields - Type-specific fields.
- 2 The base station shall include type-specific fields as specified
- 3 in 3.7.5.
- 4

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 $FRAME_OFFSET_s \times 1.25$
 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
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.

1 3.7.3.3.2.47 Base Station Status Response Message
 2 MSG_TAG: BSSRSPM

3

Field	Length (bits)
QUAL_INFO_TYPE	8
QUAL_INFO_LEN	3
Type-specific fields.	8 × 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)

- 4 QUAL_INFO_TYPE - Qualification information type.
 5 The base station shall set this field to the QUAL_INFO_TYPE
 6 field in the corresponding *Base Station Status Request*
 7 *Message*.
- 8 QUAL_INFO_LEN - Qualification information length.
 9 The base station shall set this field to the QUAL_INFO_LEN
 10 field in the corresponding *Base Station Status Request*
 11 *Message*.
- 12 Type-specific fields - Type-specific fields.
 13 The base station shall set these fields to the qualification
 14 information in the corresponding *Base Station Status Request*
 15 *Message*.
- 16 NUM_RECORDS - Number of records included in this message.
 17 The base station shall set this field to the number of
 18 occurrences of RECORD_TYPE field in this message.

19 The base station shall include one occurrence of the following variable-length record for
 20 each information record that is included:

- 21 RECORD_TYPE - Information record type.
 22 The base station shall set this field to the record type value
 23 shown in Table 3.7.3.3.2.47-1 corresponding to the
 24 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:

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)

- 1 NUM_PILOTS - Number of Pilots reported.
- 2 The base station shall set this field to the number of pilots
- 3 whose information is reported in this message.
- 4 The base station shall set this field to a number equal or
- 5 greater than one.
- 6 SID_NID_IND - SID, NID included indicator.
- 7 The base station shall set this field to '1' if SID, NID
- 8 information is included in this message; otherwise, it shall set
- 9 this field to '0'.
- 10 The base station shall include NUM_PILOTS occurrences of the following variable length
- 11 record:
- 12 RECORD_LEN - Record Length.
- 13 The base station shall set this field to the length in octets of
- 14 this 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 base station, in units of 64 PN chips.
- 18 BASE_ID - Base station identification.
- 19 The base station shall set this field to the Base Station
- 20 identification number corresponding to this pilot.
- 21 SID_NID_INCL - SID, NID included indicator.
- 22 If the SID_NID_IND 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 If this is the first pilot included in this message, the base
- 26 station shall set this field to '1'; otherwise, the base station
- 27 shall set this field as follows:
- 28 If the SID and NID of this pilot are same as the SID and NID
- 29 of the previous pilot, the base station shall set this field to '0';
- 30 otherwise, the base station shall set this field to '1'.
- 31 SID - System identification.
- 32 If the SID_NID_INCL field is not included or is included and is
- 33 set to '0', the base station shall omit this field; otherwise, the
- 34 base station shall include this field and set it as follows:
- 35 The base station shall set this field to the system
- 36 identification number of the system corresponding to this
- 37 pilot (see 2.6.5.2).
- 38 NID - Network identification.

1 If the SID_NID_INCL field is not included or is included and is
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
5 The base station shall set this field to the network
6 identification number of the network corresponding to this
7 pilot (see 2.6.5.2).

8 **BASE_LAT_LONG_INCL** - Base station LAT/LONG included indicator.
9
10 The base station shall set this field to '1' if the base station
11 LAT/LONG fields are included in this message; otherwise, the
12 base station shall set this field to '0'.

13 **BASE_LAT** - Base station latitude.
14
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
19 The base station shall set this field to its latitude in units of
20 0.25 second, expressed as a two's complement signed number
21 with positive numbers signifying North latitudes. The base
22 station shall set this field to a value in the range -1296000 to
23 1296000 inclusive (corresponding to a range of -90° to +90°).

24 **BASE_LONG** - Base station longitude.
25
26 If the BASE_LAT_LONG_INCL 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
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 number
32 with positive numbers signifying East longitude. The base
33 station shall set this field to a value in the range -2592000 to
34 2592000 inclusive (corresponding to a range of -180° to
35 +180°).

36 **RESERVED_1** - Reserved bits.
37
38 The base station shall add reserved bits as needed in order to
39 make the length of the pilot specific record equal to an integer
40 number of octets. The base station shall set these bits to '0'.

41 **RESERVED** - Reserved bits.
42
43 The base station shall add reserved bits as needed in order to
44 make the length of the record equal to an integer number of
45 octets. The base station shall set these bits to '0'.

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 specified
 2 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 $FRAME_OFFSET_s \times 1.25$
 9 ms, in units of 80 ms (modulo 64), at which the rate change is
 10 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.

29 **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_PARAMS_INCL is not included or included and
 3 set to '0', then the base station shall omit this field; otherwise,
 4 the base station shall include this field and set it as follows:
 5
 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.
- 10 NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer
 11 switching.
 12 If SWITCHING_PARAMS_INCL is not included or included and
 13 set to '0', then the base station shall omit this field; otherwise,
 14 the base station shall include this field and set it as follows:
 15
 16 The base station shall set this field to the duration of the cell
 17 switching period, in units of 20 ms, minus one, during which
 18 the mobile station is to transmit the cell switch sequence on
 19 the R-CQICH channel when it switches between two pilots
 20 which are in the same group.
- 20 CHM_SWITCHING_PARAMS_INCL- Control Hold Mode fields included indicator.
 21 If SWITCHING_PARAMS_INCL is omitted or equal to '0', the
 22 base station shall omit this field; otherwise, the base station
 23 shall include this field and set it as follows.
 24
 25 The base station shall set this field to '1' if the switching
 26 parameters for Control Hold Mode are included; otherwise,
 27 the base station shall set this field to '0'.
- 27 NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft
 28 switching while in Control Hold.
 29 If CHM_SWITCHING_PARAMS_INCL is not included or included
 30 and set to '0', then the base station shall omit this field;
 31 otherwise, the base station shall include this field and set it
 32 as follows:
 33
 34 The base station shall set this field to the duration of the cell
 35 switching period, in units of 20 ms, minus one, during which
 36 the mobile station, while in Control Hold, is to transmit the
 37 cell switch sequence on the R-CQICH when it switches
 38 between two pilots which are in different groups.
- 38 NUM_SOFTER_SWITCHING_FRAMES_CHM- Number of frames for R-CQICH softer
 39 switching while in Control Hold.
 40 If CHM_SWITCHING_PARAMS_INCL is not included or included
 41 and set to '0', then the base station shall omit this field;
 42 otherwise, the base station shall include this field and set it
 43 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 than
19 the number of occurrences of the records included in this
20 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 attribute
 3 gain adjustment that the mobile station is to make for the
 4 transmission attributes for the high power level of R-CQICH.
 5 The base station shall set the value in the range from -40 to
 6 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 of
 20 Reverse Channel Quality Indicator Channel transmission for
 21 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 attribute
 28 gain adjustment that the mobile station is to make for the
 29 transmission attributes for the low power level of R-CQICH.
 30 The base station shall set the value in the range from -16 to
 31 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.

1 If REV_ACKCH_RATE_CHANGE_INCL is equal to '0', the base
 2 station shall omit this field; otherwise, the base station shall
 3 include this field and set it according to the Table
 4 3.7.3.3.2.49-2.

5 **Table 3.7.3.3.2.49-2 R-ACKCH Repetition Factor**

REV_ACKCH_REPS (Binary)	Value
'00'	1
'01'	2
'10'	4
'11'	Reserved

6 REV_PDCH_MAX_PARAMS_INCL - Reverse Packet Data Channel maximum traffic to pilot
 7 ratio included indicator.

8 The base station shall set this field to '1' if the Reverse Packet
 9 Data Channel maximum traffic to pilot ratio for autonomous
 10 transmission is included; otherwise, the base station shall set
 11 this field to '0'.

12 REV_PDCH_MAX_AUTO_TPR- Reverse Packet Data Channel maximum traffic to pilot
 13 ratio for autonomous transmission.

14 If REV_PDCH_MAX_PARAMS_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 maximum traffic to
 18 pilot ratio for autonomous transmission on the Reverse
 19 Packet Data Channel (see [2] and [3]).

20 The base station shall set this field to values in the range 0 to
 21 18 dB inclusive in units of 0.125 dB.

22 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET - Maximum Allowed Reverse
 23 PDCH encoder packet size.

24 If REV_PDCH_MAX_PARAMS_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 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 to
 31 10 inclusive, corresponding to the encoder packet sizes 192,
 32 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and
 33 18456 bits respectively.

34 REV_PDCH_PARAMS_INCL - Reverse Packet Data Channel related parameters included
 35 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, 1,
12 or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

13 REV_PDCH_NUM_ARQ_ROUNDS_BOOST - Maximum number of allowed HARQ
14 retransmissions on the Reverse PDCH in the boosted mode.

15 If REV_PDCH_PARMS_INCL is set to '0', the base station shall
16 omit this field; otherwise, the base station shall include this
17 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 boosted mode. The base station shall set this field to 0, 1, or 2
21 corresponding to 1, 2, or 3 rounds respectively (See [3]).

22

23

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_DISCR IMINATOR_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_DISCR IMINATOR_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.

6 The base station shall set this field to '1' to indicate that the
 7 mobile station is allowed to request for a BCMC flow on traffic
 8 channel that is not included in this message; otherwise, the
 9 base station shall set this field to '0'.

10 BCMC_ON_IDLE_SUP - BCMC on idle state supported indicator.

1 The base station shall set this field to '1' to indicate that the
2 BCMC feature is supported on idle state; otherwise, the base
3 station shall set this field to '0'.

4 BCMC_FLOWS_ON_TRAFFIC_ONLY_IND - BCMC flows on traffic channel only
5 indicator.

6 If the BCMC_ON_IDLE_SUP_IND 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 '1' if this message
10 contains information only about BCMC flows on traffic
11 channel; otherwise, the base station shall set this field to '0'.

12 AUTH_SIGNATURE_REQUIRED - Authorization signature required indication.

13 The base station shall set this field to '1' to indicate that the
14 mobile station is to include the authorization signature in the
15 Origination Message, Page Response Message and Enhanced
16 Origination Message that include BCMC_FLOW_ID (see
17 2.6.13.11) for BCMC flows indicated in this message if
18 included in that message; otherwise, the base station shall set
19 this field to '0'.

20 NON_DEFAULT_VALUE_INCLUDED - Non-default values for Authorization signature
21 included indicator.

22 If the AUTH_SIGNATURE_REQUIRED field is set to '0', the
23 base station shall omit this field; otherwise, the base station
24 shall include this field and set it as follows:

25 The base station shall set this field to '0' if default values are
26 to be used to generate the Authorization signature; otherwise,
27 the base station shall set this field to '1'.

28 ACH_TIME_STAMP_SHORT_LENGTH - Length of time stamp for use on r-csch.

29 If the NON_DEFAULT_VALUE_INCLUDED field is not included
30 or is 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 length of the time
34 stamp, in units of bits, included on the Origination Message,
35 Page Response Message and Enhanced Origination Message.

36 TIME_STAMP_LONG_LENGTH - Length of time stamp.

37 If the NON_DEFAULT_VALUE_INCLUDED field is not included
38 or is included and 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 the length of the time
42 stamp, in units of bits, used to generate the Authorization
43 signature.

44 TIME_STAMP_UNIT - Unit for time stamp length.

1 If the NON_DEFAULT_VALUE_INCLUDED 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 The base station shall set this field to the unit of the time
6 stamp length field as follows: the unit of the time stamp field
7 shall be 2 to the power of the value of this field.

8 NUM_BCMC_PROGRAMS- Number of BCMC Programs.

9 The base station shall set this field to the number of BCMC
10 programs available in this base station in any one of the
11 frequencies minus one.

12 The base station shall include NUM_BCMC_PROGRAMS plus one occurrences of the
13 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 length
16 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 the
27 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 the
39 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.

43 The base station shall set this field to the BCMC flow
44 discriminator of this flow.

1 AUTH_SIGNATURE_REQ_IND - Authorization signature required indicator

2 If the AUTH_SIGNATURE_REQUIRED field is set to '0', the
3 base station shall omit this field; otherwise, the base station
4 shall include this field and set it as follows:

5 The base station shall set this field to '1' if the mobile station
6 is to include the authorization signature in the Origination
7 Message, Page Response Message, and Enhanced Origination
8 Message for this BCMC flow; otherwise, the base station shall
9 set this field to '0'.

10 BCMC_FLOW_ON_TRAFFIC_IDLE_IND - BCMC flow on traffic state or idle state
11 supported indicator.

12 If the BCMC_FLOWS_ON_TRAFFIC_ONLY_IND field is not
13 included or is included and set to '1', the base station shall
14 omit this field; otherwise, the base station shall include this
15 field and set it as follows:

16 The base station shall set this field as specified in Table
17 3.7.3.3.2.50-1 to indicate the availability of this flow in the
18 traffic state or idle state.

19 **Table 3.7.3.3.2.50-1. BCMC Flow Availability**

BCMC_FLOW_ON_TRAFFIC_ IDLE_IND (Binary)	Availability
00	Available in Idle State only
01	Available in Traffic State only
10	Available in both Idle State and Traffic State
11	Reserved

20

21

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_IN C	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_IN C	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
<u>FPC_MODE</u>	<u>3</u>
RPC_MODE	2
PWR_CNTL_STEP	3
FOR_FCH_BLANKING_DUTYCYCLE	3
REV_FCH_BLANKING_DUTYCYCLE	3
REV_ACKCH_GAIN_ADJ_ACS1_INC	1
REV_ACKCH_GAIN_ADJ_ACS1	0 or 7
REV_ACKCH_GAIN_ADJ_ACS2PLUS_INC	1
REV_ACKCH_GAIN_ADJ_ACS2PLUS	0 or 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

Field	Length (bits)
REV_SCH0_ACK_BIT_INC	1
REV_SCH0_ACK_CH_WALSH	0 or 7
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 specified in this message.

4

5

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'.

6

7

8

ACTION_TIME - Action time.

9

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.

10

11

12

13

14

FOR_FCH_ACK_MASK_RL_BLANKING_INC - Ack mask for F-FCH RC11 and RC12 when RL Blanking is enabled is included

15

16

If the FOR_FCH_ACK_MASK_RL_BLANKING 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'.

17

18

19

FOR_FCH_ACK_MASK_RL_BLANKING - Ack mask for F-FCH RC11 and RC12 when RL Blanking is enabled.

20

21

If the FOR_FCH_ACK_MASK_RL_BLANKING_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 F-FCH RC11 and RC12 when RL Blanking is enabled as describe below:

22

23

24

25

26

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'.

27

28

29

1

Table 3.7.3.3.2.51-1. Ack Mask

Subfield	Length (bits)	Subfield Description
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 '1'.
 17 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

1 If the REV_SCH_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_SCH_ACK_MASK - Ack mask for R-SCH RC08

5 If the REV_SCH_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-SCH 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_N2M_IND - N_{2m} for Forward Link RC11 and RC12 Indicator

14 The base station shall set this field to the value shown in
 15 Table 3.7.3.3.2.51-3 corresponding to the number of
 16 guaranteed transmission frames received with insufficient
 17 signal quality that will cause the mobile station to disable its
 18 transmitter when RC11 and RC12 is used on F-FCH.

19 **Table 3.7.3.3.2.51-3. N_{2m} 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.	

20 FPC_MODE - Forward Power Control Operation Mode Indicator

21 The base station shall set the value to the forward power
 22 control operation mode (see [2]).

23 RPC_MODE - Power control mode

24 The base station shall set this field as follows:

- 25 - Set to '00' if power control rate is 200 to 400 bps.
- 26 - Set to '01' if power control rate is 200 bps.

27 The base station shall not set this field to '10' or '11'.

29 PWR_CNTL_STEP - Power control step size ~~during RL Blanking~~

30 The base station shall set this field to the closed loop power
 31 control step size parameter shown in Table 3.7.3.3.2.25-1
 32 corresponding to the power control step size that the mobile
 33 station is to use for closed loop power control in RC 8.

34

1 FOR_FCH_BLANKING_DUTYCYCLE - N (duty cycle) value for Forward Link RC11 and RC12.

2 The base station shall set this field to the value shown in
3 Table 3.7.3.3.2.51-5 corresponding to the duty cycle value to
4 be used on Forward Link RC11 and RC12.

5 **Table 3.7.3.3.2.51-5. N (duty cycle) value for FL RC11, RC12 and RL RC08**

Value (binary)	N	Description
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.		

6
7 REV_FCH_BLANKING_DUTYCYCLE - N (duty cycle) value for Reverse Link RC08.

8 The base station shall set this field to the value shown in
9 Table 3.7.3.3.2.51-5 corresponding to the duty cycle value to
10 be used on Reverse Link RC08.

11 REV_ACKCH_GAIN_ADJ_ACS1_INC - Channel adjustment gain for Reverse Acknowledgment
12 Channel 1, Reverse Acknowledgment Channel 2, and Reverse
13 Acknowledgment Channel 3 for RC11 and RC12 when number of
14 cells in the active set equals 1 is included.

15 If the REV_ACKCH_GAIN_ADJ_ACS1 field is included in this
16 message, then the base station shall set this field to '1'.
17 Otherwise, the base station shall set this field to '0'.

18 REV_ACKCH_GAIN_ADJ_ACS1 - Channel adjustment gain for Reverse Acknowledgment
19 Channel 1, Reverse Acknowledgment Channel 2, and Reverse
20 Acknowledgment Channel 3 for RC11 and RC12 when number of
21 cells in the active set equals 1.

22 If REV_ACKCH_GAIN_ADJ_ACS1_INC is set to '0', the base
23 station shall omit this field; otherwise, the base station shall
24 set this field to the value of the gain adjustment that the
25 mobile station is to make for the Reverse Acknowledgment
26 Channel 1, Reverse Acknowledgment Channel 2, and Reverse
27 Acknowledgment Channel 3. The base station shall set this
28 field to the correction factor expressed as a two's complement
29 value in units of 0.125 dB. The base station shall set the
30 value in the range from -8 to 87.75 inclusive.

31 REV_ACKCH_GAIN_ADJ_ACS2PLUS_INC - Channel adjustment gain for Reverse
32 Acknowledgment Channel 1, Reverse Acknowledgment Channel
33 2, and Reverse Acknowledgment Channel 3 for RC11 and RC12
34 when number of cells in the active set exceeds 1 is included.

35 If the REV_ACKCH_GAIN_ADJ_ACS2PLUS field is included in
36 this message, then the base station shall set this field to '1'.
37 Otherwise, the base station shall set this field to '0'.

1 REV_ACKCH_GAIN_ADJ_ACS2PLUS- 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 exceeds 1.

5 If REV_ACKCH_GAIN_ADJ_ACS2PLUS_INC is set to '0', the
 6 base station shall omit this field; otherwise, the base station
 7 shall 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 7.758 inclusive.

14 NUM_RC_PARAMS_RECORDS - Number of RC Parameters Records
 15 The base station shall set this field to number of RC
 16 Parameters records included in this message.

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 base station, in units of 64 PN chips.

20 QOF_SET_IN_USE - QOF Set in use
 21 This field consists of the subfields shown in Table
 22 3.7.3.3.2.51-2. The base station shall set the subfields
 23 corresponding to the QOF Sets that are in use for this
 24 PILOT_PN to '1', and shall set the remaining subfields to '0'.

25 **Table 3.7.3.3.2.51-2. QOF Set in use**

Subfield	Length (bits)	Subfield Description
QOF_SET_1	1	QOF SET 1
QOF_SET_2	1	QOF SET 2
QOF_SET_3	1	QOF SET 3

26 REV_SCH0_ACK_BIT_INC - Reverse SCH0 Ack bit assignment included
 27 If the REV_SCH0_ACK_CH_WALSH and REV_SCH0_ACK_BIT
 28 fields are included, then the base station shall set this field to
 29 '1'. Otherwise, the base station shall set this field to '0'.

30 REV_SCH0_ACK_CH_WALSH - Reverse SCH0 Ack Channel Walsh Code Assignment
 31 for RC08
 32 If the REV_SCH0_ACK_BIT_INC field is set to '0', then the
 33 base station shall omit this field. Otherwise, the base station
 34 shall include this field and set it as follows:

35 The base station shall set this field to the Walsh code
 36 assignment for the Ack Channel used for RC08.

37 REV_SCH0_ACK_BIT - Reverse SCH0 Ack Bit for RC08

1 If the REV_SCH0_ACK_BIT_INC field is set to '0', then 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 Ack Bit (on Ack
5 Channel in the REV_SCH0_ACK_CH_WALSH field) used for
6 RC08.

7 REV_SCH1_ACK_BIT_INC - Reverse SCH1 Ack bit assignment included

8 If the REV_SCH1_ACK_CH_WALSH and REV_SCH1_ACK_BIT
9 fields are included, then the base station shall set this field to
10 '1'. Otherwise, the base station shall set this field to '0'.

11 REV_SCH1_ACK_CH_WALSH - Reverse SCH1 Ack Channel for RC08

12 If the REV_SCH1_ACK_BIT_INC field is set to '0', then the
13 base station shall omit this field. Otherwise, the base station
14 shall include this field and set it as follows:

15 The base station shall set this field to the Walsh code
16 assignment for the Ack Channel used for RC08.

17 REV_SCH1_ACK_BIT - Reverse SCH1 Ack Bit for RC08

18 If the REV_SCH1_ACK_BIT_INC field is set to '0', then the
19 base station shall omit this field. Otherwise, the base station
20 shall include this field and set it as follows:

21 The base station shall set this field to Ack Bit (on Ack
22 Channel in the REV_SCH1_ACK_CH_WALSH field) used for
23 RC08.

24 FOR_FCH_CCSH_INTERLEAVER_TYPE - Interleaver type used for Forward FCH RC12

25 The base station shall set this field to '0' for all RCs other
26 than RC12, and may set this bit to '1' for RC12. The base
27 station shall set this bit to '1' to indicate that alternate
28 interleaver type is being used.

29

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 Pilot PN included in this message following this field.

6

7

PILOT_PN - Pilot PN sequence offset index.

8

The base station shall set this field to the pilot PN sequence offset, in units of 64 PN chips, that the base station is soliciting supplementary handoff information.

9

10

11

- 1 3.7.3.3.2.53 General Extension Message
- 2 Please see section 3.7.2.3.2.44.
- 3

- 1 3.7.3.3.2.54 Alternative Technologies Information Message
- 2 MSG_TAG: ATIM

Field	Length (bits)
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_LEN

} (NUM_RADIO_INTERFACE)

- 3 For definition of NUM_RADIO_INTERFACE,
- 4 RADIO_INTERFACE_TYPE, RADIO_INTERFACE_LEN and
- 5 Radio Interface Type-specific fields, please see definition as
- 6 defined in section 3.7.2.3.2.45.

7

1 3.7.4 Orders

2 *Order Messages* are sent by the base station on the f-csch and the f-dsch. The general PDU
3 format used on the f-csch is defined in 3.7.2.3.2.7, and the general PDU format used on
4 the f-dsch is defined in 3.7.3.3.2.1. There are many specific types of *Order Messages*, as
5 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 first
8 column. The base station may send on the f-dsch any type of order shown in Table 3.7.4-1
9 with a 'Y' in the second column, but shall not send on the f-dsch any type of order with an
10 '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 there
15 are no other additional fields as shown by an 'N' in the sixth column, the base station shall
16 include no order qualification code or other order-specific fields in the *Order Message*. The
17 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**

f-csch Order	f-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	ACTIO N_TIME can be specified	Additional Fields other than ORDQ	P_REV_I N_USE¹²³	Name/Function
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)

¹²³ P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

f-csch Order	f-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	ACTIO N_TIME can be specified	Additional Fields other than ORDQ	P_REV_I N_USE 123	Name/Function
Y	N	010010	11111111	N	N	All	<i>Unlock Order</i>
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>
Y	N	011011	00000000	N	N	All	<i>Registration Accepted Order (ROAM_INDI not included; see 3.7.4.5)</i>
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, ≥ 4	<i>Registration Rejected Order (delete TMSI)</i>

f-csch Order	f-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	ACTIO N_TIME can be specified	Additional Fields other than ORDQ	P_REV_I N_USE₁₂₃	Name/Function
Y	N	011011	00000101	N	Y	≥ 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	≥ 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	≥ 6	<i>Slotted Mode Order</i> (transition to the slotted mode operation.)
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)

f-csch Order	f-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	ACTIO N_TIME can be specified	Additional Fields other than ORDQ	P_REV_I N_USE₁₂₃	Name/Function
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)
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)

f-csch Order	f-dsch Order	Order Code, ORDER (binary)	Order Qualification Code, ORDQ (binary)	ACTIO N_TIME can be specified	Additional Fields other than ORDQ	P_REV_I N_USE₁₂₃	Name/Function
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

1 3.7.4.2 Service Option Request Order

2 The *Service Option Request 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 requested or alternative
 10 service option.

11

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

1 3.7.4.4 Status Request Order

2 The *Status Request Order* can be sent only on the f-dsch. The ORDQ field of the *Status*
 3 *Request Order* specifies the information record to be returned by the mobile station in the
 4 *Status Message*.

5

Order Specific Field	Length (bits)
ORDQ	8

6

7

ORDQ - Order qualification code.

8

9

10

11

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.

12

13

14

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).

15

16

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.	

17

1

Table 3.7.4.5-1. (Part 1 of 2) Signaling Message Encryption Modes

C_SIG_ENCRYPT_MODE Field (binary)	Encryption Mode Used
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

D_SIG_ENCRYPT_MODE Field (binary)	Encryption Mode Used
000	If D_SIG_ENCRYPT_MODE _r 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. If D_SIG_ENCRYPT_MODE _r 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.
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

ENC_KEY_SIZE (binary)	Descriptions
000	Reserved
001	64 bits
010	128 bits
011-111	Reserved

MSG_INT_INFO_INCL – Message integrity information included indicator

If ORDQ is set to '00000111', the base station shall include this field and shall set it as follows; otherwise, the base station shall omit this field.

3.7.4.6 Periodic Pilot Measurement Request Order

The *Periodic Pilot Measurement Request Order* can be sent only on the f-dsch.

Order Specific Field	Length (bits)
ORDQ	8
MIN_PILOT_PWR_THRESH	5
MIN_PILOT_EC_I0_THRESH	5
INCL_SETPT	1
RESERVED	5

ORDQ - Order qualification code.

If INCL_SETPT equals '0', the base station shall set this field to a report period, in units of 0.08 seconds, in the range of '00001010' to '1111110' inclusive; otherwise, the base station shall set this field to a report period, in units of 0.08 seconds, in the range of '00000001' to '11111110' inclusive. The base station shall set this field to '11111111' to request a one time *Periodic Pilot Strength Measurement Message*.

MIN_PILOT_PWR_THRESH - The threshold of the total received E_c of the pilots in the Active Set.

If the mobile station is to report pilot strength measurements periodically to the base station irrespective of the pilot power of the Active Set, the base station shall set this field to '11111'; otherwise, the base station shall set this field to the total E_c threshold, expressed as an unsigned binary number equal to:

$$\lceil (10 \times \log_{10}(\text{pilot_ec_thresh}) + 120) / 2 \rceil$$

where *pilot_ec_thresh* is the threshold of the mobile station received total E_c (in mW) of the pilots in the Active Set below which the mobile station is to send the pilot strength measurements periodically to the base station.

MIN_PILOT_EC_I0_THRESH - Pilot Strength Threshold of Serving Frequency.

If the mobile station is to ignore this threshold, the base station shall set this field to '11111'; otherwise, the base station shall set this field to the total E_c/I_0 threshold, expressed as an unsigned binary number equal to:

$$\lceil -20 \times \log_{10} \text{pilot_streng_thresh} \rceil,$$

- 1 where *pilot_streng_thresh* 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 *Periodic Pilot Strength Measurement*
9 *Message*; 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.

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Table 3.7.4.7-1 Retry Delay Type

Value (binary)	Retry Type	Usage
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 Packet Data <i>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 ¹²⁴ (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 Packet Data <i>Origination Message</i> , <i>Reconnect Message</i> , or <i>Enhanced Origination Message</i>
100-111	Reserved	

2

3

RETRY_DELAY - Retry delay.

4

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:

6

¹²⁴ 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 Option¹²⁵. 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.

¹²⁵ Packet data service option refers to SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]

1
2
3
4
5

The base station shall set this field to '00000'.

1 3.7.4.8 Reserved.

2

1 3.7.4.9 Base Station Reject Order

2 The *Base Station Reject Order* can be sent on either the f-csch or on the f-dsch to indicate
 3 the base station does not accept a message from a mobile station due to encryption error,
 4 message integrity error, or both.

5

Order Specific Field	Length (bits)
ORDQ	8
REJECT_REASON	4
REJECTED_MSG_TYPE	8
REJECTED_MSG_SEQ	3

6

7 ORDQ - Order qualification code.
 8 The base station shall set this field to '00000010'.

9 REJECT_REASON - Reason of rejection.
 10 The base station shall set this field as specified in Table
 11 3.7.4.9-1.

12

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

13

14 REJECTED_MSG_TYPE - Message type of the rejected message.

1 The base station shall set this field to the value of the
2 MSG_TYPE or the MSG_ID (see [4]) field of the message being
3 rejected.
4 If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits,
5 the base station shall set the least significant bits of this field
6 to the value of the MSG_TYPE field and set all the remaining
7 bits to '0'.
8 REJECTED_MSG_SEQ - The Layer 2 message sequence number (see [4]) of the rejected
9 message.
10 The base station shall set this field to the Layer 2 message
11 sequence number (see [4]) of the rejected message.
12

1 3.7.4.10 BCMC Order

2 The *BCMC Order* is sent on f-csch or f-dsch to provide information on the requested BCMC
 3 flows.

4

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_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
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)

5

6

ORDQ - Order qualification code.

7

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

Value (binary)	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.

1 If the ALL_BCMC_REASON field is not included or is included
 2 and is not set to '0101', 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 the duration of the
 6 delay interval, as shown in Table 3.7.4.10-2, during which the
 7 mobile station is not permitted to request *any* BCMC flows.
 8 The base station shall not set this field to '00000000'.

9 **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

10

11 NUM_BCMC_PROGRAMS– Number of BCMC programs included.

12 If ALL_BCMC_FLOWS_IND is set to '1', the base station shall
 13 omit this field; otherwise, the base station shall include this
 14 field and set it as follows.

15 The base station shall set this field to the number of BCMC
 16 programs included in this message minus one.

17 If the NUM_BCMC_PROGRAMS field is included, the base station shall include
 18 NUM_BCMC_PROGRAMS plus one occurrences of the following record:

19 BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

20 The base station shall set this field to one less than the length
 21 in bits of the BCMC_PROGRAM_ID of this program.

22 BCMC_PROGRAM_ID - BCMC program Identifier

23 The length of this field shall be one more than the value of
 24 BCMC_PROGRAM_ID_LEN bits.

25 The base station shall set this field to the BCMC program
 26 identifier of this program.

27 BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

28 The base station shall set this field to the length in bits of the
 29 BCMC_FLOW_DISCRIMINATOR of this program.

30 NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators.

31 The length of this field shall be determined by the value of the
 32 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
 33 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
 34 is omitted; otherwise, the length of this field shall be
 35 BCMC_FLOW_DISCRIMINATOR_LEN bits.

36 The base station shall set this field to the number of flow
 37 discriminators included for this program minus one.

1 If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include
 2 NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;
 3 otherwise, the base station shall include 1 occurrence of the following variable length
 4 record:

5 **BCMC_FLOW_DISCRIMINATOR** – BMCB 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 base station shall set this field to the discriminator of the
 12 BMCB flow.

13 **SAME_AS_PREVIOUS_BCMB_FLOW** – Same As Previous BMCB Flow Identifier.

14 If **CLEAR_RETRY_DELAY**, **BCMB_REASON** and
 15 **BCMB_RETRY_DELAY** are the same for this **BCMB_FLOW_ID**
 16 (see 2.6.13.11) as for the previous **BCMB_FLOW_ID**, the base
 17 station shall set this field to '1'; otherwise, the base station
 18 shall set this field to '0'.

19 **CLEAR_RETRY_DELAY** - Clear retry delay indicator

20 If **SAME_AS_PREVIOUS_BCMB_FLOW** is set to '1', the base
 21 station shall omit this field; otherwise, the base station shall
 22 set this field as follows:

23 The base station shall set this field to '1' to indicate that the
 24 mobile station should clear retry delay associated with this
 25 BMCB Flow; otherwise the base station shall set this field to
 26 '0'.

27 **BCMB_REASON** - BMCB reason.

28 If **SAME_AS_PREVIOUS_BCMB_FLOW** is set to '1' or if
 29 **CLEAR_RETRY_DELAY** is set to '1', the base station shall omit
 30 this field; otherwise, the base station shall set this field as
 31 follows:

32 The base station shall set this field as specified in Table
 33 3.7.4.10-1 to indicate the purpose for this order.

34 **BCMB_RETRY_DELAY** - BMCB retry delay.

35 If the **BCMB_REASON** field is not included or is included and
 36 is not set to '0101', 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 the duration of the
 40 delay interval, as shown in Table 3.7.4.10-2, during which the
 41 mobile station is not permitted to request this
 42 **BCMB_FLOW_ID**. The base station shall not set this field to
 43 '00000000'.

44

1			The base station shall set this field to the maximum system
2			time, in units of time specified by MAX_RSC_END_TIME_UNIT
3			(modulo 16), at which the mobile station is to exit the reduced
4			slot cycle mode.
5	REQ_RSCI	-	Requested reduced slot cycle index.
6			If ORDQ is equal to '00000000' and RSC_MODE_SUPPORTED
7			is equal to '1', the base station shall set this field as specified
8			in Table 2.7.1.3.2.1-8 to the reduced slot cycle index value
9			that it is requesting the mobile station to operate with;
10			otherwise, the base station shall omit this field.
11	IGNORE_QPCH	-	Ignore QPCH indicators.
12			If RSC_MODE_SUPPORTED 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 '1' to indicate to the
16			mobile station that it is not to check its assigned paging
17			indicators on the QPCH while operating in the reduced slot
18			cycle mode if the reduced slot cycle index is -3 or -4;
19			otherwise, the base station shall set this field to '0'.
20	RER_MODE_INCL	-	Radio environment reporting mode information included
21			indicator.
22			If radio environment reporting mode related fields are
23			included in this message, the base station shall set this field
24			to '1'; otherwise, the base station shall set this field to '0'.
25	RER_MODE_ENABLED	-	Radio environment reporting mode enabled indicator.
26			If RER_MODE_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			If the radio environment reporting mode is enabled in this
30			message, the base station shall set this field to '1'; otherwise,
31			the base station shall set this field to '0'.
32	RER_MAX_NUM_MSG_IDX	-	Maximum number of <i>Radio Environment Messages</i>
33			permitted while in radio environment reporting mode index.
34			If RER_MODE_ENABLED is not included, or is included and
35			set to '0', the base station shall omit this field; otherwise, the
36			base station shall include this field and set it as follows:
37			The base station shall set this field to the maximum number
38			of <i>Radio Environment Messages</i> that the mobile station is
39			allowed to transmit while in radio environment reporting
40			mode, expressed as $2^{\text{RER_MAX_NUM_MSG_IDX}}$ where $0 \leq$
41			$\text{RER_MAX_NUM_MSG_IDX} \leq 6$. If the mobile station is
42			allowed to transmit an unlimited number of <i>Radio</i>
43			<i>Environment Messages</i> , then the base station shall set this
44			field to '111'.

- 1 RER_TIME - Radio environment report timer value.
- 2 If RER_MODE_ENABLED is not included, or is included and
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 the value of the radio-
6 environment report timer, expressed as 2^{RER_TIME} where $0 \leq$
7 RER_TIME ≤ 6 and in units of RER_TIME_UNIT. If the value
8 of the radio-environment report timer is infinite, then the base
9 station shall set this field to '111'.
- 10 RER_TIME_UNIT - Radio environment report timer value units.
- 11 If RER_MODE_ENABLED is included and set to '1', and
12 RER_TIME is not set to '111', the base station shall include
13 this field and shall set it according to Table 3.7.3.3.2.34-5;
14 otherwise, the base station shall omit this field.
- 15 MAX_RER_PILOT_LIST_SIZE - Maximum number of pilots to maintain in
16 RER_PILOT_LIST.
- 17 If RER_MODE_ENABLED is not included, or is included and
18 set to '0', the base station shall omit this field; otherwise, the
19 base station shall include this field and set it as follows:
- 20 The base station shall set this field to the maximum number
21 of pilots that the mobile station is to maintain in
22 RER_PILOT_LIST (see [4]). The base station shall set this field
23 to a value in the range 1 to 6 inclusive.
- 24 TKZ_MODE_INCL - Tracking zone mode information included indicator.
- 25 If tracking zone mode related fields are included in this
26 message, the base station shall set this field to '1'; otherwise,
27 the base station shall set this field to '0'.
- 28 TKZ_MODE_ENABLED - Tracking zone mode enabled indicator.
- 29 If TKZ_MODE_INCL is set to '0', the base station shall omit
30 this field; otherwise, the base station shall include this field
31 and set it as follows:
- 32 If the tracking zone mode is enabled 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 TKZ_MAX_NUM_MSG_IDX - Maximum number of *Radio Environment Messages*
36 permitted while in tracking zone mode index.
- 37 If TKZ_MODE_ENABLED is not included, or 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:

- 1 The base station shall set this field to the maximum number
 2 of *Radio Environment Messages* that the mobile station is
 3 allowed to transmit while in tracking zone mode, expressed as
 4 $2^{TKZ_MAX_NUM_MSG_IDX}$ where $0 \leq TKZ_MAX_NUM_MSG_IDX \leq$
 5 6. If the mobile station is allowed to transmit an unlimited
 6 number of *Radio Environment Messages*, then the base station
 7 shall set this field to '111'.
- 8 **TKZ_UPDATE_PRD** - Tracking zone update period.
- 9 If **TKZ_MODE_ENABLED** is not included, or 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 such that the desired
 13 tracking zone update timer value is $2^{TKZ_UPDATE_PRD+6}$
 14 seconds. If the value of the timer is infinite, then the base
 15 station shall set this field to '1111'.
- 16 **TKZ_LIST_LEN** - Tracking zone list length.
- 17 If **TKZ_MODE_ENABLED** is not included, or is included and
 18 set to '0', the base station shall omit this field; otherwise, the
 19 base station shall include this field and set it as follows:
- 20 The base station shall set this field to the length of the
 21 tracking zone list minus one.
- 22 **TKZ_TIMER** - Tracking zone timer.
- 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 value of the tracking
 27 zone timer (in units of seconds) minus one.
- 28

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

Table 3.7.4.12-2. Service Status Values

SERVICE_STATUS Value (binary)	Service Status
000	Service request accepted
001	Service request rejected
All other values are reserved.	

2

RESERVED - Reserved bits.

3

4

5

6

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'.

7

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*. On
3 the f-dsch, information records may be included in the *Alert with Information Message*, the
4 *Flash with Information Message*, the *Extended Alert with Information Message*, the *Extended*
5 *Flash with Information Message*, the *Service Request Message*, the *Service Response*
6 *Message*, the *Service Connect Message*, the *General Handoff Direction Message*, and the
7 *Universal Handoff Direction Message*. Table 3.7.5-1 lists the information record type values
8 that may be used with each message type. The following sections describe the contents of
9 each of the record types in detail.

1

Table 3.7.5-1. Information Record Types

Information Record	Record Type (binary)	Message Type	f-csch	f-dsch	P_REV_I N_USE 126
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, \geq 3
		SRPM	N	Y	
		SCM	N	Y	
		GHDM	N	Y	
		UHDM	N	Y	
Called Party Subaddress	00001000	FNM	Y	N	\geq 4
		AWI	N	Y	
		FWI	N	Y	
Calling Party Subaddress	00001001	FNM	Y	N	\geq 4
		AWI	N	Y	
		FWI	N	Y	

¹²⁶ P_REV_IN_USE equal to "All" implies all values applicable to the Band Class.

Information Record	Record Type (binary)	Message Type	f-csch	f-dsch	P_REV_I N_USE 126
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	
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

Information Record	Record Type (binary)	Message Type	f-csch	f-dsch	P_REV_I N_USE 126
<p>All other record type values are reserved.</p> <p>“AWI” refers to either the <i>Alert With Information Message</i> or the <i>Extended Alert With Information Message</i>.</p> <p>“FWI” refers to either the <i>Flash With Information Message</i> or the <i>Extended Flash With Information Message</i>.</p>					

1

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:

{

CHAR _i	8
-------------------	---

}

5

6 CHAR_i - 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

1 3.7.5.2 Called Party Number

2 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.

CHARi - Character.

The base stations shall include one occurrence of this field for each character in the calling 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'.

1 3.7.5.4 Connected Number

2 This information record identifies the responding party to a call.

3

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

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 connected 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 connected number, as defined in
13 [7], Section 4.5.9.

14 PI - Presentation indicator.

15 This field indicates whether or not the connected number
16 should be displayed.

17 The base station shall set this field to the PI value shown in
18 Table 2.7.4.4-1 corresponding to the presentation indicator,
19 as defined in [7], Section 4.5.9.

20 SI - Screening indicator.

21 This field indicates how the connected number was screened.

22 The base station shall set this field to the SI value shown in
23 Table 2.7.4.4-2 corresponding to the screening indicator
24 value, as defined in [7], Section 4.5.9.

25 CHARi - Character.

26 The base station shall include one occurrence of this field for
27 each character in the connected number. The base station
28 shall set each occurrence of this field to the ASCII
29 representation corresponding to the character, as specified in
30 [9], with the most significant bit set to '0'.

- 1 RESERVED - Reserved bits.
- 2 The base station shall set this field to '00000'.
- 3

1 3.7.5.5 Signal

2 This information record allows the network to convey information to a user by means of
3 tones and other alerting signals.

4 The Standard Alert is defined as SIGNAL_TYPE = '10', ALERT_PITCH = '00' and SIGNAL =
5 '000001'.

Type-Specific Field	Length (bits)
SIGNAL_TYPE	2
ALERT_PITCH	2
SIGNAL	6
RESERVED	6

7
8 SIGNAL_TYPE - Signal type.

9 The base station shall set this field to the signal type value
10 shown in Table 3.7.5.5-1.

11
12 **Table 3.7.5.5-1. Signal Type**

Description	SIGNAL_TYPE (binary)
Tone signal	00
ISDN Alerting	01
IS-54B Alerting	10
Reserved	11

13
14 ALERT_PITCH - Pitch of the alerting signal.

15 This field is ignored by the mobile station unless
16 SIGNAL_TYPE is '10', IS-54B Alerting.

17 If SIGNAL_TYPE is '10', the base station shall set this field to
18 the alert pitch shown in Table 3.7.5.5-2; otherwise, the base
19 station shall set this field to '00'.

1

Table 3.7.5.5-2. Alert Pitch

Description	ALERT_PITCH (binary)
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')

Description	SIGNAL (binary)
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')

Description	SIGNAL (binary)
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')

Description	SIGNAL (binary)
<i>No Tone: Off</i>	000000
<i>Long: 2.0 s on, 4.0 s off, repeating (standard alert)</i>	000001
<i>Short-Short: 0.8 s on, 0.4 s off, 0.8 s on, 4.0 s off, repeating</i>	000010
<i>Short-Short-Long: 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</i>	000011
<i>Short-Short-2: 1.0 s on, 1.0 s off, 1.0 s on, 3.0 s off, repeating.</i>	000100
<i>Short-Long-Short: 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.</i>	000101
<i>Short-Short-Short-Short: 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.</i>	000110
<i>PBX Long: 1.0 s on, 2.0 s off, repeating.</i>	000111
<i>PBX Short-Short: 0.4 s on, 0.2 s off, 0.4 s on, 2.0 off, repeating.</i>	001000
<i>PBX Short-Short-Long: 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.</i>	001001
<i>PBX Short-Long-Short: 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.</i>	001010
<i>PBX Short-Short-Short-Short: 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.</i>	001011
<i>Pip-Pip-Pip-Pip: 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.</i>	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

2

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.

1 If P_REV_IN_USE_s is less than eight, the mobile station shall
2 set this field as follows:

3 For a *Status Response Message*, the mobile station shall
4 set this field to the number of the multiplex option for the
5 Forward Fundamental Channel, Forward Dedicated
6 Control Channel, or both, if both are present (e.g., 1
7 corresponds to Multiplex Option 1).

8 For a *Service Request Message* and a *Service Response*
9 *Message*, the mobile station shall set this field to the
10 number of the multiplex option for the Forward
11 Fundamental Channel, Forward Dedicated Control
12 Channel, or both, if both are present.

13 If P_REV_IN_USE_s is greater than or equal to eight, the mobile
14 station shall set this field as follows:

15 For a *Status Response Message*, the mobile station shall
16 set this field to the number of the multiplex option for the
17 Forward Fundamental Channel, Forward Dedicated
18 Control Channel, or both (e.g., 1 corresponds to Multiplex
19 Option 1), according to the value as specified by
20 FCH_DCCH_MUX_OPTION_IND.

21 For a *Service Request Message* and a *Service Response*
22 *Message*, the mobile station shall set this field to the
23 number of the multiplex option for the Forward
24 Fundamental Channel, Forward Dedicated Control
25 Channel, or both, according to the value as specified by
26 FCH_DCCH_MUX_OPTION_IND.

27 If neither the Forward Fundamental Channel nor Forward
28 Dedicated Control Channel configuration is assigned, then
29 the mobile station shall set this field to 0.

30 If MOB_P_REV is less than eight, the base station shall set
31 this field as follows:

32 For a *Service Request Message* and a *Service Response*
33 *Message*, the base station shall set this field to the
34 number of the multiplex option for the Forward
35 Fundamental Channel, Forward Dedicated Control
36 Channel, or both, if both are present.

37 For a *Service Connect Message*, *General Handoff Direction*
38 *Message*, and a *Universal Handoff Direction Message*, the
39 base station shall set this field to the number of the
40 multiplex option for the Forward Fundamental Channel,
41 Forward Dedicated Control Channel, or both, if both are
42 present.

43 If MOB_P_REV is greater than or equal to eight, the base
44 station shall set this field 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
 4 Fundamental Channel, Forward Dedicated Control
 5 Channel, or both, according to the value as specified by
 6 FCH_DCCH_MUX_OPTION_IND.

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 Fundamental Channel,
 11 Forward Dedicated Control Channel, or both, according to
 12 the value as specified by FCH_DCCH_MUX_OPTION_IND.

13 If neither the Forward Fundamental Channel nor Forward
 14 Dedicated Control Channel configuration is assigned, the
 15 base station shall set this field to 0.

16 REV_MUX_OPTION - Reverse multiplex option.

17 If P_REV_IN_USE_s is less than eight, the mobile station shall
 18 set this field as follows:

19 For a *Status Response Message*, the mobile station shall
 20 set this field to the number of the multiplex option for the
 21 Reverse Fundamental Channel, Reverse Dedicated Control
 22 Channel, or both, if both are present (e.g., 1 corresponds
 23 to Multiplex Option 1).

24 For a *Service Request Message* and a *Service Response*
 25 *Message*, the mobile station shall set this field to the
 26 number of the multiplex option for the Reverse
 27 Fundamental Channel, Reverse Dedicated Control
 28 Channel, or both, if both are present.

29 If P_REV_IN_USE_s is greater than or equal to eight, the mobile
 30 station shall set this field as follows:

31 For a *Status Response Message*, the mobile station shall
 32 set this field to the number of the multiplex option for the
 33 Reverse Fundamental Channel, Reverse Dedicated Control
 34 Channel, or both [e.g., 1 corresponds to Multiplex Option
 35 1), according to the value as specified by
 36 FCH_DCCH_MUX_OPTION_IND.

37 For a *Service Request Message* and a *Service Response*
 38 *Message*, the mobile station shall set this field to the
 39 number of the multiplex option for the Reverse
 40 Fundamental Channel, Reverse Dedicated Control
 41 Channel, or both, according to the value as specified by
 42 FCH_DCCH_MUX_OPTION_IND.

43 If neither the Reverse Fundamental Channel nor Reverse
 44 Dedicated Control Channel configuration is assigned, the
 45 mobile station shall set this field to 0.

46

47 If MOB_P_REV is less than eight, the base station shall set
 48 this field 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 Reverse
 4 Fundamental Channel, Reverse Dedicated Control
 5 Channel, or both, if both are present.

6 For a *Service Connect Message*, *General Handoff Direction*
 7 *Message*, and a *Universal Handoff Direction Message*, the
 8 base station shall set this field to the number of the
 9 multiplex option for the Reverse Fundamental Channel,
 10 Reverse Dedicated Control Channel, or both, if both are
 11 present.

12 If MOB_P_REV is greater than or equal to eight, the base
 13 station shall set this field as follows:

14 For a *Service Request Message* and a *Service Response*
 15 *Message*, the base station shall set this field to the
 16 number of the multiplex option for the Reverse
 17 Fundamental Channel, Reverse Dedicated Control
 18 Channel, or both, according to the value as specified by
 19 FCH_DCCH_MUX_OPTION_IND.

20 For a *Service Connect Message*, *General Handoff Direction*
 21 *Message*, and a *Universal Handoff Direction Message*, the
 22 base station shall set this field to the number of the
 23 multiplex option for the Reverse Fundamental Channel,
 24 Reverse Dedicated Control Channel, or both, according to
 25 the value as specified by FCH_DCCH_MUX_OPTION_IND.

26 FOR_NUM_BITS - Set of number of bits per frame of the Forward Fundamental
 27 Channel.

28 The mobile station shall set this field as follows:

29 The mobile station shall use the Forward Fundamental
 30 Channel transmission set of number of bits per frame
 31 specified in 2.7.4.28 for the specified Forward Traffic
 32 Channel multiplex option.

33 For a *Status Response Message*, the mobile station shall
 34 set the subfields corresponding to the Forward Traffic
 35 Channel transmission set of number of bits per frame of
 36 the current service configuration to '1', and shall set the
 37 remaining subfields to '0'. If FOR_MUX_OPTION is equal
 38 to 1 or 2, the mobile station shall set RESERVED to
 39 '0000'. If the Forward Fundamental Channel configuration
 40 is not specified in this record, then the mobile station
 41 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 configuration
 9 is not specified in this record, then the mobile station
 10 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 this
 25 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 remaining
 32 subfields to '0'. If FOR_MUX_OPTION is equal to 1 or 2,
 33 the base station shall set RESERVED to '0000'. If the
 34 Forward Fundamental Channel configuration is not
 35 specified in this record, then the base station shall set this
 36 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 transmission
 11 set of number of bits per frame of the proposed service
 12 configuration to '1', and shall set the remaining subfields
 13 to '0'. If REV_MUX_OPTION is equal to 1 or 2, the mobile
 14 station shall set RESERVED to '0000'.

15 The base station shall set this field as follows:

16 The base station shall set this field to the Reverse
 17 Fundamental Channel transmission set of number of bits
 18 per frame specified in 2.7.4.28 for the specified Reverse
 19 Traffic Channel multiplex option.

20 For a *Service Request Message* or a *Service Response*
 21 *Message*, the base station shall set the subfields
 22 corresponding to the Reverse Fundamental Channel
 23 transmission set of number of bits per frame of the
 24 proposed service configuration to '1', and shall set the
 25 remaining subfields to '0'. If REV_MUX_OPTION is equal
 26 to 1 or 2, the base station shall set RESERVED to '0000'.

27 For a *Service Connect Message*, *General Handoff Direction*
 28 *Message*, and a *Universal Handoff Direction Message*, the
 29 base station shall set the subfields corresponding to the
 30 Reverse Fundamental Channel transmission set of
 31 number of bits per frame of the actual service
 32 configuration to be used to '1', and shall set the remaining
 33 subfields to '0'. If REV_MUX_OPTION is equal to 1 or 2,
 34 the base station shall set RESERVED to '0000'.

35 NUM_CON_REC - Number of service option connection records.

36 The mobile station shall set this field as follows:

37 The mobile station shall set this field to the number of
 38 service option connection records included in the
 39 message.

40 The base station shall set this field as follows:

41 The base station shall set this field to the number of
 42 service option connection records included in the
 43 message.

44 For a *Status Response Message*, the mobile station shall include one occurrence of the
 45 following variable-length record for each service option connection of the current service
 46 configuration. For a *Service Request Message* and a *Service Response Message*, the mobile

1 station shall include one occurrence of the following variable-length record for each service
2 option connection of the proposed service configuration.

3 For a *Service Request Message* or a *Service Response Message*, the base station shall
4 include one occurrence of the following variable-length record for each service option
5 connection of the proposed service configuration.

6 For a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal*
7 *Handoff Direction Message*, the base station shall include one occurrence of the following
8 variable-length record for each service option connection of the actual service configuration
9 to be used.

10 RECORD_LEN - Service option connection record length.

11 The mobile station shall set this field as follows:

12 The mobile station shall set this field to the number of
13 octets included in this service option connection record
14 including this field.

15 The base station shall set this field as follows:

16 The base station shall set this field to the number of
17 octets included in this service option connection record
18 including this field.

19 CON_REF - Service option connection reference.

20 The mobile station shall set this field as follows:

21 For a *Status Response Message*, the mobile station shall
22 set this field to the service option connection reference.

23 For a *Service Request Message* and a *Service Response*
24 *Message*, if the service option connection is part of the
25 current service configuration, the mobile station shall set
26 this field to the service option connection reference;
27 otherwise, the mobile station shall set this field to
28 '00000000'.

29 The base station shall set this field as follows:

30 For a *Service Request Message* or a *Service Response*
31 *Message*: if the service option connection is part of the
32 current service configuration, the base station shall set
33 this field to the service option connection reference;
34 otherwise, the base station shall set this field to
35 '00000000'.

36 For a *Service Connect Message*, *General Handoff Direction*
37 *Message*, and a *Universal Handoff Direction Message*, the
38 base station shall set this field to the service option
39 connection reference assigned to the service option
40 connection.

41 SERVICE_OPTION - Service option.

42 The mobile station shall set this field as follows:

1 For a *Status Response Message*, the mobile station shall
2 set this field to the service option in use with the service
3 option connection.

4 For a *Service Request Message* and a *Service Response*
5 *Message*, the mobile station shall set this field to the
6 service option to be used with the service option
7 connection.

8 The base station shall set this field as follows:

9 The base station shall set this field to the service option to
10 be used with the service option connection.

11 FOR_TRAFFIC - Forward Traffic Channel traffic type.

12 The mobile station shall set this field as follows:

13 For a *Status Response Message*, the mobile station shall
14 set this field to the FOR_TRAFFIC code shown in
15 Table 3.7.5.7-1 corresponding to the Forward Traffic
16 Channel traffic type in use with the service option
17 connection.

18 For a *Service Request Message* and a *Service Response*
19 *Message*, the mobile station shall set this field to the
20 FOR_TRAFFIC code shown in Table 3.7.5.7-1
21 corresponding to the Forward Traffic Channel traffic type
22 to be used with the service option connection.

23 The base station shall set this field as follows:

24 The base station shall set this field to the FOR_TRAFFIC
25 code shown in Table 3.7.5.7-1 corresponding to the
26 Forward Traffic Channel traffic type to be used with the
27 service option connection.

28

1

Table 3.7.5.7-1. FOR_TRAFFIC Codes

FOR_TRAFFIC (binary)	Description
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

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.

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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.

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The base station shall set this field as follows:

16

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.

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1

Table 3.7.5.7-2. REV_TRAFFIC Codes

REV_TRAFFIC (binary)	Description
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

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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.

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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.

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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.

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Table 3.7.5.7-3. User information Encryption Modes

UI_ENCRYPT_MODE Field (binary)	Encryption Mode Used
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 set this field to the service reference identifier in use.

5

6

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field as follows:

7

8

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.

9

10

1 If the service option connection is not a part of the current
 2 service configuration, the mobile station shall perform the
 3 following:

- 4 – If this service option connection request is initiated by
 5 the base station, the mobile station shall set this field
 6 to the value sent by the base station.
- 7 – If this service option connection request is initiated by
 8 the mobile station, the mobile station shall perform
 9 the following: if the service instance provides a service
 10 reference identifier, the mobile station shall set this
 11 field to the service reference identifier specified by the
 12 service instance; otherwise, the mobile station shall
 13 set this field to the smallest unused service reference
 14 identifier value between 1 and 6 inclusive.

15 The base station shall set this field as follows:

16 For a *Service Request Message*, a *Service Response*
 17 *Message*, a *Service Connect Message*, a *General Handoff*
 18 *Direction Message*, or a *Universal Handoff Direction*
 19 *Message*, the base station shall set this field as follows:

20 If the service option connection is a part of the current
 21 service configuration, the base station shall set this field
 22 to the service reference identifier in use.

23 If the service option connection is not a part of the current
 24 service configuration, the base station shall perform the
 25 following:

- 26 – If this service option connection request is initiated by
 27 the mobile station, the base station shall set this field
 28 to the value sent by the mobile station.
- 29 – If this service option connection request is initiated by
 30 the base station, the base station shall perform the
 31 following: if the service instance provides a service
 32 reference identifier, the base station shall set this field
 33 to the service reference identifier specified by the
 34 service instance; otherwise, the base station shall set
 35 this field to the highest unused service reference
 36 identifier value between 1 and 6 inclusive.

37 RLP_INFO_INCL - RLP information included indicator.

38 The mobile station shall set this field as follows:

39 The mobile station shall set this field to '1' if the
 40 RLP_BLOB field is included in this record; otherwise, it
 41 shall set this field to '0'.

42 The base station shall set this field as follows:

43 The base station shall set this field to '1' if the RLP_BLOB
 44 field is included in this record; otherwise, it shall set this
 45 field to '0'.

- 1 RLP_BLOB_LEN - RLP information block of bits length.
- 2 The mobile station shall set this field as follows:
- 3 If the RLP_INFO_INCL field is set to '0', the mobile station
- 4 shall omit this field; otherwise, it shall include this field
- 5 and set it as follows:
- 6 The mobile station shall set this field to the size of the
- 7 RLP_BLOB field in integer number of octets.
- 8 The base station shall set this field as follows:
- 9 If the RLP_INFO_INCL field is set to '0', the base station
- 10 shall omit this field; otherwise, it shall include this field
- 11 and set it as follows:
- 12 The base station shall set this field to the size of the
- 13 RLP_BLOB field in integer number of octets.
- 14 RLP_BLOB - Radio Link Protocol block of bits.
- 15 The mobile station shall set this field as follows:
- 16 If the RLP_INFO_INCL field is set to '0', the mobile station
- 17 shall omit this field; otherwise, the mobile station shall
- 18 include this field and set it as follows:
- 19 For a *Status Response Message*, the mobile station shall
- 20 set this field to the Radio Link Protocol block of bits for
- 21 this service option connection.
- 22 For a *Service Request Message* or *Service Response*
- 23 *Message*, the mobile station shall set this field to the
- 24 proposed Radio Link Protocol block of bits for this service
- 25 option connection, and shall add '0' bits to the end of the
- 26 field as needed in order to make the length of this field
- 27 equal to an integer number of octets.
- 28 The base station shall set this field as follows:
- 29 If the RLP_INFO_INCL field is set to '0', the base station
- 30 shall omit this field; otherwise, the base station shall
- 31 include this field and set it as follows:
- 32 The base station shall set this field to the Radio Link
- 33 Protocol block of bits for this service option connection,
- 34 and shall add '0' bits to the end of the field as needed in
- 35 order to make the length of this field equal to an integer
- 36 number of octets.
- 37 QOS_PARMS_INCL - Presence indicator for the QoS parameters.
- 38 The mobile station shall set this field as follows:

1 The base station shall set this field as follows:

2 If QOS_PARMS_INCL is set to '1', the base station shall
 3 include the minimum number of '0' bits necessary to
 4 ensure that the combined length of the QOS_PARMS field
 5 and of this field is an integer number of octets; otherwise,
 6 the base station shall omit this field.

7 RESERVED - Reserved bits.

8 The mobile station shall set this field as follows:

9 The mobile station shall add reserved bits as needed in
 10 order to make the length of the entire record equal to an
 11 integer number of octets. The mobile station shall set
 12 these bits to '0'.

13 The base station shall set this field as follows:

14 The base station shall add reserved bits as needed in
 15 order to make the length of this record equal to an integer
 16 number of octets. The base station shall set these bits to
 17 '0'.

18 FCH_CC_INCL - Channel configuration for the Fundamental Channel included
 19 indicator.

20 The mobile station shall set this field as follows:

21 The mobile station shall set this field to '1', if
 22 Fundamental Channel Configuration information is
 23 included in the record; otherwise, the mobile station shall
 24 set this field to '0' to indicate the current values of
 25 Channel configuration for the Fundamental Channel are
 26 to be used.

27 The base station shall set this field as follows:

28 The base station shall set this field to '1', if the channel
 29 configuration information for the Fundamental Channel is
 30 included in this Service Configuration Record; otherwise,
 31 the base station shall set this field to '0' to indicate the
 32 current values of Channel configuration for the
 33 Fundamental Channel are to be used.

34 FCH_FRAME_SIZE - Fundamental Channel frame size supported indicator.

35 The mobile station shall set this field as follows:

36 If FCH_CC_INCL field is set to '1', the mobile station shall
 37 include this field and set it as described below; otherwise,
 38 the mobile station shall omit this field.

1 For a *Status Response Message*, the mobile station shall
 2 set this field to '1', if the 5ms frame size is used in the
 3 Forward Fundamental Channel (if specified in this record)
 4 and Reverse Fundamental Channel, in addition to the
 5 20ms frame size, for the current service configuration;
 6 otherwise, the mobile station shall set this field to '0'.

7 For a *Service Request Message* or a *Service Response*
 8 *Message*, the mobile station shall set this field to '1' if the
 9 5 ms frame size is used in the Forward Fundamental
 10 Channel (if specified in this record) and Reverse
 11 Fundamental Channel, in addition to the 20 ms frame
 12 size, for the proposed service configuration; otherwise the
 13 mobile station shall set this field to '0'

14 The base station shall set this field as follows:

15 If the FCH_CC_INCL field is set to '0', the base station
 16 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' if the service
 19 configuration includes the use of 5 ms frame size in
 20 addition to 20ms frame size for the Forward Fundamental
 21 Channel (if specified in this record) and Reverse
 22 Fundamental Channel; otherwise, the base station shall
 23 set this field to '0'.

24 FOR_FCH_RC - Forward Fundamental Channel Radio Configuration.

25 The mobile station shall set this field as follows:

26 If FCH_CC_INCL field is set to '1', the mobile station shall
 27 include this field and set it as described below; otherwise,
 28 the mobile station shall omit this field.

29 For a *Status Response Message*, the mobile station shall
 30 set this field to the Forward Fundamental Channel Radio
 31 Configuration (see [2]) for the current service
 32 configuration. If the Forward Fundamental Channel
 33 configuration is not specified in this record, then the
 34 mobile station shall set this field to 0.

35 For a *Service Request Message* or *Service Response*
 36 *Message*, the mobile station shall set this field to the
 37 Forward Fundamental Channel Radio Configuration for
 38 the proposed service configuration. If the Forward
 39 Fundamental Channel configuration is not specified in
 40 this record, then the mobile station shall set this field to
 41 0.

42 The base station shall set this field as follows:

43 If the FCH_CC_INCL field is set to '0', the base station
 44 shall omit this field; otherwise, the base station shall
 45 include this field and set it as follows:

1 For a *Service Request Message* or a *Service Response*
 2 *Message*, the base station shall set this field to the
 3 Forward Fundamental Channel Radio Configuration (see
 4 [2]) in the proposed service configuration. If the Forward
 5 Fundamental Channel configuration is not specified in
 6 this record, then the base station shall set this field to 0.

7 For a *Service Connect Message*, a *General Handoff*
 8 *Direction Message*, or a *Universal Handoff Direction*
 9 *Message*, the base station shall set this field to the actual
 10 Forward Fundamental Channel Radio Configuration to be
 11 used. If the Forward Fundamental Channel configuration
 12 is not specified in this record, then the base station shall
 13 set this field to 0.

14 REV_FCH_RC - Reverse Fundamental Channel Radio Configuration.

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 field to the Reverse Fundamental Channel Radio
 21 Configuration (see [2]) for the current service
 22 configuration.

23 For a *Service Request Message* or a *Service Response*
 24 *Message*, the mobile station shall set this field to the
 25 Reverse Fundamental Channel Radio Configuration for
 26 the proposed service configuration.

27 The base station shall set this field as follows:

28 If the FCH_CC_INCL field is set to '0', the base station
 29 shall omit this field; otherwise, the base station shall
 30 include this field and set it as follows:

31 For a *Service Request Message* or a *Service Response*
 32 *Message*, the base station shall set this field to the
 33 Reverse Fundamental Channel Radio Configuration (see
 34 [2]) in the proposed service configuration.

35 For a *Service Connect Message*, a *General Handoff*
 36 *Direction Message*, or a *Universal Handoff Direction*
 37 *Message*, the base station shall set this field to the actual
 38 Reverse Fundamental Channel Radio Configuration to be
 39 used.

40 DCCH_CC_INCL - Channel configuration for the Dedicated Control Channel
 41 included indicator.

42 The mobile station shall set this field as follows:

43 The mobile station shall set this field to '1', if DCCH
 44 channel configuration information is included in this
 45 record; otherwise, the mobile station shall set this field to
 46 '0' to indicate the current values of Channel configuration
 47 for the Dedicated Control Channel are to be used.

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The base station shall set this field as follows:

The base station shall set this field to '1', if channel configuration information for the Dedicated Control Channel is included in this Service Configuration Record; otherwise, the base station shall set this field to '0' to indicate the current values of Channel configuration for the Dedicated Control Channel are to be used.

DCCH_FRAME_SIZE - Dedicated Control Channel frame size.

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 frame size, as defined in Table 3.7.5.7-4, for the current service configuration.

For a *Service Request Message* or a *Service Response Message*, the mobile station shall set this field to the frame size, as defined in Table 3.7.5.7-4, for the proposed service configuration.

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

DCCH_FRAME_SIZE (binary)	Description
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.

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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:

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 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 actual Forward Dedicated Control Channel Radio Configuration to be used (see [2]). 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 base station shall set this field to the Forward Dedicated Control Channel Radio Configuration in the proposed service configuration. If the Forward Dedicated Control Channel configuration is not specified in this record, then the base station shall set this field to 0.

REV_DCCH_RC - Reverse 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 Reverse Dedicated Control Channel Radio Configuration (see [2]) for the current service configuration.

1 For a *Service Request Message* or a *Service Response*
2 *Message*, the mobile station shall set this field to the
3 Reverse Dedicated Control Channel Radio Configuration
4 for the proposed service configuration.

5 The base station shall set this field as follows:

6 If the DCCH_CC_INCL field is set to '0', the base station
7 shall omit this field; otherwise, the base station shall
8 include this field and set it as follows:

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 Dedicated Control Channel Radio Configuration
13 to be used (see [2]).

14 For a *Service Request Message* or a *Service Response*
15 *Message*, the base station shall set this field to the
16 Reverse Dedicated Control Channel Radio Configuration
17 for the proposed service configuration.

18 FOR_SCH_CC_INCL - Channel configuration for the Forward Supplemental Channel
19 included indicator.

20 The mobile station shall set this field as follows:

21 The mobile station shall set this field to '1', if the Forward
22 Supplemental Channel Configuration information is
23 included; otherwise, the mobile station shall set this field
24 to '0' to indicate the current values of Channel
25 configuration for the Forward Supplemental Channel are
26 to be used.

27 The base station shall set this field as follows:

28 The base station shall set this field to '1', if the channel
29 configuration information for the Forward Supplemental
30 Channel is included in this Service Configuration Record;
31 otherwise, the base station shall set this field to '0' to
32 indicate the current values of Channel configuration for
33 the Forward Supplemental Channel are to be used.

34 NUM_FOR_SCH - Number of Forward Supplemental Channels.

35 The mobile station shall set this field as follows:

36 If FOR_SCH_CC_INCL field is set to '1', the mobile station
37 shall include this field and set it as describe below;
38 otherwise, the mobile station shall omit this field.

39 For a *Status Response Message*, the mobile station shall
40 set this field to the number of Forward Supplemental
41 Channels for the current service configuration and include
42 one occurrence of the following three-field SCH record for
43 each Supplemental Channel Configuration.

1 For a *Service Request Message* or a *Service Response*
 2 *Message*, the mobile station shall set this field to the
 3 number of Forward Supplemental Channels for the
 4 proposed service configuration and include one
 5 occurrence of the following three-field SCH record for each
 6 Supplemental Channel Configuration.

7 The base station shall set this field as follows:

8 If the FOR_SCH_CC_INCL field is set to '0', the base
 9 station shall omit this field; otherwise, the base station
 10 shall set this field to the number of Forward Supplemental
 11 Channels associated with this service configuration.

12 If the FOR_SCH_CC_INCL field is set to '1', the base
 13 station shall not set this field to '00'.

14 If the NUM_FOR_SCH field is present, the base station shall include one occurrence of the
 15 following three-field record for each Forward Supplemental Channel included in this
 16 record:

17 FOR_SCH_ID - Forward Supplemental Channel Identification

18 The mobile station shall set this field as follows:

19 The mobile station shall set this field to the identification
 20 of the Supplemental Channel included in this Forward
 21 Supplemental Channel Configuration record.

22 The mobile station shall set this field to the Supplemental
 23 Channel identifier, shown in Table 3.7.5.7-5.

24 **Table 3.7.5.7-5. SCH Identifier**

FOR_SCH_ID REV_SCH_ID (binary)	Description
00	Supplemental Channel 0
01	Supplemental Channel 1
10-11	Reserved

25 The base station shall set this field as follows:

26 The base station shall set this field to the identifier of the
 27 Forward Supplemental Channel pertaining to this record.

28 The base station shall set this field to the Supplemental
 29 Channel identifier, shown in Table 3.7.5.7-5.

30

31 FOR_SCH_MUX - Forward Supplemental Channel Multiplex Option.

32 The mobile station shall set this field as follows:

33 The mobile station shall set this field to the Multiplex
 34 Option associated with the maximum data rate for this
 35 Forward Supplemental Channel (see [3]).

1 For a *Service Request Message* or a *Service Response*
 2 *Message*, the mobile station shall set this field to the
 3 number of Reverse Supplemental Channels for the
 4 proposed service configuration and include one
 5 occurrence of the following three-field record for each
 6 reverse Supplemental Channel Configuration.

7 The base station shall set this field as follows:

8 If the REV_SCH_CC_INCL field is set to '0', the base
 9 station shall omit this field; otherwise, the base station
 10 shall set this field to the number of Reverse Supplemental
 11 Channels associated with this service configuration.

12 If the REV_SCH_CC_INCL field is set to '1', the base
 13 station shall not set this field to '00'.

14 If the NUM_REV_SCH field is present, the base station shall include one occurrence of the
 15 following three-field record for each Reverse Supplemental Channel included in this record:

16 REV_SCH_ID - Reverse Supplemental Channel Identification

17 The mobile station shall set this field as follows:

18 The mobile station shall set this field to the identifier of
 19 the Supplemental Channel included in this Reverse
 20 Supplemental Channel Configuration record.

21 The mobile station shall set this field to the Supplemental
 22 Channel identifier, shown in Table 3.7.5.7-5.

23 The base station shall set this field as follows:

24 The base station shall set this field to the identifier of the
 25 Reverse Supplemental Channel pertaining to this record.

26 The base station shall set this field to the Supplemental
 27 Channel identifier, shown in Table 3.7.5.7-5.

28 REV_SCH_MUX - Reverse Supplemental Channel Multiplex Option

29 The mobile station shall set this field as follows:

30 The mobile station shall set this field to the Multiplex
 31 Option associated with the maximum data rate for this
 32 Reverse Supplemental Channel (see [3]).

33 The base station shall set this field as follows:

34 The base station shall set this field to the Multiplex Option
 35 associated with the maximum data rate for this Reverse
 36 Supplemental Channel (see [3]).

37 SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

38 The mobile station shall set this field as follows:

1 The mobile station shall set this field to the subfields of
 2 the Channel Configuration record defined in 3.7.5.7.1, for
 3 this Reverse Supplemental Channel included in the
 4 service configuration.

5 The base station shall set this field as follows:

6 The base station shall set this field as defined in 3.7.5.7.1
 7 for this Reverse Supplemental Channel.

8 **FCH_DCCH_MUX_OPTION_IND** – FCH and DCCH Multiplex Option Indicator

9 The mobile station shall set this field according to Table
 10 3.7.5.7-6.

11 The base station shall set this field according to Table 3.7.5.7-
 12 6.

13

14 **Table 3.7.5.7-6. FCH_DCCH_MUX_OPTION_IND USAGE**

FCH_DCCH_MUX_OPTION_IND	Description
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.

15

16 **FOR_DCCH_MUX_OPTION** – Forward DCCH Multiplex Option.

17 If FCH_DCCH_MUX_OPTION_IND is set to a value other than
 18 '11', the mobile station shall omit this field; otherwise, the
 19 mobile station shall include this field and set as follows:

1 For a *Status Response Message*, the mobile station shall
 2 set this field to the number of the multiplex option for the
 3 Forward Dedicated Control Channel (e.g., 1 corresponds
 4 to Multiplex Option 1). 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 Request Message* and a *Service Response*
 8 *Message*, the mobile station shall set this field to the
 9 number of the multiplex option for the Forward Dedicated
 10 Control Channel. If the Forward Dedicated Control
 11 Channel configuration is not specified in this record, then
 12 the mobile station shall set this field to 0.

13 If FCH_DCCH_MUX_OPTION_IND is set to a value other than
 14 '11', the base station shall omit this field; otherwise, the base
 15 station shall include this field and set as follows:

16 For a *Service Request Message* and a *Service Response*
 17 *Message*, the base station shall set this field to the
 18 number of the multiplex option for the Forward Dedicated
 19 Control Channel. If the Forward Dedicated Control
 20 Channel configuration is not specified in this record, then
 21 the mobile station shall set this field to 0.

22 For a *Service Connect Message*, *General Handoff Direction*
 23 *Message*, and a *Universal Handoff Direction Message*, the
 24 base station shall set this field to the number of the
 25 multiplex option for the Forward Dedicated Control
 26 Channel. If the Forward Dedicated Control Channel
 27 configuration is not specified in this record, then the base
 28 station shall set this field to 0.

29 REV_DCCH_MUX_OPTION – Reverse DCCH Multiplex Option.

30 If FCH_DCCH_MUX_OPTION_IND is set to a value other than
 31 '11', the mobile station shall omit this field; otherwise, the
 32 mobile station shall include this field and set as follows:

33 For a *Status Response Message*, the mobile station shall
 34 set this field to the number of the multiplex option for the
 35 Reverse Dedicated Control Channel (e.g., 1 corresponds to
 36 Multiplex Option 1).

37 For a *Service Request Message* and a *Service Response*
 38 *Message*, the mobile station shall set this field to the
 39 number of the multiplex option for the Reverse Dedicated
 40 Control Channel.

41 If DCCH_MUX_OPTION_INCL is set to a value other than '11',
 42 the base station shall omit this field; otherwise, the base
 43 station shall include this field and set as follows:

44 For a *Service Request Message* and a *Service Response*
 45 *Message*, the base station shall set this field to the
 46 number of the multiplex option for the Reverse Dedicated
 47 Control Channel.

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 number of the
 4 multiplex option for the Reverse Dedicated Control
 5 Channel.

6 FOR_PDCH_CC_INCL - Channel configuration for the Forward Packet Data Channel
 7 included indicator.

8 The mobile station shall set this field as follows:

9 The mobile station shall set this field to '1', if channel
 10 configuration information for the Forward Packet Data
 11 Channel is included in this Service Configuration Record;
 12 otherwise, the mobile station shall set this field to '0' to
 13 indicate the current values of Channel configuration for
 14 the Forward Packet Data Channel are to be used.

15 The base station shall set this field as follows:

16 The base station shall set this field to '1', if channel
 17 configuration information for the Forward Packet Data
 18 Channel is included in this Service Configuration Record;
 19 otherwise, the base station shall set this field to '0' to
 20 indicate the current values of Channel configuration for
 21 the Forward Packet Data Channel are to be used.

22 FOR_PDCH_MUX_OPTION - Forward Packet Data Channel Multiplex Option.

23 The mobile station shall set this field as follows:

24 If FOR_PDCH_CC_INCL is set to '0', then the mobile
 25 station shall omit this field; otherwise, the mobile station
 26 shall set this field to the Multiplex Option associated with
 27 the Forward Packet Data Channel (see [3]).

28 The base station shall set this field as follows:

29 If FOR_PDCH_CC_INCL is set to '0', then the base station
 30 shall omit this field; otherwise, the base station shall set
 31 this field to the Multiplex Option associated with the
 32 Forward Packet Data Channel (see [3]).

33 FOR_PDCH_RC - Forward Packet Data Channel Radio Configuration.

34 The mobile station shall set this field as follows:

35 If FOR_PDCH_CC_INCL is set to '0', then the mobile
 36 station shall omit this field; otherwise, the mobile station
 37 shall include this field and set it as follows:

38 For a *Status Response Message*, the mobile station shall
 39 set this field to the Forward Packet Data Channel Radio
 40 Configuration (see [2]) for the current service
 41 configuration.

1 For a *Service Request Message* or a *Service Response*
 2 *Message*, the mobile station shall set this field to the
 3 Forward Packet Data Channel Radio Configuration (see
 4 [2]) for the proposed service configuration.

5 The base station shall set this field as follows:

6 If FOR_PDCH_CC_INCL field is set to '0', then the base
 7 station shall omit this field; otherwise, the base station
 8 shall include this field and set it as follows:

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 Forward Packet Data Channel Radio Configuration to be
 13 used (see [2]).

14 For a *Service Request Message* or a *Service Response Message*,
 15 the base station shall set this field to the Forward Packet
 16 Data Channel Radio Configuration (see [2]) for the proposed
 17 service configuration.

18 REV_PDCH_CC_INCL - Channel configuration for the Reverse Packet Data Channel
 19 included indicator.

20 The mobile station shall set this field as follows:

21 The mobile station shall set this field to '1', if channel
 22 configuration information for the Reverse Packet Data
 23 Channel is included in this Service Configuration Record;
 24 otherwise, the mobile station shall set this field to '0' to
 25 indicate the current values of Channel configuration for
 26 the Reverse Packet Data Channel are to be used.

27 The base station shall set this field as follows:

28 The base station shall set this field to '1', if channel
 29 configuration information for the Reverse Packet Data
 30 Channel is included in this Service Configuration Record;
 31 otherwise, the base station shall set this field to '0' to
 32 indicate the current values of Channel configuration for
 33 the Reverse Packet Data Channel are to be used.

34 REV_PDCH_MUX_OPTION_HIGH_RATE - Reverse Packet Data Channel Multiplex Option
 35 for Higher Data Rates.

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:

40 For a *Status Response Message*, the mobile station shall
 41 set this field to the Multiplex Option for Higher Data Rates
 42 associated with the Reverse Packet Data Channel (see [3])
 43 for the current service configuration.

1 For a *Service Request Message* or a *Service Response*
2 *Message*, the mobile 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 proposed
5 service configuration.

6 The base station shall set this field as follows:

7 If REV_PDCH_CC_INCL field is set to '0', then the base
8 station shall omit this field; otherwise, the base station
9 shall include this field and set it as follows:

10 For a *Service Connect Message*, a *General Handoff*
11 *Direction Message*, or a *Universal Handoff Direction*
12 *Message*, the base station shall set this field to the actual
13 Multiplex Option for Higher Data Rates associated with
14 the Reverse Packet Data Channel to be used (see [3]).

15 For a *Service Request Message* or a *Service Response*
16 *Message*, the base station shall set this field to the
17 Multiplex Option for Higher Data Rates associated with
18 the Reverse Packet Data Channel (see [3]) for the proposed
19 service configuration.

20 REV_PDCH_MUX_OPTION_LOW_RATE - Reverse PDCH Mux Option for Lower Data Rates

21 The mobile station shall set this field as follows:

22 If REV_PDCH_CC_INCL is set to '0', then the mobile
23 station shall omit this field; otherwise, the mobile station
24 shall include this field and set it as follows:

25 This field shall be set to 0x1, 0x1301, or 0x1305.

26 For a *Status Response Message*, the mobile station shall
27 set this field to the Multiplex Option for Lower Data Rates
28 associated with the Reverse Packet Data Channel (see [3])
29 for the current service configuration.

30 For a *Service Request Message* or a *Service Response*
31 *Message*, the mobile 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 The base station shall set this field as follows:

36 If REV_PDCH_CC_INCL field is set to '0', then the base
37 station shall omit this field; otherwise, the base station
38 shall include this field and set it as follows:

39 For a *Service Connect Message*, a *General Handoff*
40 *Direction Message*, or a *Universal Handoff Direction*
41 *Message*, the base station shall set this field to the actual
42 Multiplex Option for Lower Data Rates associated with the
43 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 Lower Data Rates associated with the
 4 Reverse Packet Data Channel (see [3]) for the proposed
 5 service configuration.

6 REV_PDCH_RC - Reverse Packet Data Channel Radio Configuration.

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 For a *Status Response Message*, the mobile station shall
 12 set this field to the Reverse Packet Data Channel Radio
 13 Configuration (see [2]) for the current service
 14 configuration.

15 For a *Service Request Message* or a *Service Response*
 16 *Message*, the mobile station shall set this field to the
 17 Reverse Packet Data Channel Radio Configuration (see [2])
 18 for the proposed service configuration.

19 The base station shall set this field as follows:

20 If REV_PDCH_CC_INCL field is set to '0', then the base
 21 station shall omit this field; otherwise, the base station
 22 shall include this field and set it as follows:

23 For a *Service Connect Message*, a *General Handoff*
 24 *Direction Message*, or a *Universal Handoff Direction*
 25 *Message*, the base station shall set this field to the actual
 26 Reverse Packet Data Channel Radio Configuration to be
 27 used (see [2]).

28 For a *Service Request Message* or a *Service Response*
 29 *Message*, the base station shall set this field to the
 30 Reverse Packet Data Channel Radio Configuration (see [2])
 31 for the proposed service configuration.

32 RESERVED - Reserved bits.

33 The mobile station shall set this field as follows:

34 The mobile station shall add reserved bits as needed in
 35 order to make the length of the entire information record
 36 equal to an integer number of octets. The mobile station
 37 shall set these bits to '0'.

38 The base station shall set this field as follows:

39 The base station shall add reserved bits as needed in
 40 order to make the length of the entire message equal to an
 41 integer number of octets. The base station shall set these
 42 bits to '0'.

43

1 3.7.5.7.1 Channel Configuration for the Supplemental Channel

2 The channel configuration information for the Supplemental Channel consists of the
 3 following subfields:

4

Subfields	Length (bits)
SCH_REC_LEN	4
SCH_RC	5
CODING	1
FRAME_40_USED	1
FRAME_80_USED	1
MAX_RATE	4

5

6 SCH_REC_LEN - Supplemental Channel channel configuration record length.
 7 The mobile station or base station shall set this field to the
 8 number of octets included in this Supplemental Channel
 9 channel configuration record including this SCH_REC_LEN
 10 field.

11 SCH_RC - Supplemental Channel Radio Configuration.
 12 The mobile station or base station shall set this field to the
 13 Radio Configuration for this Supplemental Channel. Radio
 14 Configurations are defined in [2].

15 CODING - Coding type.
 16 The mobile station or base station shall set this field to '1' if
 17 the mobile station or the base station is to use Convolutional
 18 Coding when the number of channel bits per frame is less
 19 than 360 and Turbo Coding when the number of channel bits
 20 per frame is equal to or greater than 360. The mobile station
 21 or base station shall set this field to '0' if the mobile station or
 22 the base station uses Convolution Coding for all block sizes.

23 FRAME_40_USED - 40ms frame used indicator
 24 The mobile station or base station shall set this field to '1' if
 25 40ms frame is used; otherwise, the mobile station or base
 26 station shall set this field to '0'.
 27 If a f-dtch logical channel corresponding to the same sr_id is
 28 mapped to both forward Supplemental Channels 0 and 1,
 29 then the mobile station or base station shall specify the same
 30 frame length for both forward Supplemental Channels 0 and
 31 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, then
 3 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, then
 20 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

1 3.7.5.8 Called Party Subaddress

2 This information record identifies the called 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:

{

CHARi	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 4.5.8.

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 4.5.8. It is only used when the type of subaddress
 17 is "User specified" and the coding is BCD.

18 RESERVED - Reserved bits.

19 The base station shall set this field to '000'.

20 CHARi - Character.

21 The base station shall include one occurrence of this field for
 22 each character in the called 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 be
 30 applied.

31

3.7.5.9 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 _i	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 4.5.10.
- 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 4.5.10. 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_i - Character.
The base 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.

1 3.7.5.10 Connected Subaddress

2 This information record identifies the subaddress of the responding party.

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:

{

CHARi	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 4.5.14.

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 4.5.14. 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 CHARi - Character.

21 The base station shall include one occurrence of this field for
 22 each character in the connected 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 be
 30 applied.

31

1 3.7.5.11 Redirecting Number

2 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

Description	REDIRECTION-REASON (binary)
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'.

1 3.7.5.12 Redirecting Subaddress

2 This information record identifies the subaddress of the responding party.

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 _i	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
 11 [34].

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 [34]. It is only used when the type of subaddress is "User
 17 specified" and the coding is BCD.

18 RESERVED - Reserved bits.

19 The base station shall set this field to '000'.

20 CHAR_i - Character.

21 The base station shall include one occurrence of this field for
 22 each character in the redirecting 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 be
 30 applied.

31

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

1 3.7.5.14 Parametric Alerting

2 This information record allows the network to convey information to a user by means of
 3 programmable alerting signals.

4

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

5

6 CADENCE_COUNT - Cadence count.
 7 The base station shall set this field to the number of times the
 8 cadence of tone groups will be generated between 0x01 and
 9 0xFE. The base station shall set this field to 0x00 to indicate
 10 that the mobile station should end alert tone generation. The
 11 base station shall set this field to 0xFF to indicate that the
 12 cadence will repeat indefinitely.

13 NUM_GROUPS - Number of groups.
 14 The base station shall set this field to the number of groups.

15 AMPLITUDE - Amplitude.
 16 The base station shall set this field to the amplitude level of
 17 the tone group in units of -1 dBm.

18 FREQ_1 - Tone frequency 1.
 19 The base station shall set this field to the first frequency of
 20 the tone group in units of 5 Hz.

21 FREQ_2 - Tone frequency 2.

1 3.7.5.15 Line Control

2 This information record allows the network to convey line control information.

3

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)

4

5 POLARITY_INCLUDED - Polarity parameter included.

6 If the mobile station is to change the line polarity, the base
 7 station shall set this field to '1'; otherwise, the base station
 8 shall set this field to '0'.

9 TOGGLE_MODE - If POLARITY_INCLUDED is set to '1', the base station shall
 10 include this field and set it to '1' to toggle the line polarity or
 11 to '0' to set the polarity to the absolute value indicated in the
 12 REVERSE_POLARITY field.

13 REVERSE_POLARITY - Reverse polarity.
 14 If POLARITY_INCLUDED is set to '1' and TOGGLE_MODE is
 15 equal to '0', the base station shall include this field and set it
 16 to '1' to reverse the tip and ring polarity or to '0' to use normal
 17 polarity. If POLARITY_INCLUDED is set to '1' and
 18 TOGGLE_MODE is set to '1', the base station shall include
 19 this field and set it to '0'; otherwise, the base station shall
 20 omit this field.

21 POWER_DENIAL_TIME - Power denial timeout.
 22 The base station shall include this field and set it to the
 23 duration of the power denial in increments of 5 ms.

24 RESERVED - Reserved bits.
 25 The base station shall add reserved bits as needed in order to
 26 make the length of the entire message equal to an integer
 27 number of octets. The base station shall set these bits to '0'.

28

1 3.7.5.16 Extended Display

2 This information record allows the network to supply supplementary service display
3 information that may be displayed by the mobile station.

4

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 _i	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'.

7

8 DISPLAY_TYPE - The type of display.

8

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.

10

11

12

13

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.

15

16

17 There are three types of display tags: mandatory control tags
18 (Blank and Skip), display text tags, and optional control tags,
see [8] Annex D.

18

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

Table 3.7.5.16-2. Mandatory Control Tags and Display Text Tags

Description	DISPLAY_TAG (binary)
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

2

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 significant
10 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 the
5 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_PARS_INCL	0 or 1
NUM_SOFT_SWITCHING_FRAMES _CHM	0 or 4
NUM_SOFTER_SWITCHING_FRA MES_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_LE N, 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_PARAMS_INCL	1
REV_PDCH_PARAMS_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_PARAMS_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 × (REV_PDCH_EP_MAP_LEN + 1))

If REV_PDCH_CRC_PARMES_INCL is included and equals '1'
 $\{ (weight(REV_PDCH_EP_MAP))$

REV_PDCH_STEP_UP	8
REV_PDCH_STEP_DOWN	8
<i>} (weight(REV_PDCH_EP_MAP))</i>	
REV_PDCH_SR_ID_MAP	0 or 7
<i>{ (weight(REV_PDCH_SR_ID_MAP))</i>	
REV_PDCH_BOOST_ALLOWED	0 or 1
REV_PDCH_AUTO_ALLOWED	0 or 1
<i>} (weight(REV_PDCH_SR_ID_MAP))</i>	

(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

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'.

7

8

9

FPC_PRI_CHAN - Power Control Subchannel indicator.

10

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:

11

12

13

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.

14

15

16

17

18

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
5 If the F-CPCCH is assigned, the base station will multiplex
6 the Power Control Subchannel on the F-CPCCH; otherwise:
7
8 If this field is set to '0', the base station will multiplex the
9 Power Control Subchannel on the Forward Fundamental
10 Channel; otherwise, the base station will multiplex the Power
11 Control Subchannel on the Forward Dedicated Control
12 Channel.

11 FPC_MODE - Forward Power Control operation mode indicator.
12
13 If the FPC_INCL field 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
17 The base station shall set this field to the value of the forward
18 power control operation mode (see [2]).

17 FPC_OLPC_FCH_INCL - Fundamental Channel Outer Loop Power Control
18 parameter included indicator.
19
20 If the FPC_INCL field 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
24 If the forward link Fundamental Channel outer loop power
25 control parameters are included in this record, the base
26 station shall set this field to '1'; otherwise, the base station
27 shall set this field to '0'.

26 FPC_FCH_FER - Fundamental Channel target Frame Error Rate.
27
28 If FPC_OLPC_FCH_INCL is included and set to '1', the base
29 station shall set this field to the target Frame Error Rate on
30 the Forward Fundamental Channel, as specified in Table
31 3.7.3.3.2.25-2; otherwise, the base station shall omit this
32 field.

32 FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint.
33
34 If FPC_OLPC_FCH_INCL is included and set to '1', the base
35 station shall set this field to minimum Fundamental Channel
36 Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise,
37 the base station shall omit this field.

37 FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint.
38
39 If FPC_OLPC_FCH_INCL is set to '1', the base station shall set
40 this field to maximum Fundamental Channel Outer Loop
41 Eb/Nt setpoint, in units of 0.125dB; otherwise, the base
42 station shall omit this field.

42 FPC_OLPC_DCCH_INCL - Dedicated Control Channel Outer Loop Power Control
43 parameter included indicator.
44
45 If the FPC_INCL field is set to '0', the base station shall omit
46 this field; otherwise, the base station shall include this field
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 Channel.

Table 3.7.5.20-1. 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

- 34
- 35 **FOR_SCH_INCL** - Forward Supplemental Channel information included
 36 indicator.

1 The base station shall set this field to '1', if the forward
 2 Supplemental Channel information is included; otherwise, the
 3 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 $(FRAME_OFFSET \times 1.25 + FOR_SCH_FRAME_OFFSET \times 20)$
 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, the
 25 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 of
 40 this Reverse Supplemental Channel are delayed by
 41 $(FRAME_OFFSET \times 1.25 + REV_SCH_FRAME_OFFSET \times 20)$
 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

LPM_IND Field (binary)	Logical-to-Physical Mapping indicator
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.

LOGICAL_RESOURCE (binary)	Logical Resource
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.

PHYSICAL_RESOURCE (binary)	Physical Resource
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 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 field
 3 to one less than the number of instances of the Flexible Rate
 4 Table included in this message; otherwise, the base station
 5 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

CRC_LEN_IDX (binary)	Number of CRC bits per frame
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

5

6

7

8

The base station shall set this field to '1' to indicate that at least one of the forward or reverse supplemental channels is to operate in the variable rate mode (i.e., the rate of the supplemental channel can be picked from a pre-determined set of rates autonomously).

9

10

The base station shall set this bit to '0' to indicate that variable rate on supplemental channels are not allowed.

11

VAR_TABLES_INCL - Variable Rate Tables included indicator.

12

13

14

If the USE_VAR_RATE field is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set this field as follows:

15

16

17

If the Variable Rate Tables are included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

18

19

VAR_RATE_TABLES_COUNT - Number of instances of the Variable Rate Mask Table included in this message.

20

21

22

23

24

If VAR_TABLES_INCL is included and is equal to '1', the base station shall include this field and set this field to one less than the number of instances of the Variable Rate Mask table included in this message as follows; otherwise, the base station shall omit this field:

25

26

If VAR_TABLES_INCL is included and is equal to '1', the base station shall include VAR_RATE_TABLES_COUNT + 1 instances of the Variable Rate Mask table

27

28

29

30

VAR_RATE_TABLE_ID - Variable Rate Mask table ID.

The base station shall set this field to the ID of the Variable Rate Mask table that follows. The base station shall not set this field to '000'.

31

NUM_RECS - Number of records in the Variable Rate Mask table.

- 1 If the USE_OLD_FLEX_MAPPING field is included and is equal
 2 to '0', the base station shall include this field and set this field
 3 as follows; otherwise, the base station shall omit this field:
- 4 The base station shall set this field to the ID of the Flexible
 5 Rate Table corresponding to Forward Supplemental Channel
 6 1. The base station shall set this field to '0000' to indicate
 7 that the Flexible Rate feature is not used for Forward
 8 Supplemental 1 and the default table specified in
 9 3.7.3.3.2.37-4 shall be used.
- 10 RSCH1_NBIT_TABLE_ID - Reverse Supplemental Channel 1 Flexible Rate Table ID.
- 11 If the USE_OLD_FLEX_MAPPING field is included and is equal
 12 to '0', the base station shall include this field and set this field
 13 as follows; otherwise, the base station shall omit this field:
- 14 The base station shall set this field to the ID of the Flexible
 15 Rate Table corresponding to Reverse Supplemental Channel
 16 1. The base station shall set this field to '0000' to indicate
 17 that the Flexible Rate feature is not used for Reverse
 18 Supplemental 1 and the default table specified in
 19 3.7.3.3.2.37-2 shall be used.
- 20 FFCH_NBIT_TABLE_ID - Forward Fundamental Channel Flexible Rate Table ID.
- 21 If the USE_OLD_FLEX_MAPPING field is included and is equal
 22 to '0', the base station shall include this field and set this field
 23 as follows; otherwise, the base station shall omit this field:
- 24 The base station shall set this field to the ID of the Flexible
 25 Rate Table corresponding to the Forward Fundamental
 26 Channel. The base station shall set this field to '0000' to
 27 indicate that the Flexible Rate feature is not used for the
 28 Forward Fundamental Channel.
- 29 RFCH_NBIT_TABLE_ID - Reverse Fundamental Channel Flexible Rate Table ID.
- 30 If the USE_OLD_FLEX_MAPPING field is included and is equal
 31 to '0', the base station shall include this field and set this field
 32 as follows; otherwise, the base station shall omit this field:
- 33 The base station shall set this field to the ID of the Flexible
 34 Rate Table corresponding to the Reverse Fundamental
 35 Channel. The base station shall set this field to '0000' to
 36 indicate that the Flexible Rate feature is not used for the
 37 Reverse Fundamental Channel.
- 38 FDCCH_NBIT_TABLE_ID - Forward Dedicated Control Channel Flexible Rate Table ID.
- 39 If the USE_OLD_FLEX_MAPPING field is included and is equal
 40 to '0', the base station shall include this field and set this field
 41 as follows; otherwise, the base station shall omit this field:
- 42 The base station shall set this field to the ID of the Flexible
 43 Rate Table corresponding to the Forward Dedicated Control
 44 Channel. The base station shall set this field to '0000' to
 45 indicate that the Flexible Rate feature is not used for the
 46 Forward Dedicated Control Channel.

- 1 FDCCH_NBITS_IDX - Forward Dedicated Control Channel number of information
2 bits per frame index.
- 3 If the FDCCH_NBIT_TABLE_ID field is included and is not
4 equal to '0000', the base station shall include this field and
5 set this field to indicate the number of information bits per
6 Forward Dedicated Control Channel frame; otherwise, the
7 base station shall omit this field.
- 8 The number of information bits per frame is specified by the
9 Flexible Rate Table associated with Forward Dedicated
10 Control Channel and FDCCH_NBITS_IDX as the index to the
11 table (i.e.,
12 NUM_BITS_s[FDCCH_NBIT_TABLE_ID_r][FDCCH_NBITS_IDX].
- 13 RDCCH_NBIT_TABLE_ID - Reverse Dedicated Control Channel Flexible Rate Table ID.
- 14 If the USE_OLD_FLEX_MAPPING field is included and is equal
15 to '0', the base station shall include this field and set this field
16 as follows; otherwise, the base station shall omit this field:
- 17 The base station shall set this field to the ID of the Flexible
18 Rate Table corresponding to the Reverse Dedicated Control
19 Channel. The base station shall set this field to '0000' to
20 indicate that the Flexible Rate feature is not used for the
21 Reverse Dedicated Control Channel.
- 22 RDCCH_NBITS_IDX - Reverse Dedicated Control Channel number of information
23 bits per frame index.
- 24 If the RDCCH_NBIT_TABLE_ID field is included and is not
25 equal to '0000', the base station shall include this field and
26 set this field to indicate the number of information bits per
27 Reverse Dedicated Control Channel frame; otherwise, the
28 base station shall omit this field.
- 29 The number of information bits per frame is specified by the
30 Flexible Rate Table associated with Reverse Dedicated Control
31 Channel and RDCCH_NBITS_IDX as the index to the table
32 (i.e.,
33 NUM_BITS_s[RDCCH_NBIT_TABLE_ID_r][RDCCH_NBITS_IDX].
- 34 USE_OLD_VAR_MAPPING - Use the previously downloaded mapping between the
35 channels and Variable Rate Mask Tables.
- 36 If the USE_VAR_RATE field is equal to '0', the base station
37 shall omit this field; otherwise, the base station shall include
38 this field and set this field as follows:
- 39 The base station shall set this field to '1' to indicate that the
40 mobile station is to use the previously downloaded mapping
41 between the channels and Variable Rate Mask Tables. The
42 base station shall set this field to '0', if the following four
43 fields are included in this message.

- 1 FSCH0_VAR_TABLE_ID - Forward Supplemental Channel 0 Variable Rate Mask Table
2 ID.
- 3 If the USE_OLD_VAR_MAPPING field is included and is equal
4 to '0', the base station shall include this field and set this field
5 as follows; otherwise, the base station shall omit this field:
- 6 The base station shall set this field to the ID of the Variable
7 Rate Mask Table corresponding to Forward Supplemental
8 Channel 0. The base station shall set this field to '000' to
9 indicate that no variable rate operation is performed on the F-
10 SCH0.
- 11 RSCH0_VAR_TABLE_ID - Reverse 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 field
15 as follows; otherwise, the base station shall omit this field:
- 16 The base station shall set this field to the ID of the Variable
17 Rate Mask Table corresponding to Reverse Supplemental
18 Channel 0. The base station shall set this field to '000' to
19 indicate that the mobile station is not to autonomously
20 change the rate of the R-SCH0.
- 21 FSCH1_VAR_TABLE_ID - Forward Supplemental Channel 1 Variable Rate Mask Table
22 ID.
- 23 If the USE_OLD_VAR_MAPPING field is included and is equal
24 to '0', the base station shall include this field and set this field
25 as follows; otherwise, the base station shall omit this field:
- 26 The base station shall set this field to the ID of the Variable
27 Rate Mask Table corresponding to Forward Supplemental
28 Channel 1. The base station shall set this field to '000' to
29 indicate that no variable rate operation is performed on the F-
30 SCH1.
- 31 RSCH1_VAR_TABLE_ID - Reverse Supplemental Channel 1 Variable Rate Mask Table
32 ID.
- 33 If the USE_OLD_VAR_MAPPING field is included and is equal
34 to '0', the base station shall include this field and set this field
35 as follows; otherwise, the base station shall omit this field:
- 36 The base station shall set this field to the ID of the Variable
37 Rate Mask Table corresponding to Reverse Supplemental
38 Channel 1. The base station shall set this field to '000' to
39 indicate that the mobile station is not to autonomously
40 change the rate of the R-SCH1.
- 41 R_INC_RATE_ALLOWED - Reverse increase rate within Variable Rate Set Allowed
42 indicator.
- 43 If the USE_VAR_RATE field is included and is equal to '1', the
44 base station shall include this field and set this field as
45 follows; otherwise, the base station shall omit this field:

1 The base station shall set this field to '1' to indicate that the
 2 mobile station is allowed to switch between any of the rates
 3 (i.e., number of bits per frame) in the Variable Rate Set for the
 4 Reverse Supplemental channels. The base station shall set
 5 this field to '0' to indicate that only a downward transition in
 6 rate within the rates (i.e., number of bits per frame) in the
 7 Variable Rate Set for the Reverse Supplemental channels is
 8 allowed.

9 F_INC_RATE_ALLOWED - Forward increase rate within Variable Rate Set Allowed
 10 indicator.

11 If the USE_VAR_RATE field is included and is equal to '1', the
 12 base station shall include this field and set this field as
 13 follows; otherwise, the base station shall omit this field:

14 The base station shall set this field to '1' to indicate that the
 15 base station is allowed to switch between any of the rates (i.e.,
 16 number of bits per frame) in the Variable Rate Set for the
 17 Forward Supplemental channels. The base station shall set
 18 this field to '0' to indicate that only a downward transition in
 19 rate within the rates (i.e., number of bits per frame) in the
 20 Variable Rate Set for the Forward Supplemental channels is
 21 possible.

22 LTU_INFO_INCL - LTU Tables included indicator.

23 The base station shall set this field to '1' if the base station
 24 includes LTU related information in this message; otherwise,
 25 the base station shall set this field to '0'.

26 The base station shall set this field to '0' if the mobile station
 27 indicates that it does not support downloadable LTU Table in
 28 the capability information (i.e., the
 29 F_SCH_LTU_TAB_SUPPORTED and
 30 R_SCH_LTU_TAB_SUPPORTED fields in the capability
 31 information are equal to '0').

32 LTU_TABLES_INCL - LTU Tables included indicator.

33 If the LTU_INFO_INCL field is equal to '0', the base station
 34 shall omit this field; otherwise, the base stations shall include
 35 this field and set this field as follows:

36 If the LTU Tables are included 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 If LTU_TABLES_INCL is included and is equal to '1', the base station shall include the
 40 following fields related to the LTU Table information:

41 NUM_LTU_TABLES - Number of LTU tables included.

42 The base station shall set this field to the number of LTU
 43 Tables minus one included in this message.

44 If LTU_TABLES_INCL is included and is equal to '1', then the base station shall include
 45 NUM_LTU_TABLES + 1 occurrences of the following fields:

- 1 LTU_TABLE_ID - LTU Table ID.
- 2 The base station shall set this field to the ID of the LTU Table
- 3 that follows. The base station shall not set this field to '000'.
- 4 NUM_ROWS - Number of configurations associated with the LTU Table
- 5 identified by LTU_TABLE_ID.
- 6 The base station shall set this field to one less than the
- 7 number of rows of the LTU Table identified by LTU_TABLE_ID.

8 If LTU_TABLES_INCL is included and is equal to '1', then the base station shall include the
 9 NUM_ROWS + 1 occurrences of the following fields:

- 10 NBITS_IDX - Number of bits per frame index.
- 11 The base station shall set this field to the 4-bit index that
- 12 specified the number of information bits per supplemental
- 13 channel frame.
- 14 NUM_LTUS - Number of LTUs per physical layer supplemental channel
- 15 frame.
- 16 The base station shall specify the number of LTUs per
- 17 physical layer supplemental channel frame corresponding to
- 18 the number of information bits per supplemental channel
- 19 frame specified by NBITS_IDX according to Table 3.7.5.20-6.
- 20 The base station shall set this field to '0000' to indicate that
- 21 no LTUs are supported for the number of information bits per
- 22 frame specified by NBITS_IDX.

23 **Table 3.7.5.20-6. NUM_LTUS**

NUM_LTUS (binary)	Number of LTUS per supplemental channel frame
0000	0
0001	2
0010	3
0011	4
0100	5
0101	6
0110	7
0111	8
1000-1111	Reserved

- 24
- 25
- 26 USE_OLD_LTU_MAPPING - Use the previously downloaded mapping between the
- 27 channels and LTU Tables.

1 If the LTU_INFO_INCL field is equal to '0', the base station
2 shall omit this field; otherwise, the base station shall include
3 this field and set this field as follows:

4 The base station shall set this field to '1' to indicate that the
5 mobile station is to use the previously downloaded mapping
6 between the channels and LTU Tables. The base station shall
7 set this field to '0' if the following four fields are included in
8 this message.

9 **FSCH0_LTU_TAB_ID** - Forward Supplemental Channel LTU Table ID.

10 If **USE_OLD_LTU_MAPPING** is included and is equal to '0',
11 the base station shall include this field and set this field as
12 follows; otherwise, the base station shall omit this field:

13 The base station shall set this field to the LTU Table ID to be
14 used for the Forward Supplemental Channel 0. The base
15 station shall set this field to '000' to indicate that the default
16 number of LTUs are to be used (see [3]). The base station
17 shall set this field to '000' if MuxPDU Type 5 is not used on
18 this channel (see [3]).

19 **RSCH0_LTU_TAB_ID** - Reverse Supplemental Channel LTU Table ID.

20 If **USE_OLD_LTU_MAPPING** is included and is equal to '0',
21 the base station shall include this field and set this field as
22 follows; otherwise, the base station shall omit this field:

23 The base station shall set this field to the LTU Table ID to be
24 used for the Reverse Supplemental Channel 0. The base
25 station shall set this field to '000' to indicate that the default
26 number of LTUs are to be used (see [3]). The base station
27 shall set this field to '000' if MuxPDU Type 5 is not used on
28 this channel (see [3]).

29 **FSCH1_LTU_TAB_ID** - Forward Supplemental Channel LTU Table ID.

30 If **USE_OLD_LTU_MAPPING** is included and is equal to '0',
31 the base station shall include this field and set this field as
32 follows; otherwise, the base station shall omit this field:

33 The base station shall set this field to the LTU Table ID to be
34 used for the Forward Supplemental Channel 1. The base
35 station shall set this field to '000' to indicate that the default
36 number of LTUs are to be used (see [3]). The base station
37 shall set this field to '000' if MuxPDU Type 5 is not used on
38 this channel (see [3]).

39 **RSCH1_LTU_TAB_ID** - Reverse Supplemental Channel LTU Table ID.

40 If **USE_OLD_LTU_MAPPING** is included and is equal to '0',
41 the base station shall include this field and set this field as
42 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 1. 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 PARTITION_TABLES_INFO_INCL - Partition Tables information included indicator.

8 If USE_FLEX_NUM_BITS is equal to '0', the base station shall
 9 omit this field; otherwise, the base station shall include this
 10 field and set this field as follows:

11 If Partition Tables information is included in this message, the
 12 base station shall set this field to '1'; otherwise, the base
 13 station shall set this field to '0'.

14 PARTITION_TABLES_INCL - Partition Tables included indicator.

15 If PARTITION_TABLES_INFO_INCL is equal to '0', the base
 16 station shall omit this field; otherwise, the base station shall
 17 include this field and set this field as follows:

18 If the Partition Tables are included in this message, the base
 19 station shall set this field to '1'; otherwise, the base station
 20 shall set this field to '0'.

21

22 If PARTITION_TABLES_INCL is included and is equal to '1', then the base station shall
 23 include the following fields

24 NUM_PARTITION_TABLES - Number of partition tables.

25 The base station shall set this field to one less than the
 26 number of Partition Tables corresponding to an FCH or DCCH
 27 included in this message.

28 If PARTITION_TABLES_INCL is included and is equal to '1', then the base station shall
 29 include the NUM_PARTITION_TABLES + 1 occurrences of the following fields:

30 PARTITION_TABLE_ID - Partition Table ID.

31 The base station shall set this field to the ID of the Partition
 32 Table that follows. The base station shall not set this field to
 33 '000'.

34 NUM_ROWS - Number of configurations associated with the Partition Table
 35 identified by PARTITION_TABLE_ID.

36 The base station shall set this field to one less than the
 37 number of rows of the Partition Table identified by
 38 PARTITION_TABLE_ID.

39 If PARTITION_TABLES_INCL is included and is equal to '1', then the base station shall
 40 include NUM_ROWS + 1 occurrences of the following fields:

41 CATEGORY - Category number.

- 1 The base station shall set this field to the category number of
2 the entry of the Partition Table identified by number of bits
3 per each service as specified below. The base station shall
4 not set this field to '00001' or '00010'. The base station shall
5 place rows of the Partition Table corresponding to the same
6 number of total information bits per frame consecutively. See
7 [3].
- 8 MUX_HEADER_LEN - Multiplex Sublayer Header Length.
9 The base station shall set this field to the length of the
10 multiplex sublayer header corresponding to the entry of the
11 Partition Table identified by number of bits per each service
12 as specified below.
- 13 MUX_HEADER - Multiplex Sublayer Header.
14 The base station shall set this field to the multiplex sublayer
15 header corresponding to the entry of the Partition Table
16 identified by number of bits per each service as specified
17 below.¹²⁷
- 18 NUM_PARTITIONS - Number of partitions.
19 The base station shall set this field to one less than the
20 number of partitions corresponding to each service (including
21 signaling) included in the entry of the Partition Table
22 identified by CATEGORY.
- 23 If PARTITION_TABLES_INCL is included and is equal to '1', then the base station shall
24 include NUM_PARTITIONS + 1 occurrences of the following fields:
- 25 SR_ID - Service Reference ID.
26 The base station shall set this field to the sr_id of the service
27 (sr_id = '000' for signaling) present in this category.
- 28 SRV_NUM_BITS - Number of bits allocated to the service.
29 The base station shall set this field to the number of bits
30 allocated to the service (including signaling) identified by
31 SR_ID.
- 32 USE_OLD_PART_MAPPING - Use the previously downloaded mapping between the
33 channels and Partition Tables.
34 If PARTITION_TABLES_INFO_INCL is equal to '1', the base
35 station shall include this field and set this field as follows;
36 otherwise, the base station shall omit this field:

¹²⁷ 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 '1' to indicate that the
 2 mobile station is to use the previously downloaded mapping
 3 between the channels and Partition Tables. The base station
 4 shall set this field to '0', if the following four fields are
 5 included in this message.
- 6 **FFCH_PART_TAB_ID** - Forward Fundamental Channel Partition Table ID.
 7 If **USE_OLD_PART_MAPPING** is included and is equal to '0',
 8 the base station shall include this field and set this field as
 9 follows; otherwise, the base station shall omit this field:
- 10 The base station shall set this field to the Partition Table ID to
 11 be used for the Forward Fundamental Channel. The base
 12 station shall set this field to '000' to indicate that the default
 13 number of bits per service is to be used (see MuxPDU Type 1
 14 and 2 Categories and Formats for the FCH and DCCH in [3]).
 15 The base station shall set this field to a value other than '000'
 16 if the **FFCH_NBIT_TABLE_ID** field is included in this message
 17 and is not set to '0000'.
- 18 **RFCH_PART_TAB_ID** - Reverse Fundamental Channel Partition Table ID.
 19 If **USE_OLD_PART_MAPPING** is included and is equal to '0',
 20 the base station shall include this field and set this field as
 21 follows; otherwise, the base station shall omit this field:
- 22 The base station shall set this field to the Partition Table ID to
 23 be used for the Reverse Fundamental Channel. The base
 24 station shall set this field to '000' to indicate that the default
 25 number of bits per service is to be used (see MuxPDU Type 1
 26 and 2 Categories and Formats for the FCH and DCCH in [3]).
 27 The base station shall set this field to a value other than '000'
 28 if the **RFCH_NBIT_TABLE_ID** is included in this message and
 29 field is not set to '0000'.
- 30 **FDCCH_PART_TAB_ID** - Forward Dedicated Control Channel Partition Table ID.
 31 If **USE_OLD_PART_MAPPING** is included and is equal to '0',
 32 the base station shall include this field and set this field as
 33 follows; otherwise, the base station shall omit this field:
- 34 The base station shall set this field to the Partition Table ID to
 35 be used for the Forward Dedicated Control Channel. The
 36 base station shall set this field to '000' to indicate that the
 37 default number of bits per service is to be used (see MuxPDU
 38 Type 1 and 2 Categories and Formats for the FCH and DCCH
 39 in [3]). The base station shall set this field to a value other
 40 than '000' if the **FDCCH_NBIT_TABLE_ID** field is included in
 41 this message and is not set to '0000'.
- 42 **RDCCH_PART_TAB_ID** - Reverse Dedicated Control Channel Partition Table ID.

- 1 If USE_OLD_PART_MAPPING is included and is equal to '0',
 2 the base station shall include this field and set this field as
 3 follows; otherwise, the base station shall omit this field:
- 4 The base station shall set this field to the Partition Table ID to
 5 be used for the Reverse Dedicated Control Channel. The base
 6 station shall set this field to '000' to indicate that the default
 7 number of bits per service is to be used (see MuxPDU Type 1
 8 and 2 Categories and Formats for the FCH and DCCH in [3]).
 9 The base station shall set this field to a value other than '000'
 10 if the RDCCH_NBIT_TABLE_ID field is included in this
 11 message and is not set to '0000'.
- 12 USE_ERAM - Use the Enhanced Rate Adaptation Mode indicator.
 13 The base station shall include this field only if
 14 USE_FLEX_NUM_BITS or USE_VAR_RATE is equal to '1'. If
 15 included, the base station shall set this field to '1' if the base
 16 station is to use lower rate turbo codes for RC4 and RC5
 17 Forward Supplemental Channel and the mobile station is to
 18 use lower rate turbo codes for RC4 Reverse Supplemental
 19 Channel to match the desired channel interleaver block size
 20 instead of pure code symbol repetition; otherwise, the base
 21 station shall set this field to '0'.
- 22 SWITCHING_PARMES_INCL - R-CQICH switching parameters included indicator.
 23 If the GATING_RATE_INCL field is set to '0', the base station
 24 shall omit this field; otherwise, the base station shall include
 25 this field and set it as follows:
 26 The base station shall set this field to '1' if the parameters for
 27 R-CQICH soft and softer switching are included in this
 28 message; otherwise, 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 SWITCHING_PARMES_INCL is not included or included and
 32 set to '0', then 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 duration of the cell
 35 switching period, in units of 20 ms, minus one, during which
 36 the mobile station, while in Control Hold, is to transmit the
 37 cell switch sequence on the R-CQICH when it switches
 38 between two pilots which are in different groups.
- 39 NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer
 40 switching while in Control Hold.
 41 If SWITCHING_PARMES_INCL is not included or included and
 42 set to '0', then the base station shall omit this field; otherwise,
 43 the base 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 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 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 RPC_ADJ_REC_LEN - Reverse Link Power Control adjustment record length.
21 If RPC_ADJ_REC_TYPE is not equal to '0100', the base
22 station shall set this field to the number of octets in the type-
23 specific fields of this adjustment record as given in Table
24 3.7.3.3.2.25-3.
25 If RPC_ADJ_REC_TYPE is equal to '0100', the base station
26 shall set this field to '0000'.
- 27 EXT_RPC_ADJ_REC_LEN- Reverse Link Power Control adjustment record length.
28 If RPC_ADJ_REC_TYPE is not equal to '0100', the base
29 station shall omit this field; otherwise, the base station shall
30 include this field and set it as follows.
31 If RPC_ADJ_REC_TYPE is equal to '0100', the base station
32 shall set this field to the number of octets in the type-specific
33 fields of this adjustment record as given in Table 3.7.3.3.2.25-
34 3.
- 35 Type-specific fields - Reverse Link Power Control adjustment record type-specific
36 fields.
37 The base station shall include type-specific fields based on
38 the RPC_ADJ_REC_TYPE of this adjustment record, as
39 specified as below.
- 40 If RPC_ADJ_REC_TYPE is equal to '0000', the base station shall set type-specific fields as
41 specified in Table 3.7.5.20-4.

1

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)

2

3

4

FCH_INCL - FCH channel adjustment gain included indicator.

5

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'.

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FCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Fundamental Channel.

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If FCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set each field to the value of the gain adjustment that the mobile station is to make for the Reverse Fundamental Channel. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB. The base station shall set the value in the range from -48 to 48 inclusive.

16

DCCH_INCL - DCCH channel adjustment gain included indicator.

17

18

19

If DCCH_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'.

20

DCCH_CHAN_ADJ_GAIN - Channel adjustment gain for the Reverse Dedicated Control Channel.

21

- 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 as
 6 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 as
 20 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 shall
 35 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 Acknowledgment
 42 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 as
 6 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. The
 20 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 3.7.5.20-5.

1

Table 3.7.5.20-5. Type Specific Fields for RECORD_TYPE = '0001'

Fields	Length (Bits)
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)

2

3

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)
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2

3 RL_ATT_ADJ_GAIN_TYPE- Reverse Link Attribute Adjustment Gain value type indicator.

4 If the following fields are set to the nominal attribute gain
 5 adjustment values that the mobile station is to use for the
 6 transmission attributes (relative to Nominal_Attribute_Gain
 7 specified in [2]), the base station shall set this field to '0'. If
 8 the following fields are set to the pilot reference level
 9 adjustment values that the mobile station is to use for the
 10 transmission attributes (relative to Pilot_Reference_Level
 11 specified in [2]), the base station shall set this field to '1'.

12 RC3_RC5_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
 13 Configuration 3 or 5 of 20 ms frame included indicator.

14 If Reverse Link Attribute adjustment Gain for Radio
 15 Configuration 3 or 5 of 20 ms frame is included 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 RL_ATT_ADJ_GAIN_1500 - Reverse Link Attribute Adjustment Gain for the transmission
 19 rate 1500 bits/s.

20 If RC3_RC5_20MS_INCL is set to '0', the base station shall
 21 omit this field.

22 If RC3_RC5_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 1500 bits/s,
 27 convolutional code and 20ms frame. The base station shall
 28 set the value in the range from -48 to 48 inclusive.

29 If RC3_RC5_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 1500 bits/s,
 34 convolutional code 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.

1 RL_ATT_ADJ_GAIN_2700 - Reverse Link Attribute Adjustment Gain for the transmission
2 rate 2700 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 2700 bits/s,
10 convolutional code and 20ms frame. The base station shall
11 set the value in the 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 2700 bits/s,
17 convolutional code 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_4800 - Reverse Link Attribute Gain Adjustment for the transmission
21 rate 4800 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 4800 bits/s,
29 convolutional code and 20ms frame. The base station shall
30 set the value in the range from -48 to 48 inclusive.
31 If RC3_RC5_20MS_INCL is set to '1' and
32 RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall
33 set this field to the value of the pilot reference level
34 adjustment that the mobile station is to make for the
35 transmission attributes with transmission rate 4800 bits/s,
36 convolutional code and 20ms 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_9600 - Reverse Link Attribute Gain Adjustment for the transmission
40 rate 9600 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 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 base
22 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.

1

Table 3.7.5.20-6. Type Specific Fields for RECORD_TYPE = '0010'

Fields	Length (Bits)
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

2

(continues on next page)

3

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)
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CODE_TYPE - Coding type indicator.

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If the following corresponding gain adjustment fields apply for the convolutional code, the base station shall set this field to '0'. If the following corresponding gain adjustment fields apply for the Turbo code, the base station shall set this field to '1'.

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RL_ATT_ADJ_GAIN_TYPE- Reverse Link Attribute adjustment Gain value type indicator.

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If the following corresponding gain adjustment fields are set to the value of the nominal attribute gain adjustment that the mobile station is to make for the corresponding transmission attributes (relative to Nominal_Attribute_Gain specified in [2]), the base station shall set this field to '0'. If the following corresponding gain adjustment fields are set to the value of the pilot reference level adjustment that the mobile station is to use for the corresponding transmission attributes (relative to Pilot_Reference_Level specified in [2]), the base station shall set this field to '1'.

19

RC3_RC5_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20ms frame included indicator.

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24

If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20ms 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'.

25

RL_ATT_ADJ_GAIN_19200 - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

26

1 If RC3_RC5_20MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC3_RC5_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 19200 bits/s,
8 and 20ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC3_RC5_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 19200 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_38400 - Reverse Link Attribute Adjustment Gain for the
19 transmission rate 38400 bits/s.

20 If RC3_RC5_20MS_INCL is set to '0', the base station shall
21 omit this field.

22 If RC3_RC5_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 38400 bits/s,
27 and 20ms frame. The base station shall set the value in the
28 range from -48 to 48 inclusive.

29 If RC3_RC5_20MS_INCL is set to '1' and
30 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
31 this field to the value of the pilot reference level adjustment
32 that the mobile station is to make for the transmission
33 attributes with transmission rate 38400 bits/s and 20ms
34 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_76800 - Reverse Link Attribute Adjustment Gain for the
38 transmission rate 76800 bits/s.

39 If RC3_RC5_20MS_INCL is set to '0', the base station shall
40 omit this field.

41 If RC3_RC5_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 76800 bits/s,
46 and 20ms frame. The base station shall set the value in the
47 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 76800 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_153600 - Reverse Link Attribute Adjustment Gain for the
10 transmission rate 153600 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 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 153600 bits/s,
18 and 20ms frame. The base station shall set the value in the
19 range from -48 to 48 inclusive.

20 If RC3_RC5_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 153600 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_307200 - Reverse Link Attribute Adjustment Gain for the
29 transmission rate 307200 bits/s.

30 If RC3_RC5_20MS_INCL is set to '0', the base station shall
31 omit this field.

32 If RC3_RC5_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 307200 bits/s,
37 and 20ms frame. The base station shall set the value in the
38 range from -48 to 48 inclusive.

39 If RC3_RC5_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 307200 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_614400 - Reverse Link Attribute Adjustment Gain for the
48 transmission rate 614400 bits/s.

1 If RC3_RC5_20MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC3_RC5_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 614400 bits/s,
8 and 20ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC3_RC5_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 614400 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 RC4_RC6_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
19 Configuration 4 or 6 of 20ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio
21 Configuration 4 or 6 of 20ms 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 - Reverse Link Attribute Adjustment Gain for the
25 transmission rate 28800 bits/s.

26 If RC4_RC6_20MS_INCL is set to '0', the base station shall
27 omit this field.

28 If RC4_RC6_20MS_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 20ms frame. The base station shall set the value in the
34 range from -48 to 48 inclusive.

35 If RC4_RC6_20MS_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 20ms
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 - Reverse Link Attribute Adjustment Gain for the
44 transmission rate 57600 bits/s.

45 If RC4_RC6_20MS_INCL is set to '0', the base station shall
46 omit this field.

1 If RC4_RC6_20MS_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 20ms frame. The base station shall set the value in the
 7 range from -48 to 48 inclusive.

8 If RC4_RC6_20MS_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 20ms
 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 - Reverse Link Attribute Adjustment Gain for the
 17 transmission rate 115200 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 115200 bits/s,
 25 and 20ms frame. The base station shall set the value in the
 26 range from -48 to 48 inclusive.

27 If RC4_RC6_20MS_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 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_230400 - Reverse Link Attribute Adjustment Gain for the
 36 transmission rate 230400 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 attribute gain
 42 adjustment that the mobile station is to make for the
 43 transmission attributes with transmission rate 230400 bits/s,
 44 and 20ms frame. The base station shall set the value in the
 45 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 230400 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_460800 - Reverse Link Attribute Adjustment Gain for the
 10 transmission rate 460800 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 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 460800 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 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 460800 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 RL_ATT_ADJ_GAIN_1036800 - Reverse Link Attribute Adjustment Gain for the
 29 transmission rate 1036800 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 1036800
 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 1306800
 44 bits/s 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 RC3_RC5_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
 48 Configuration 3 or 5 of 40ms frame included indicator.

1 If Reverse Link Attribute Adjustment Gain for Radio
2 Configuration 3 or 5 of 40ms 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_19200_40MS - Reverse Link Attribute Adjustment Gain for the
6 transmission rate 19200 bits/s.

7 If RC3_RC5_40MS_INCL is set to '0', the base station shall
8 omit this field.

9 If RC3_RC5_40MS_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 19200 bits/s,
14 and 40ms frame. The base station shall set the value in the
15 range from -48 to 48 inclusive.

16 If RC3_RC5_40MS_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 19200 bits/s
21 and 40ms 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_38400_40MS - Reverse Link Attribute Adjustment Gain for the
25 transmission rate 38400 bits/s.

26 If RC3_RC5_40MS_INCL is set to '0', the base station shall
27 omit this field.

28 If RC3_RC5_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 38400 bits/s,
33 and 40ms frame. The base station shall set the value in the
34 range from -48 to 48 inclusive.

35 If RC3_RC5_20MS_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 38400 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_76800_40MS - Reverse Link Attribute Adjustment Gain for the
44 transmission rate 76800 bits/s.

45 If RC3_RC5_40MS_INCL is set to '0', the base station shall
46 omit this field.

1 If RC3_RC5_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 76800 bits/s,
6 and 40ms frame. The base station shall set the value in the
7 range from -48 to 48 inclusive.

8 If RC3_RC5_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 76800 bits/s
13 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_153600_40MS - Reverse Link Attribute Adjustment Gain for the
17 transmission rate 153600 bits/s.

18 If RC3_RC5_40MS_INCL is set to '0', the base station shall
19 omit this field.

20 If RC3_RC5_40MS_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 bits/s,
25 and 40ms frame. The base station shall set the value in the
26 range from -48 to 48 inclusive.

27 If RC3_RC5_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 153600 bits/s and 40ms
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_40MS - Reverse Link Attribute Adjustment Gain for the
36 transmission rate 307200 bits/s.

37 If RC3_RC5_40MS_INCL is set to '0', the base station shall
38 omit this field.

39 If RC3_RC5_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 307200 bits/s,
44 and 40ms frame. The base station shall set the value in the
45 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 307200 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 RC4_RC6_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
10 Configuration 4 or 6 of 40ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio
12 Configuration 4 or 6 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_28800_40MS - Reverse Link Attribute Adjustment Gain for the
16 transmission rate 28800 bits/s.

17 If RC4_RC6_40MS_INCL is set to '0', the base station shall
18 omit this field.

19 If RC4_RC6_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 28800 bits/s,
24 and 40ms frame. The base station shall set the value in the
25 range from -48 to 48 inclusive.

26 If RC4_RC6_40MS_INCL is set to '1' and
27 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
28 this field to the value of the pilot reference level adjustment
29 that the mobile station is to make for the transmission
30 attributes with transmission rate 28800 bits/s and 40ms
31 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_57600_40MS - Reverse Link Attribute Adjustment Gain for the
35 transmission rate 57600 bits/s.

36 If RC4_RC6_40MS_INCL is set to '0', the base station shall
37 omit this field.

38 If RC4_RC6_40MS_INCL is set to '1' and
39 NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
40 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 57600 bits/s,
43 and 40ms frame. The base station shall set the value in the
44 range from -48 to 48 inclusive.

1 If RC4_RC6_40MS_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 57600 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_115200_40MS - Reverse Link Attribute Adjustment Gain for the
10 transmission rate 115200 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 115200 bits/s,
18 and 40ms frame. The base station shall set the value in the
19 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 115200 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_230400_40MS - Reverse Link Attribute Adjustment Gain for the
29 transmission rate 230400 bits/s.

30 If RC4_RC6_40MS_INCL is set to '0', the base station shall
31 omit this field.

32 If RC4_RC6_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 230400 bits/s,
37 and 40ms frame. The base station shall set the value in the
38 range from -48 to 48 inclusive.

39 If RC4_RC6_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 230400 bits/s
44 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_518400_40MS - Reverse Link Attribute Adjustment Gain for the
48 transmission rate 518400 bits/s.

1 If RC4_RC6_40MS_INCL is set to '0', the base station shall
2 omit this field.

3 If RC4_RC6_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 518400 bits/s,
8 and 40ms frame. The base station shall set the value in the
9 range from -48 to 48 inclusive.

10 If RC4_RC6_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 518400 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 RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
19 Configuration 3 or 5 of 80ms frame included indicator.

20 If Reverse Link Attribute Adjustment Gain for Radio
21 Configuration 3 or 5 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_19200_80MS - Reverse Link Attribute Adjustment Gain for the
25 transmission rate 19200 bits/s.

26 If RC3_RC5_80MS_INCL is set to '0', the base station shall
27 omit this field.

28 If RC3_RC5_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 19200 bits/s,
33 and 80ms frame. The base station shall set the value in the
34 range from -48 to 48 inclusive.

35 If RC3_RC5_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 19200 bits/s
40 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_38400_80MS - Reverse Link Attribute Adjustment Gain for the
44 transmission rate 38400 bits/s.

45 If RC3_RC5_80MS_INCL is set to '0', the base station shall
46 omit this field.

1 If RC3_RC5_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 38400 bits/s,
 6 and 80ms frame. The base station shall set the value in the
 7 range from -48 to 48 inclusive.

8 If RC3_RC5_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 38400 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_76800_80MS - Reverse Link Attribute Adjustment Gain for the
 17 transmission rate 76800 bits/s.

18 If RC3_RC5_80MS_INCL is set to '0', the base station shall
 19 omit this field.

20 If RC3_RC5_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 76800 bits/s,
 25 and 80ms frame. The base station shall set the value in the
 26 range from -48 to 48 inclusive.

27 If RC3_RC5_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 76800 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_153600_80MS - Reverse Link Attribute Adjustment Gain for the
 36 transmission rate 153600 bits/s.

37 If RC3_RC5_80MS_INCL is set to '0', the base station shall
 38 omit this field.

39 If RC3_RC5_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 153600 bits/s,
 44 and 80ms frame. The base station shall set the value in the
 45 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 153600 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 RC4_RC6_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio
10 Configuration 4 or 6 of 80ms frame included indicator.

11 If Reverse Link Attribute Adjustment Gain for Radio
12 Configuration 4 or 6 of 80ms 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_28800_80MS - Reverse Link Attribute Adjustment Gain for the
16 transmission rate 28800 bits/s.

17 If RC4_RC6_80MS_INCL is set to '0', the base station shall
18 omit this field.

19 If RC4_RC6_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 28800 bits/s,
24 and 80ms frame. The base station shall set the value in the
25 range from -48 to 48 inclusive.

26 If RC4_RC6_80MS_INCL is set to '1' and
27 NORM_ATT_GAIN_TYPE is set to '1', the base station shall set
28 this field to the value of the pilot reference level adjustment
29 that the mobile station is to make for the transmission
30 attributes with transmission rate 28800 bits/s and 80ms
31 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_57600_80MS - Reverse Link Attribute Adjustment Gain for the
35 transmission rate 57600 bits/s.

36 If RC4_RC6_80MS_INCL is set to '0', the base station shall
37 omit this field.

38 If RC4_RC6_80MS_INCL is set to '1' and
39 NORM_ATT_GAIN_TYPE is set to '0', the base station shall set
40 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 57600 bits/s,
43 and 80ms frame. The base station shall set the value in the
44 range from -48 to 48 inclusive.

1 If RC4_RC6_80MS_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 57600 bits/s and 80ms
 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_115200_80MS - Reverse Link Attribute Adjustment Gain for the
 10 transmission rate 115200 bits/s.

11 If RC4_RC6_80MS_INCL is set to '0', the base station shall
 12 omit this field.

13 If RC4_RC6_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 115200 bits/s,
 18 and 80ms frame. The base station shall set the value in the
 19 range from -48 to 48 inclusive.

20 If RC4_RC6_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 115200 bits/s
 25 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_259200_80MS - Reverse Link Attribute Adjustment Gain for the
 29 transmission rate 259200 bits/s.

30 If RC4_RC6_80MS_INCL is set to '0', the base station shall
 31 omit this field.

32 If RC4_RC6_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 259200 bits/s,
 37 and 80ms frame. The base station shall set the value in the
 38 range from -48 to 48 inclusive.

39 If RC4_RC6_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 259200 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 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 If RPC_ADJ_REC_TYPE is equal to '0011', the base station shall set type-specific fields as
 6 specified in Table 3.7.5.20-7.

7

Table 3.7.5.20-7. 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)

8

9 RL_CQICH_ATT_ADJ_GAIN_TYPE - Reverse Channel Quality Indicator Channel
 10 attribute adjustment gain value type indicator

11 If the following fields are set to the nominal attribute gain
 12 adjustment values that the mobile station is to use for the
 13 transmission attributes (relative to Nominal_Attribute_Gain
 14 specified in [2]), the base station shall set this field to '0'. If
 15 the following fields are set to the pilot reference level
 16 adjustment values that the mobile station is to use for the
 17 transmission attributes (relative to Pilot_Reference_Level
 18 specified in [2]), the base station shall set this field to '1'.

19 RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL - Reverse Channel Quality Indicator Channel
 20 attribute adjustment gain for the high power level included
 21 indicator.

22 If the attribute adjustment gain for the high 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_HIGH - Attribute adjustment gain for Reverse Channel
 27 Quality Indicator Channel for the high Channel Quality
 28 Indicator gain power level.

29 If RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL is set to '0', the
 30 base station shall omit this field; otherwise, the base station
 31 shall set this field 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 attribute
 3 gain adjustment that the mobile station is to make for the
 4 transmission attributes for the high power level of R-CQICH.
 5 The base station shall set the value in the range from -40 to
 6 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 - Reverse Channel Quality Indicator Channel
 14 attribute adjustment gain for the low power level included
 15 indicator.

16 If the attribute adjustment gain for the low power level of
 17 Reverse Channel Quality Indicator Channel transmission is
 18 included in this message, the base station shall set this field
 19 to '1'; otherwise, the base station shall set this field to '0'.

20 RL_CQICH_ATT_ADJ_GAIN_LOW - Attribute adjustment gain for Reverse Channel
 21 Quality Indicator Channel for the low Channel Quality
 22 Indicator gain power level.

23 If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is set to '0', the base
 24 station shall omit this field; otherwise, the base station shall
 25 set this field 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 attribute
 28 gain adjustment that the mobile station is to make for the
 29 transmission attributes for the low power level of R-CQICH.
 30 The base station shall set the value in the range from -16 to
 31 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

39

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)
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
<i>{ (REV_PDCCH_EP_SIZE_NUM + 1)</i>	
<i>{ (2)</i>	
REV_PDCCH_ATTRIBUTE_ADJ_GAIN	8
<i>} (2)</i>	
<i>} (REV_PDCCH_EP_SIZE_NUM + 1)</i>	
REV_PDCCH_BOOST_ADJ_INCL	1
<i>{ (2)</i>	
REV_PDCCH_BOOST_ADJ_GAIN	0 or 8
<i>} (2)</i>	
REV_PDCCH_PAYLOAD_ADJ_INCL	1
REV_PDCCH_EP_SIZE_NUM_1	0 or 4
<i>{ (REV_PDCCH_EP_SIZE_NUM_1 + 1)</i>	
REV_PDCCH_PAYLOAD_ADJ_GAIN	8
<i>} (REV_PDCCH_EP_SIZE_NUM_1 + 1)</i>	

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
<i>{ (REV_PDCH_EP_SIZE_NUM +1)</i>	
REV_PDCH_PAYLOAD_ADJ_GAIN	8
<i>} (REV_PDCH_EP_SIZE_NUM +1)</i>	
REV_PDCH_BOOST_ADJ_INCL	1
<i>{ (2)</i>	
REV_PDCH_BOOST_ADJ_GAIN	8
<i>} (2)</i>	
REV_PDCH_SUBPACKET_ADJ_INCL	1
REV_PDCH_RETRX_NUM	0 or 2
<i>{ (REV_PDCH_RETRX_NUM+1)</i>	
REV_PDCH_SUBPACKET_ADJ_GAIN	8
<i>} (REV_PDCH_RETRX_NUM+1)</i>	
REV_PDCH_ATTRIBUTE_ADJ_INCL	1
REV_PDCH_EP_SIZE_NUM_1	0 or 4
REV_PDCH_RETRX_NUM_1	0 or 2
<i>{ (REV_PDCH_EP_SIZE_NUM_1 +1)</i>	
<i>{ (REV_PDCH_RETRX_NUM_1+1)</i>	
<i>{ (2)</i>	
REV_PDCH_ATTRIBUTE_ADJ_GAIN	8
<i>} (2)</i>	
<i>} (REV_PDCH_RETRX_NUM_1+1)</i>	
<i>} (REV_PDCH_EP_SIZE_NUM_1 +1)</i>	
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 TThe 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 TThe 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 nominal
6 attribute gain adjustment that the mobile station is to make
7 for the transmission attributes for the power level of R-
8 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 '0'.

19 REV_PDCCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Control
20 Channel Attribute Adjustment Gains.
21 If REV_PDCCH_ATTRIBUTE_ADJ_INCL 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 one less than half the
25 number of occurrences of the field included hereafter. The
26 records are listed per encoder packet size, in the following
27 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,
28 9240, 12312, 15384, 18456 bits.

29 If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to '1', the base station shall include
30 REV_PDCCH_EP_SIZE_NUM+1 occurrences of the following record:

31 The base station shall include 2 occurrences of the following field. The first occurrence of
32 this field is for the non-boosted mode, while the second is for the boosted mode.

33 REV_PDCCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Control Channel Attribute
34 Adjustment Gain.
35 The base station shall set this field to the value of the nominal
36 attribute gain adjustment that the mobile station is to make
37 for the transmission attributes for the power level of R-
38 PDCCH, for the i-th encoder packet size, and for the non-
39 boosted and boosted modes.

40 The base station shall set the value in the range from -32 to
41 32 inclusive. The base station shall set this field to the
42 correction factor expressed as a two's complement value in
43 units of 0.125 dB.

1 REV_PDCCH_BOOST_ADJ_INCL - Reverse Packet Data Control Channel Boost
 2 Adjustment included field.
 3 If the attribute adjustment gains for the Reverse Packet Data
 4 Control Channel per boosted mode are included in this
 5 message, the base station shall set this field to '1'; otherwise,
 6 the base station shall set this field to '0'.

7 If REV_PDCCH_BOOST_ADJ_INCL is set to '1', the base station shall include two
 8 occurrences of the following record:

9 REV_PDCCH_BOOST_ADJ_GAIN - Reverse Packet Data Control Channel Boost
 10 Adjustment Gains.
 11 The base station shall set this field to the value of the nominal
 12 attribute gain adjustment that the mobile station is to make
 13 for the transmission attributes for the power level of R-
 14 PDCCH, for the appropriate mode.
 15 The base station shall set the value in the range from -32 to
 16 32 inclusive.
 17 The first occurrence of this field is for the non-boosted mode,
 18 while the second is for the boosted mode. The base station
 19 shall set this field to the correction factor expressed as a two's
 20 complement value in units of 0.125 dB.

21 REV_PDCCH_PAYLOAD_ADJ_INCL - Reverse Packet Data Control Channel Payload
 22 Attribute Adjustment included field.
 23 If the attribute adjustment gains for the Reverse Packet Data
 24 Control Channel are included per encoder packet size in this
 25 message, the base station shall set this field to '1'; otherwise,
 26 the base station shall set this field to '0'.

27 REV_PDCCH_EP_SIZE_NUM_1 - Number of occurrences of Reverse Packet Data Control
 28 Channel Payload Attribute Adjustment Gain records.
 29 If REV_PDCCH_PAYLOAD_ADJ_INCL is set to '0', the base
 30 station shall omit this field; otherwise, the base station shall
 31 include this field, and set it as follows.
 32 The base station shall set this field to one less than the
 33 number of occurrences of the field included hereafter. The
 34 fields are listed per encoder packet size, in the following
 35 ascending order: 192, 408, 792, 1560, 3096, 4632, 6168,
 36 9240, 12312, 15384, 18456 bits.

37 If REV_PDCCH_PAYLOAD_ADJ_INCL is set to '1', the base station shall include
 38 (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 nominal
 4 attribute gain adjustment that the mobile station is to make
 5 for the transmission attributes for the power level of R-
 6 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 nominal
 24 attribute gain adjustment that the mobile station is to make
 25 for the transmission attributes for the power level of R-PDCH.
- 26 The base station shall set the value in the range from -40 to
 27 56 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_PDCH_PAYLOAD_ADJ_INCL - Reverse Packet Data Channel Adjustment included
 31 field.
 32 If the attribute adjustment gains for the Reverse Packet Data
 33 Channel are included per encoder packet size in this
 34 message, the base station shall set this field to '1'; otherwise,
 35 the base station shall set this field to '0'.
- 36 REV_PDCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Channel
 37 Payload Adjustment Gains.
 38 If REV_PDCH_PAYLOAD_ADJ_INCL is set to '0', the base
 39 station shall omit this field; otherwise, the base station shall
 40 include this field, and set it as follows.
- 41 The base station shall set this field to one less than the
 42 number of occurrences of the following field. The fields are
 43 listed per encoder packet size, in the following ascending
 44 order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312,
 45 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 nominal
 6 attribute gain adjustment that the mobile station is to make
 7 for the transmission attributes for the power level of R-PDCH,
 8 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 nominal
 25 attribute gain adjustment that the mobile station is to make
 26 for the transmission attributes for the power level of R-PDCH.

27 The base station shall set the value in the range from -40 to
 28 56 inclusive. The first occurrence of this field is for the non-
 29 boosted mode, while the second is for the boosted mode. The
 30 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_PDCH_SUBPACKET_ADJ_INCL - Reverse Packet Data Channel Subpacket
 33 Adjustment included field.

34 If the attribute adjustment gains for the Reverse Packet Data
 35 Channel are included per subpacket transmission round in
 36 this message, the base station shall set this field to '1';
 37 otherwise, the base station shall set this field to '0'.

38 REV_PDCH_RETRX_NUM - Number of occurrences of the Reverse Packet Data
 39 Channel Subpacket Adjustment Gains.

40 If REV_PDCH_SUBPACKET_ADJ_INCL 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 The base station shall set this field to one less than the
 44 number of occurrences of the following field.

1 If REV_PDCH_SUBPACKET_ADJ_INCL is set to '1', the base station shall include
2 (REV_PDCH_RETRX_NUM+1) occurrences of the following record:

3 REV_PDCH_SUBPACKET_ADJ_GAIN - Reverse Packet Data Channel Subpacket
4 Adjustment Gain.

5 The base station shall set this field to the value of the nominal
6 attribute gain adjustment that the mobile station is to make
7 for the transmission attributes for the power level of R-PDCH
8 on the i-th transmission round.

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_ATTRIBUTE_ADJ_INCL - Reverse Packet Data Channel Attribute
14 Adjustment included field.

15 If the attribute adjustment gains for the Reverse Packet Data
16 Channel are included per encoder packet size and per
17 subpacket transmission round in this message, the base
18 station shall set this field to '1'; otherwise, the base station
19 shall set this field to '0'.

20 REV_PDCH_EP_SIZE_NUM_1 - Number of occurrences of the Reverse Packet Data
21 Channel Attribute Adjustment Gains record.

22 If REV_PDCH_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 the
26 number of occurrences of the following subrecord. The
27 subrecords 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_PDCH_ATTRIBUTE_ADJ_INCL is set to '1', the base station shall include
31 (REV_PDCH_EP_SIZE_NUM_1+1) occurrences of the following subrecord:

32 REV_PDCH_RETRX_NUM_1 - Number of occurrences of the Reverse Packet Data
33 Channel Subpacket Adjustment Gains.

34 The base station shall set this field to one less than the
35 number of occurrences of the following field.

36 The base station shall include (REV_PDCH_RETRX_NUM_1+1) occurrences of the following
37 record:

38 The base station shall include 2 occurrences of the following field. The first occurrence of
39 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 nominal
4			attribute gain adjustment that the mobile station is to make
5			for the transmission attributes for the power level of R-PDCH,
6			for the i-th encoder packet size on a j-th transmission round,
7			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.
42			The base station shall set this field to the identifier of the
43			BCMC program to which this Logical to Physical Mapping
44			entry applies.

- 1 BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field
 2 The base station shall set this field to the length, in bits, of
 3 the BCMC_FLOW_DISCRIMINATOR of this program.
- 4 NUM_FLOW_DISCRIMINATOR - Number of flow discriminators
 5 The length of this field shall be determined by the value of the
 6 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
 7 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
 8 is omitted; otherwise, the length of this field shall be
 9 BCMC_FLOW_DISCRIMINATOR_LEN bits.
 10 The base station shall set this field to the number of flow
 11 discriminators included for this program.
- 12 If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include
 13 NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;
 14 otherwise, the base station shall include 1 occurrence of the following variable length
 15 record:
- 16 BCMC_FLOW_DISCRIMINATOR - BCMC Flow discriminator.
 17 The length of this field shall be determined by the value of the
 18 BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
 19 BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
 20 is omitted; otherwise, the length of this field shall be
 21 BCMC_FLOW_DISCRIMINATOR_LEN bits.
 22 The base station shall set this field to the BCMC flow
 23 discriminator to which this Logical to Physical Mapping entry
 24 applies.
- 25 PHYSICAL_RESOURCE - Physical resource identifier.
 26 The base station shall set this field to the physical resource
 27 identifier '0000', '0001', '0010', '0011' as shown in Table
 28 3.7.5.20-4 to which the logical BCMC traffic channel
 29 corresponding to BCMC_FLOW_ID specified in this BCMC
 30 Logical to Physical Mapping entry is to be mapped.
- 31 FORWARD_FLAG - Forward mapping indicator.
 32 The base station shall set this field to '1' if the logical to
 33 physical channel mapping specified in this record applies to
 34 forward logical channels; otherwise, the base station shall set
 35 this field to '0'.
- 36 REVERSE_FLAG - Reverse mapping indicator.
 37 The base station shall set this field to '1' if the logical to
 38 physical channel mapping specified in this record applies to
 39 reverse logical channels; otherwise, the base station shall set
 40 this field to '0'.
- 41 BSR_ID_INCL - BSR_ID included indicator.
 42 The base station shall set this field to '1' if BSR_ID field is
 43 included in this message; otherwise, the base station shall set
 44 this field to '0' and include FOR_TRAFFIC, REV_TRAFFIC
 45 fields in this message.

1

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.	

2

REV_PDCH_PARAMS_INCL

- Reverse PDCH Parameters Included indicator.

3

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'.

4

5

6

REV_PDCH_PARAMS_1_INCL

- Reverse Packet Data Channel parameters subset included indicator.

7

8

If REV_PDCH_PARAMS_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.

9

10

11

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'.

12

13

14

REV_PDCH_MAX_AUTO_TPR

- Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

15

16

If REV_PDCH_PARAMS_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.

17

18

19

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]).

20

21

22

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

23

24

REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.

25

26

If REV_PDCH_PARAMS_1_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.

27

28

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, 1,
4 or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

5 REV_PDCH_OPER_PARMS_INCL - Reverse Packet Data Channel operational parameters
6 included indicator.

7 If REV_PDCH_PARMS_INCL 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' if the following R-
11 PDCH operational parameters are included in this message;
12 otherwise, the base station shall set this field to '0'.

13 REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET - Maximum Allowed Reverse
14 PDCH encoder packet size.

15 If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
16 included and 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 the maximum size
20 encoder packet that the mobile station is allowed to use. (see
21 [2] and [3]).

22 The base station shall set this field to a value in the range 0 to
23 10 inclusive, corresponding to the encoder packet sizes 192,
24 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and
25 18456 bits respectively.

26 REV_PDCH_DEFAULT_PERSISTENCE - Reverse Packet Data Channel default initial
27 persistence.

28 If REV_PDCH_OPER_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 '1' if the mobile station
33 is to be persistent at the call setup; otherwise, the base
34 station shall set this field to '0' (See [3]).

35 REV_PDCH_RESET_PERSISTENCE - Reverse Packet Data Channel reset persistence
36 indicator.

37 If REV_PDCH_OPER_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 '1' if, at the end of a
42 persistent grant, the mobile station shall reset its persistent
43 indicator to persistent; otherwise, the base station shall set
44 this field to '0' if the mobile station shall reset its persistent
45 indicator to non-persistent (See [3]).

46 REV_PDCH_GRANT_PRECEDENCE - Reverse Packet Data Channel Grant Precedence
47 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 unicast Forward
 6 Grant Channel messages have precedence over Rate Control
 7 commands; otherwise, the base station shall set this field to
 8 '0' to indicate that Rate Control down commands from non-
 9 serving sectors have precedence over Forward Grant Channel
 10 messages (see [3]).

11 REV_PDCH_MSIB_SUPPORTED - Reverse Packet Data Channel MSIB usage 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 the mobile station
 17 is to use the MSIB bit on the Reverse Packet Data Control
 18 Channel; otherwise, the base station shall set this field to
 19 '0'(See [3]).

20 REV_PDCH_ALWAYS_ACK_FINAL_ROUND - Reverse Packet Data Channel Final Round
 21 Always Acknowledged

22 If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is
 23 included and 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 The base station shall set this field to '1' if all of the following
 27 conditions are true:

- 28 • The Forward Acknowledgment Channel is assigned to
 29 the mobile station,
- 30 • The base station does not send an acknowledgment on
 31 the assigned Forward Acknowledgment Channel
 32 whenever a Reverse Packet Data Channel
 33 transmission is not successfully decoded on the last
 34 ARQ round, and
- 35 • The base station sends an acknowledgment on the
 36 assigned Forward Acknowledgment Channel to the
 37 mobile station whenever a Reverse Packet Data
 38 Channel transmission is successfully decoded on the
 39 last ARQ round,

40 Otherwise, the base station shall set this field to '0'.

41 REV_PDCH_SOFT_HANDOFF_RESET_IND - Reverse Packet Data Channel soft handoff
 42 reset 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 the mobile station
 6 is to initialize RPDCHCF when soft selection occurs in the
 7 FPDCHCF; otherwise, the base station shall set this field to '0'
 8 (see [3]).
- 9 REV_PDCH_BOOST_PARMS_INCL - Reverse Packet Data Channel boosted mode
 10 parameters included indicator.
- 11 If REV_PDCH_PARMS_INCL 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 '1' if the Reverse Packet
 15 Data Channel boosted mode parameters are included;
 16 otherwise, the base station shall set this field to '0'.
- 17 REV_PDCH_NUM_ARQ_ROUNDS_BOOST - Maximum number of allowed ARQ rounds
 18 on the Reverse PDCH in the boosted mode.
- 19 If REV_PDCH_BOOST_PARMS_INCL is omitted, or if it is
 20 included and set to '0', the base station shall omit this field;
 21 otherwise, the base station shall include this field and set it
 22 as follows.
- 23 The base station shall set this field to one less the maximum
 24 number of allowed ARQ rounds on the Reverse PDCH in the
 25 boosted mode. The base station shall set this field to 0, 1, or 2
 26 corresponding to 1, 2, or 3 rounds respectively (See [3]).
- 27 REV_PDCH_BOOST_OVERSHOOT - Reverse Packet Data Channel Boost Overshoot.
- 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 the boosted QoS
 33 parameter that defines the overshoot allowed by boosted QoS
 34 on the Reverse Packet Data Channel (see [3]).
- 35 The base station shall set this field to a value in the range 0 to
 36 3.875 dB inclusive in units of 0.125 dB.
- 37 REV_REQCH_ENABLED - Reverse Request Channel Enabled.
- 38 If REV_PDCH_PARMS_INCL is set to '0', the base station shall
 39 omit this field; otherwise, the base station shall include this
 40 field and set it as follows.
- 41 The base station shall set this field to '1' if the mobile station
 42 is to enable the Reverse Request Channel; otherwise, the base
 43 station shall set this field to '0'.
- 44 REV_REQCH_PARMS_INCL - Reverse Request Channel Parameters Included Indicator.

1 If REV_REQCH_ENABLED is omitted, or if it is included and
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 '1' if the Reverse
5 Request Channel Parameters are included hereafter;
6 otherwise, the base station shall set this field to '0'.

7 REV_REQCH_QUICK_REPEAT_ALLOWED - Reverse Request Channel Quick Repeat
8 Allowed indicator.

9 If REV_REQCH_PARAMS_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 '1' if quick repeats are
13 allowed on the Reverse Request Channel; otherwise, the base
14 station shall set this field to '0' (see [3]).

15 REV_REQCH_POWER_REPORTS_PARAMS_INCL - Reverse Request Channel Power Report
16 Parameters Included indicator.

17 If REV_REQCH_PARAMS_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 the parameters
21 needed for power status reports are included hereafter;
22 otherwise, the base station shall set this field to '0'.

23 REV_REQCH_POWER_HEADROOM_INCREASE- Reverse Request Channel Power
24 headroom increase delta to trigger power report.

25 If REV_REQCH_POWER_REPORTS_PARAMS_INCL is omitted,
26 or if it is included and 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 power headroom
30 increase delta that triggers a power report (see [3]).

31 The base station shall set this field to a value in the range 0 to
32 18 dB inclusive in units of 1 dB, or to 31 which means plus
33 infinity.

34 REV_REQCH_POWER_HEADROOM_DECREASE - Reverse Request Channel Power
35 headroom decrease delta to trigger power report.

36 If REV_REQCH_POWER_REPORTS_PARAMS_INCL is omitted,
37 or if it is included and set to '0', the base station shall omit
38 this field; otherwise, the base station shall include this field
39 and set it as follows.

40 The base station shall set this field to the power headroom
41 decrease delta that triggers a power report (see [3]).

42 The base station shall set this field to a value in the range 0 to
43 18 dB inclusive in units of 1 dB, or to 31 which means plus
44 infinity.

45 REV_REQCH_HEADROOM_DURATION - Reverse Request Channel minimum power
46 headroom update trigger interval.

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 minimum power
 6 headroom update trigger interval (see [3]).

7 The base station shall set this field to a value in the range 0 to
 8 5.10 seconds inclusive in units of 20 ms.

9 REV_REQCH_MAX_POWER_UPDATE_DURATION - Reverse Request Channel
 10 maximum power headroom update trigger interval.

11 If REV_REQCH_POWER_REPORTS_PARMS_INCL is omitted,
 12 or if it is included and 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 maximum power
 16 headroom update trigger interval (see [3]).

17 The base station shall set this field to a value in the range
 18 0.02 to 5.10 seconds inclusive in units of 20 ms, or to 0
 19 which means plus infinity.

20 REV_PDCH_CRC_PARMS_INCL - Reverse Packet Data Channel Common Rate Control
 21 Parameters Included Indicator.

22 If REV_PDCH_PARMS_INCL 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 '1' if Reverse Packet
 26 Data Channel Common Rate Control Parameters are included
 27 hereafter; otherwise, the base station shall set this field to '0'.

28 REV_PDCH_INIT_TARGET_TPR - Reverse Packet Data Channel initial target traffic to
 29 pilot ratio.

30 If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
 31 included and set to '0', the base station shall omit this field;
 32 otherwise, the base station shall include this field and set it
 33 as follows.

34 The base station shall set this field to the initial target traffic
 35 to pilot ratio on the Reverse Packet Data Channel (see [3]).

36 The base station shall set this field to a value in the range 0 to
 37 18 dB inclusive in units of 0.125 dB.

38 REV_PDCH_MAX_TARGET_TPR - Reverse Packet Data Channel maximum target traffic
 39 to pilot ratio.

40 If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is
 41 included and set to '0', the base station shall omit this field;
 42 otherwise, the base station shall include this field and set it
 43 as follows.

44 The base station shall set this field to the maximum target
 45 traffic to pilot ratio on the Reverse Packet Data Channel (see
 46 [3]).

- 1 REV_PDCH_SR_ID_MAP - Number of Reverse PDCH Encoder Packet sizes.
 2 If REV_PDCH_PARAMS_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 the i-th bit to '1' for each SR_ID
 6 associated with the Reverse Packet Data Channel. The LSB
 7 corresponds to SR_ID 0. The MSB corresponds to SR_ID 6.
- 8 The base station shall include the following subrecord for each bit set to '1' in
 9 REV_PDCH_SR_ID_MAP:
- 10 REV_PDCH_BOOST_ALLOWED - Reverse PDCH TPR Boost Allowed indicator.
 11 If REV_PDCH_PARAMS_INCL is omitted or is included and is
 12 set to '0', then the base station shall omit this field; otherwise,
 13 the base station shall include this field and set it as follows:
 14 The base station shall set this field to '1' if TPR (traffic to pilot
 15 ratio) power boost on the Reverse PDCH is allowed; otherwise,
 16 the base station shall set this field to '0'.
- 17 REV_PDCH_AUTO_ALLOWED - Reverse PDCH Autonomous Transmission Allowed
 18 indicator.
 19 If REV_PDCH_PARAMS_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 '1' if autonomous
 23 transmission on the Reverse PDCH is allowed; otherwise, the
 24 base station shall set this field to '0'.
- 25 If REV_REQCH_PARAMS_INCL, is not included or is included and is set to '0', the base
 26 station shall omit the following fields; otherwise, the base station shall include the following
 27 subrecord as described hereafter;
- 28 • The base station shall include an occurrence of the following subrecord for each bit
 29 set to '1' in REV_PDCH_SR_ID_MAP,
 - 30 • The base station shall include an additional subrecord for the aggregate traffic
 31 across all SR_ID's, and,
 - 32 • The base station shall set REV_REQCH_USE_POWER_REPORTS,
 33 REV_REQCH_USE_BUFFER_REPORTS, or REV_REQCH_USE_WATERMARKS to '1'
 34 in at least one of these subrecords.
- 35 REV_REQCH_MIN_DURATION - Reverse Request Channel Minimum Duration.
 36 The base station shall set this field to the minimum duration
 37 between REQCH messages for this sr_id(see [3]).
 38 The base station shall set this field to a value in the range 0 to
 39 5.10 seconds inclusive in units of 20 ms.
- 40 REV_REQCH_USE_POWER_REPORTS - Reverse Request Channel Use of Power Status
 41 Reports indicator.

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 '1' if power status
 6 reports are allowed; otherwise, the base station shall set this
 7 field to '0'.

8 REV_REQCH_USE_BUFFER_REPORTS - Reverse Request Channel Use of Buffer Status
 9 Reports indicator.

10 The base station shall set this field to '1' if buffer status
 11 reports are allowed; otherwise, the base station shall set this
 12 field to '0'.

13 REV_REQCH_USE_WATERMARKS - Reverse Request Channel Use of Watermark Reports
 14 indicator.

15 The base station shall set this field to '1' if watermark reports
 16 are allowed; otherwise, the base station shall set this field to
 17 '0'.

18 REV_REQCH_USE_DEFAULT_TAB - Reverse Packet Data Channel use default buffer
 19 size table indicator.

20 If REV_REQCH_USE_POWER_REPORTS is included and set
 21 to '1', or if REV_REQCH_USE_BUFFER_REPORTS is set to '1',
 22 or if REV_REQCH_USE_WATERMARKS is set to '1', the base
 23 station shall include this field and set it according to Table
 24 3.7.5.20.7; otherwise, the base station shall omit this field.

25 Table 3.7.5.20.7. Encoding of REV_REQCH_USE_DEFAULT_TAB

26

REV_REQCH_US E_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

27

28 Table 3.7.5.20.8. Default Buffer Size Table (REV_REQCH_USE_DEFAULT_TAB = '001')

29

Row	Buffer Size (in units of 96 bytes)
------------	---

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

1

2

Table 3.7.5.20.9. Default Buffer Size Table (REV_REQCH_USE_DEFAULT_TAB = '010')

3

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

4

1 REV_REQCH_BUF_QUANT_PARM_1 - Reverse Request Channel First Buffer Quantization
2 Parameter.

3 If REV_REQCH_USE_DEFAULT_TAB is omitted, or if it is
4 included and not set to '000', the base station shall omit this
5 field; otherwise, the base station shall include this field and
6 set it as follows.

7 The base station shall set this field to the first Reverse Packet
8 Data Channel buffer size quantization parameter.

9 The base station shall not set this field to '0000000' if
10 REV_REQCH_BUF_QUANT_PARM_2 is equal to '00000000'
11 (see [3]).

12 REV_REQCH_BUF_QUANT_PARM_2 - Reverse Request Channel Second Buffer
13 Quantization Parameter.

14 If REV_REQCH_USE_DEFAULT_TAB is omitted, or if it is
15 included and not set to '000', the base station shall omit this
16 field; otherwise, the base station shall include this field and
17 set it as follows.

18 The base station shall set this field to the second Reverse
19 Packet Data Channel buffer size quantization parameter.

20 The base station shall not set this field to '0000000' if
21 REV_REQCH_BUF_QUANT_PARM_1 is equal to '00000000'
22 (see [3]).

23 REV_REQCH_HIGH_WATERMARK_1- Reverse Request Channel First High Watermark
24 Parameter.

25 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
26 station shall omit this field; otherwise, the base station shall
27 include this field and set it to the first high watermark
28 parameter (for high priority reports) for this sr_id:

29 REV_REQCH_HIGH_WATERMARK_2 - Reverse Request Channel Second High Watermark
30 Parameter.

31 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
32 station shall omit this field; otherwise, the base station shall
33 include this field and set it to the second high watermark
34 parameter (for high priority report) for this sr_id.

35 REV_REQCH_LOW_WATERMARK_1 - Reverse Request Channel First Low Watermark
36 Parameter .

37 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
38 station shall omit this field; otherwise, the base station shall
39 include this field and set it to the first low watermark
40 parameter (for high priority reports) for this sr_id.

41 REV_REQCH_LOW_WATERMARK_2 - Reverse Request Channel Second Low
42 WatermarkParameter.

43 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
44 station shall omit this field; otherwise, the base station shall
45 include this field and set it to the second low watermark
46 prameter (for high priority reports) for this sr_id.

- 1 REV_REQCH_CEILING_1 - Reverse Request Channel Ceiling first parameter.
2 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
3 station shall omit this field; otherwise, the base station shall
4 include this field and set it to the first high ceiling level
5 parameter for this sr_id .
- 6 REV_REQCH_CEILING_2 - Reverse Request Channel Ceiling second parameter.
7 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
8 station shall omit this field; otherwise, the base station shall
9 include this field and set it to the second high ceiling level
10 parameter for this sr_id.
- 11 REV_REQCH_FLOOR_1 - Reverse Request Channel Floor first parameter.
12 If REV_REQCH_USE_WATERMARKS is equal to '0',the base
13 station shall omit this field; otherwise, the base station shall
14 include this field and set it to the first low floor level
15 parameters for this sr_id.
- 16 REV_REQCH_FLOOR_2 - Reverse Request Channel Floor second parameter.
17 If REV_REQCH_USE_WATERMARKS is equal to '0', the base
18 station shall omit this field; otherwise, the base station shall
19 include this field and set it to the second low floor level
20 parameter for this sr_id.
- 21 RESERVED - Reserved bits.
22 The base station shall add reserved bits as needed in order to
23 make the length of the entire record equal to an integer
24 number of octets. The base station shall set these bits to '0'.
25

1 3.7.5.21 Multiple Character Extended Display

2 If P_REV_IN_USE is equal to or greater than nine, the base station shall not transmit this
 3 information record to the mobile station.

4 This information record allows the network to supply supplementary service multiple
 5 character display information that may be displayed by the mobile station.

6

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 _i	Variable
-------------------	----------

} (NUM_FIELDS)

} (NUM_RECORDS)

}

RESERVED	0 - 7 (as needed)
----------	-------------------

7

8 MC_EXT_DISPLAY_IND - The indicator of Multiple Character Extended Display
 9 information record.

10 The base station shall set this field to '1'.

11 DISPLAY_TYPE - The type of display.

12 The base station shall set this field to the DISPLAY_TYPE
 13 value shown in Table 3.7.5.16-1 corresponding to the type of
 14 display, as defined in [8] Annex D.

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 The base station shall set this field to the DISPLAY_TAG value
 2 shown in Table 3.7.5.16-2 corresponding to the type of
 3 information contained in the following CHAR_i 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 '000'
 13 and the five least significant bit of this field shall be set to a
 14 value as specified in [30] to indicate the display encoding type
 15 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 CHAR_i field.

24 The base station shall set this field to the number of
 25 characters included in this record.

26 CHAR_i - 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

1 3.7.5.23 Enhanced Multiple Character Extended Display

2 This information record allows the network to supply supplementary service multiple
3 character display information that may be displayed by the mobile station.

4

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 _i	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 then 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 value
 5 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 '000'
 20 and the five least significant bit of this field shall be set to a
 21 value as specified in [30] to indicate the display encoding type
 22 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,

1 equal to an integer number of octets. The base station shall
2 set these bits to '0'.

3 RESERVED_1 - Reserved bits for octet alignment.

4 The mobile station shall add the minimum number of bits
5 necessary to make the record length in bits an integral
6 multiple of 8. The mobile station shall set these bits to '0'.

7

8

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.

Table 3.7.6.1-2. TD Mode

TD_MODE	Descriptions
00	OTD (Orthogonal Transmit Diversity) mode
01	STS (Space Time Spreading) mode
10-11	Reserved

RESERVED - Reserved bits.

1 The base station or mobile station shall set this field to
 2 '000000'.

3
 4 If PILOT_REC_TYPE is equal to '001', the base station or mobile station shall include the
 5 following fields:

Field	Length (bits)
QOF	2
WALSH_LENGTH	3
AUX_PILOT_WALSH	WALSH_LENGTH+6
RESERVED	0 to 7 (as needed)

- 6
 7 QOF - Quasi-orthogonal function index.
 8 The base station or mobile station shall set this field to the
 9 index of the Quasi-orthogonal function (see [2]).
 10 WALSH_LENGTH - Length of the Walsh Code.
 11 The base station or mobile station shall set this field to the
 12 WALSH_LENGTH value shown in Table 3.7.6.1-3
 13 corresponding to the length of the Walsh code for the pilot
 14 that is used as the Auxiliary pilot.

15 **Table 3.7.6.1-3. Walsh Code Length**

WALSH_LENGTH (binary)	Length of the Walsh Code
'000'	64
'001'	128
'010'	256
'011'	512
'100' - '111'	Reserved

- 16
 17 AUX_PILOT_WALSH - Walsh Code for the Auxiliary Pilot.
 18 The base station or mobile station shall set this field to the
 19 Walsh code corresponding to the Auxiliary pilot.
 20 RESERVED - Reserved bits.
 21 The base station or mobile station shall set all the bits of this
 22 field to '0' to make the entire record octet-aligned.

23 If PILOT_REC_TYPE is equal to '010', the base station or mobile station shall include the
 24 following fields:

25

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)

1
2
3
4
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12
13
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17
18

- 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.
- AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot Power Level.
The base station or mobile 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 3.7.6.1-4.

Table 3.7.6.1-4. Auxiliary Transmit Diversity Pilot Transmit Power Level

AUX_TD_POWER_LEVEL	Transmit Power Level
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

19
20
21
22
23

- 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.
- RESERVED - Reserved bits.

1
2
3
4
5
6
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8
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10
11
12
13
14
15
16
17
18
19

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 '011', the base station or mobile station shall include the following fields:

Field	Length (bits)
SR3_PRIMARY_PILOT	2
SR3_PILOT_POWER1	3
SR3_PILOT_POWER2	3

SR3_PRIMARY_PILOT – Primary SR3 pilot.

The base station or mobile station shall set this field to the value shown in Table 3.7.6.1-5 corresponding to the position of the primary SR3 pilot.

Table 3.7.6.1-5. The Position of the Primary SR3 Pilot

SR3_PRIMARY_PILOT (Binary)	Position
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.

1
2
3
4
5
6
7
8
9
10
11
12
13

Table 3.7.6.1-6. Pilot Transmission Power

SR3_PILOT_POWER1 , SR3_PILOT_POWER2 (Binary)	Relative Transmission Power
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.

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.

If PILOT_REC_TYPE is equal to '100', the base station or mobile station shall include the following 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 or mobile station shall set this field to the
4 value shown in Table 3.7.6.1-5 corresponding to the position
5 of the 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 or mobile station shall set this field to the
9 value shown in Table 3.7.6.1-6 corresponding to the power
10 level of the primary pilot with respect to the pilot on the lower
11 frequency 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 or mobile station shall set this field to the
16 value shown in Table 3.7.6.1-6 corresponding to the power
17 level of the primary pilot with respect to the pilot on the
18 higher frequency of the two remaining SR3 frequencies.

19 QOF – Quasi-orthogonal function index.

20 The base station or mobile station shall set this field to the
21 index of the Quasi-orthogonal function (see [2]) on the
22 frequency of the primary pilot.

1	WALSH_LENGTH	-	Length of the Walsh Code.
2			The base station or mobile station shall set this field to the
3			WALSH_LENGTH value shown in Table 3.7.6.1-3
4			corresponding to the length of the Walsh code for the pilot
5			that is used as the Auxiliary pilot on the frequency of the
6			primary pilot.
7	AUX_PILOT_WALSH	-	Walsh Code for the Auxiliary Pilot.
8			The base station or mobile station shall set this field to the
9			Walsh code corresponding to the Auxiliary pilot on the
10			frequency of the primary pilot.
11	ADD_INFO_INCL1	-	Additional information included for the pilot on the lower
12			frequency of the two remaining SR3 frequencies.
13			If the additional information for the pilot on the lower
14			frequencies of the two remaining SR3 frequencies is the same
15			as pilot on the primary frequency, the base station or mobile
16			station shall set this field to '0'; otherwise, the base station or
17			mobile station shall set this field to '1'.
18	QOF1	-	Quasi-orthogonal function index for the pilot on the lower
19			frequency of the two remaining SR3 frequencies.
20			If ADD_INFO_INCL1 is set to '0', the base station or mobile
21			station shall omit this field; otherwise, the base station or
22			mobile station shall set this field as follows:
23			The base station or mobile station shall set this field to the
24			index of the Quasi-orthogonal function (see [2]) on the lower
25			frequency of the two remaining SR3 frequencies.
26	WALSH_LENGTH1	-	Length of the Walsh Code for the pilot on the lower frequency
27			of the two remaining SR3 frequencies.
28			If ADD_INFO_INCL1 is set to '0', the base station or mobile
29			station shall omit this field; otherwise, the base station or
30			mobile station shall set this field as follows:
31			The base station or mobile station shall set this field to the
32			WALSH_LENGTH value shown in Table 3.7.6.1-3
33			corresponding to the length of the Walsh code for the pilot
34			that is used as the Auxiliary pilot on the lower frequency of
35			the two remaining SR3 frequencies.
36	AUX_PILOT_WALSH1	-	Walsh Code for the Auxiliary Pilot on the lower frequency of
37			the two remaining SR3 frequencies.
38			If ADD_INFO_INCL1 is set to '0', the base station or mobile
39			station shall omit this field; otherwise, the base station or
40			mobile station shall set this field as follows:
41			The base station or mobile station shall set this field to the
42			Walsh code corresponding to the Auxiliary pilot on the lower
43			frequency of the two remaining SR3 frequencies.
44	ADD_INFO_INCL2	-	Additional information included for the pilot on the higher
45			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 or mobile
4 station shall set this field to '0'; otherwise, the base station or
5 mobile station shall set this field 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 or mobile
9 station shall omit this field; otherwise, the base station or
10 mobile station shall set this field as follows:
11 The base station or mobile station shall set this field to the
12 index of the Quasi-orthogonal function (see [2]) on the higher
13 frequency of the two remaining SR3 frequencies.
- 14 WALSH_LENGTH2 - Length of the Walsh Code for the pilot on the higher frequency
15 of the two remaining SR3 frequencies.
16 If ADD_INFO_INCL2 is set to '0', the base station or mobile
17 station shall omit this field; otherwise, the base station or
18 mobile station shall set this field as follows:
19 The base station or mobile station shall set this field to the
20 WALSH_LENGTH value shown in Table 3.7.6.1-3
21 corresponding to the length of the Walsh code for the pilot
22 that is used as the Auxiliary pilot on the higher frequency of
23 the two remaining 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 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 code corresponding to the Auxiliary pilot on the higher
31 frequency of the two remaining SR3 frequencies.
- 32 RESERVED - Reserved bits.
33 The base station or mobile station shall set all the bits of this
34 field to '0' to make the entire record octet-aligned.
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1 **Annex A RESERVED**

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Annex B CDMA CALL FLOW EXAMPLES

This is an informative annex which contains examples of call flow. The diagrams follow these conventions:

- All messages are received without error
- Receipt of messages is not shown except in the handoff examples
- Acknowledgments are not shown
- Optional authentication procedures are not shown
- Optional private long code transitions are not shown

For the call flow diagrams B-22 through B-31, the following conventions hold:

- The following message acronyms are defined:

ERRM: Extended Release Response Message

ERRMM: Extended Release Response Mini Message

RRM: Resource Request Message

RRMM: Resource Request Mini Message

RRRM: Resource Release Request Message

RRRMM: Resource Release Request Mini Message

SreqM: Service Request Message

SCRM: Supplemental Channel Request Message

SCRMM: Supplemental Channel Request Mini Message

ERM: Extended Release Message

ERMM: Extended Release Mini Message

RAM: Resource Allocation Message

RAMM: Resource Allocation Mini Message

SCM: Service Connect Message

GHDM: General Handoff Direction Message

UHDM: Universal Handoff Direction Message

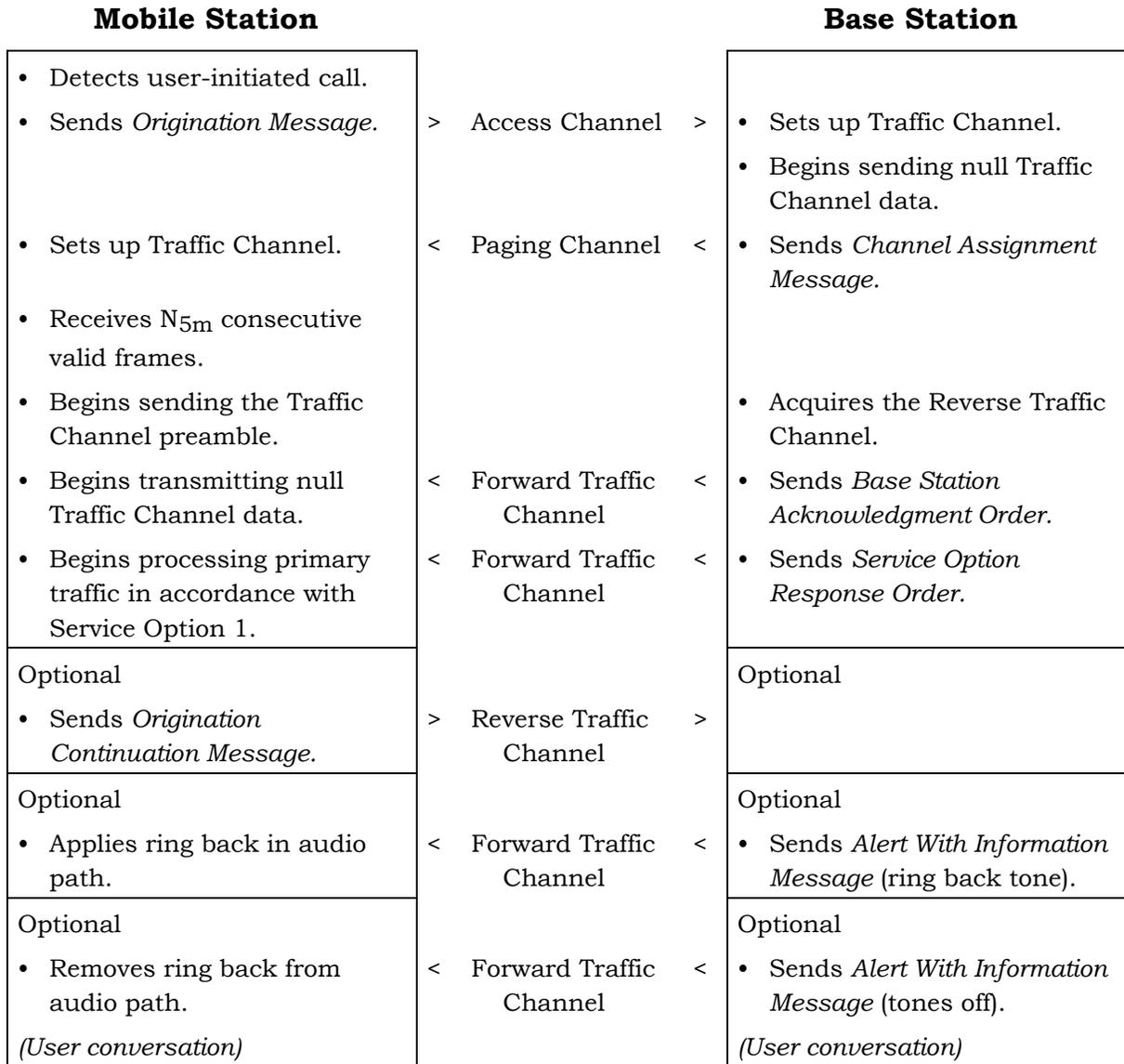
ESCAM: Extended Supplemental Channel Assignment Message

FSCAMM: Forward Supplemental Channel Assignment Mini Message

1 RSCAMM: Reverse Supplemental Channel Assignment Mini Message

2 HCM: (Extended) Handoff Complete Message

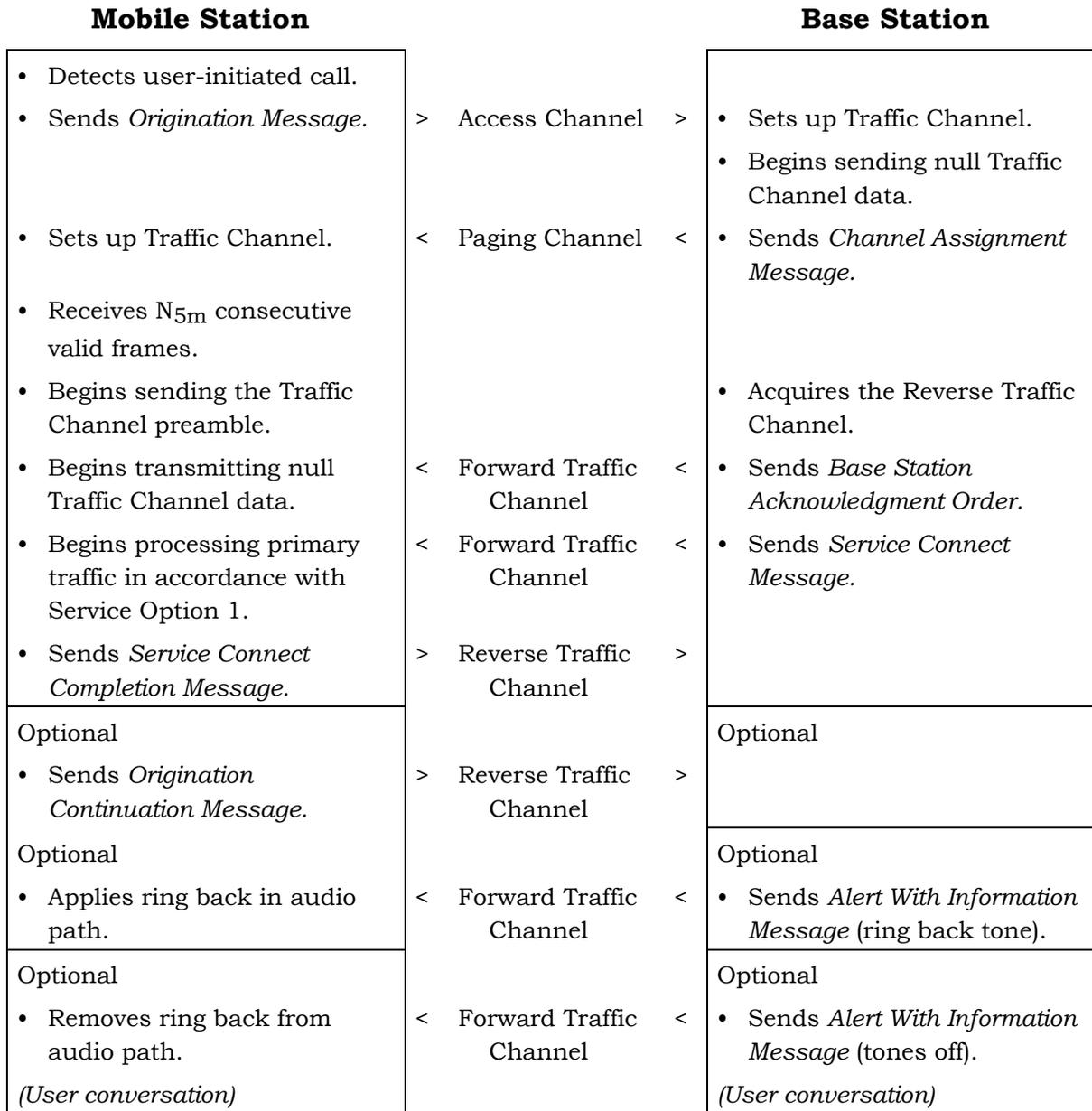
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4 **Figure B-1A. Simple Call Flow, Mobile Station Origination Example Using Service**
 5 **Option Negotiation with Service Option 1**

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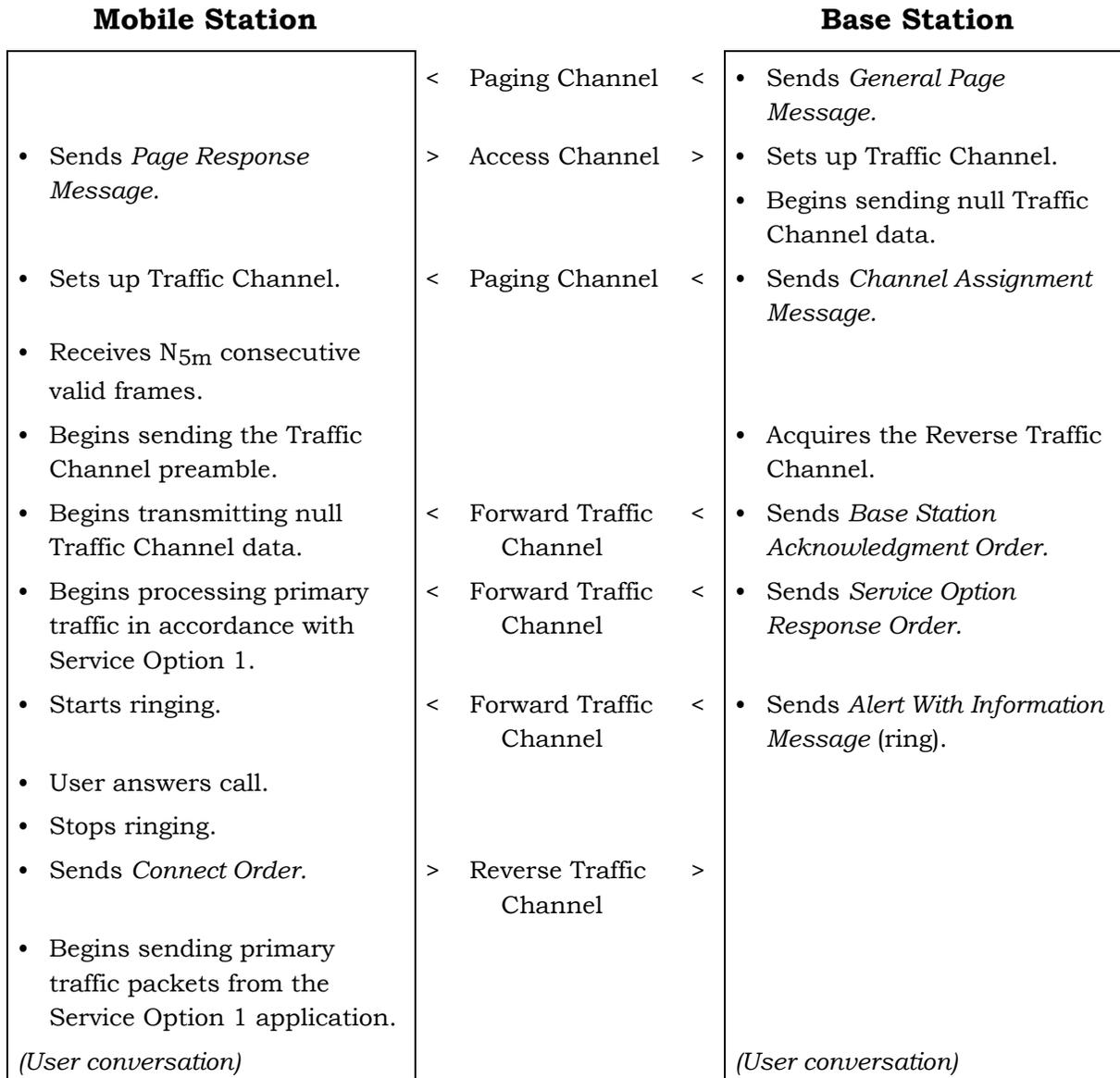
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Figure B-1B. Simple Call Flow, Mobile Station Origination Example Using Service Negotiation with Service Option 1

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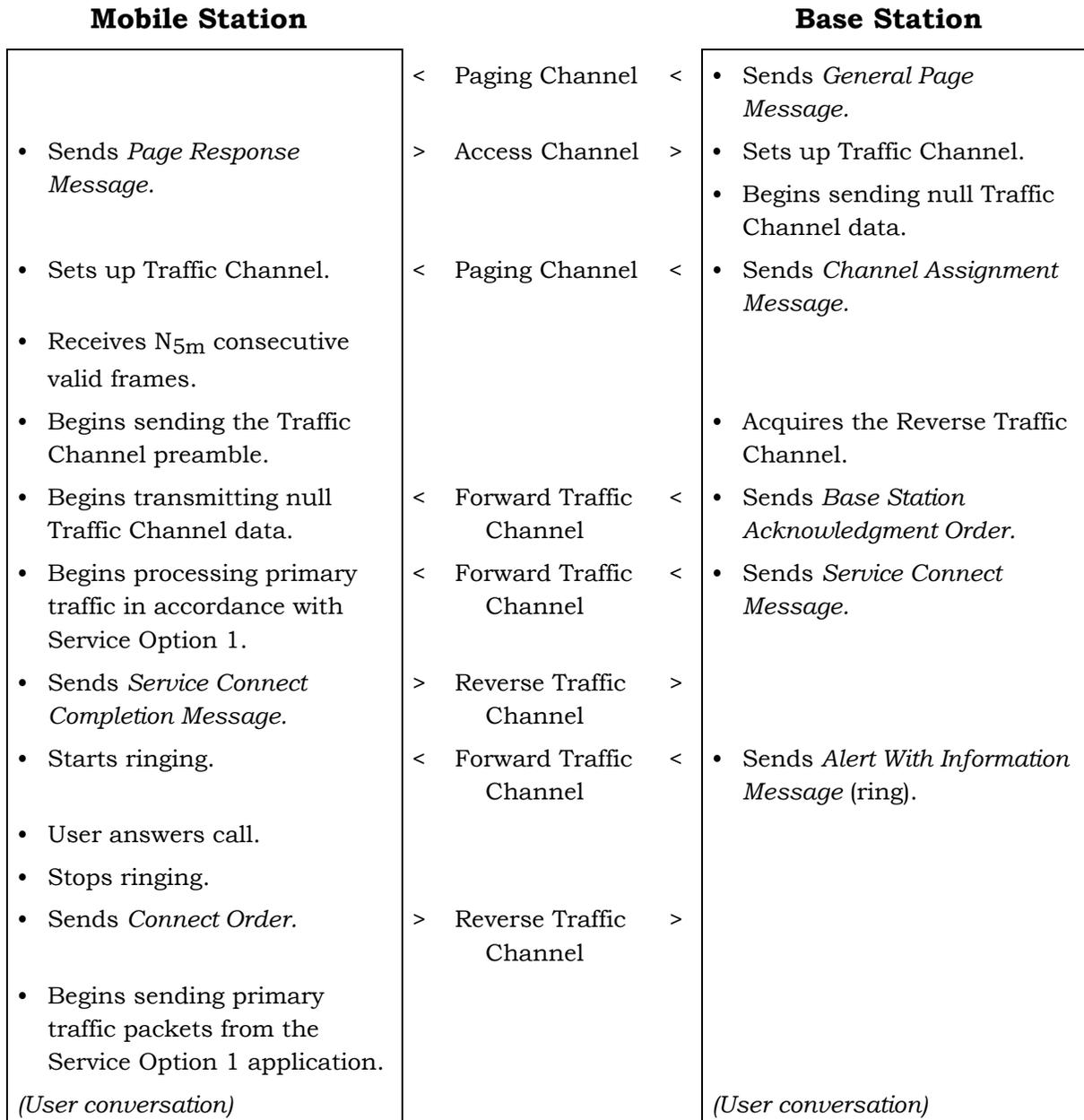
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Figure B-2A. Simple Call Flow, Mobile Station Termination Example Using Service Option Negotiation with Service Option 1

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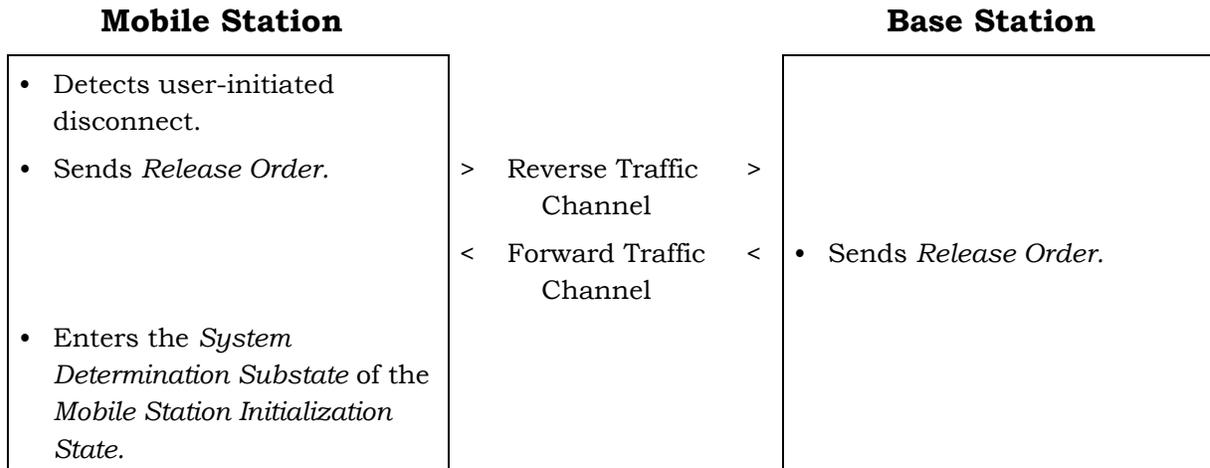
2

Figure B-2B. Simple Call Flow, Mobile Station Termination Example Using Service Negotiation with Service Option 1

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Figure B-3. Simple Call Flow, Mobile Station Initiated Call Disconnect Example

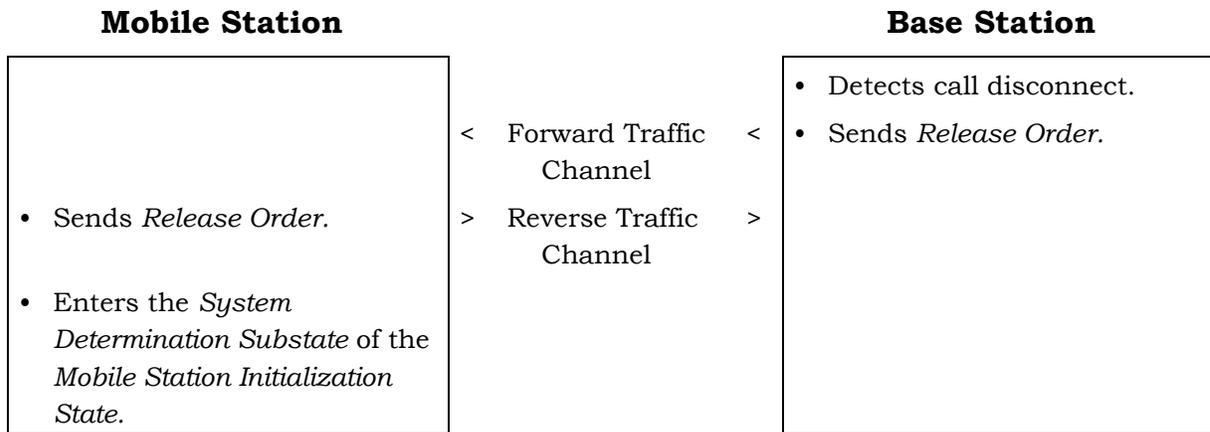
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Figure B-4. Simple Call Flow, Base Station Initiated Call Disconnect Example

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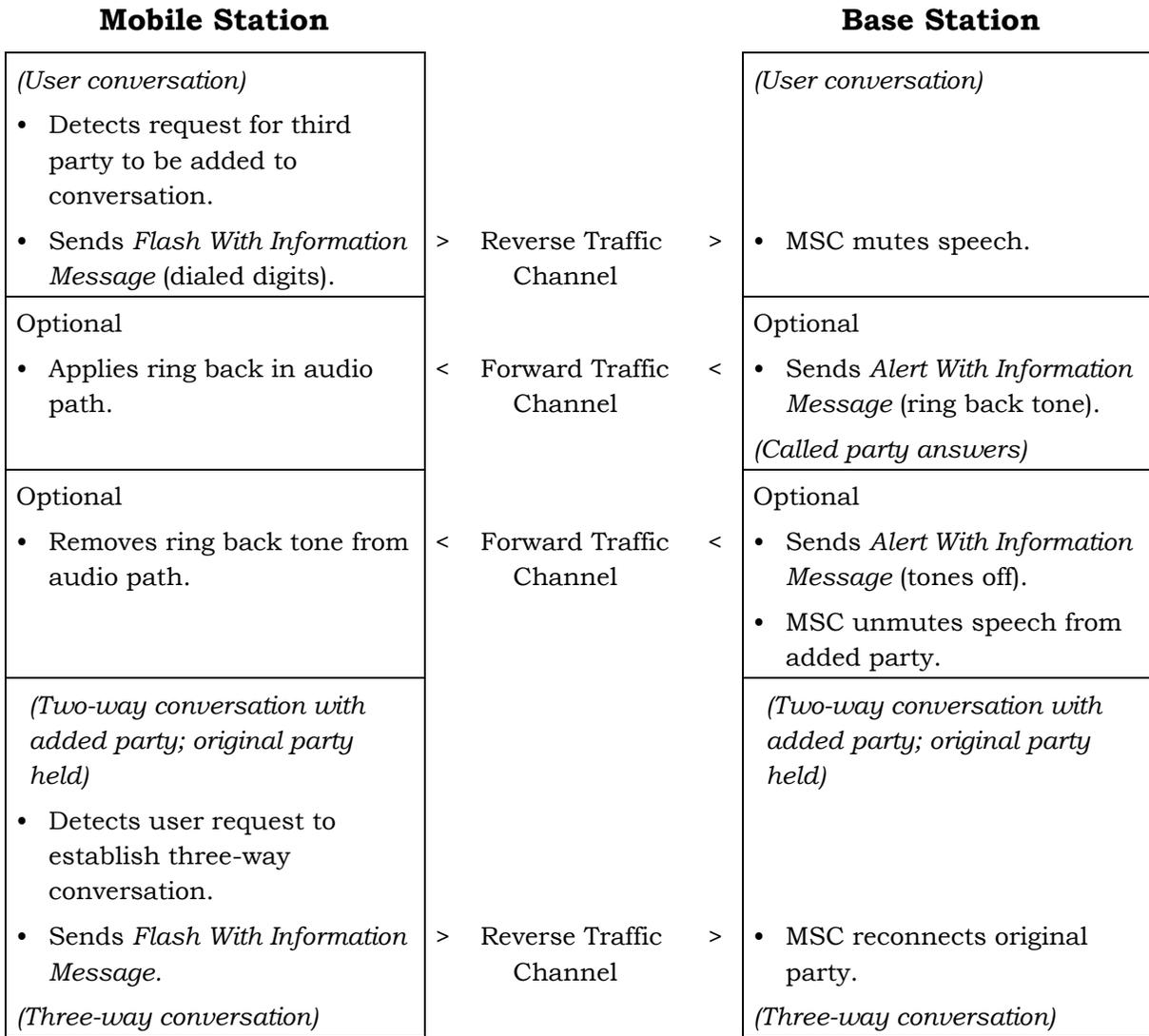


Figure B-5. Simple Call Flow, Three-Party Calling Example

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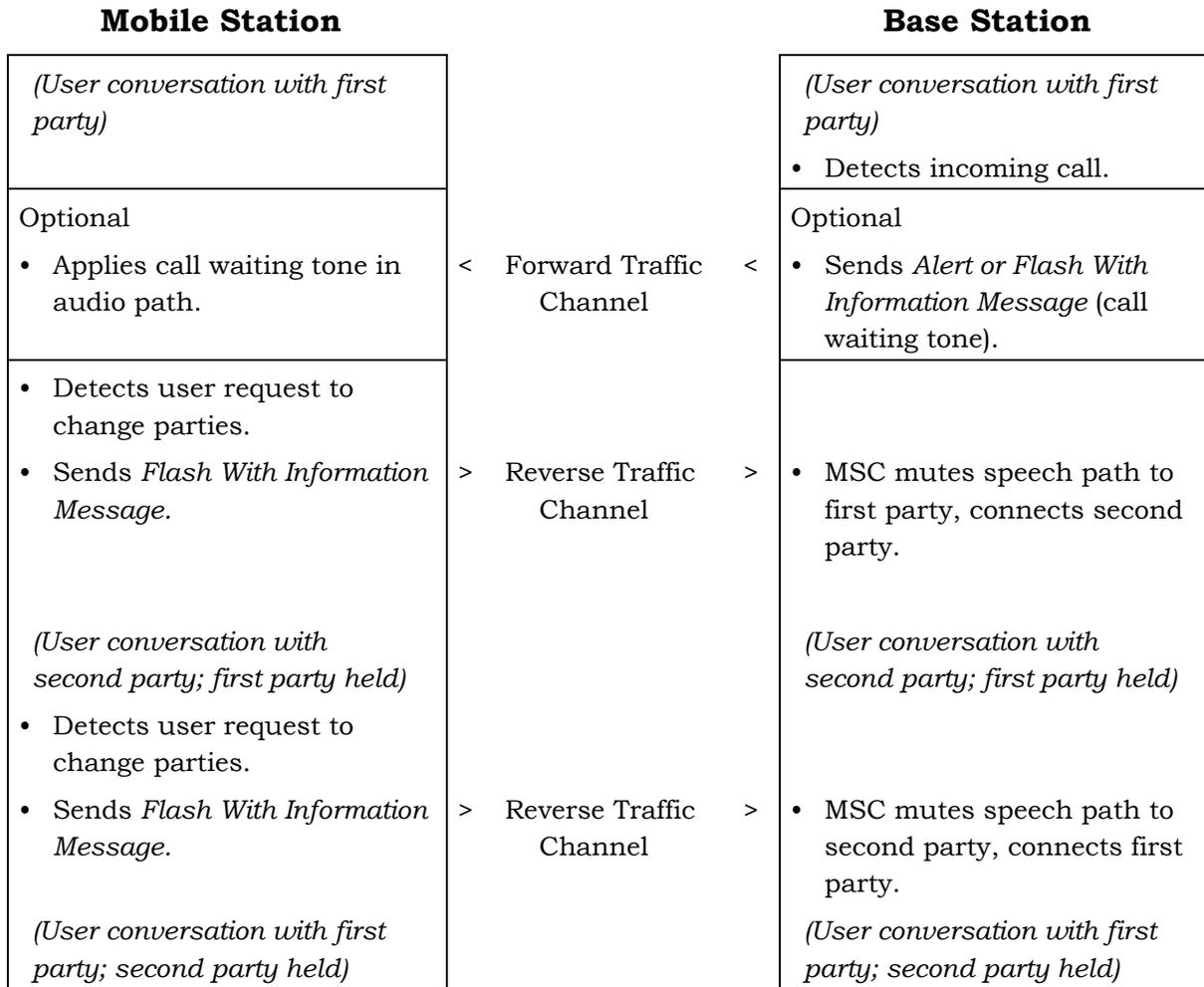


Figure B-6. Simple Call Flow, Call-Waiting Example

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Figure B-7 illustrates call processing operations during a soft handoff from base station A to base station B. Figure B-8 illustrates call processing operations during a sequential soft handoff in which the mobile station is transferred from a pair of base stations A and B through a pair of base stations B and C to base station C.

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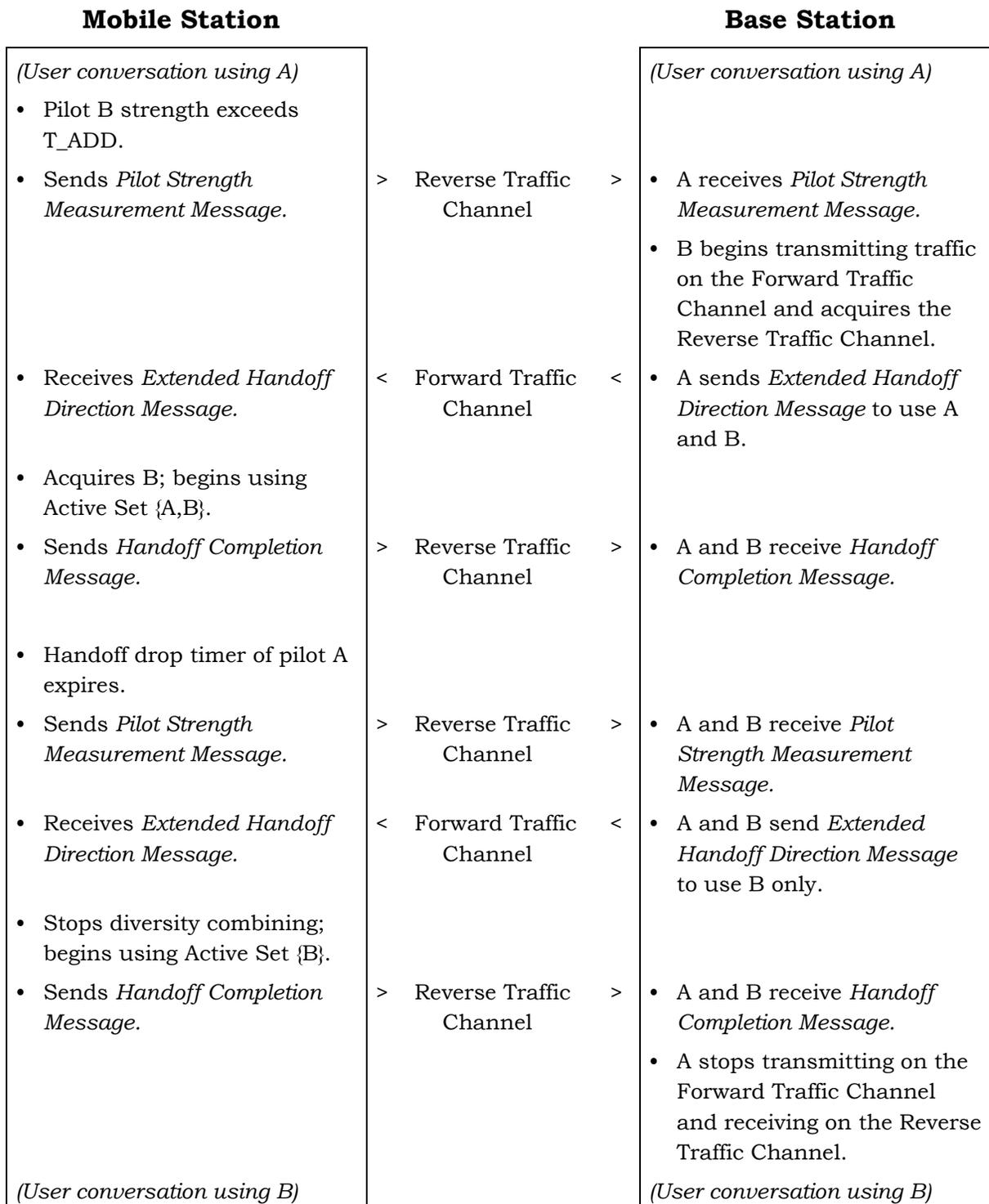
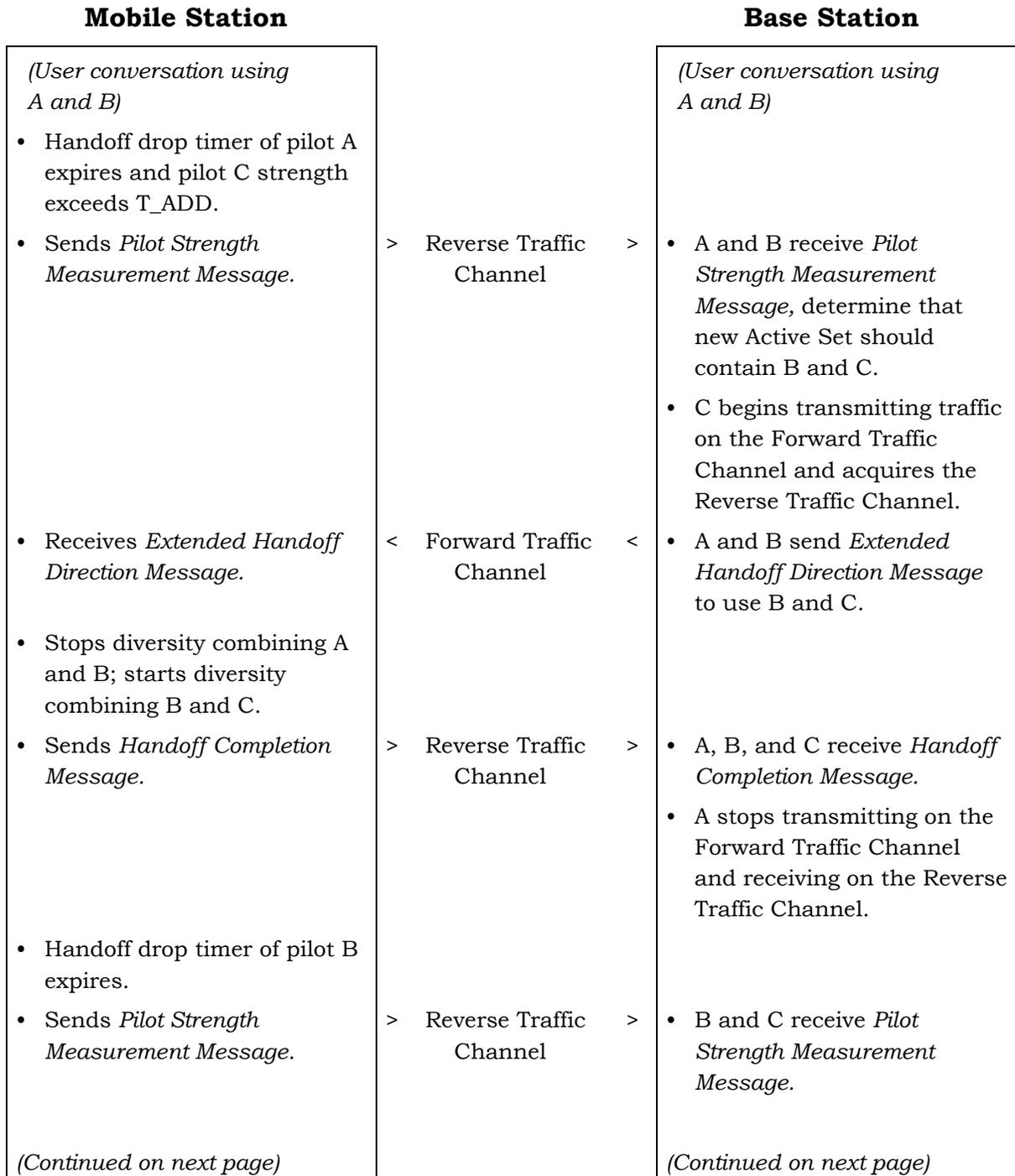


Figure B-7. Call Processing During Soft Handoff

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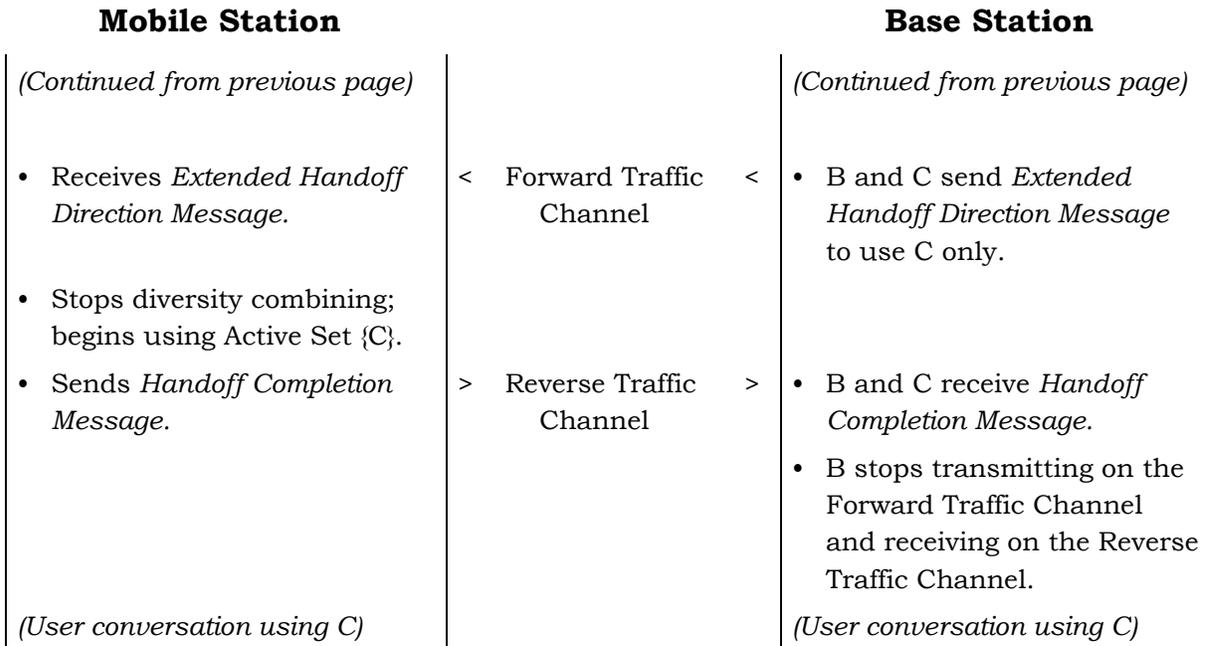


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Figure B-8. Call Processing During Sequential Soft Handoff (Part 1 of 2)

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Figure B-8. Call Processing During Sequential Soft Handoff (Part 2 of 2)

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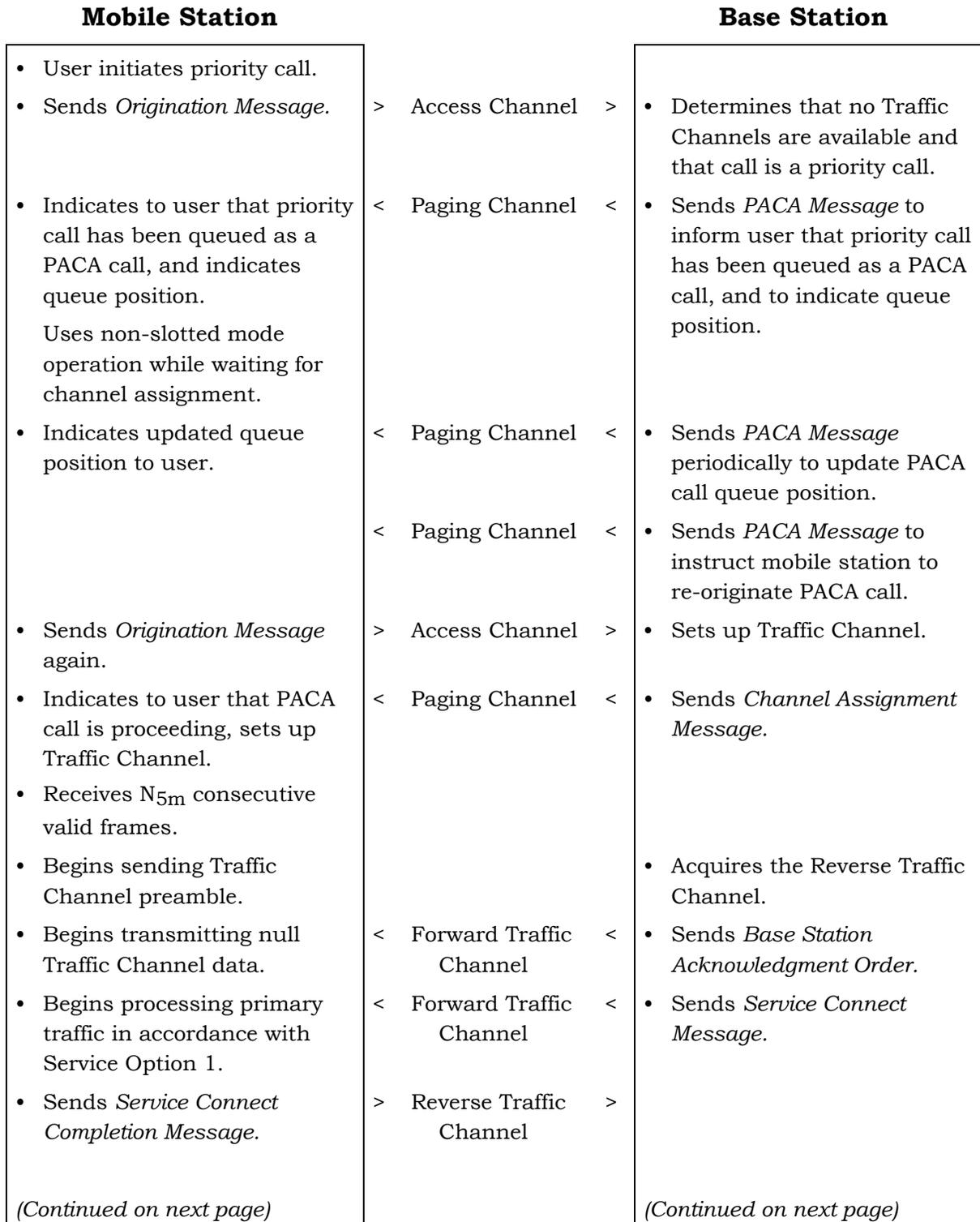


Figure B-9. PACA Call Processing (Part 1 of 2)

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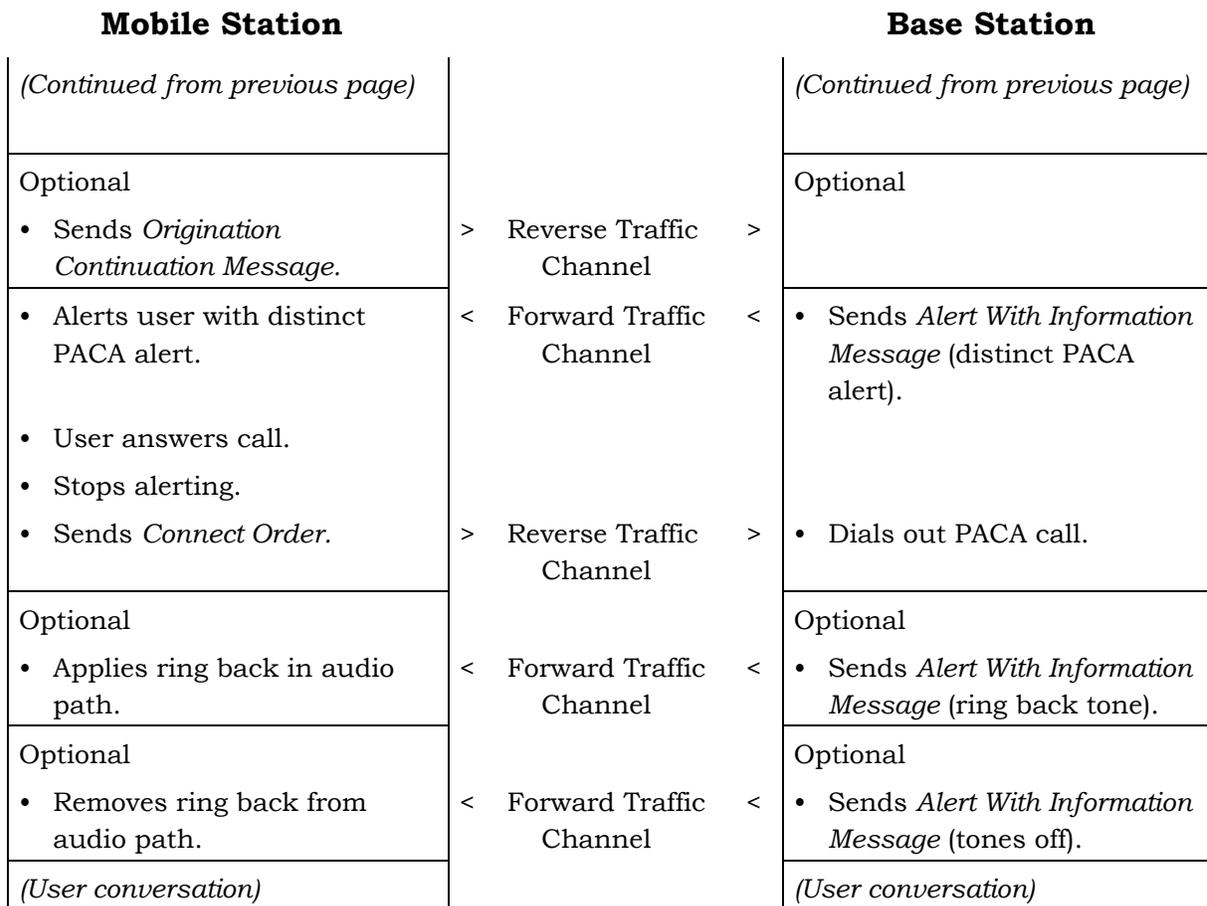


Figure B-9. PACA Call Processing (Part 2 of 2)

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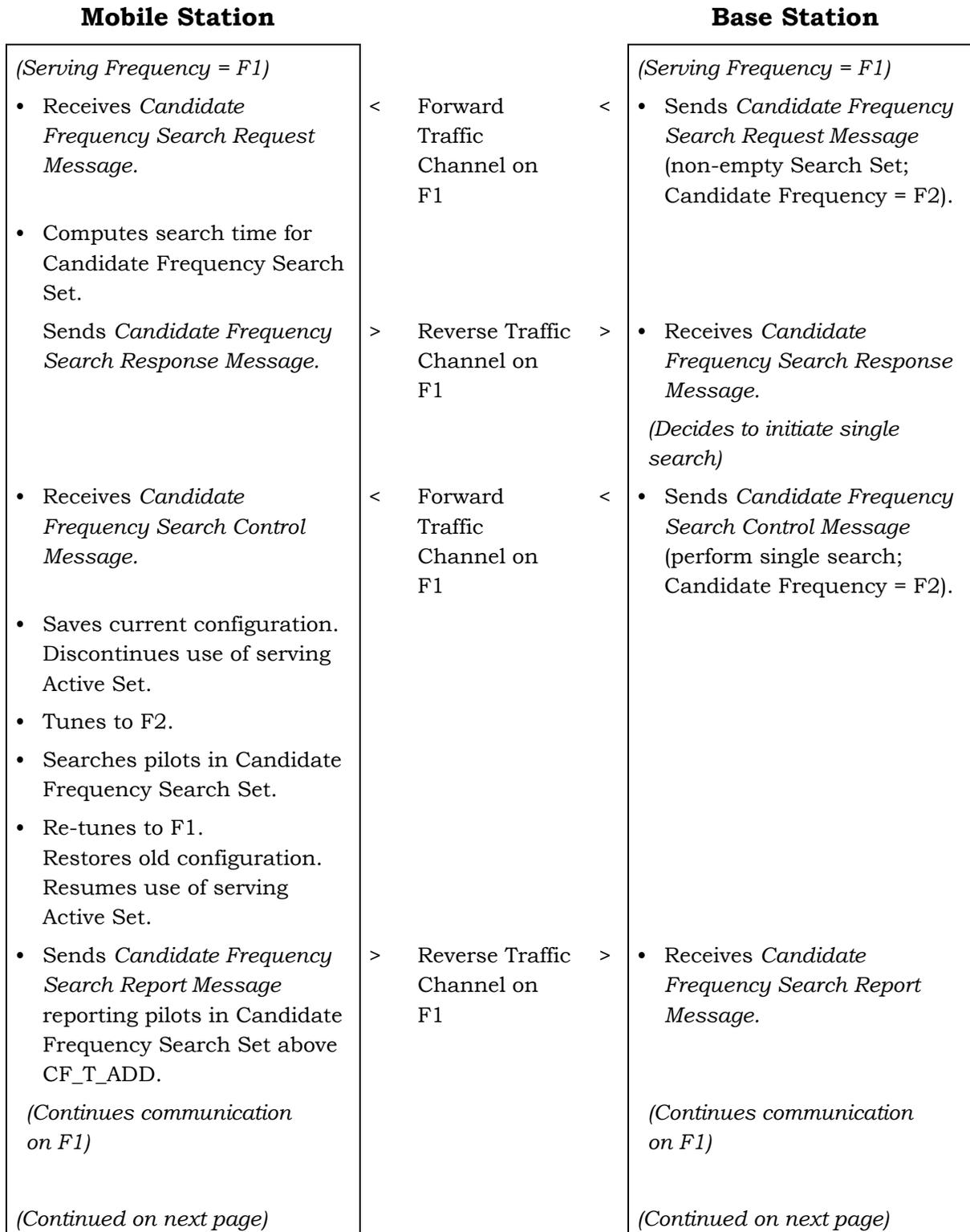
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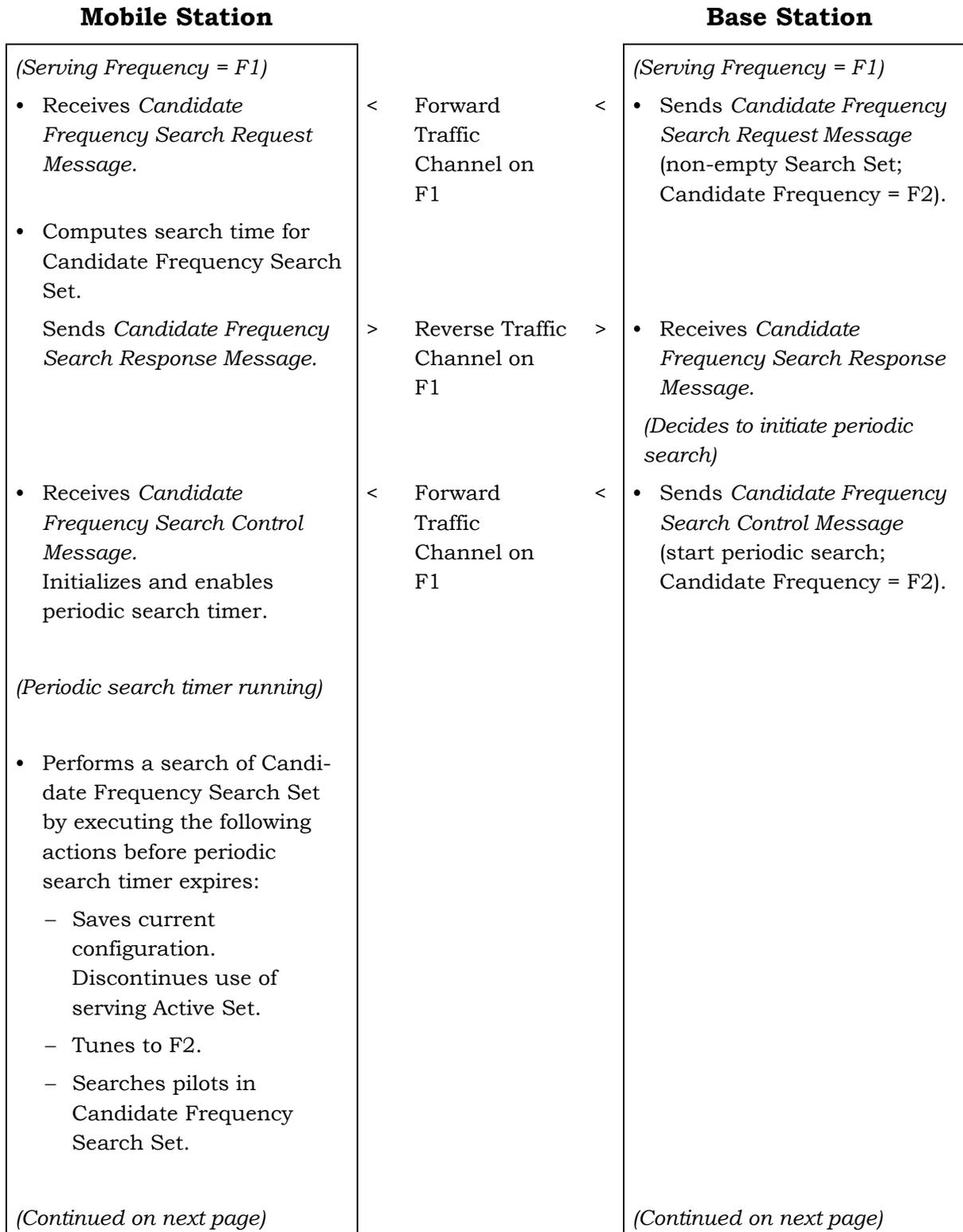
16

Figure B-10 illustrates call processing operations for failure recovery for hard handoff on the same frequency. Figure B-11 illustrates call flow for failure recovery for inter-frequency handoff when the mobile station does not search the Candidate Frequency. Figures B-12 and B-13 show the call flow for mobile-assisted inter-frequency handoff (handoff preceded by searching of the Candidate Frequency Search Set by the mobile station), where the search is started by using the *Candidate Frequency Search Control Message*. Figures B-14 and B-15 illustrate call flow for inter-frequency handoff when failure recovery also includes searching the Candidate Frequency Search Set. In the periodic search examples (Figures B-13 and B-15), it is assumed that the mobile station performs a search of the Candidate Frequency Search Set in a single visit to the Candidate Frequency. Figures B-16 and B-17 illustrate the interaction of inter-frequency handoff operations with an ongoing periodic search of the Candidate Frequency Search Set.



1 **Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate**
 2 **Frequency Search Control Message) (Part 1 of 2)**

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1 **Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate**
 2 **Frequency Search Control Message) (Part 1 of 3)**

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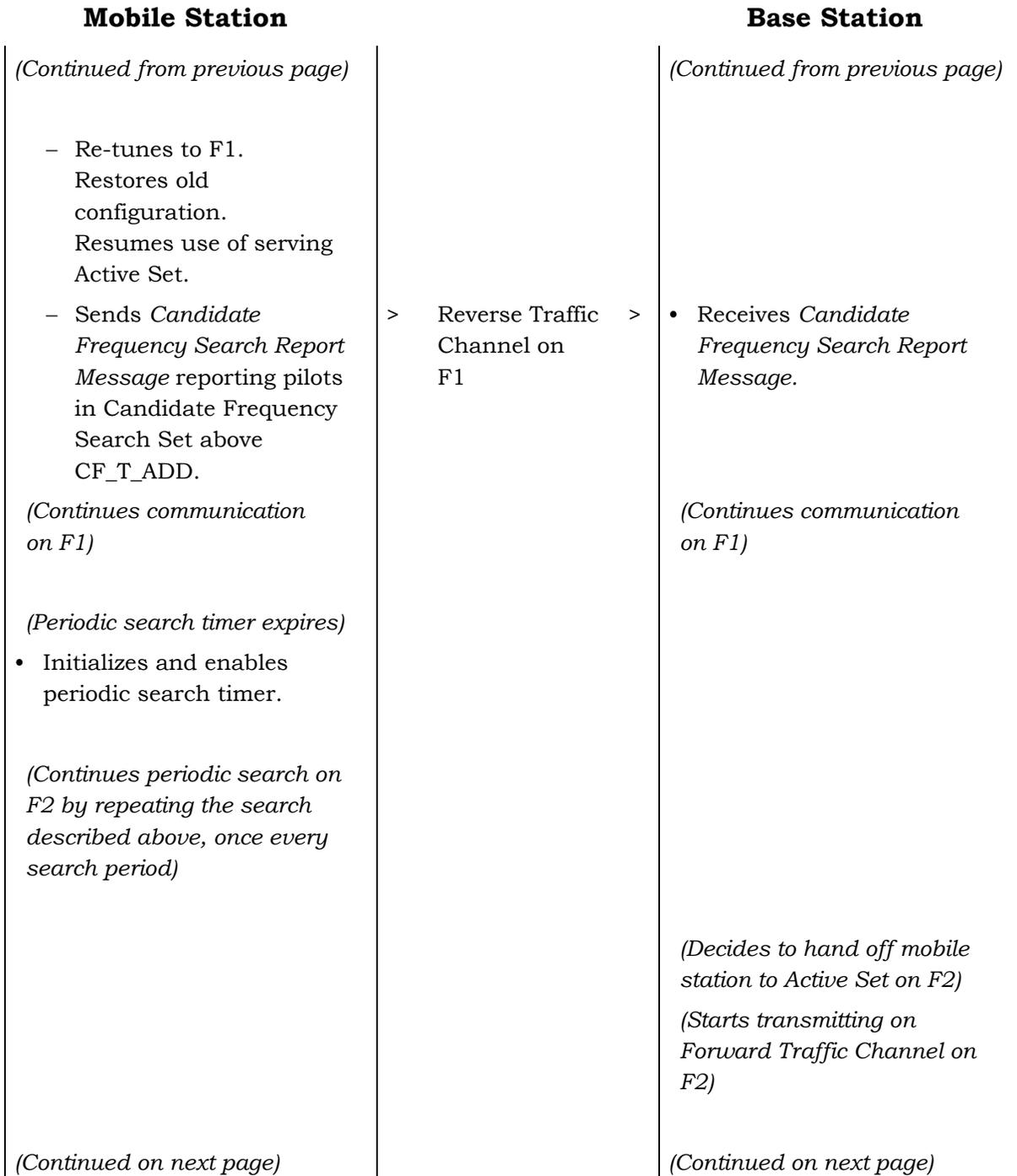


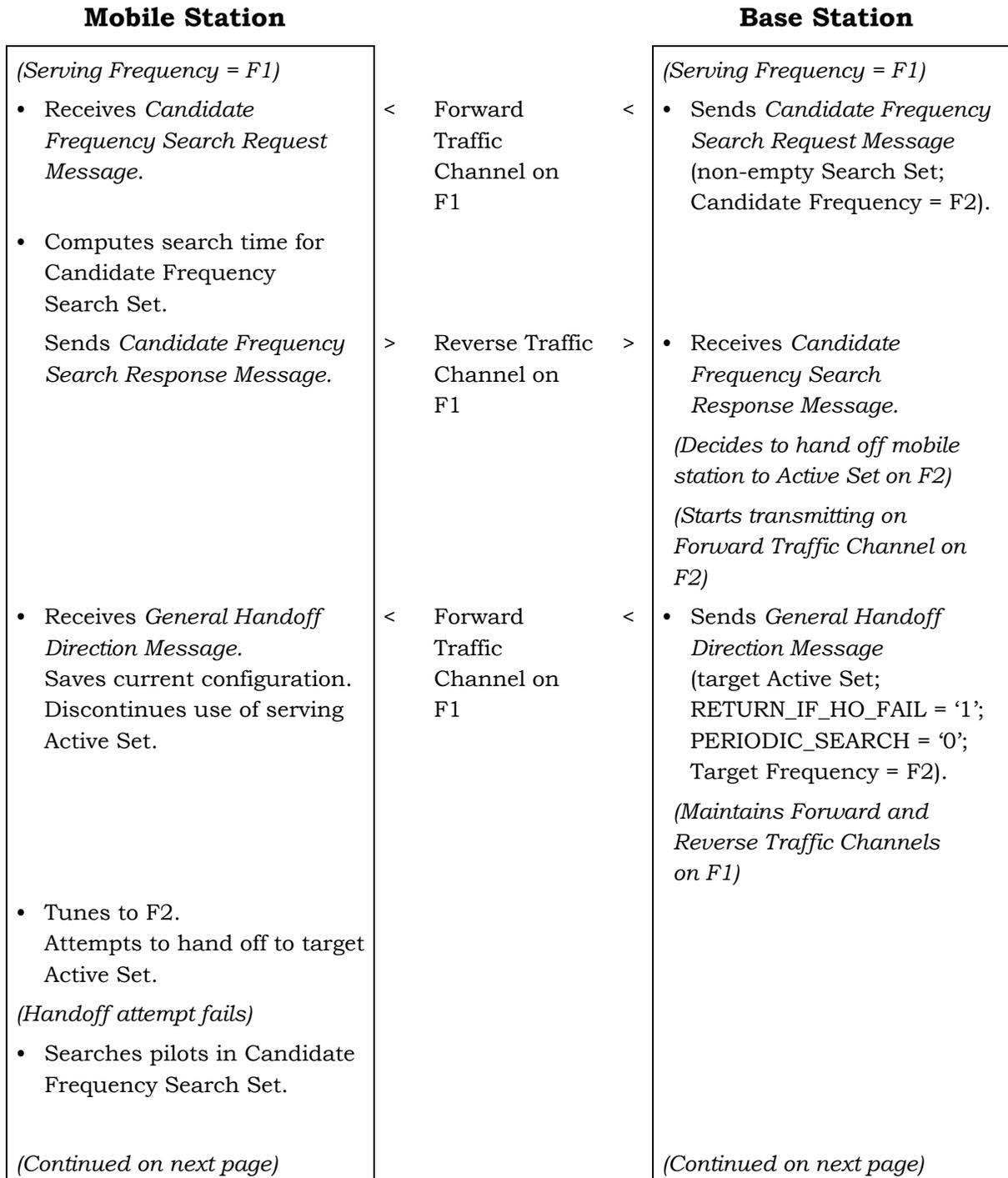
Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate Frequency Search Control Message) (Part 2 of 3)

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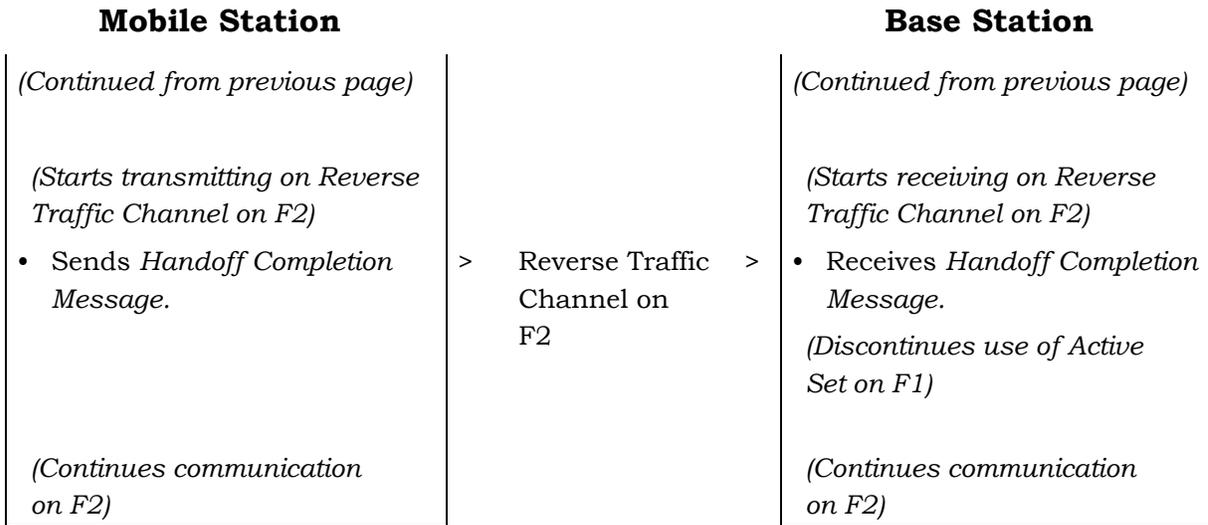


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Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 1 of 3)

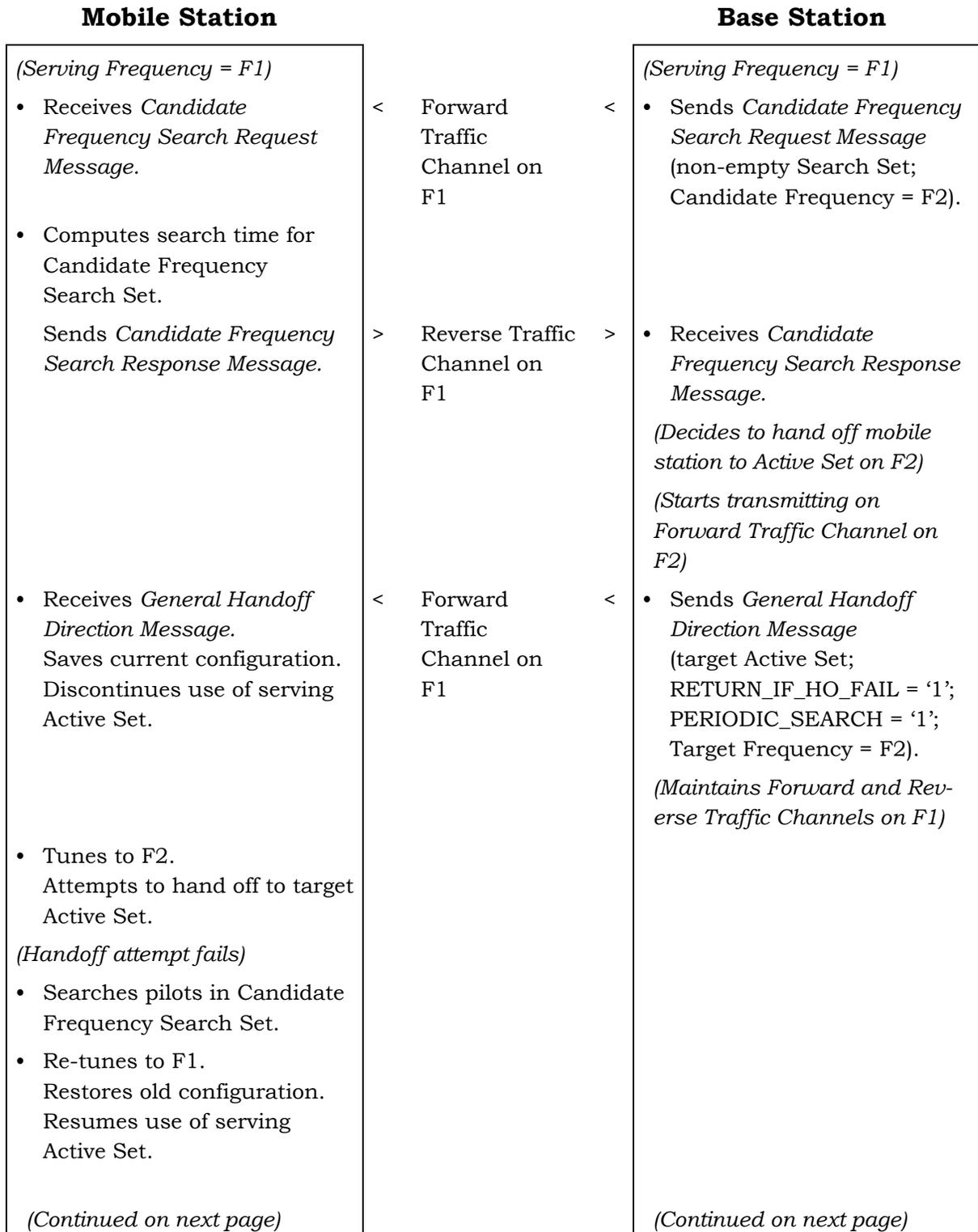
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Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 3 of 3)

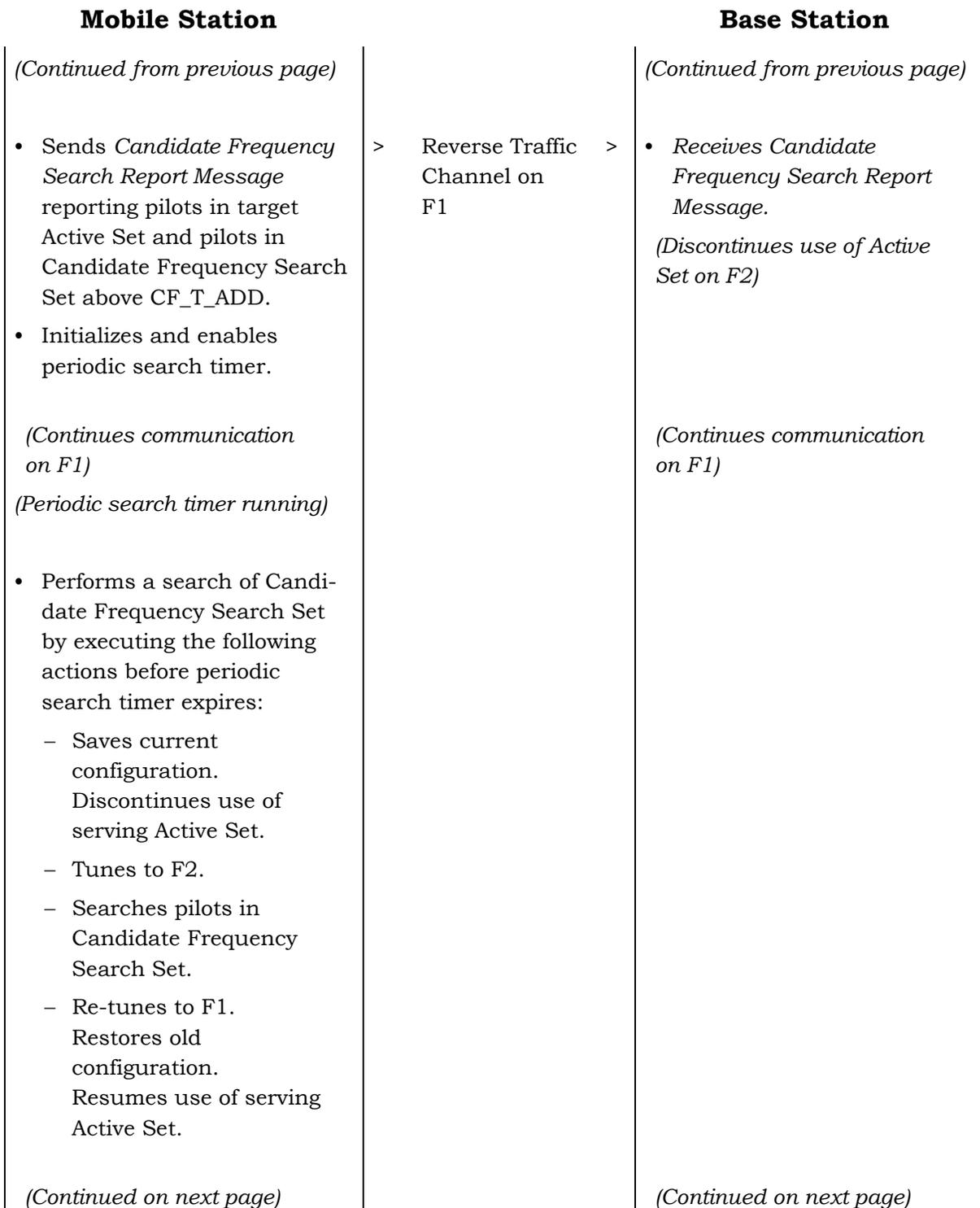
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1 **Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General**
 2 **Handoff Direction Message) (Part 1 of 4)**

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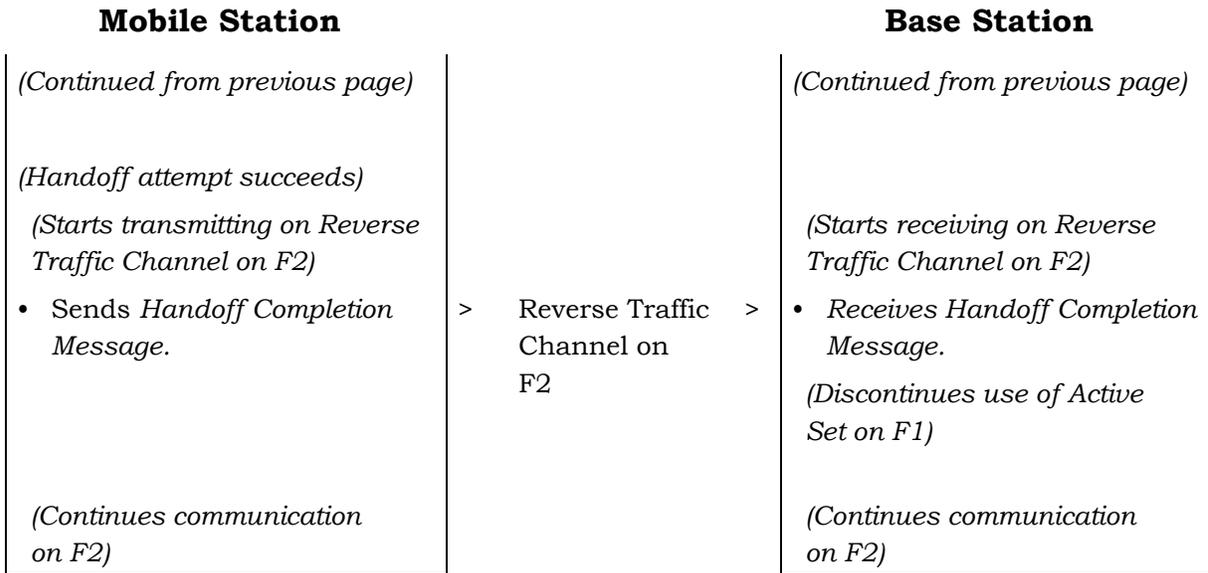


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Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 2 of 4)

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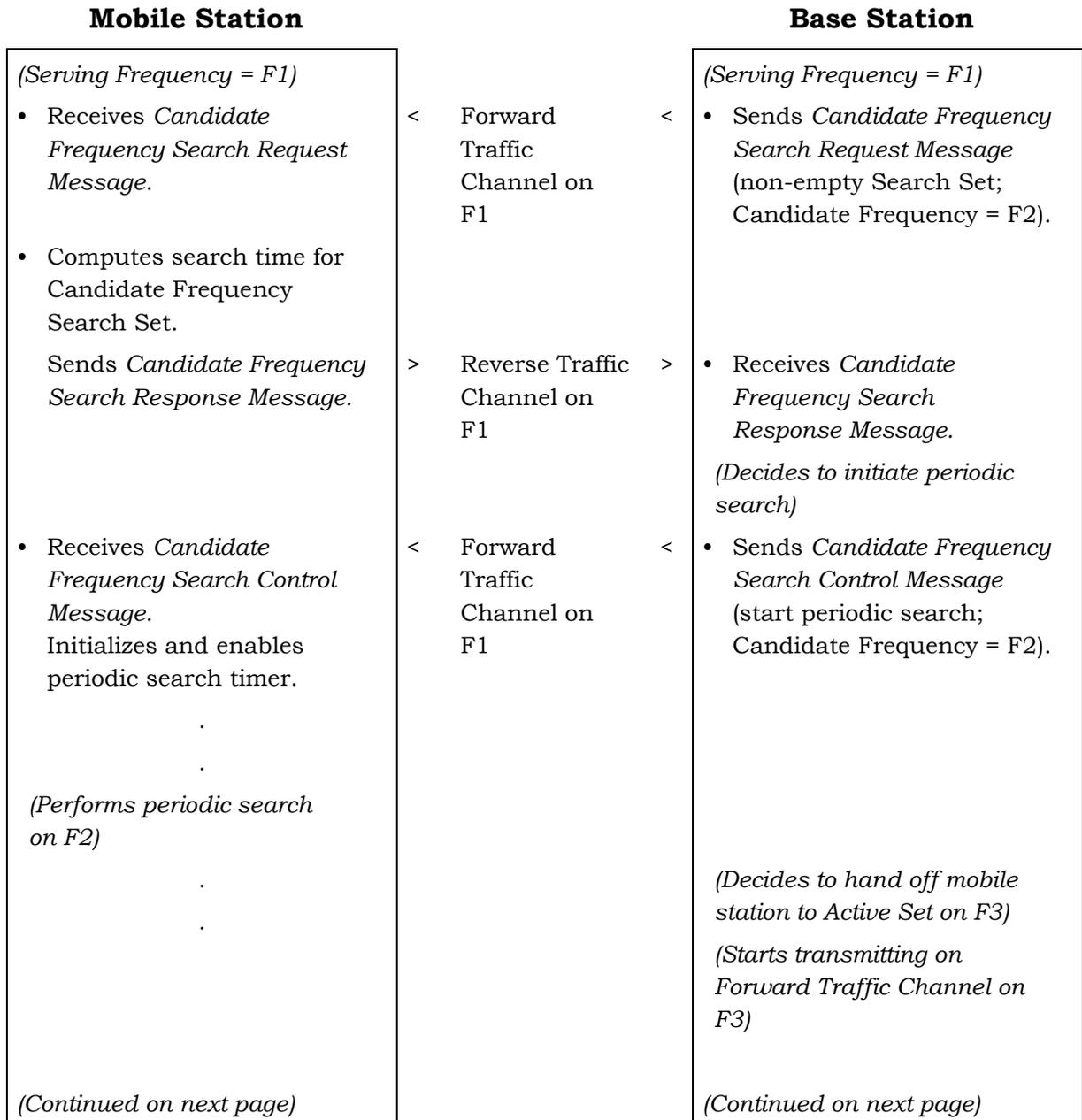
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Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 4 of 4)

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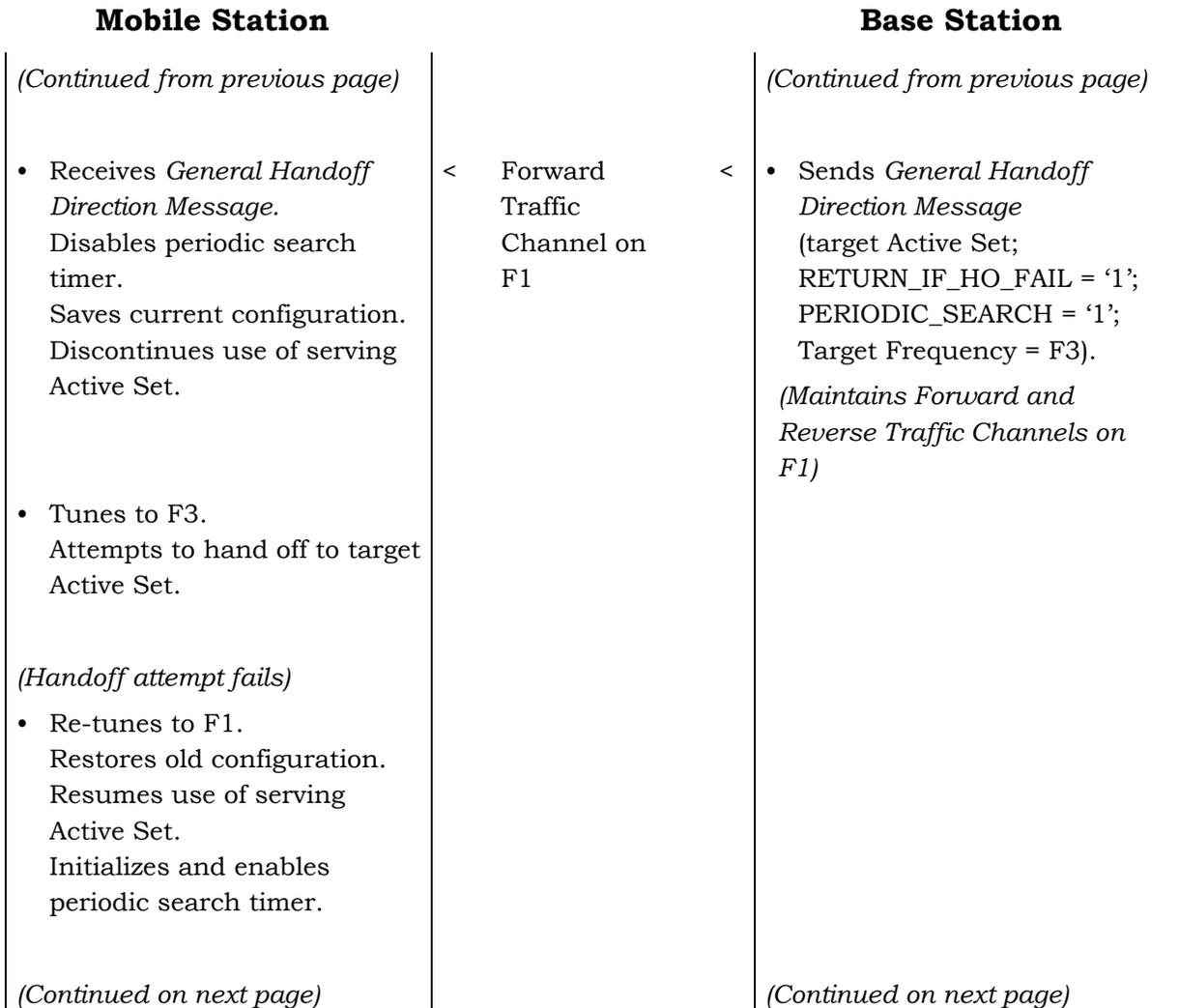
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Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 1 of 3)

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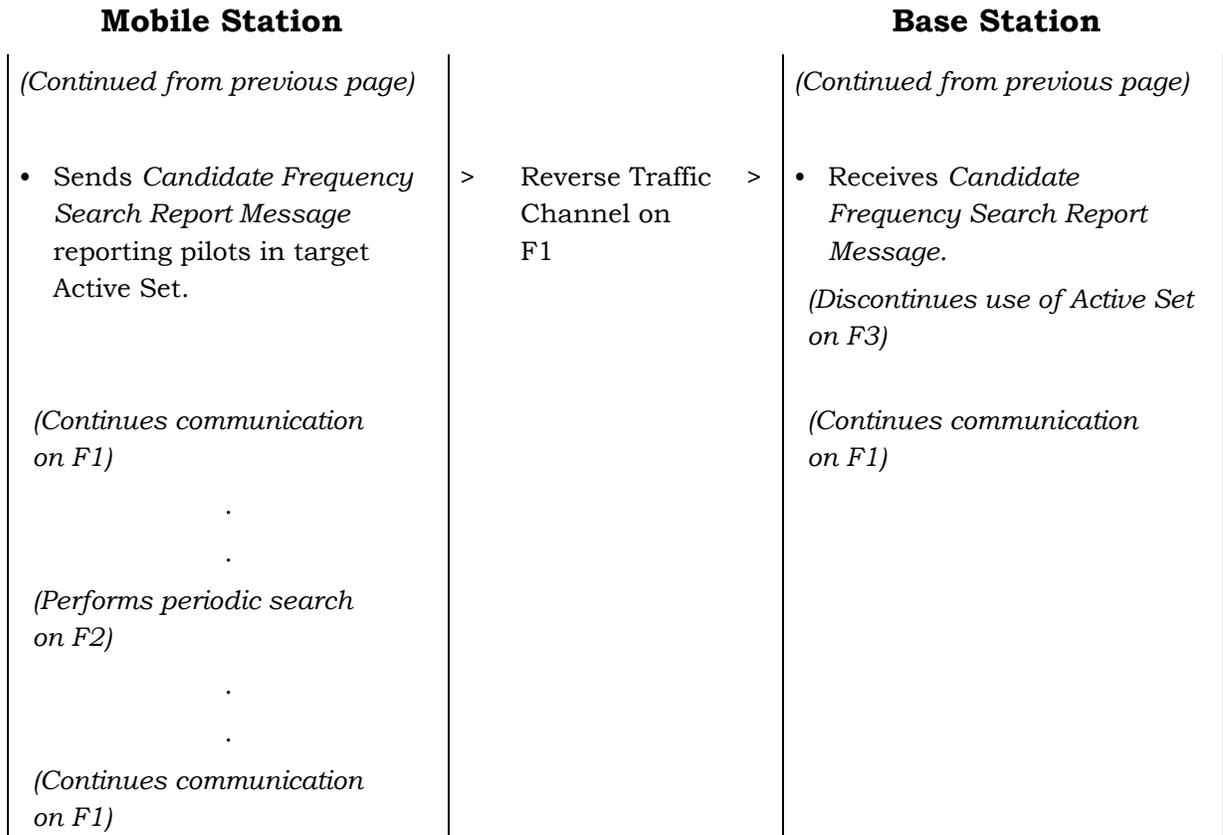
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Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 2 of 3)

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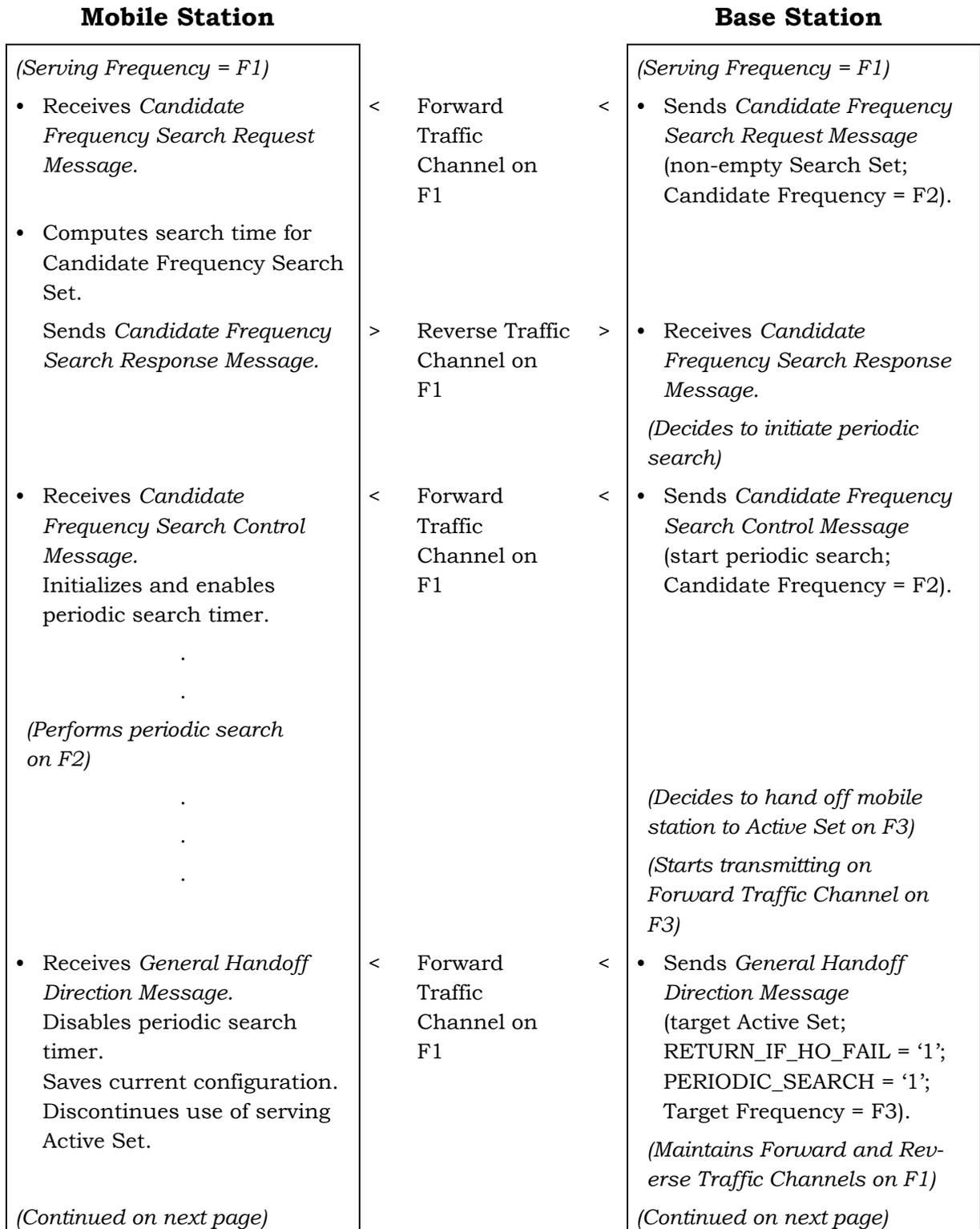
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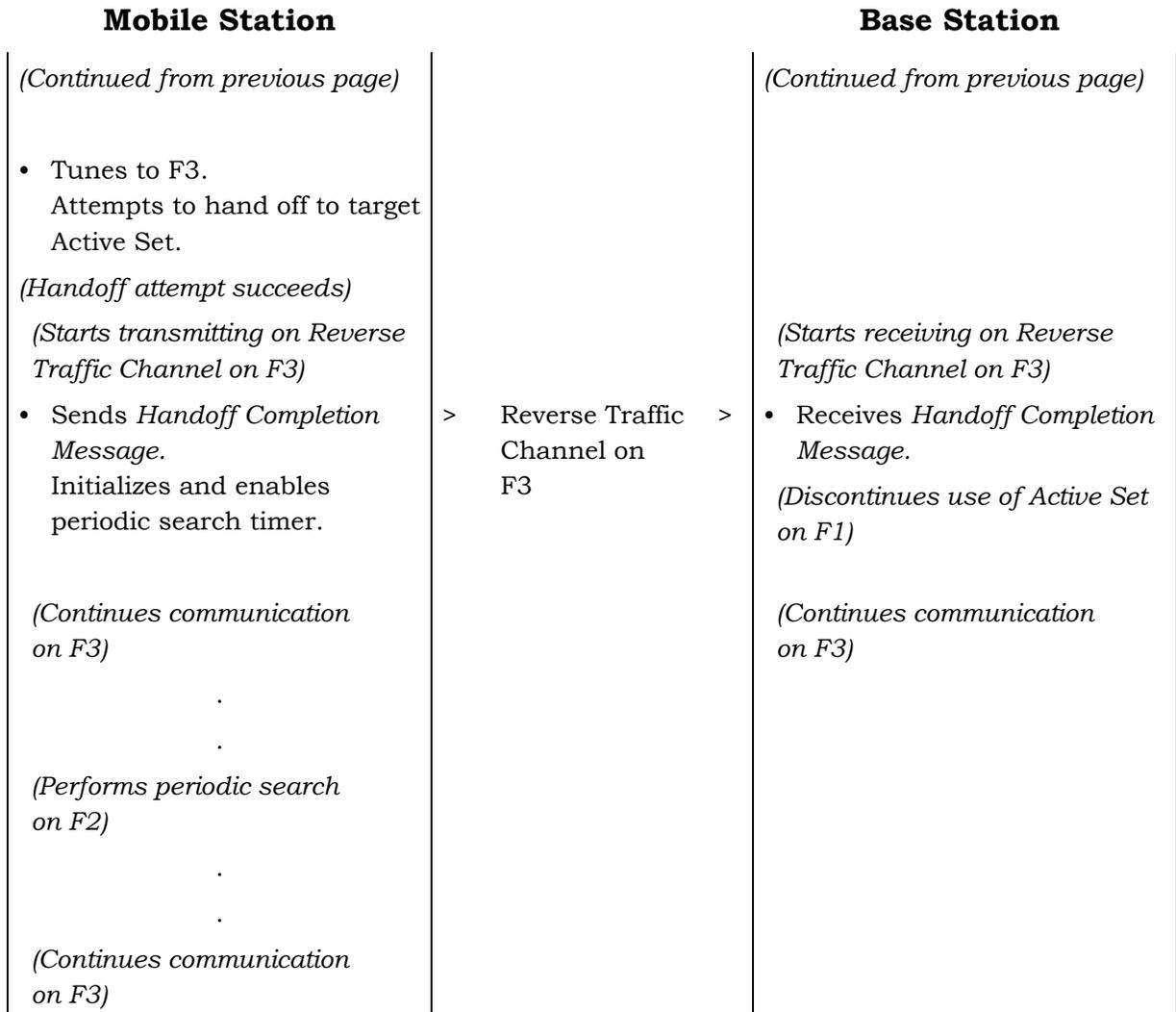
Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 3 of 3)

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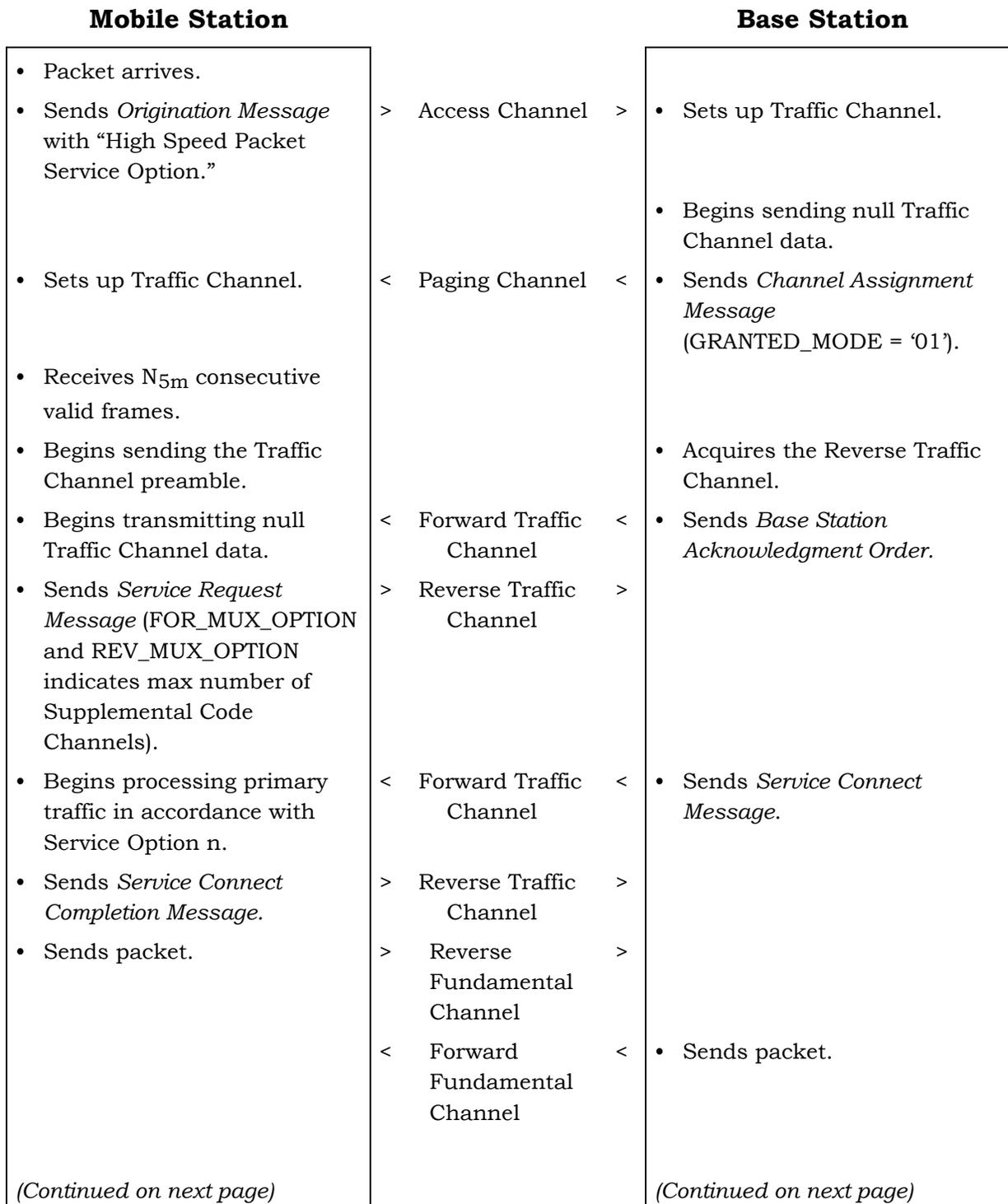


1 **Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3,**
 2 **Continued Periodic Search on F2 from F3 (Part 1 of 2)**
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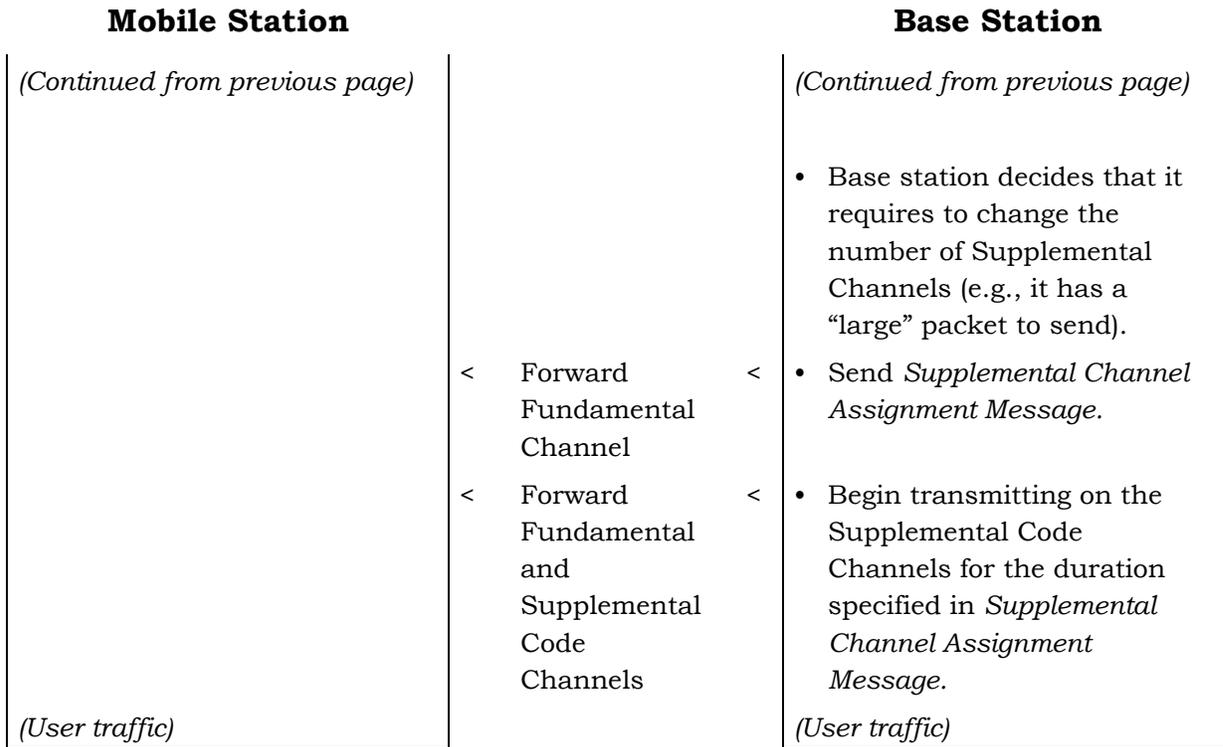


2 **Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3,**
 3 **Continued Periodic Search on F2 from F3 (Part 2 of 2)**



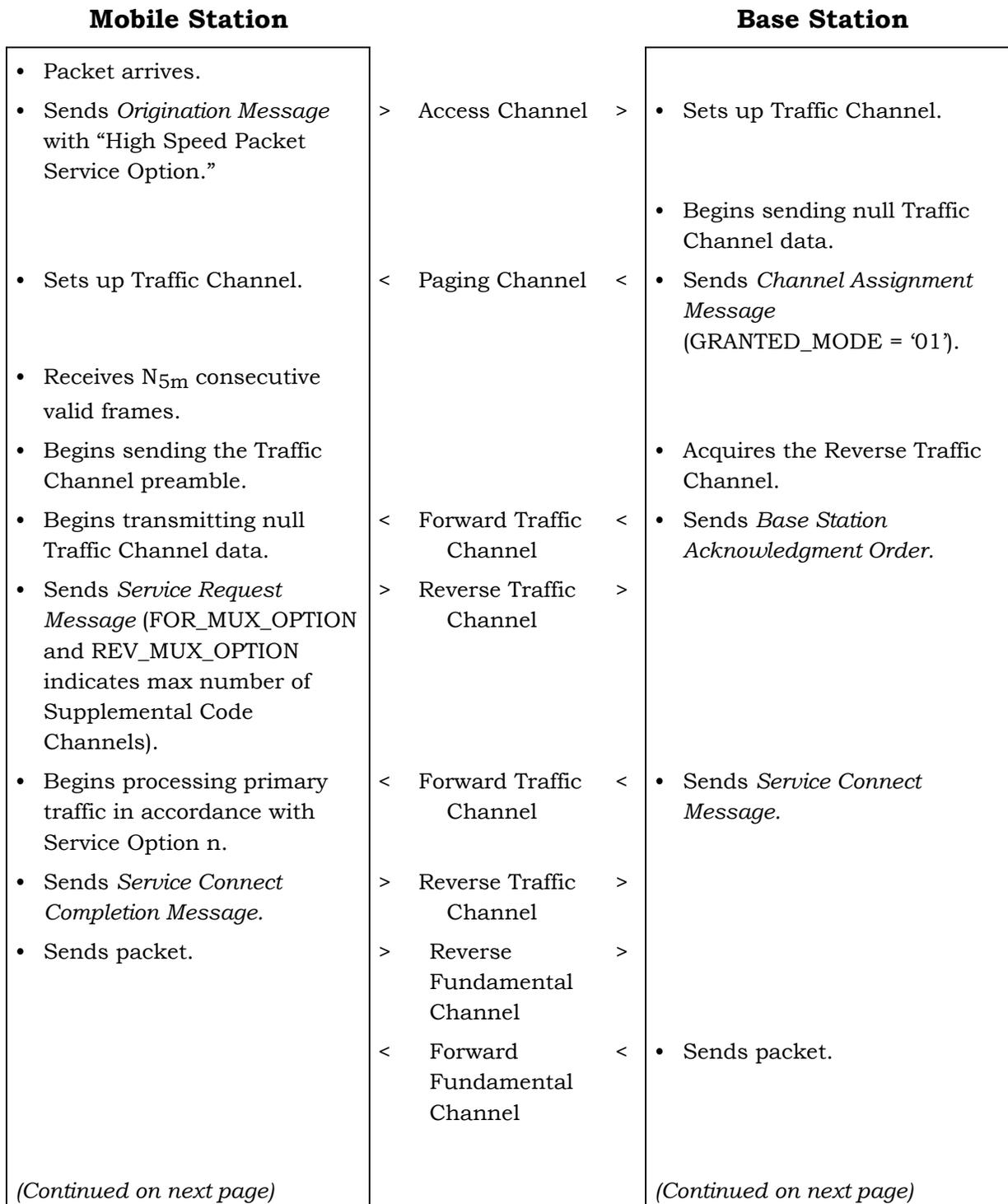
1 **Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission**
 2 **on Forward Supplemental Code Channels (Part 1 of 2)**
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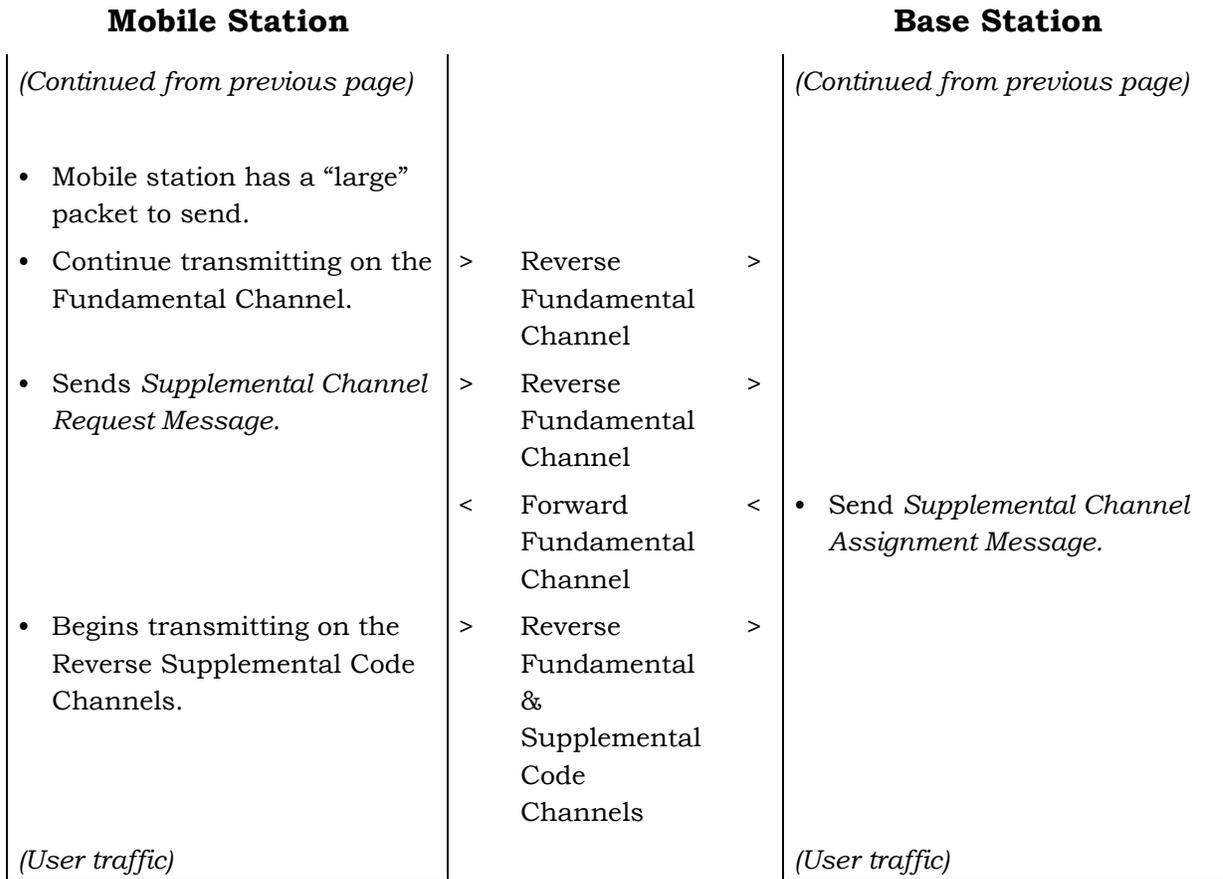
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Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission on Forward Supplemental Code Channels (Part 2 of 2)



1 **Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission**
 2 **on Reverse Supplemental Code Channels (Part 1 of 2)**
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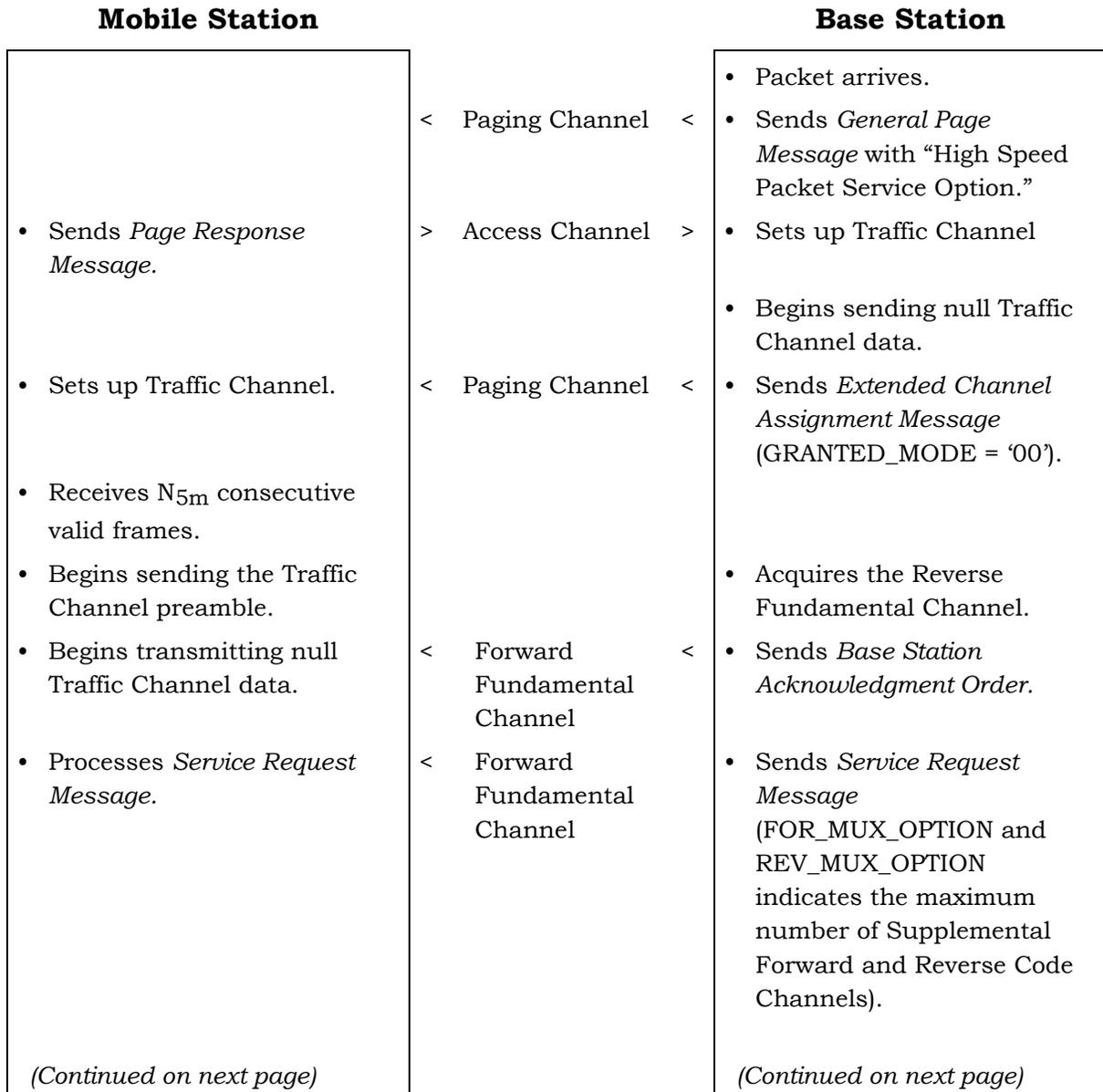
2

Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission on Reverse Supplemental Code Channels (Part 2 of 2)

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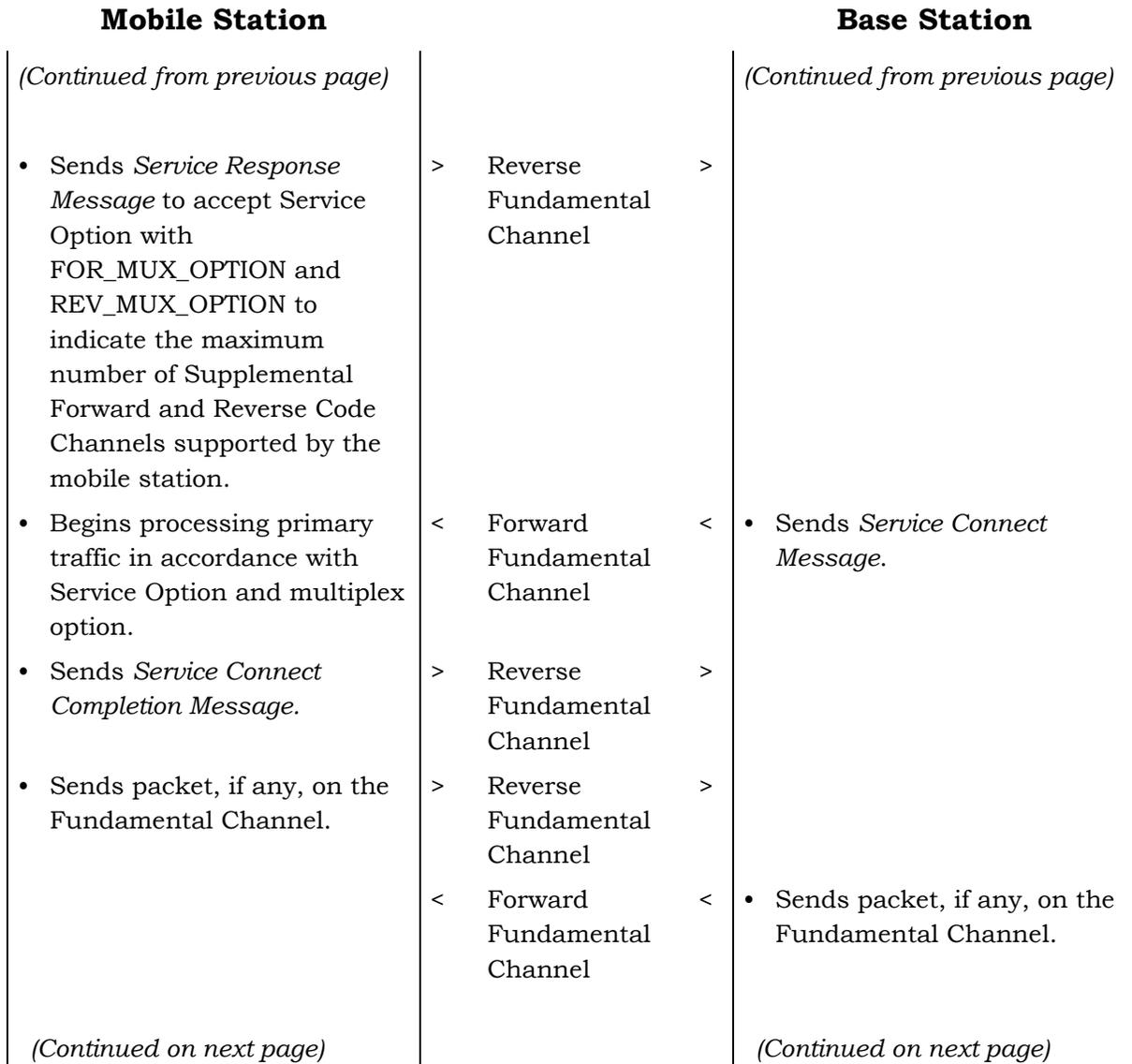
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Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 1 of 3)

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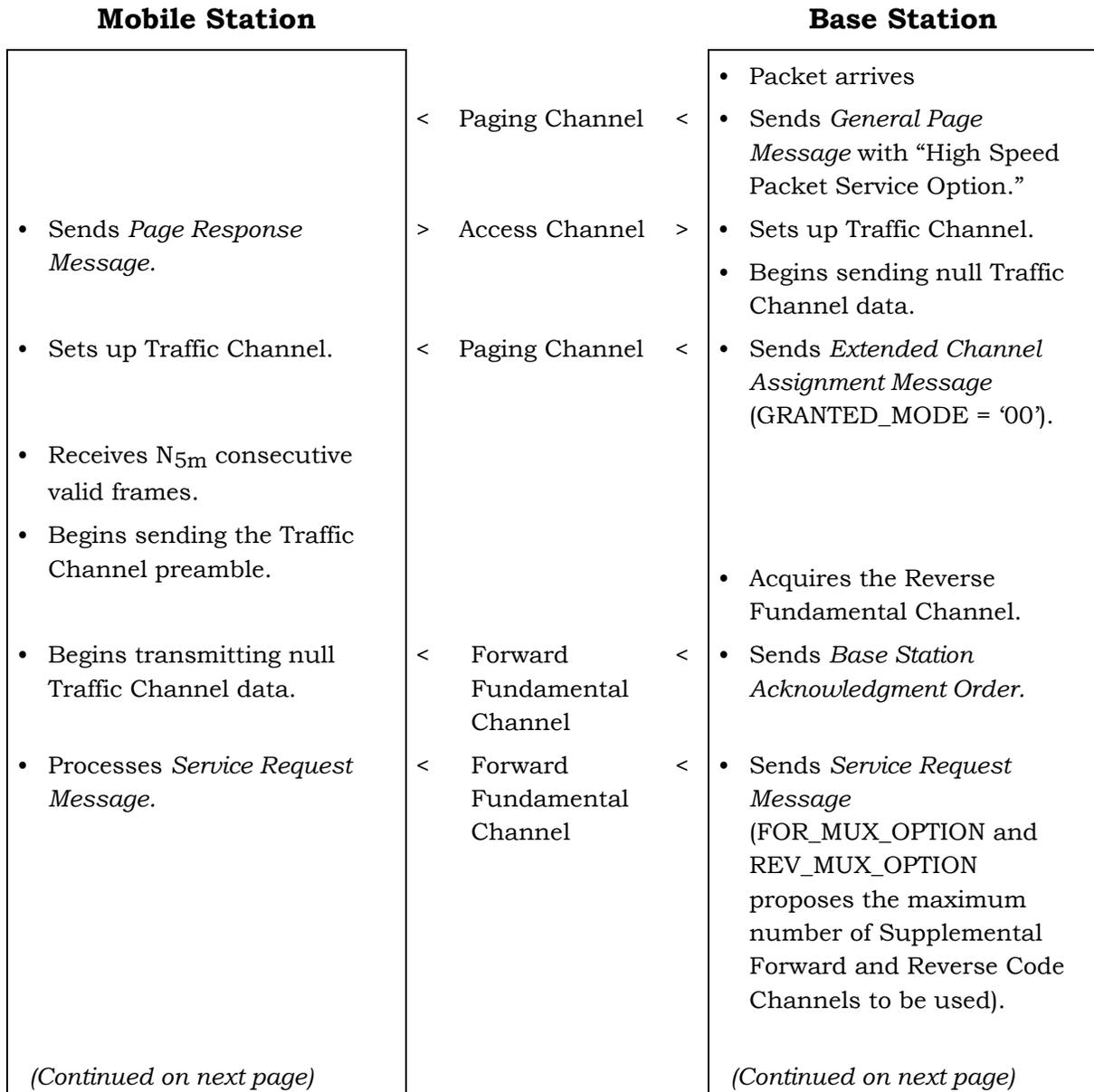


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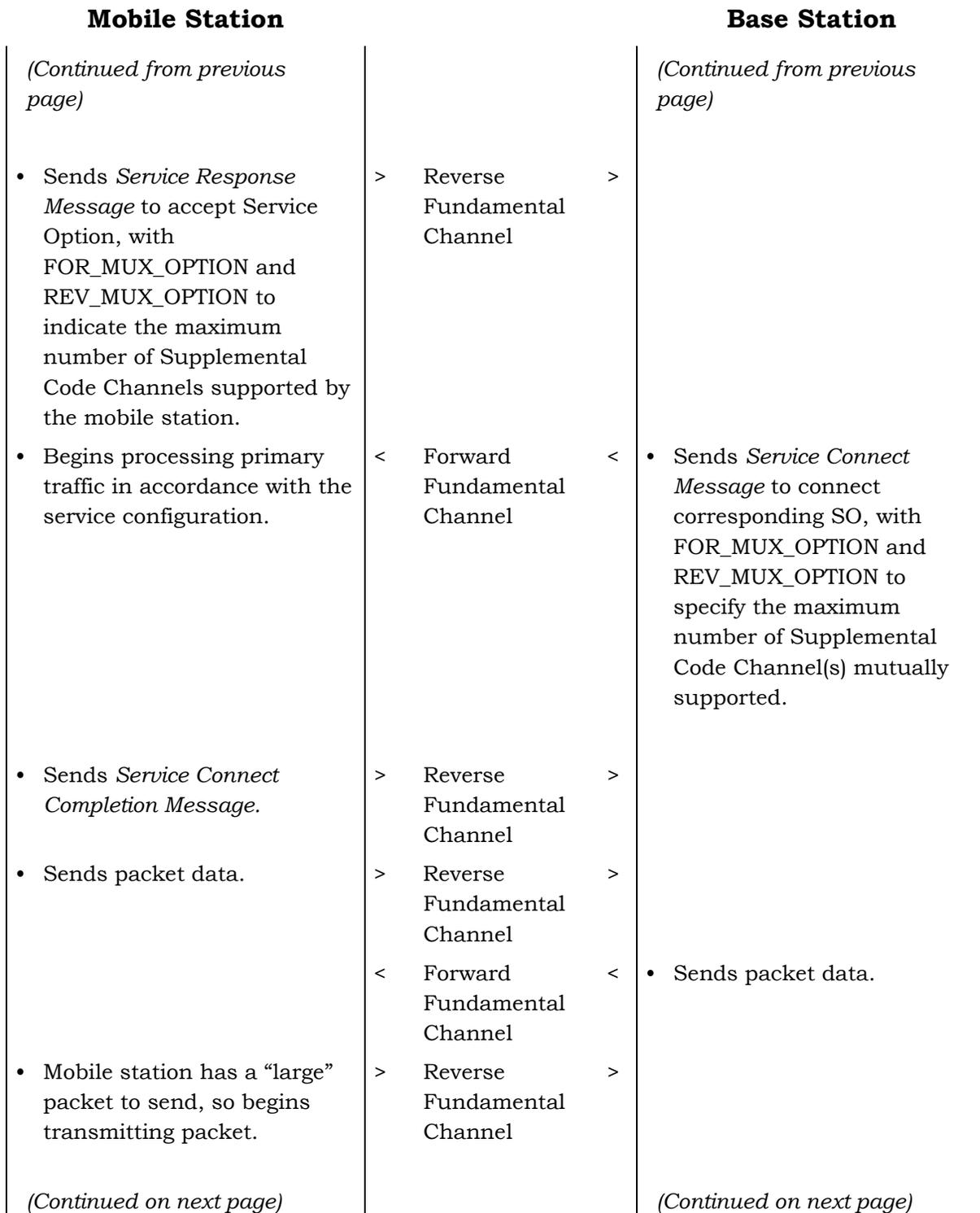
4

Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 2 of 3)



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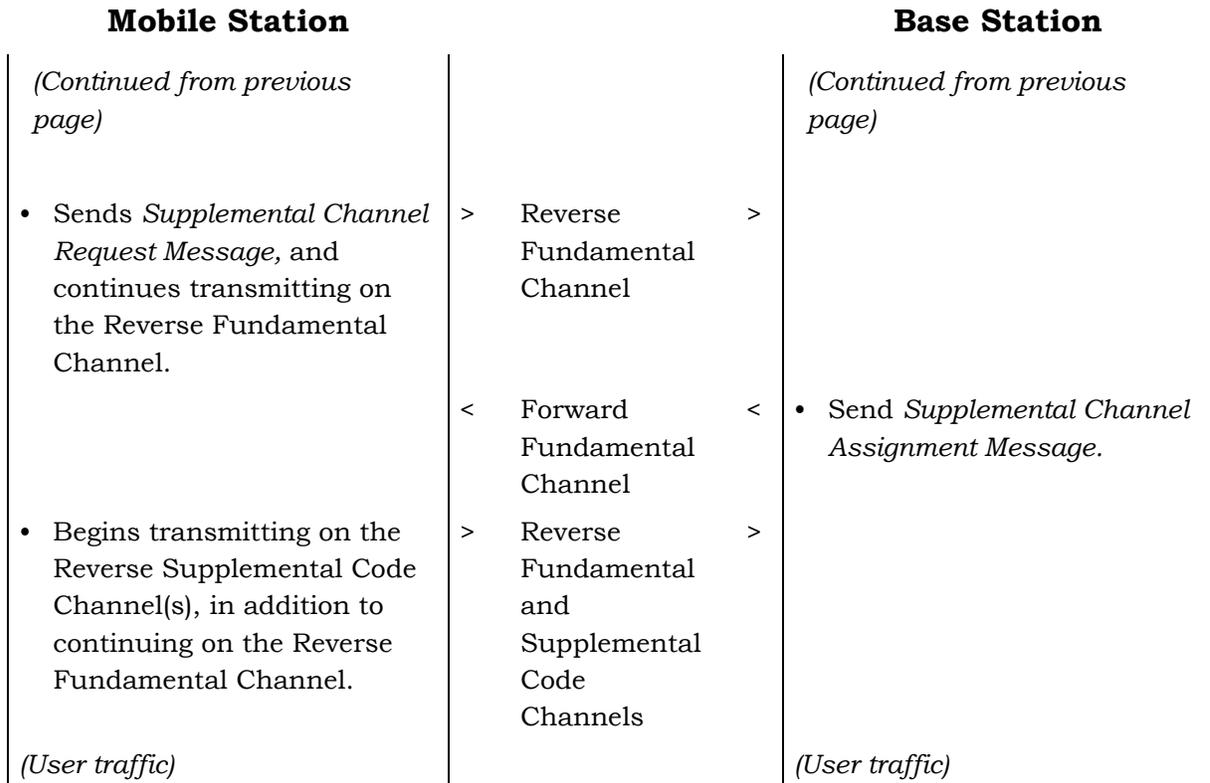
Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 1 of 3)



1 **Figure B-21. Simple Call Flow, Mobile Station Termination Example with**
2 **Transmission on Reverse Supplemental Code Channel(s) (Part 2 of 3)**

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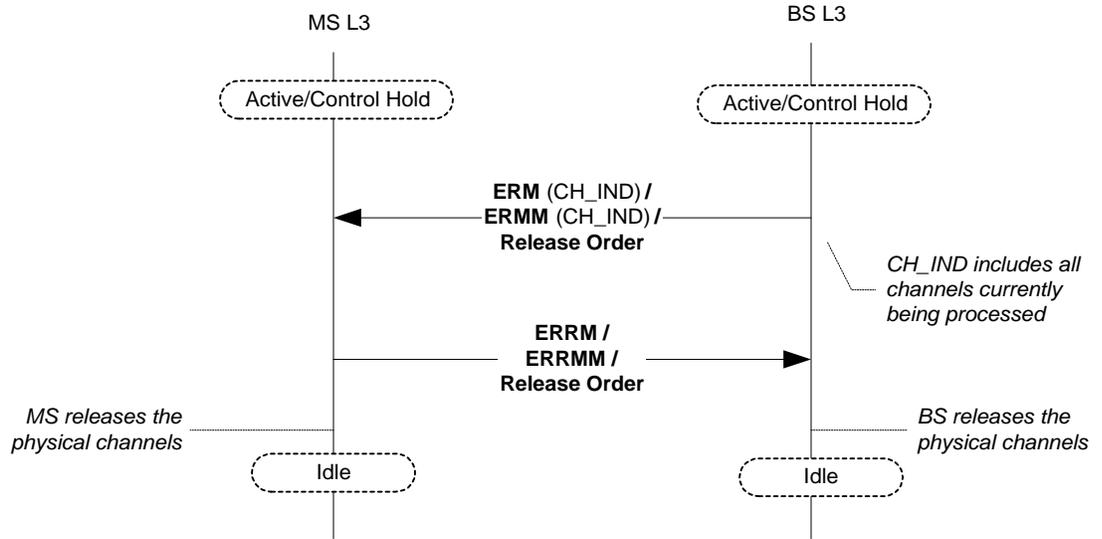


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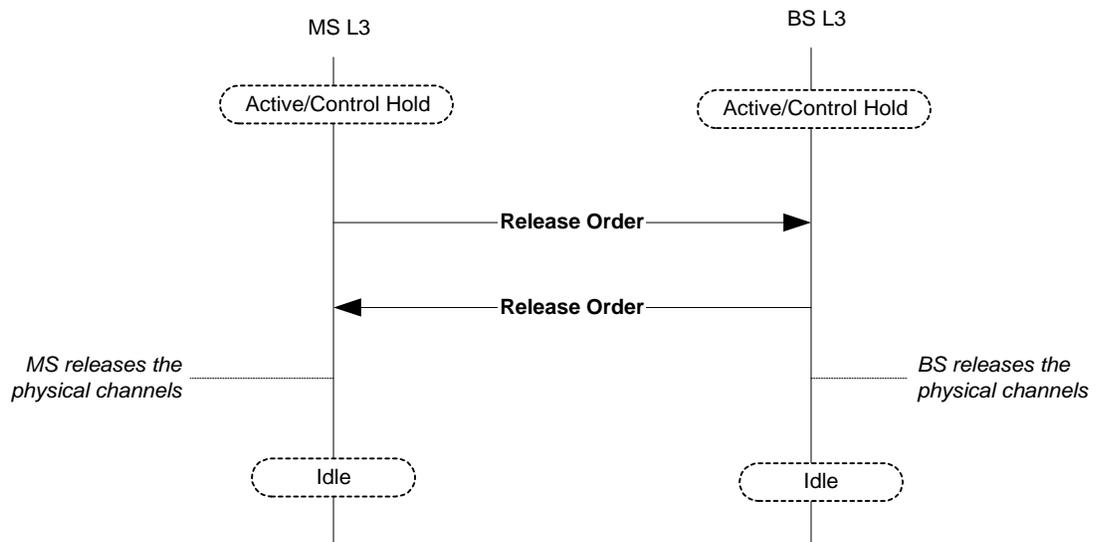
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Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 3 of 3)



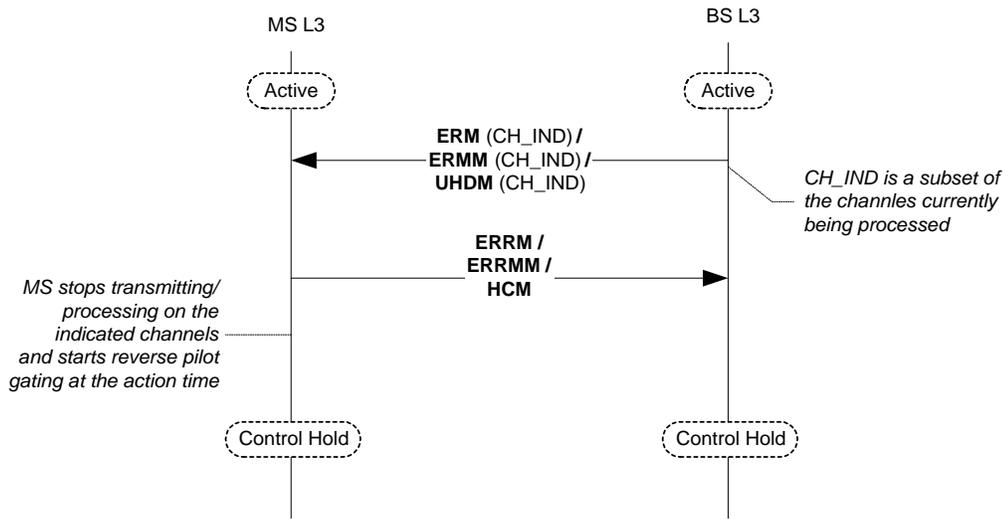
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Figure B-22. Active/Control Hold to Idle State Transition; Release all services (BS Initiated)



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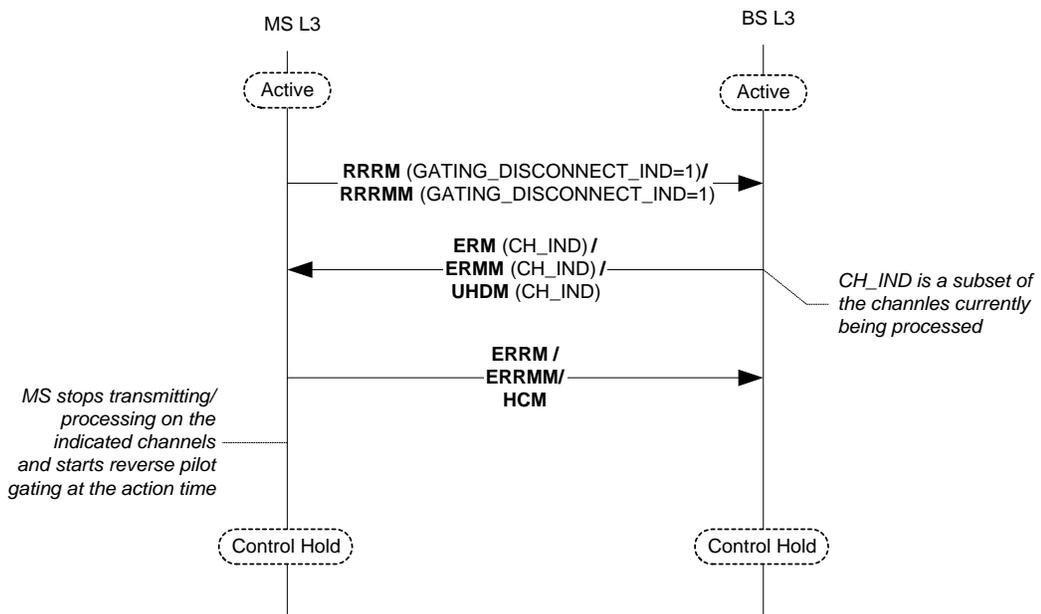
Figure B-23. Active/Control Hold to Idle State Transition; Release all services (MS Initiated)



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Figure B-24. Active to Control Hold State Transition (BS Initiated)

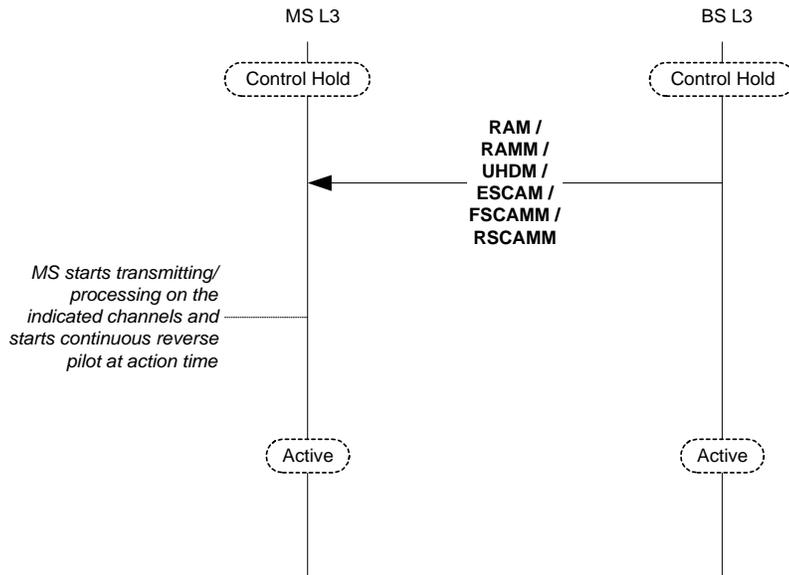


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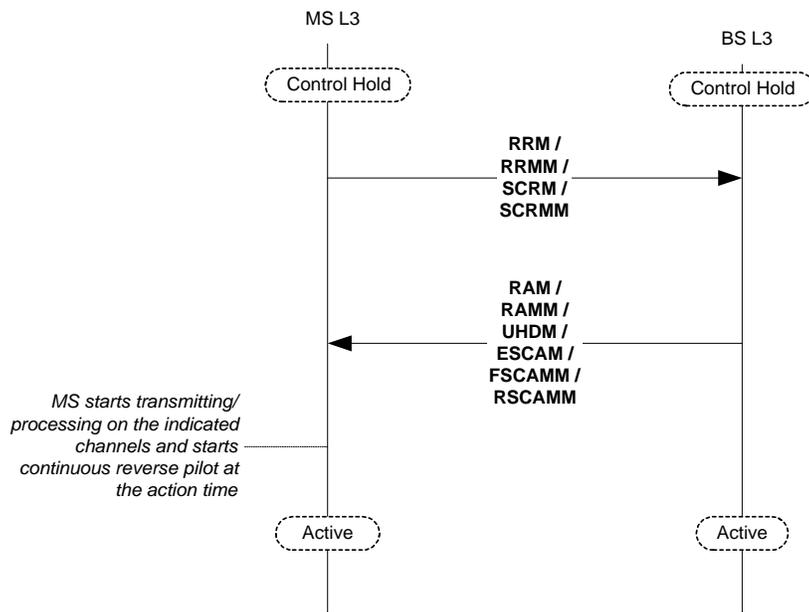
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Figure B-25. Active to Control Hold State Transition (MS Initiated)



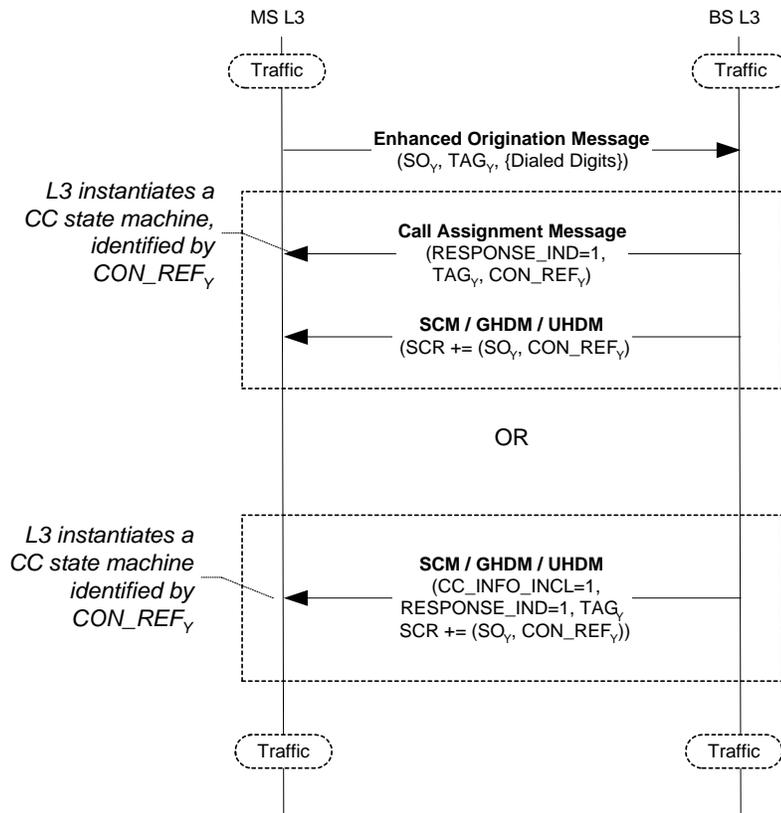
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Figure B-26. Control Hold to Active Transition (BS Initiated)



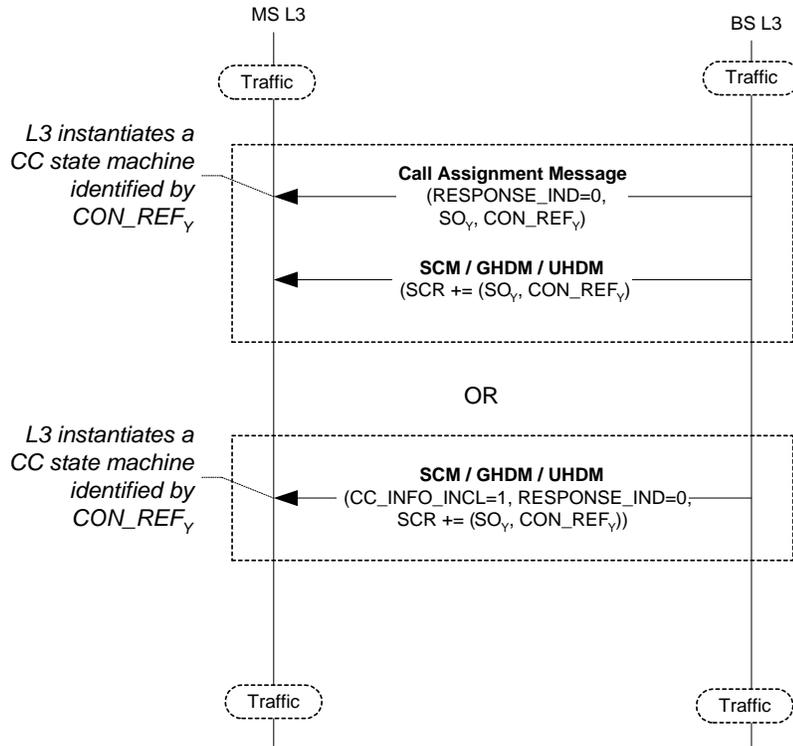
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Figure B-27. Control Hold to Active Transition (MS Initiated)



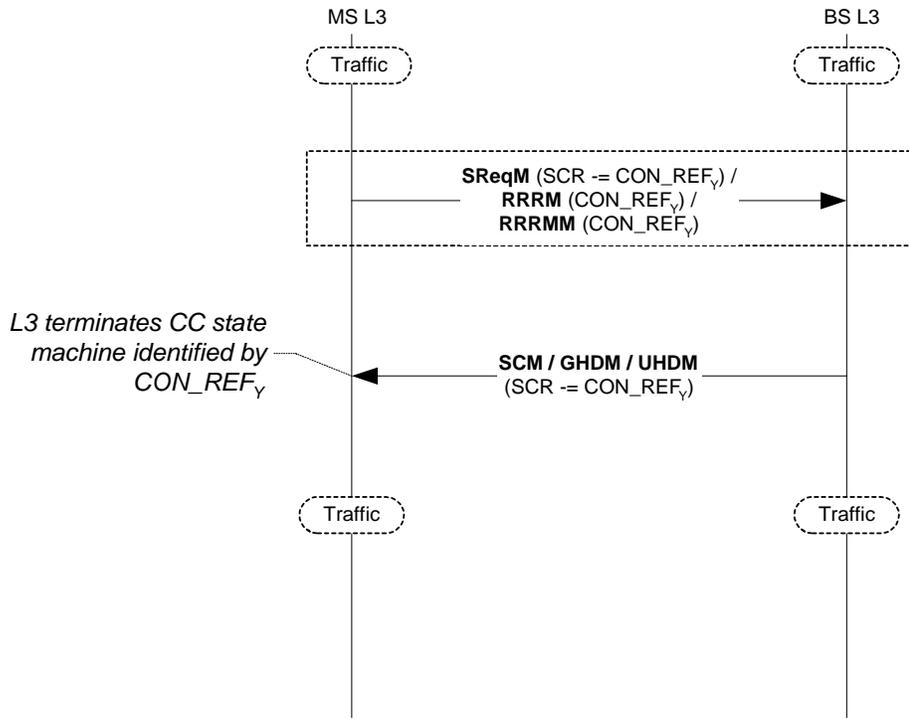
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Figure B-28. Connecting an Additional Service (MS Initiated)



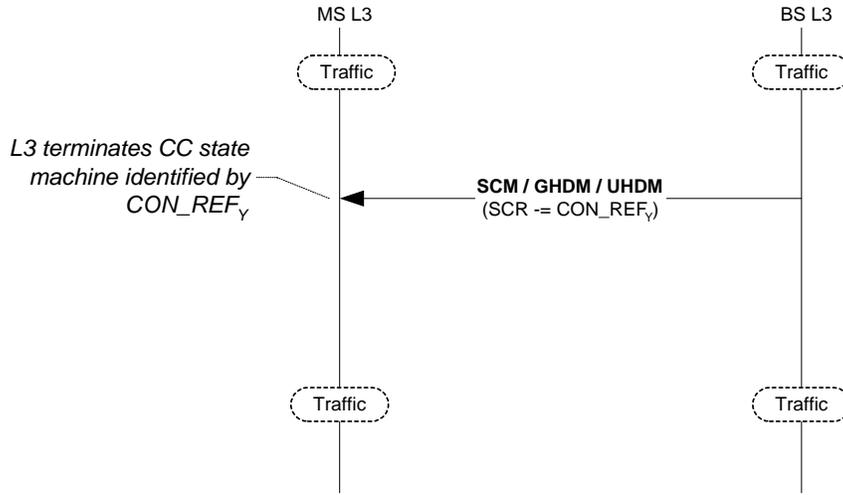
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Figure B-29. Connecting an Additional Service (BS Initiated)



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Figure B-30. Releasing a Service that is not the last one connected (MS Initiated)



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Figure B-31. Releasing a Service that is not the last one connected (BS Initiated)

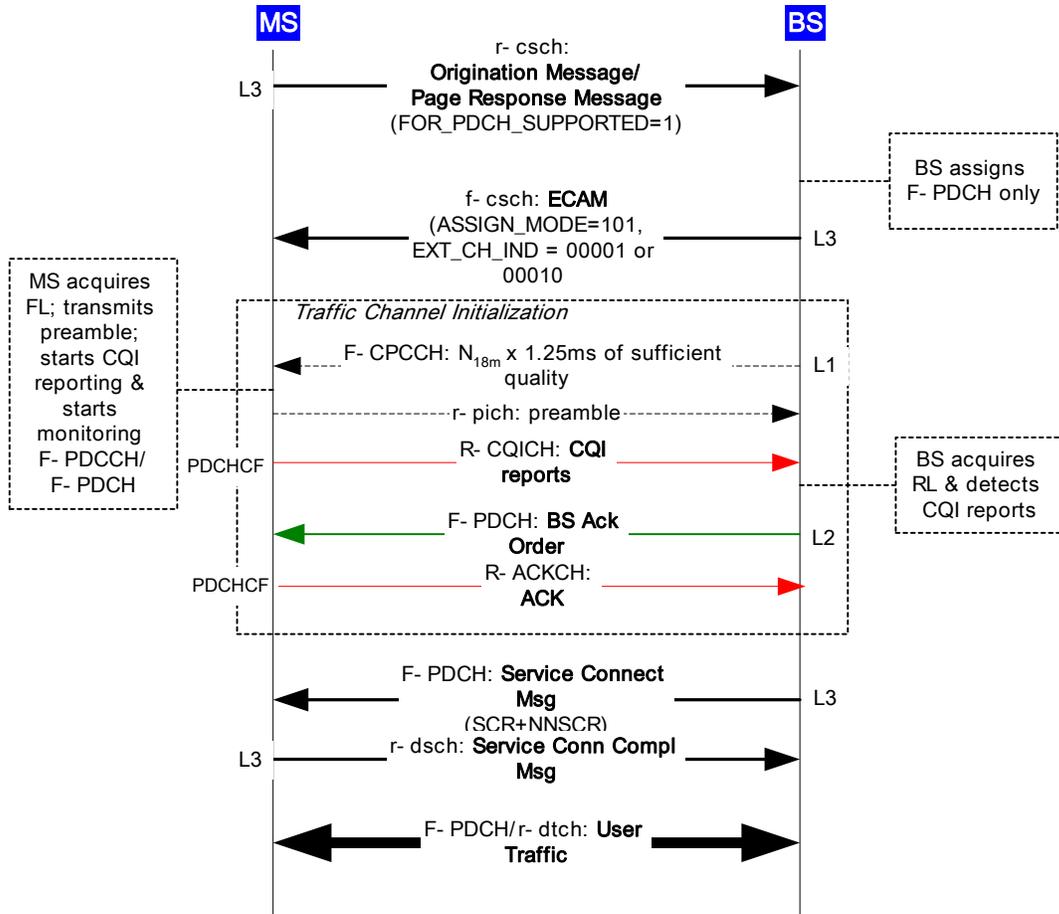
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1 **Annex C ADDITIONAL CDMA CALL FLOW EXAMPLES**

2 C.1 Regular Call Setup

3 C.1.1 Call setup with F-PDCH and no F-Fundicated

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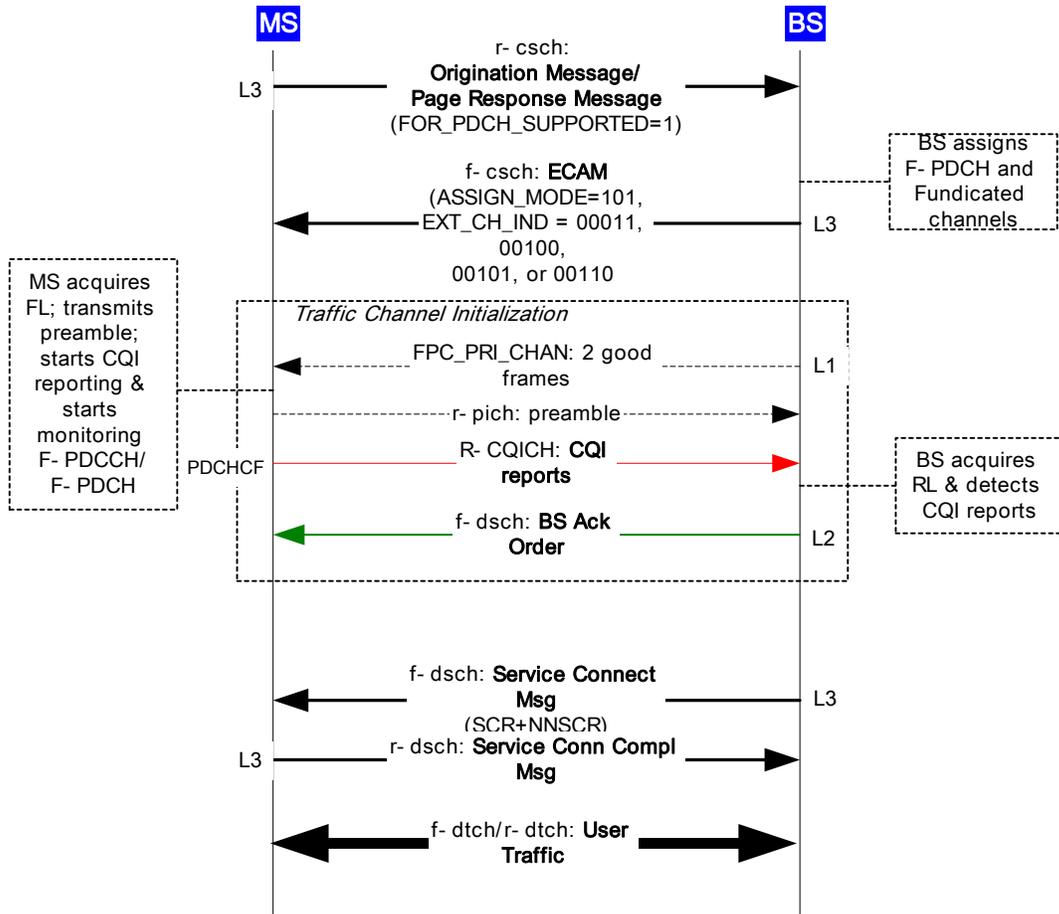
Figure C.1.1-1. Call setup with F-PDCH and no F-Fundicated

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1 C.1.2 Call setup with F-PDCH and F-Fundicated

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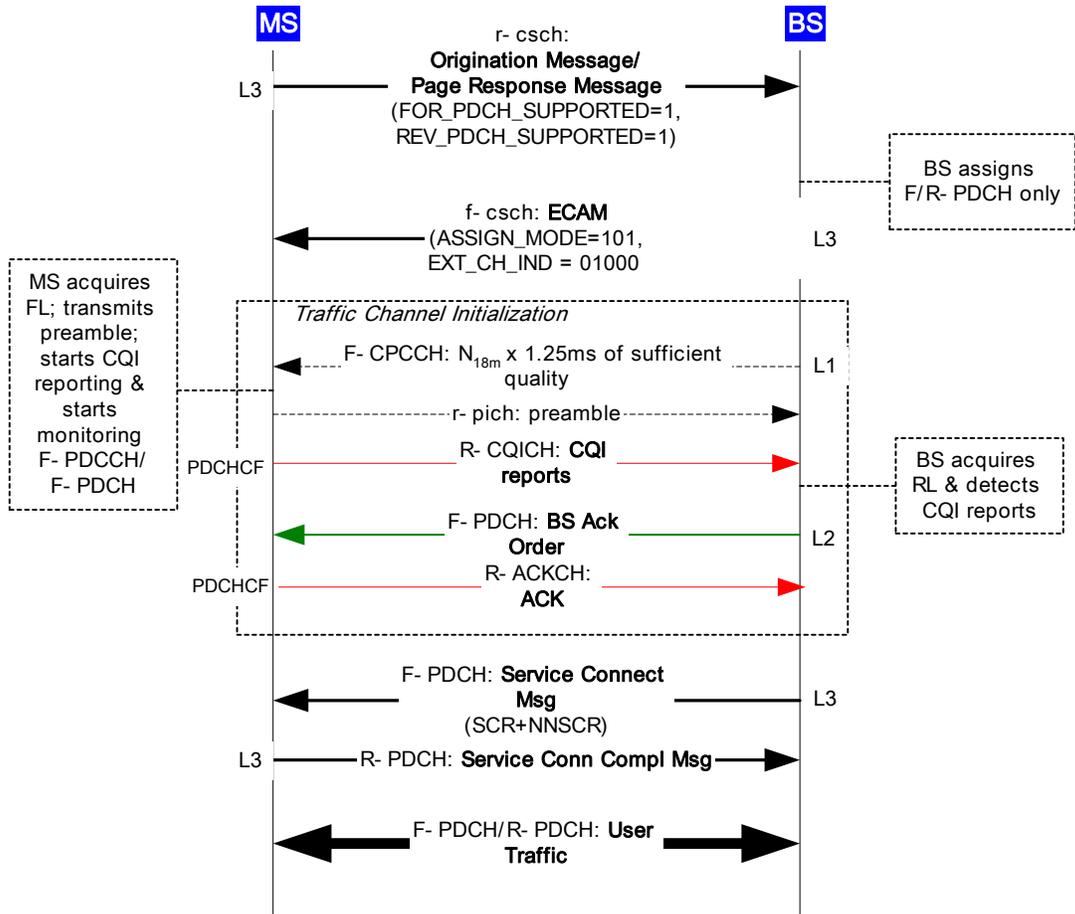
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Figure C.1.2-1. Call setup with F-PDCH and F-Fundicated

1 C.1.3 Call setup with F/R-PDCH

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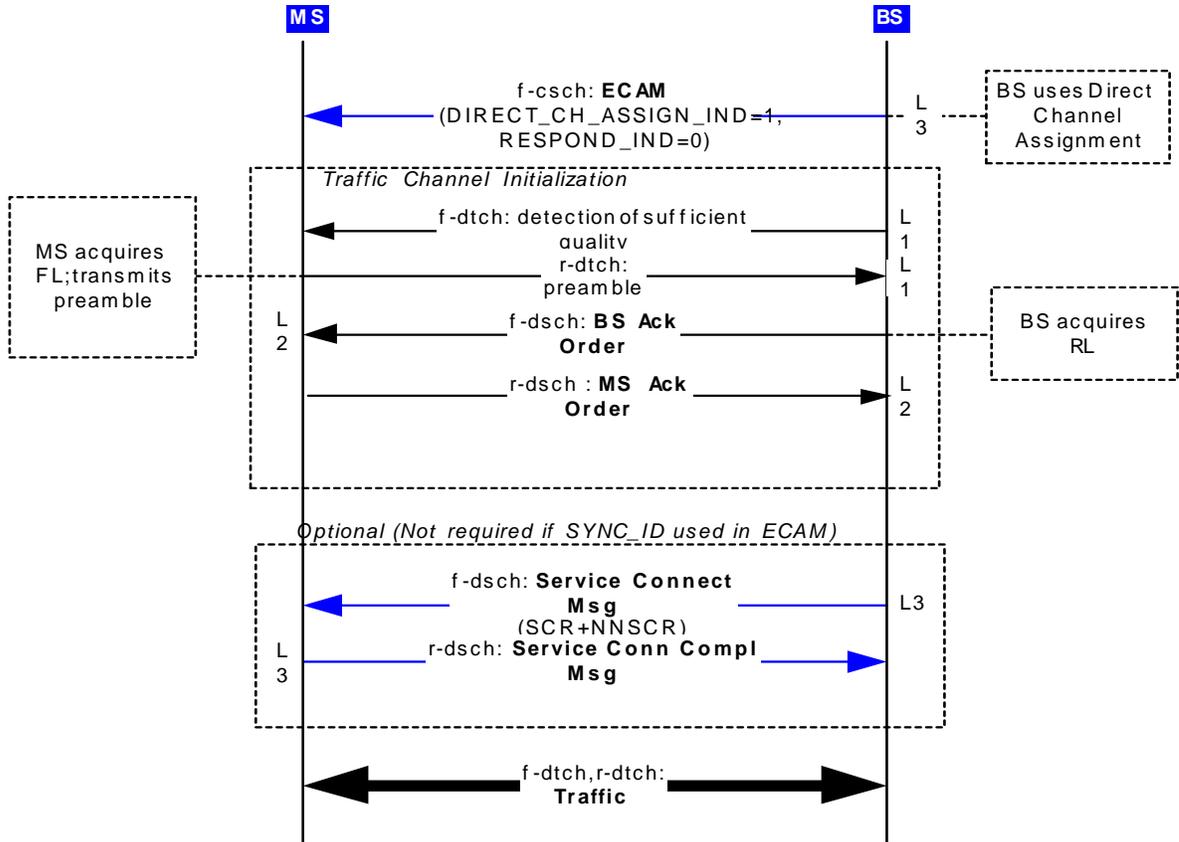
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Figure C.1.3-1. Call setup with F/R-PDCH

1 C.2 Fast Call Setup Enhancements
 2 C.2.1 Direct Channel Assignment - Normal setup
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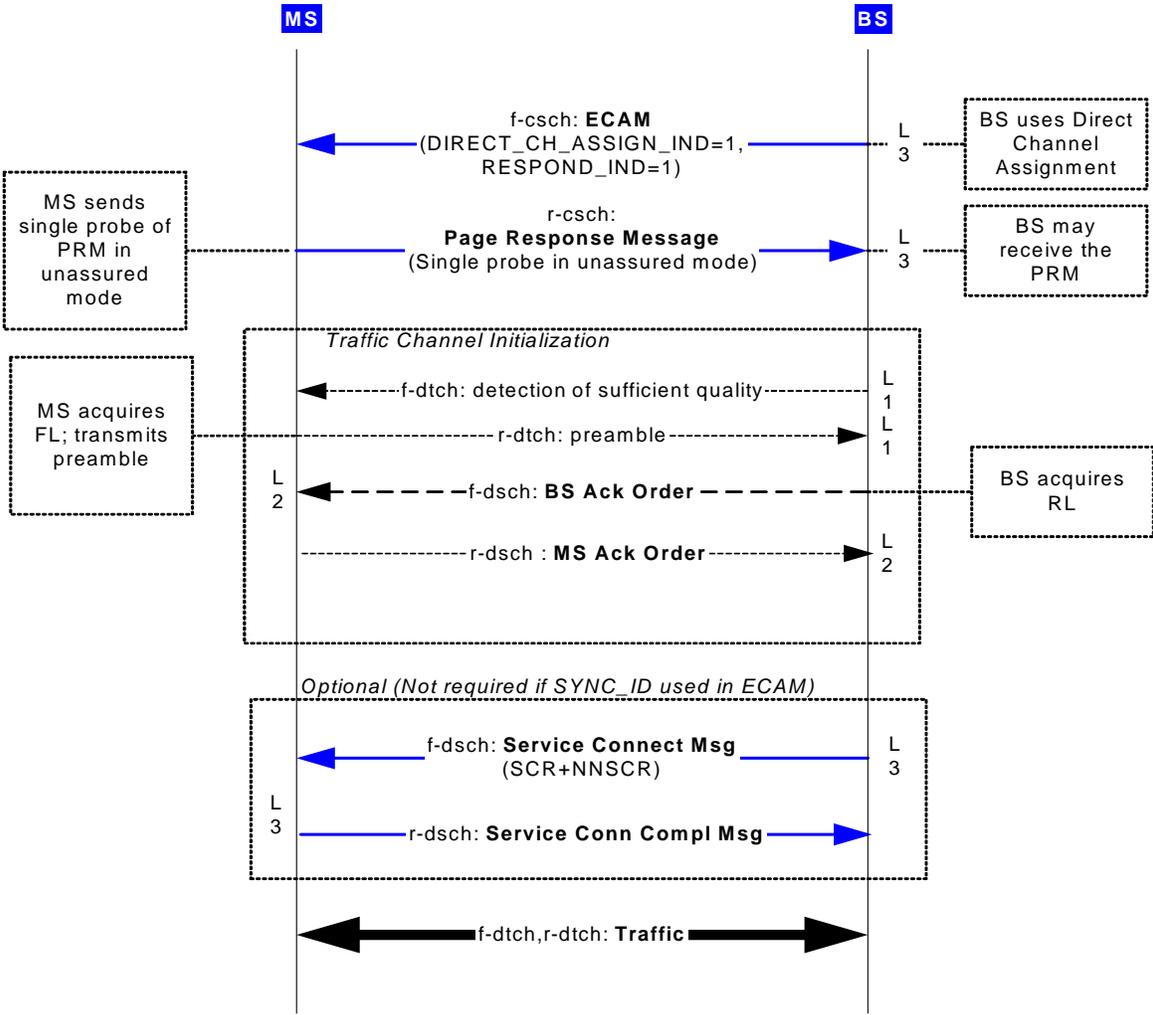


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Figure C.2.1-1 Direct Channel Assignment - Normal setup

1 C.2.2 Direct Channel Assignment - With unassured page response

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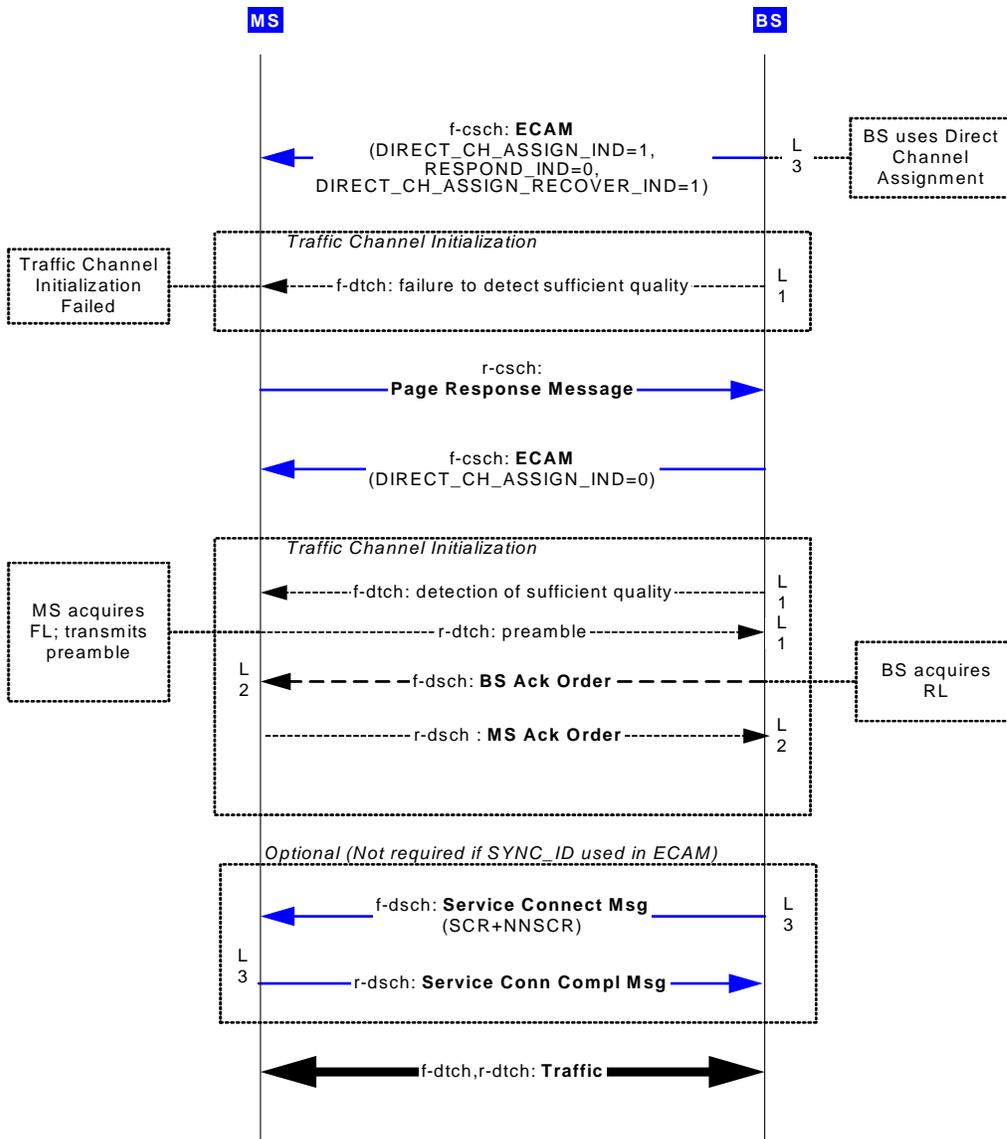
5 **Figure C.2.2-1 Direct Channel Assignment - With unassured page response**

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1 C.2.3 Direct Channel Assignment - With failure recovery

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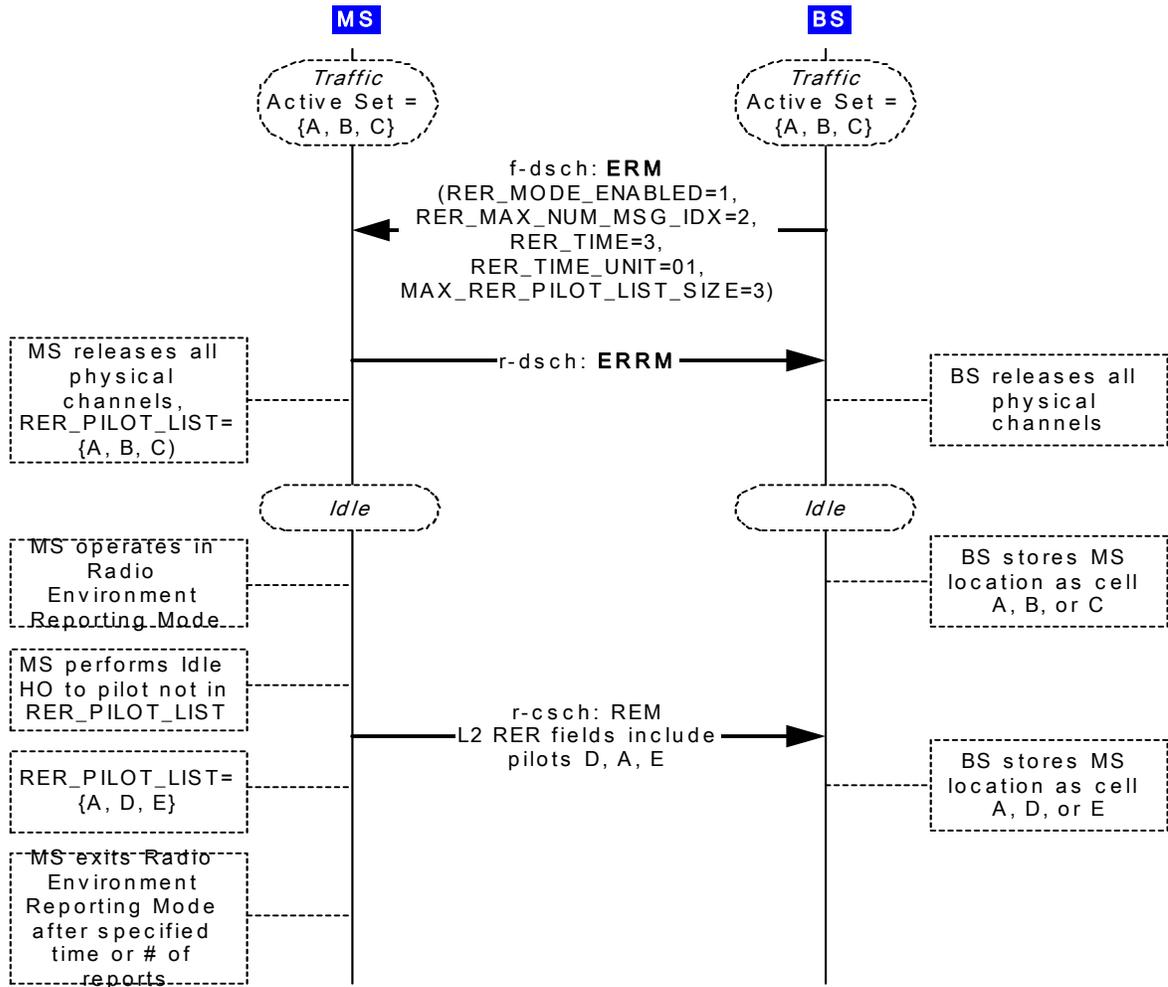
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Figure C.2.3-1 Direct Channel Assignment - With failure recovery

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1 C.2.4 Radio Environment Reporting Mode Example

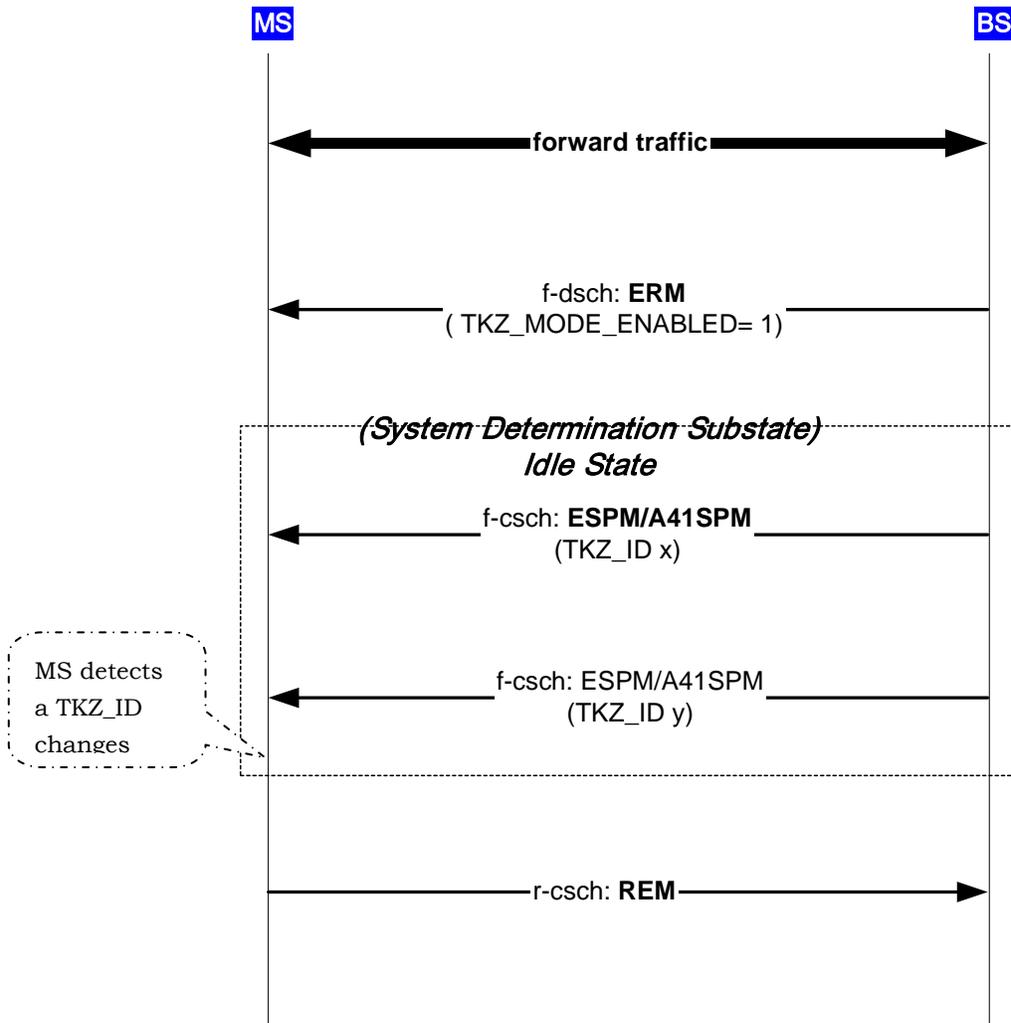


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Figure C.2.4-1 Radio Environment Reporting Mode Example

1 C.2.5 Tracking zone reporting example

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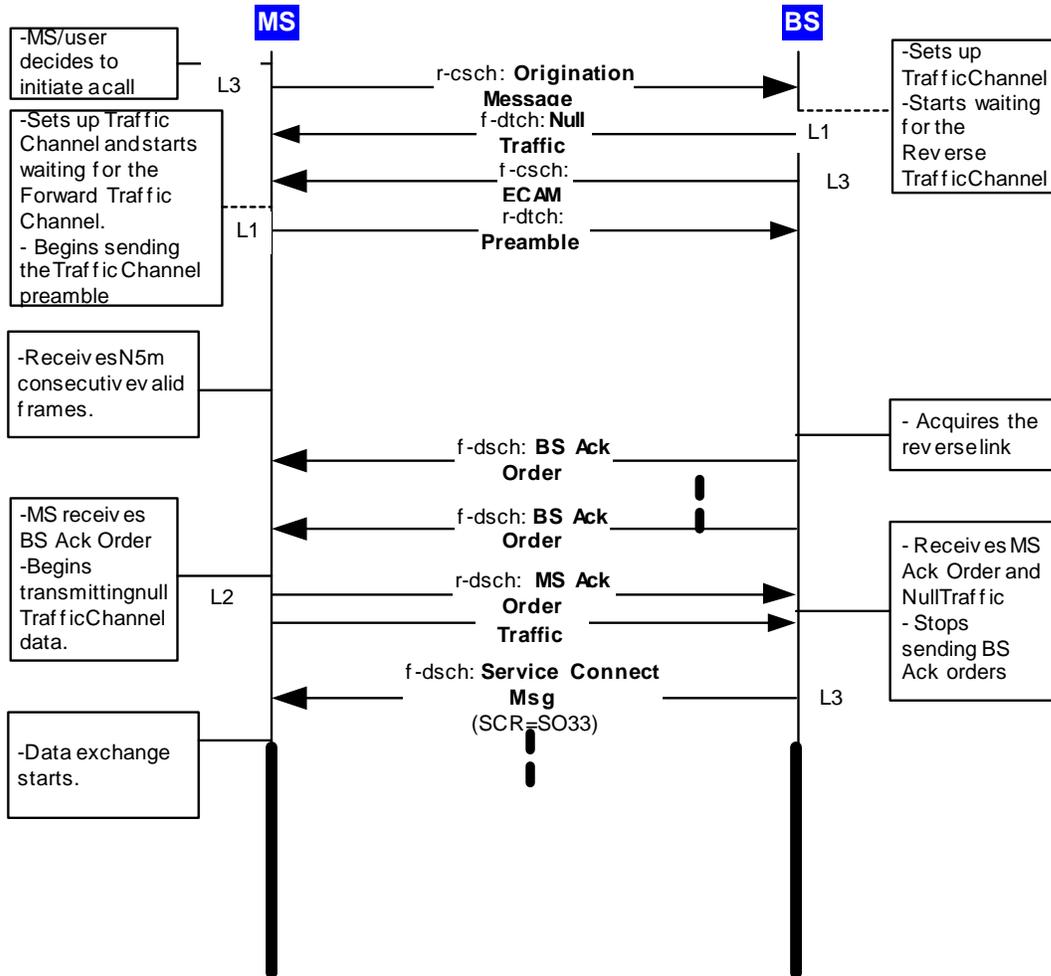
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Figure C.2.5-1 Tracking zone reporting example

1 C.2.6 Call setup with bypass two good frames

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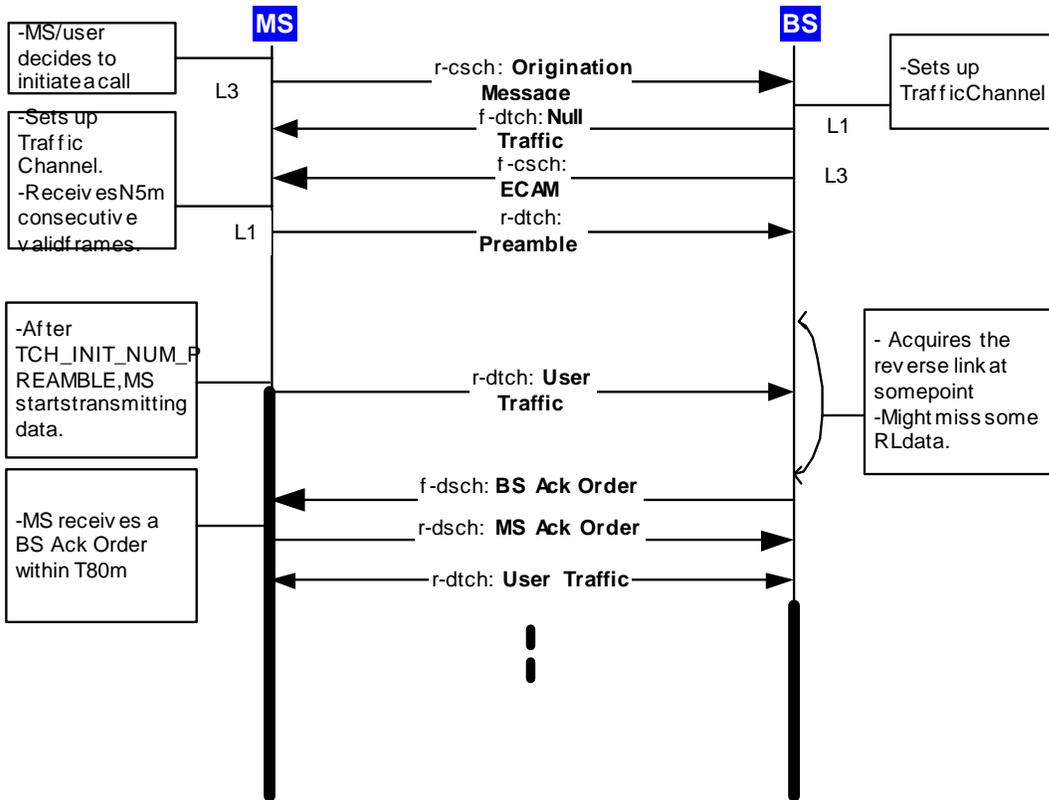
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4 **Figure C.2.6-1 Call setup with bypass two good frames**

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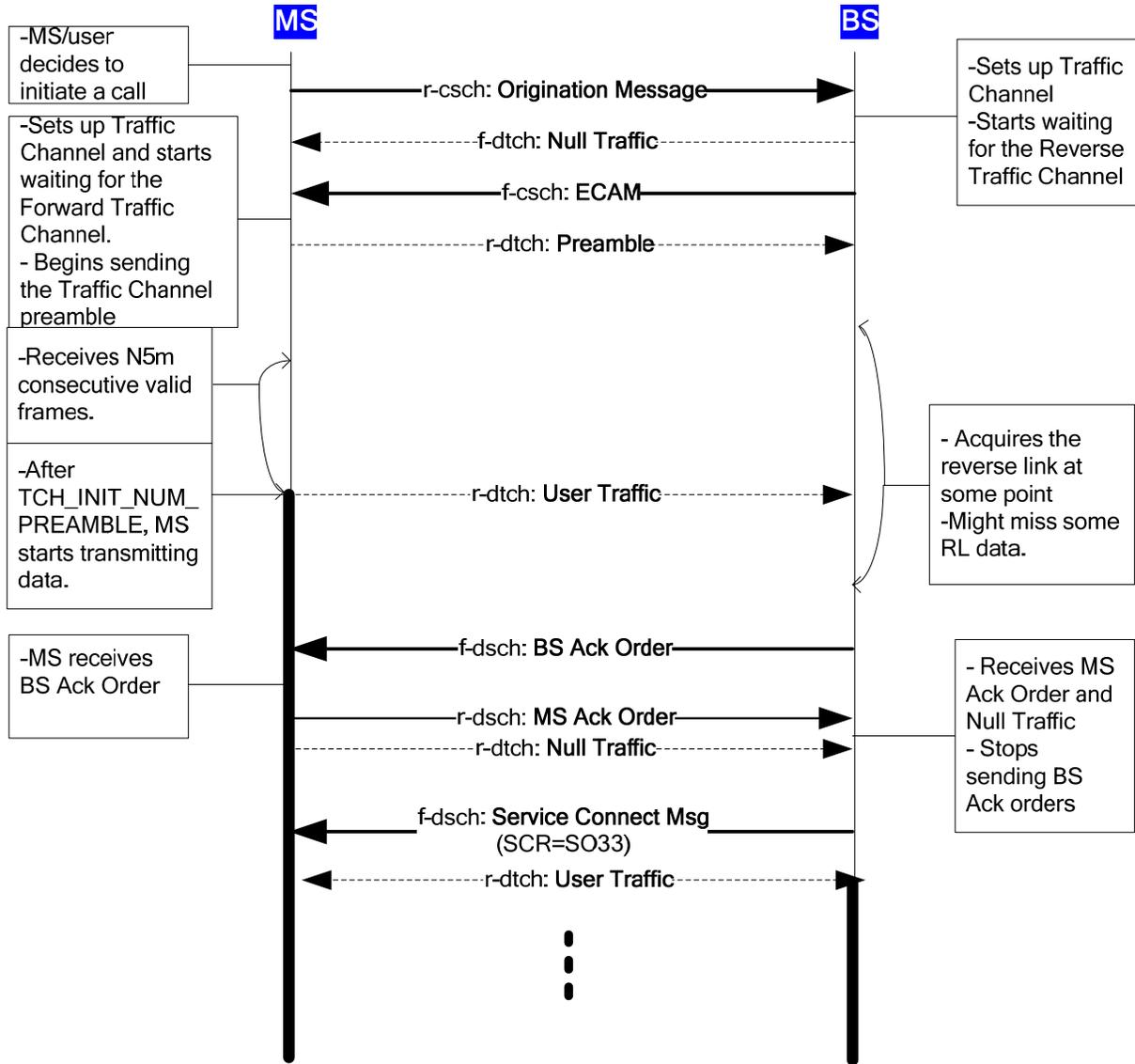
1 C.2.7 Call setup with fixed duration preamble transmission
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 4 **Figure C.2.7-1 Call setup with fixed duration preamble transmission**
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1 C.2.8 Call setup with bypass two good frames + fixed duration preamble transmission

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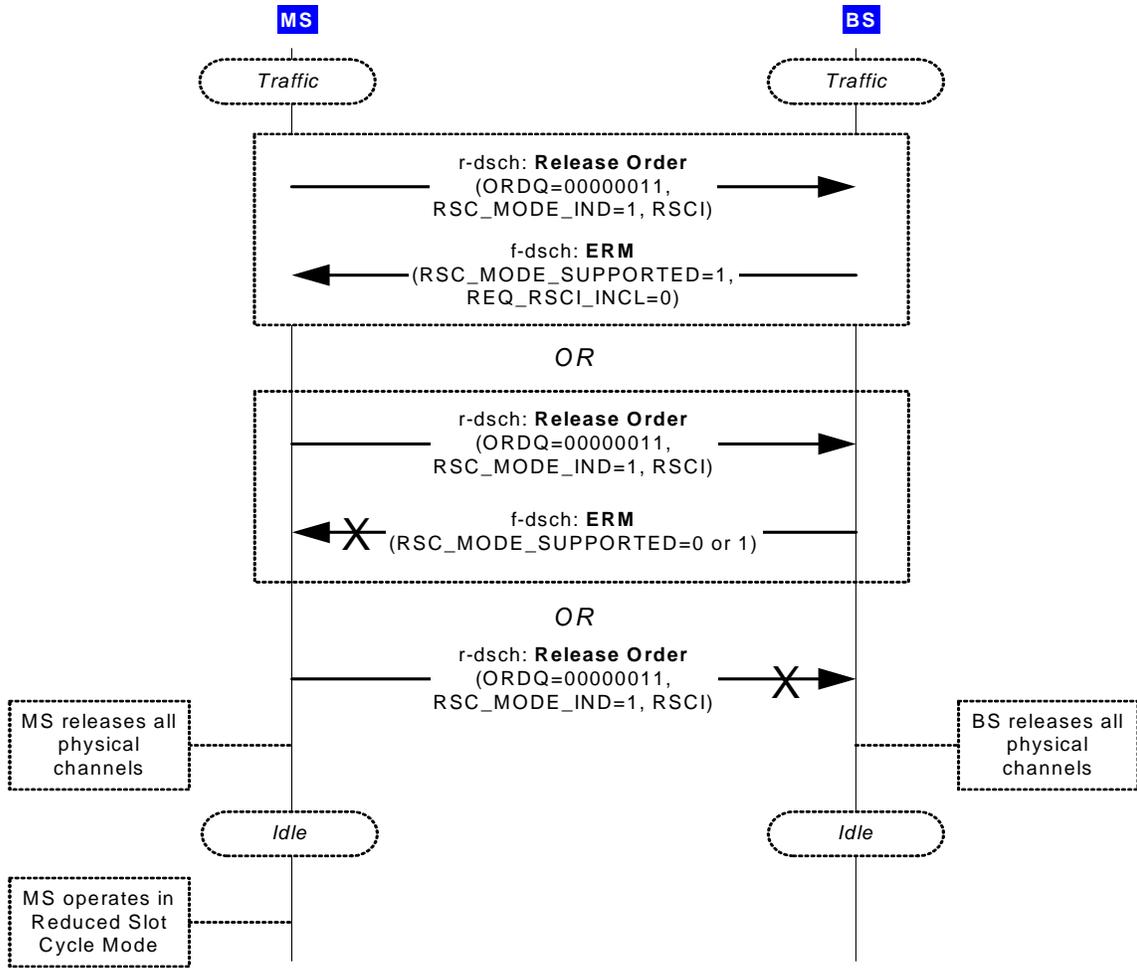
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5 **Figure C.2.8-1 Call setup with bypass two good frames + fixed duration preamble**
6 **transmission**

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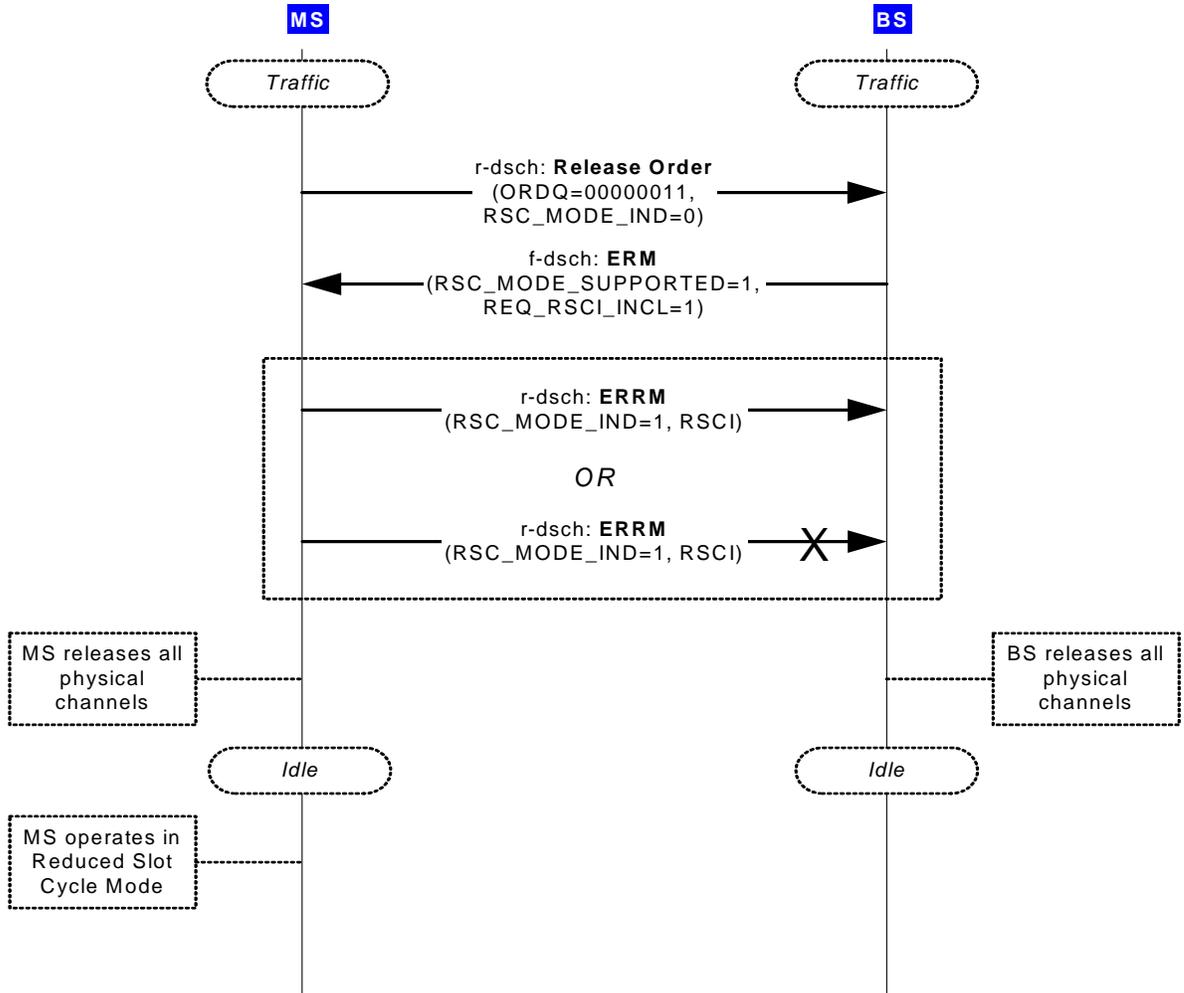
1 C.2.9 Reduced Slot Cycle Mode - MS initiated release; MS request
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Figure C.2.9-1 Reduced Slot Cycle Mode - MS initiated release; MS request

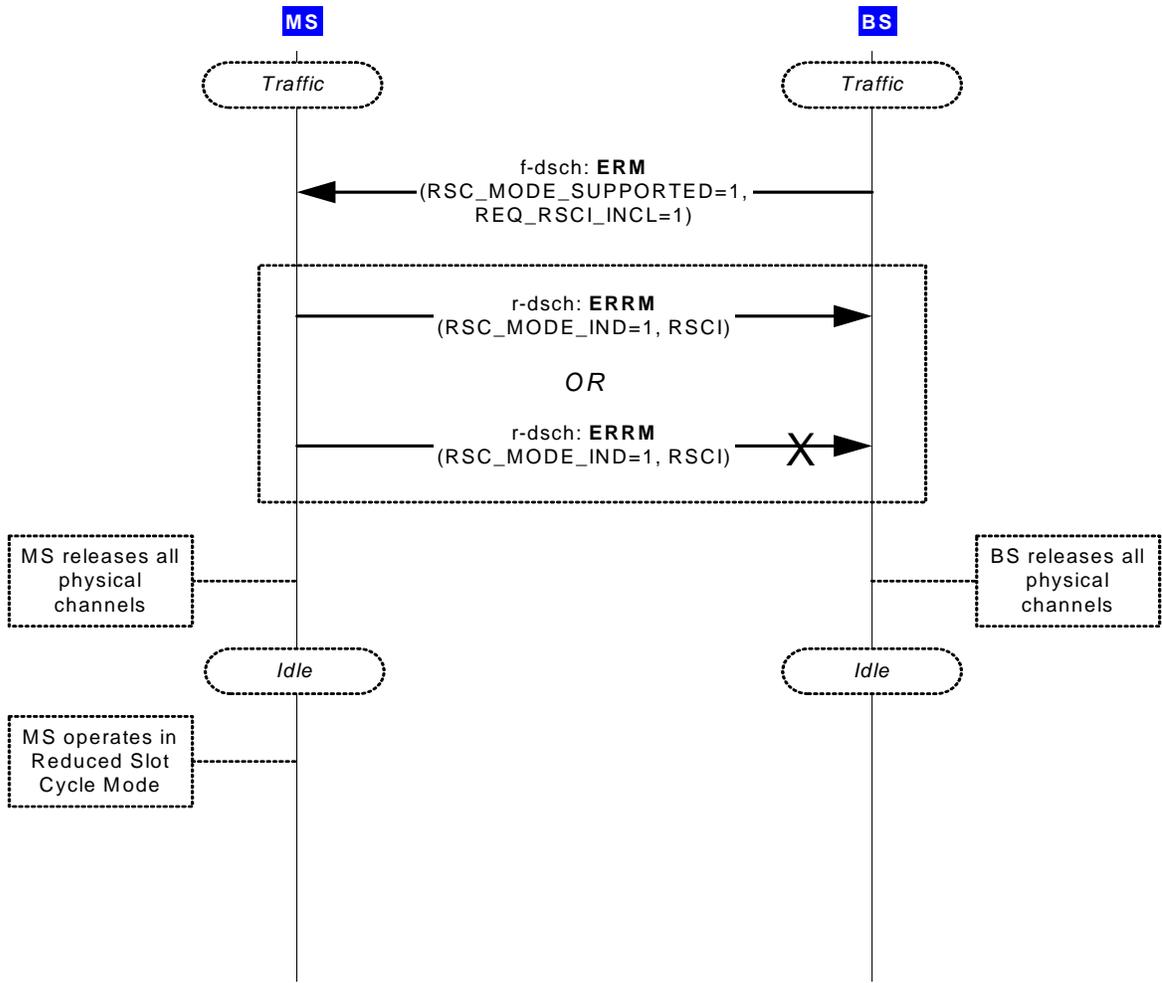
1 C.2.10 Reduced Slot Cycle Mode - MS initiated release; BS request
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Figure C.2.10-1 Reduced Slot Cycle Mode (MS Initiated Release; BS Request)

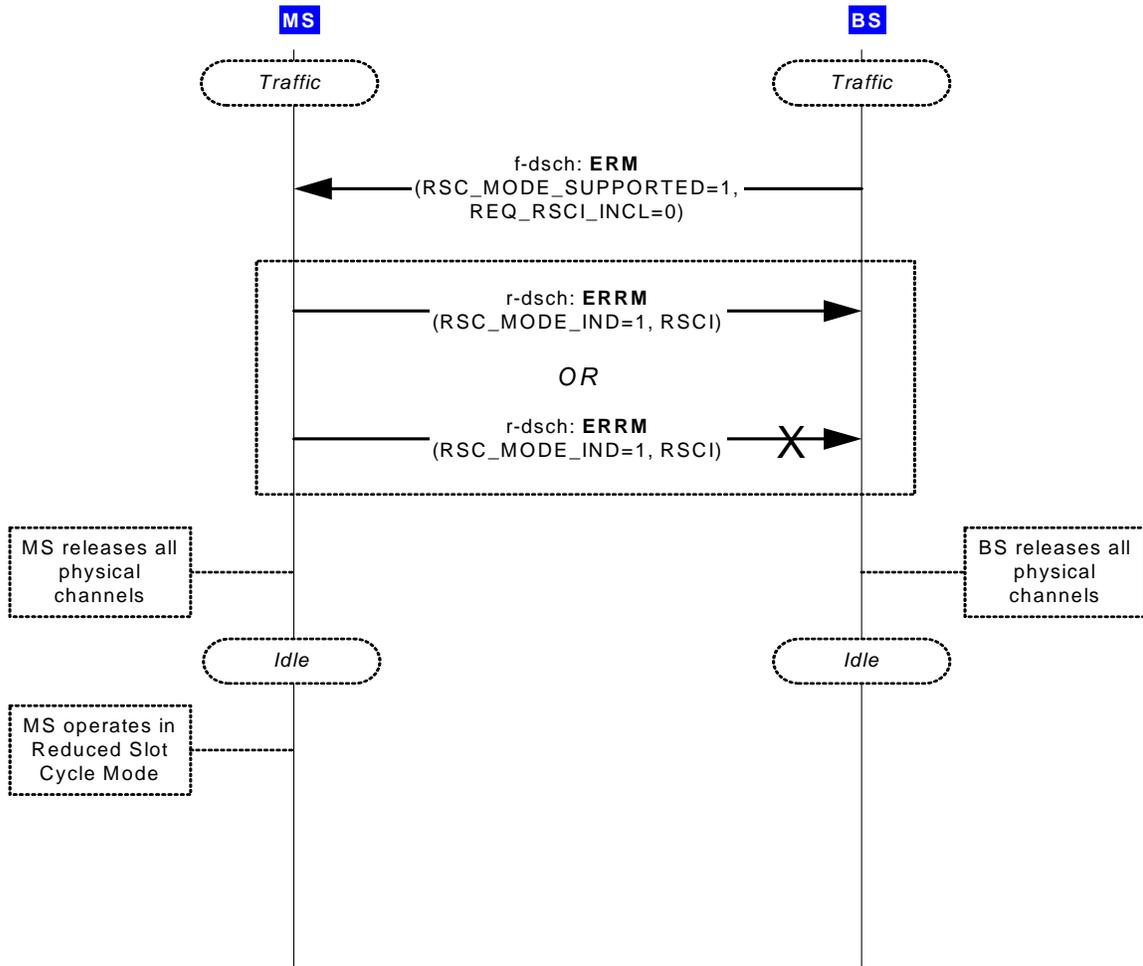
1 C.2.11 Reduced Slot Cycle Mode - BS initiated release; BS request
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Figure C.2.11-1 Reduced Slot Cycle Mode - BS initiated release; BS request

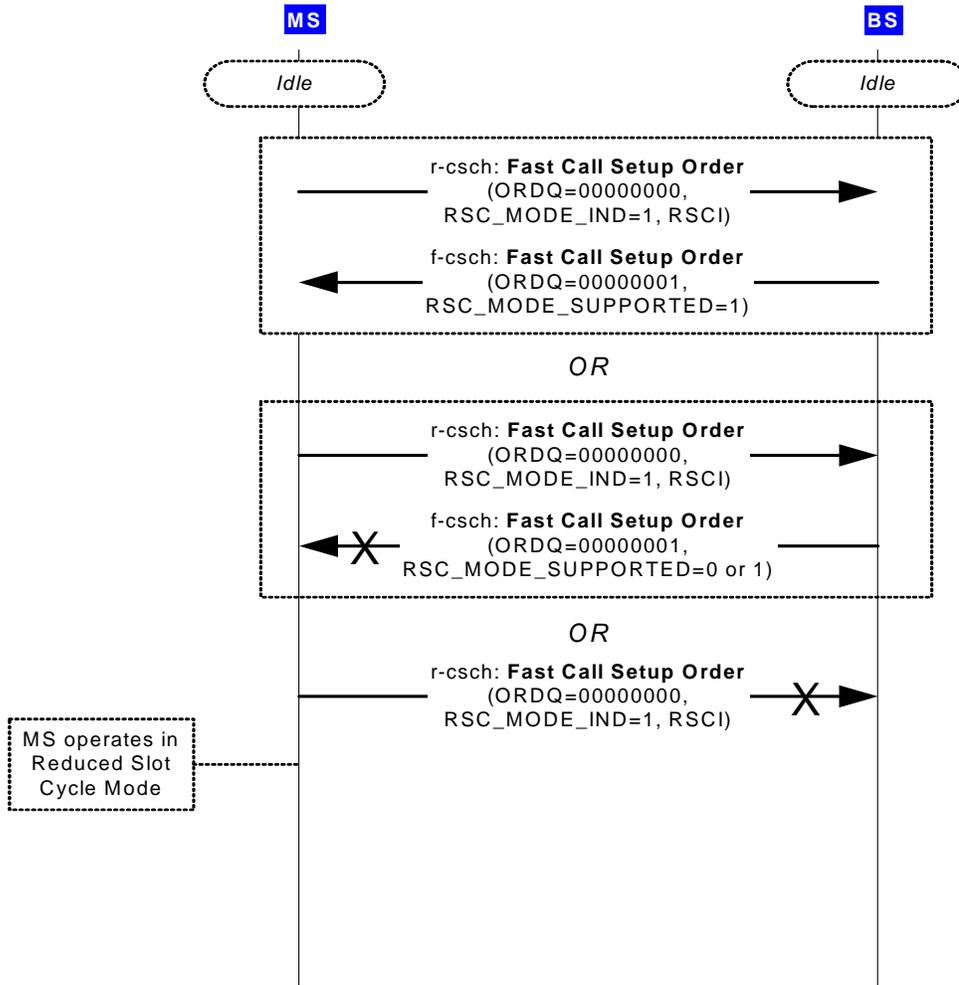
1 C.2.12 Reduced Slot Cycle Mode - BS initiated release; MS request
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Figure C.2.12-1 Reduced Slot Cycle Mode - BS initiated release; MS request

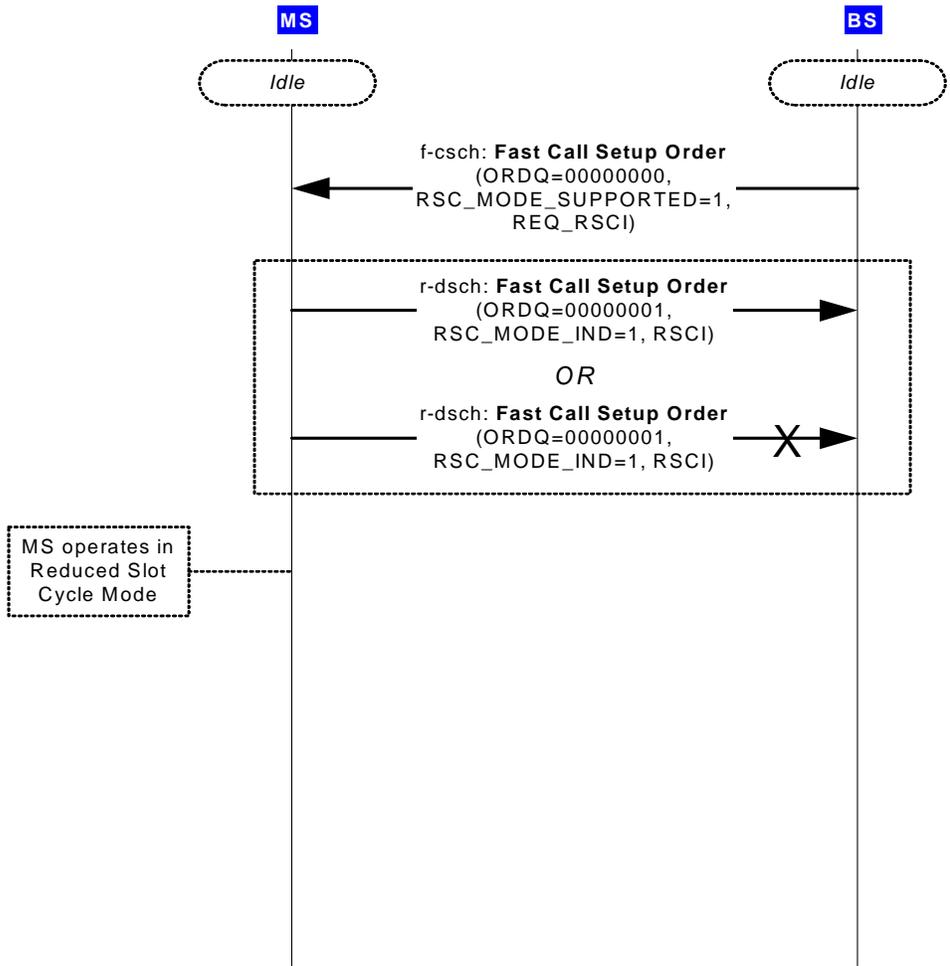
1 C.2.13 Reduced Slot Cycle Mode - MS initiated in Idle State
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Figure C.2.13-1 Reduced Slot Cycle Mode - MS initiated in Idle State

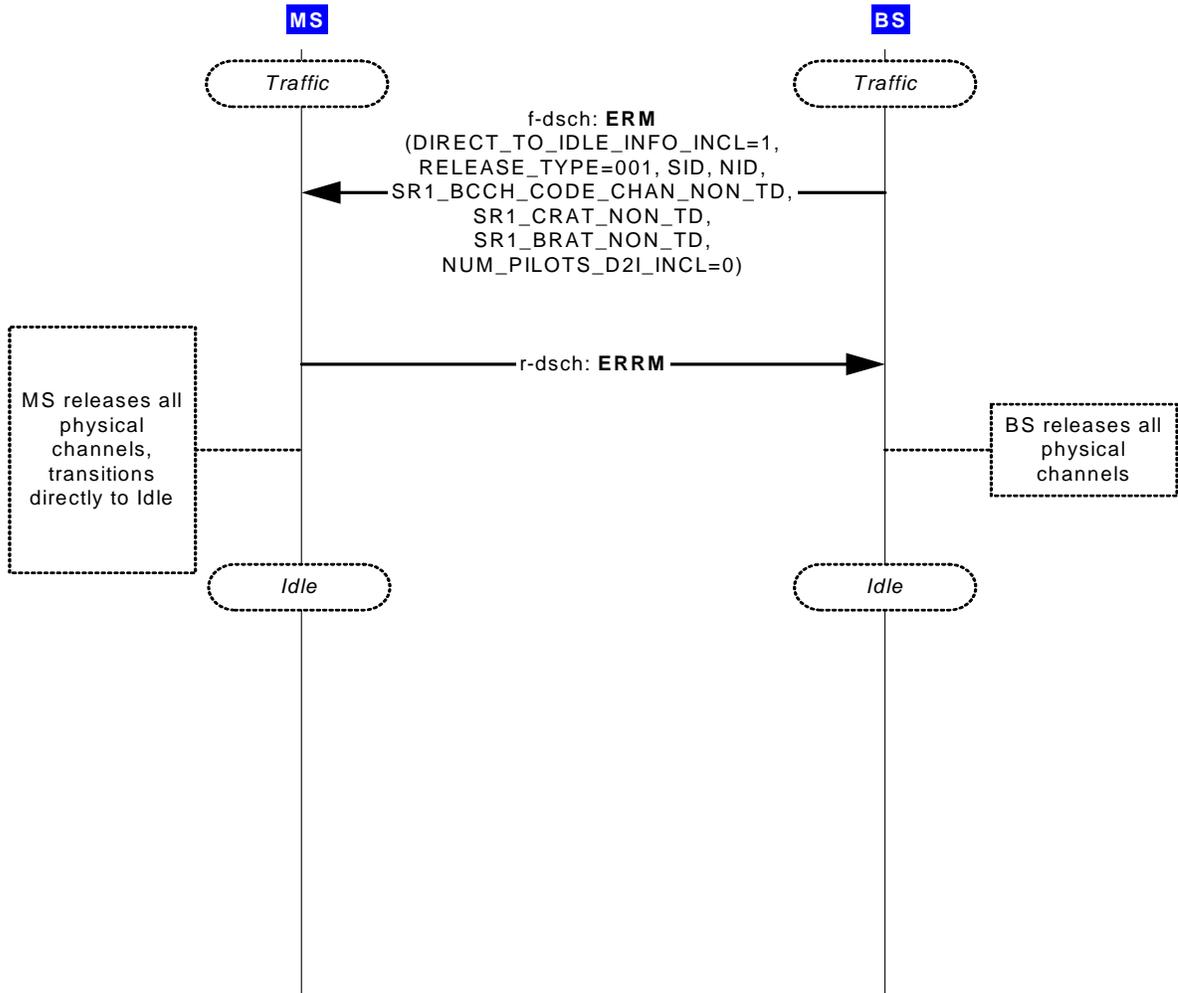
1 C.2.14 Reduced Slot Cycle Mode - BS initiated in Idle State
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Figure C.2.14-1 Reduced Slot Cycle Mode - BS initiated in Idle State

1 C.2.15 Direct to Idle transition example
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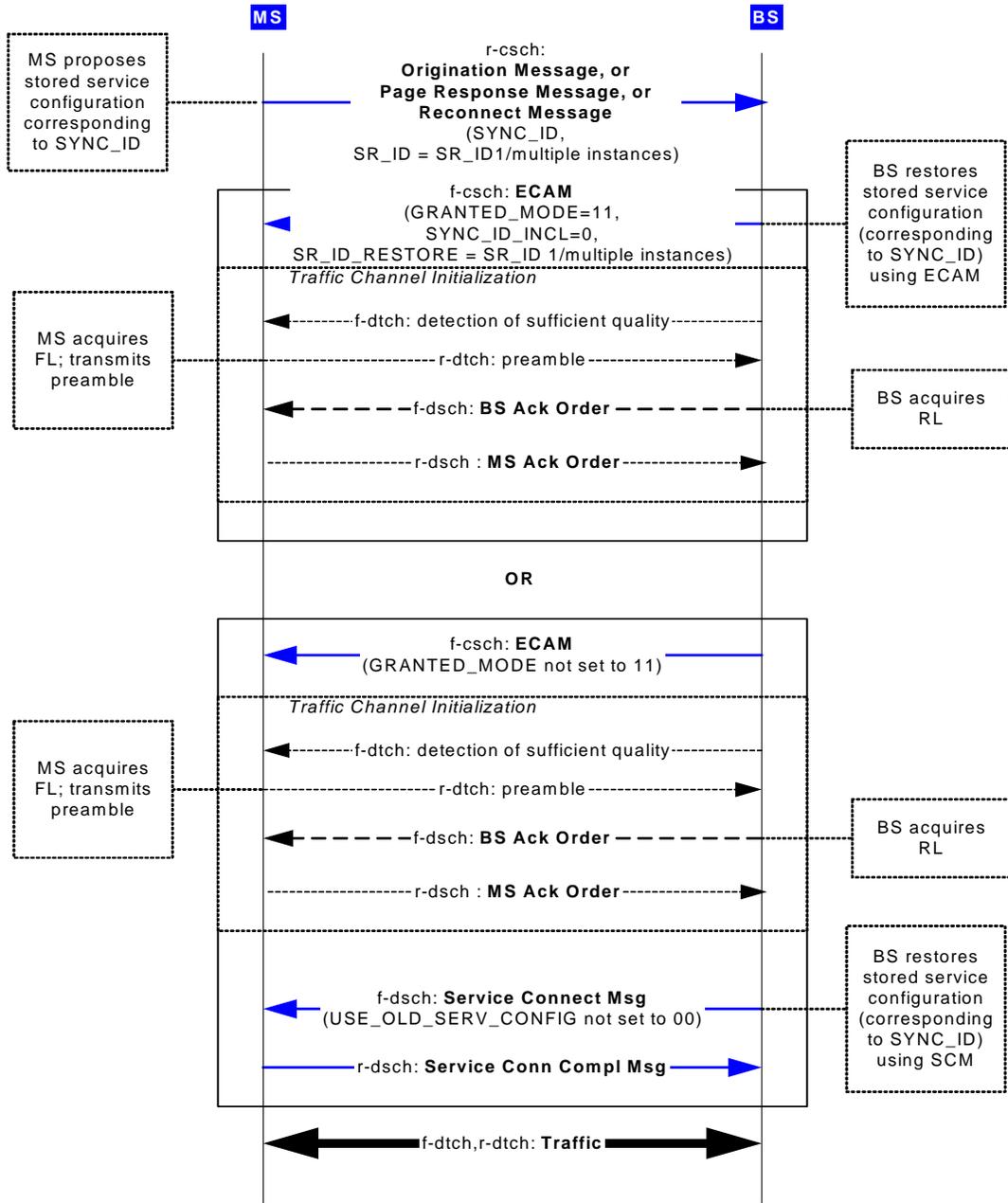


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Figure C.2.15-1 Direct to Idle Transition Example (BS Initiated Release to BCCH)

1 C.3 SYNC_ID enhancements

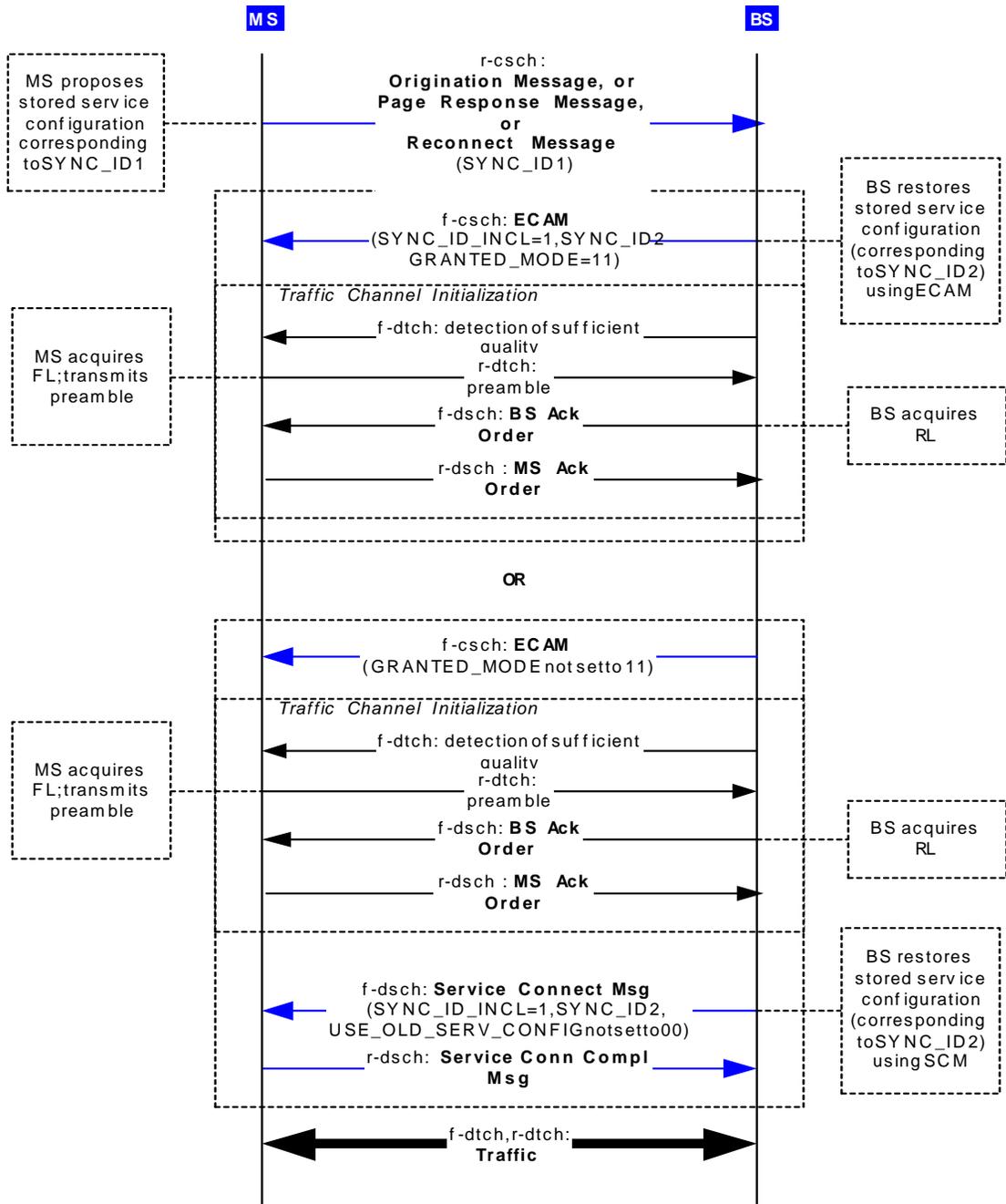
2 C.3.1 SYNC_ID in Origination/Page Response/Reconnect Message and BS grants it via
 3 ECAM or SCM



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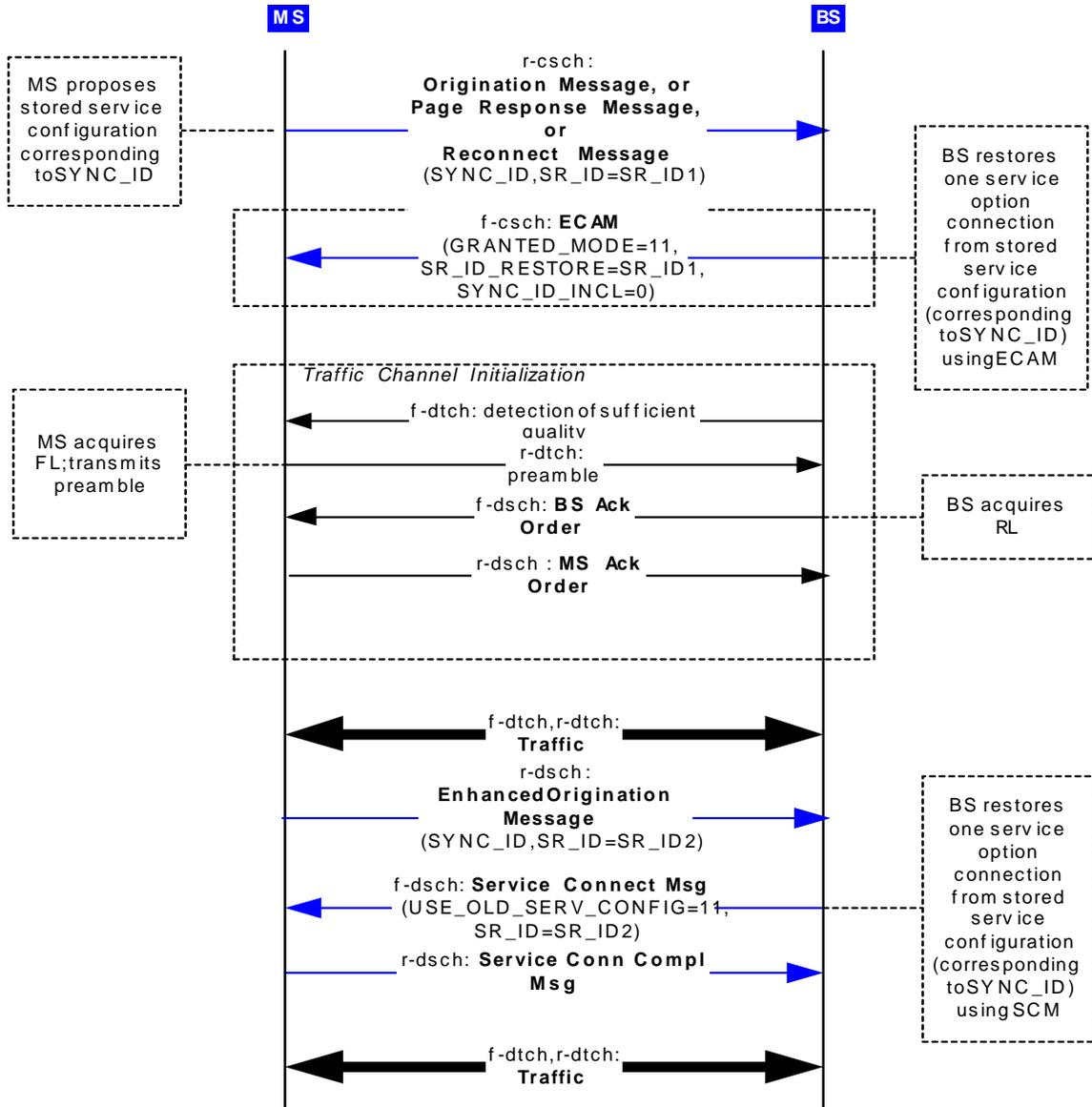
Figure C.3.1-1 SYNC_ID in Origination/Page Response/Reconnect Message and BS grants it via ECAM or SCM

1 C.3.2 SYNC_ID in Origination/Page Response/Reconnect Message and BS assigns a
 2 different one in ECAM or SCM



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 4 **Figure C.3.2-1 SYNC_ID in Origination/Page Response/Reconnect Message and BS**
 5 **assigns a different one in ECAM or SCM**
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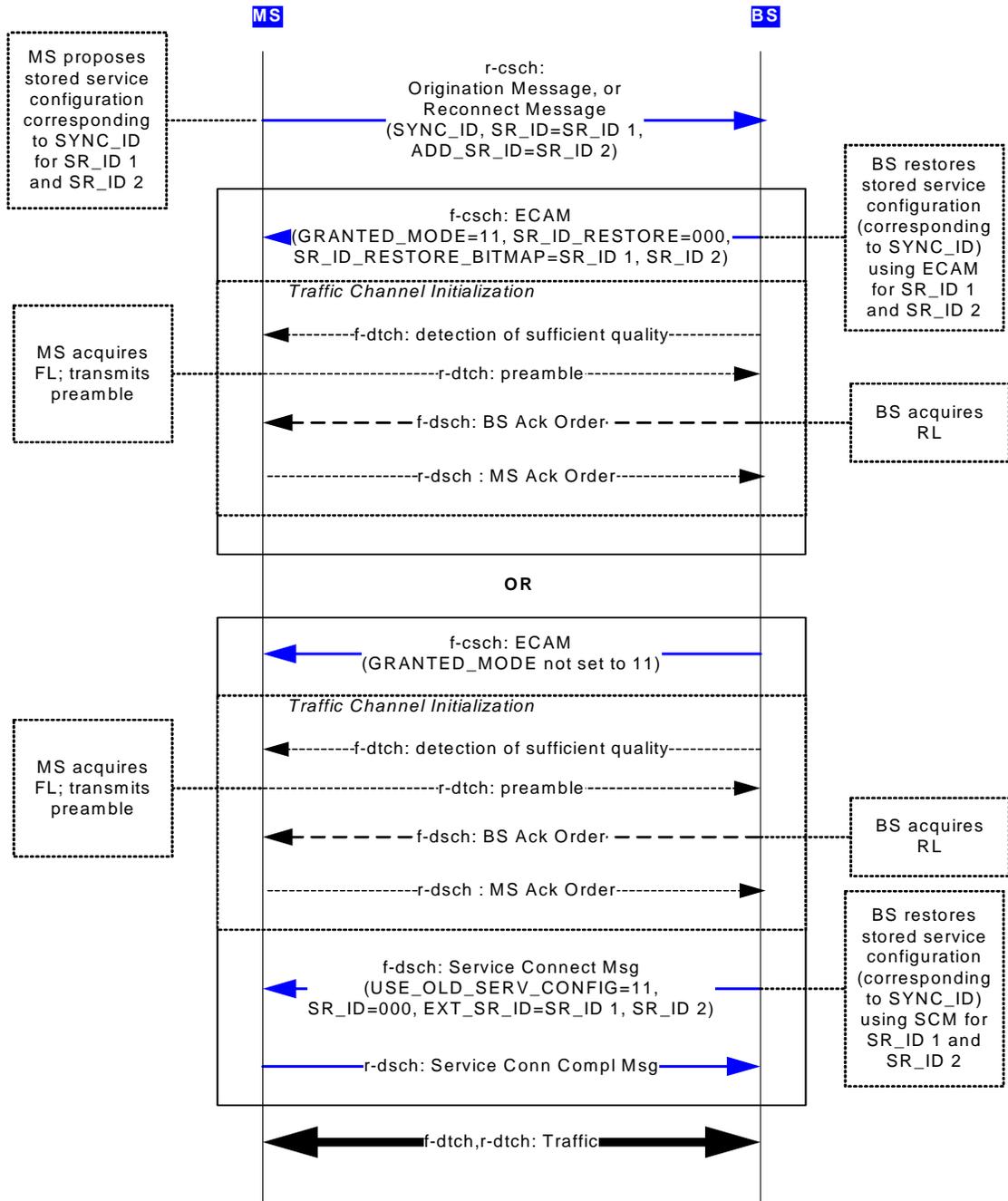
1 C.3.3 Incremental restoration of stored service option connections with SYNC_ID (ORM +
 2 EOM example)



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Figure C.3.3-1 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



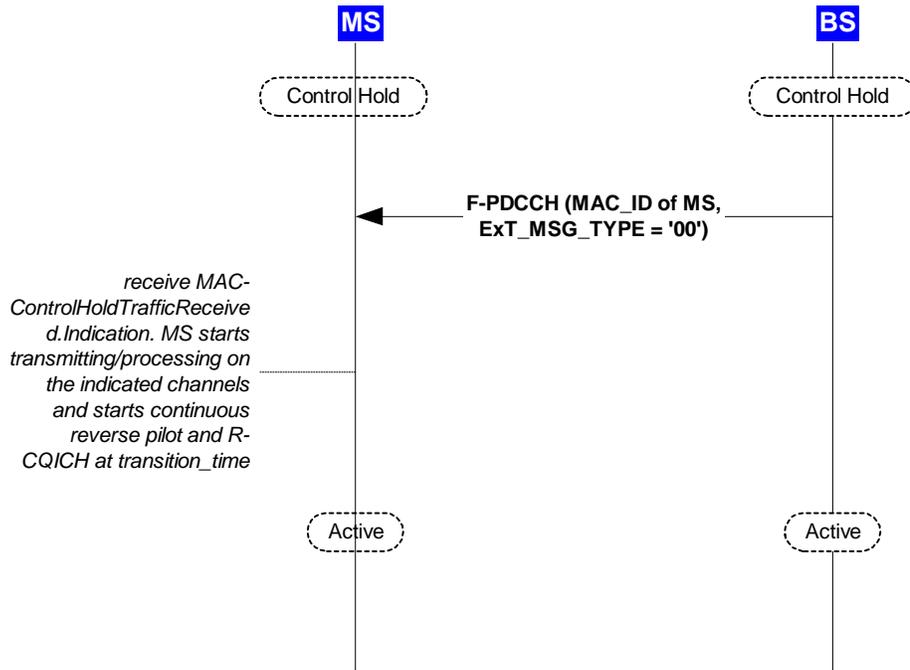
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Figure C.3.4-1 Initiate M of N service option connections from SYNC_ID

1 C.4 DV Control Hold

2 C.4.1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-DCCH)

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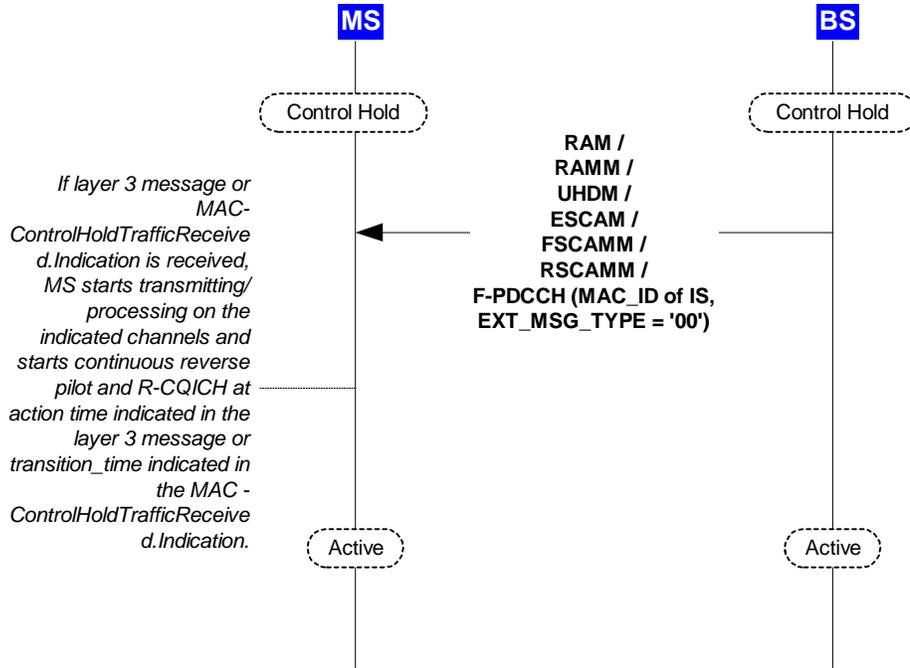
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6 **Figure C.4.1-1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-**
 7 **DCCH)**

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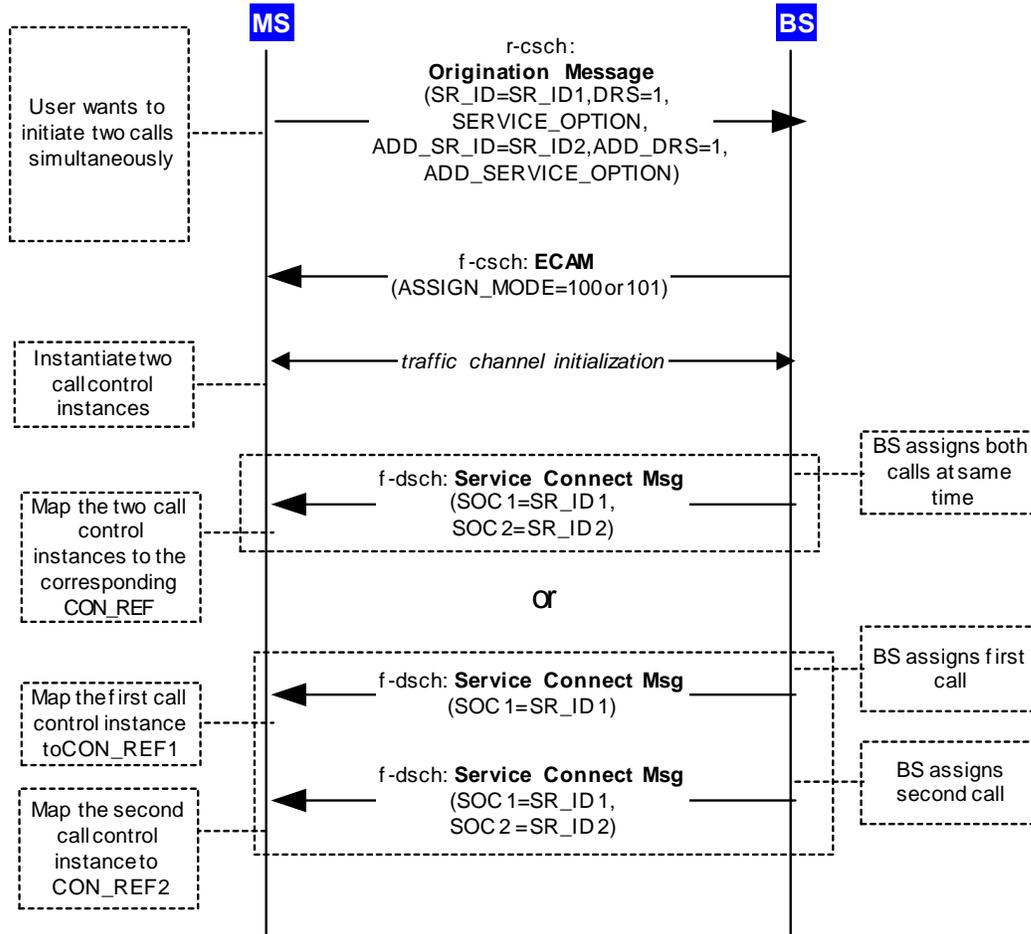
1 C.4.2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)
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Figure C.4.2-1 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)

1 C.5 Multiple Services Support
 2 C.5.1 Initiate multiple calls in Origination Message
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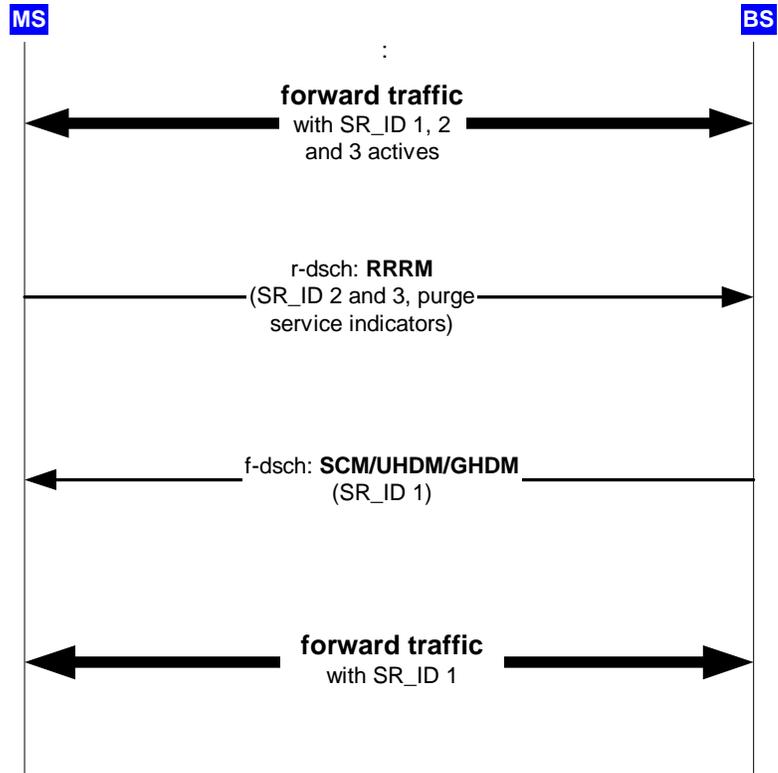


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 5 **Figure C.5.1-1 Initiate multiple calls in Origination Message**

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1 C.5.2 Request release of multiple calls via RRRM

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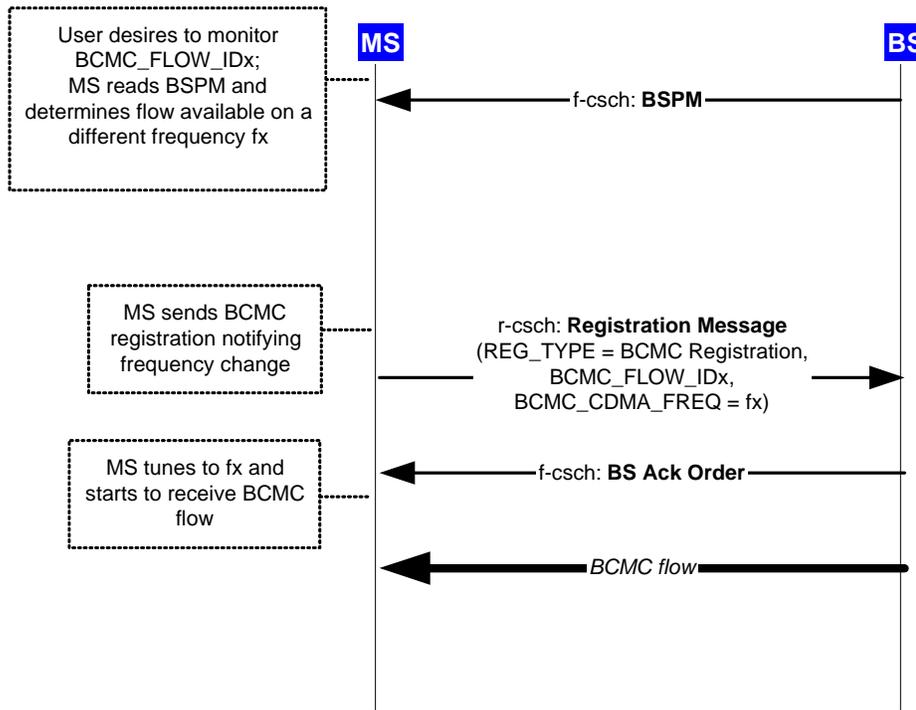
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5 **Figure C.5.2-1 Request release of multiple calls via RRRM**

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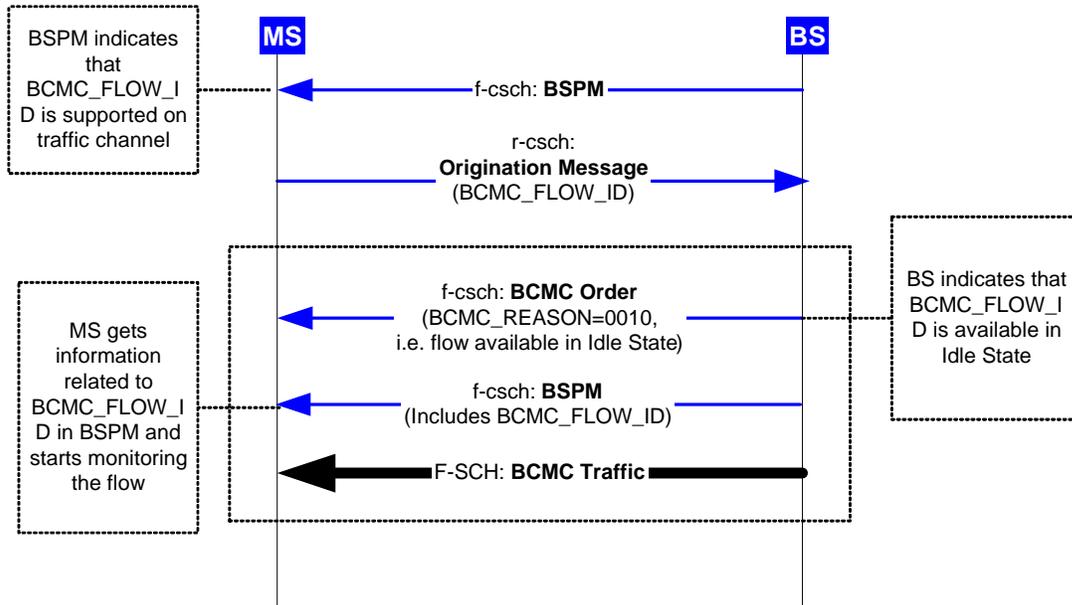
- 1 C.6 BCMC
- 2 C.6.1 Initiating BCMC monitoring in idle state that results in Registration Message
- 3



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5 **Figure C.6.1-1 Initiating BCMC monitoring in idle state that results in Registration**
6 **Message**

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- 1 C.6.2 Initiating BCMC monitoring in idle state that results in Origination Message and
- 2 directed to Idle State BCMC

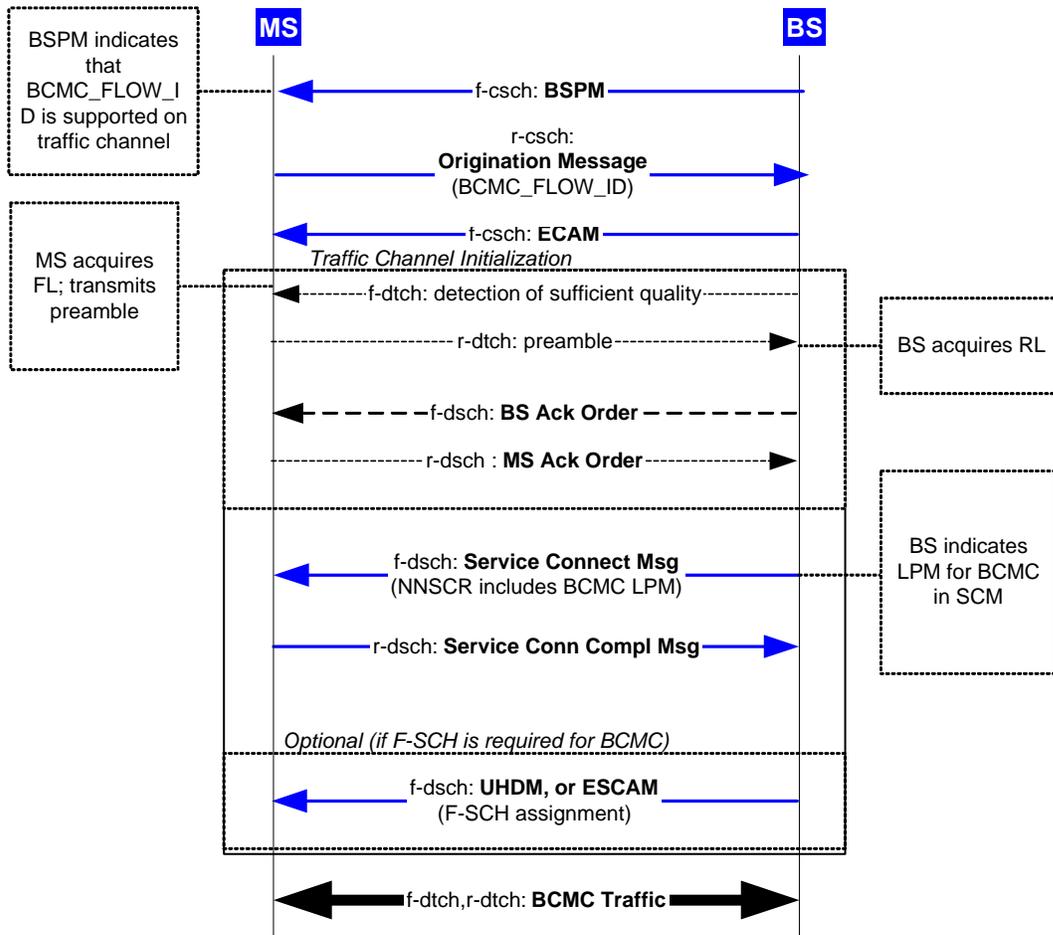


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Figure C.6.2-1 Initiating BCMC monitoring in idle state that results in Origination Message and directed to Idle State BCMC

1 C.6.3 Initiating BCMC monitoring in idle state that results in Origination Message and
 2 assigned to Traffic State BCMC

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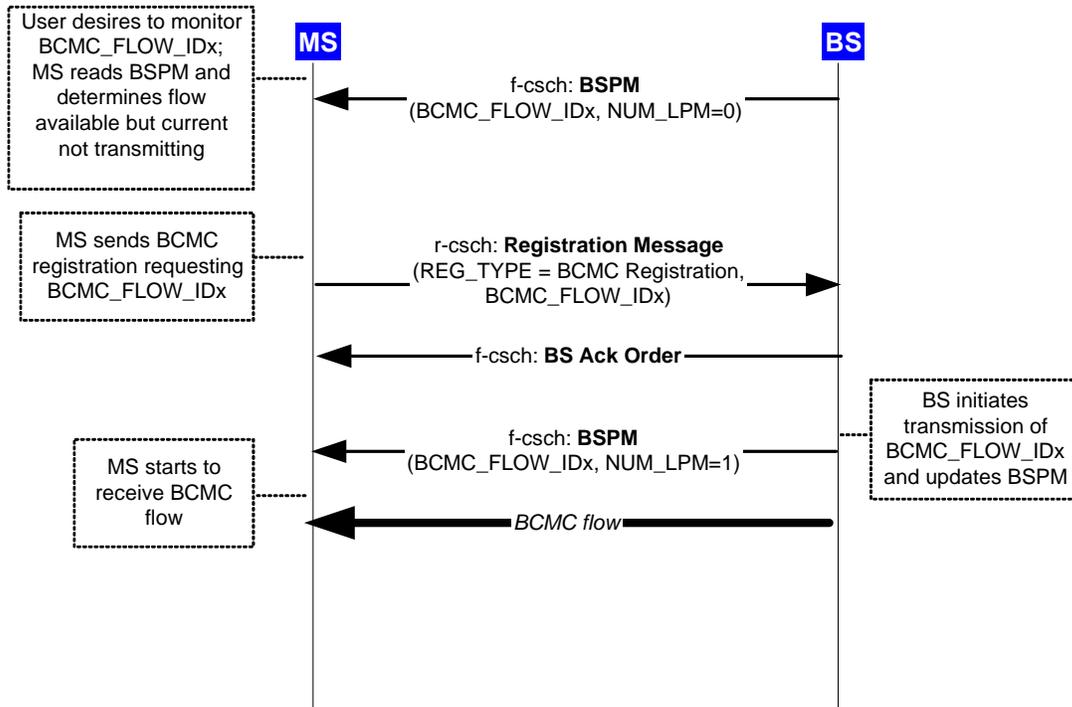
5 **Figure C.6.3-1 Initiating BCMC monitoring in idle state that results in Origination**
 6 **Message and assigned to Traffic State BCMC**

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1 C.6.4 Dynamic BCMC in idle state

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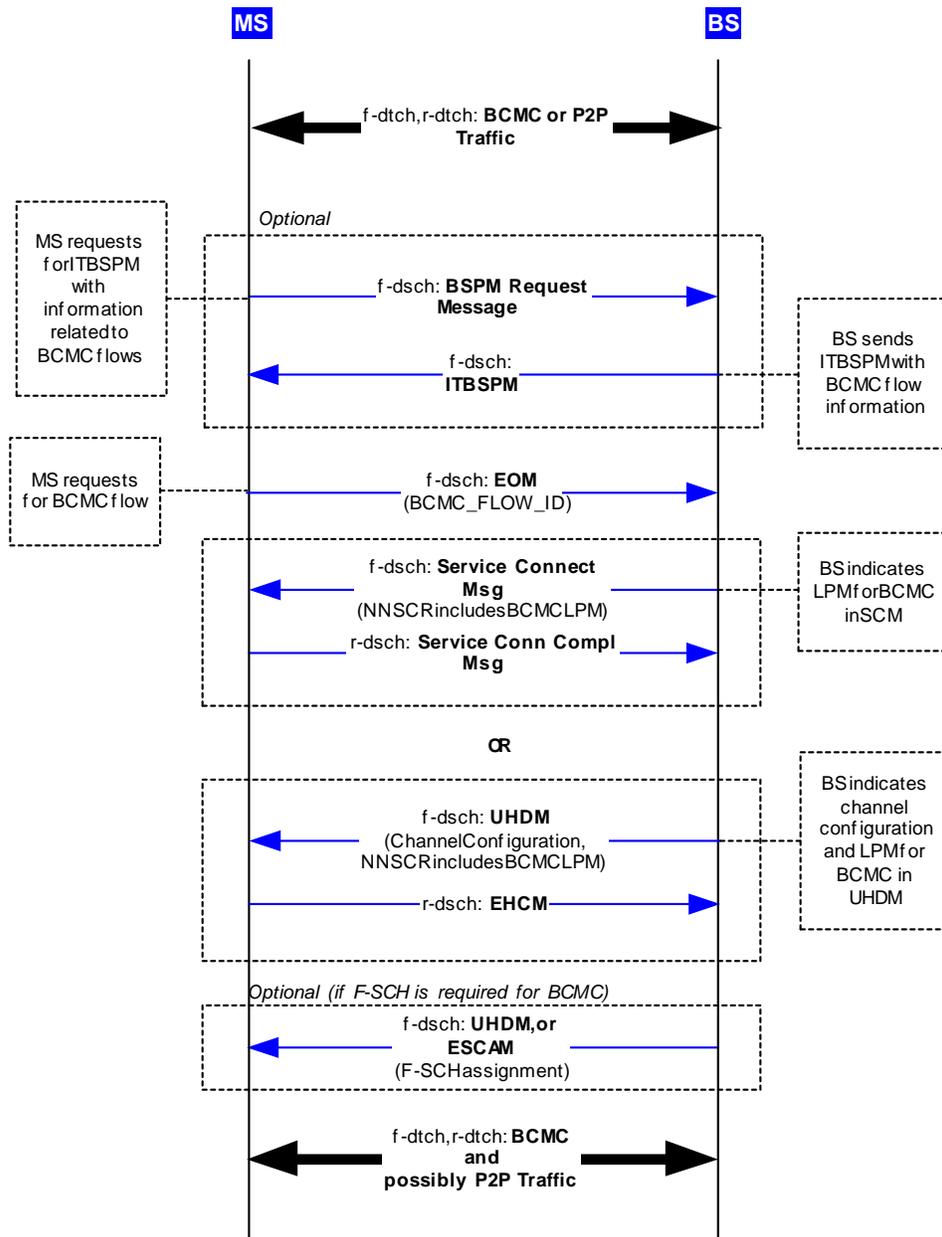
Figure C.6.4-1 Dynamic BCMC in idle state

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1 C.6.5 Initiating BCMC in traffic state

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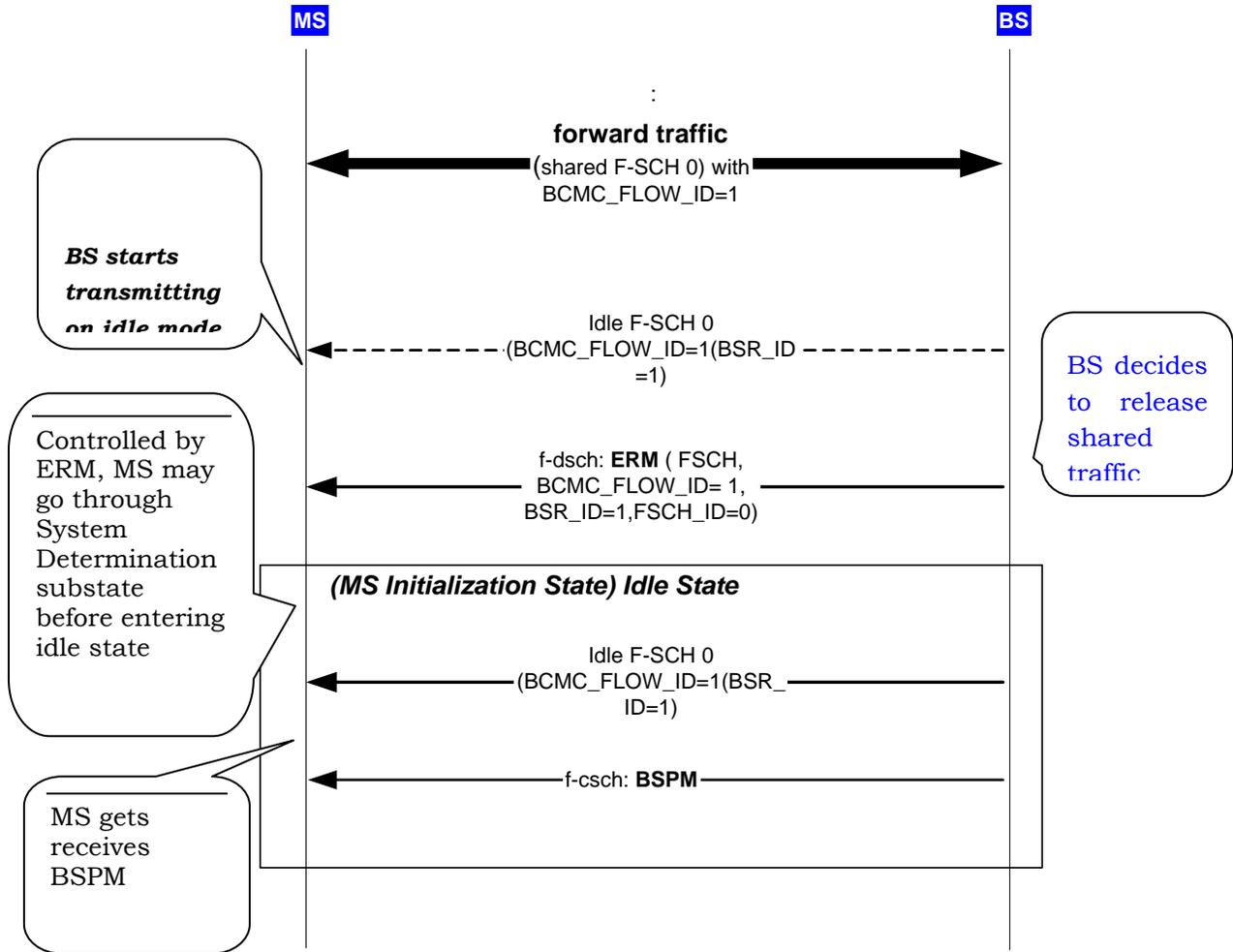
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Figure C.6.5-1 Initiating BCMC in traffic state

1 C.6.6 Traffic State BCMC to Idle State BCMC transition

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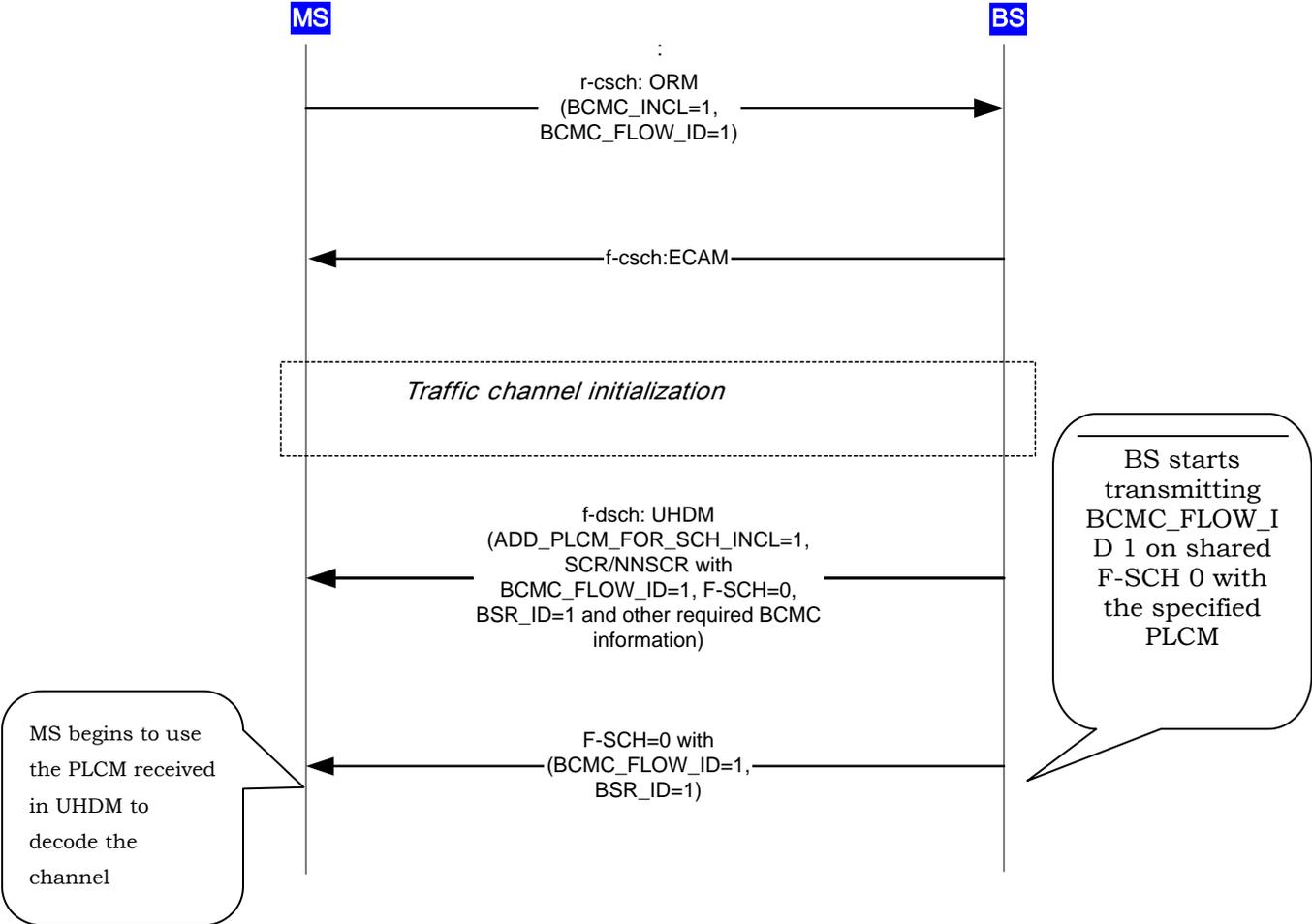
5 **Figure C.6.6-1 Traffic State BCMC to Idle State BCMC transition**

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1 C.6.7 Concurrent BCME flows monitoring

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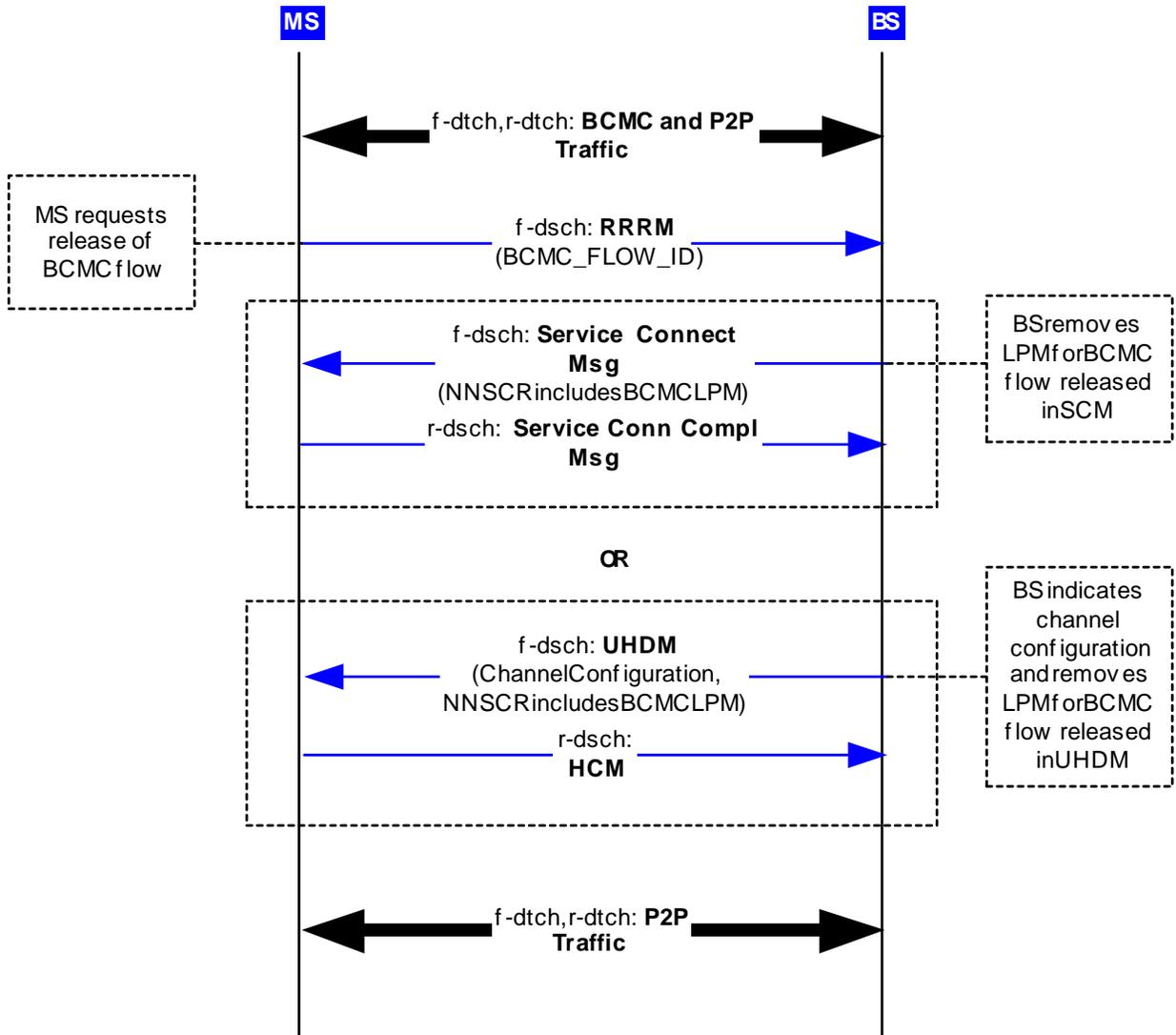
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4 **Figure C.6.7-1 Concurrent BCME flows monitoring**

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1 C.6.8 Concurrent BCMC and Point-to-Point call
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Figure C.6.8-1 Concurrent BCMC and Point-to-Point call

1 **Annex D CDMA CONSTANTS**

2 Annex D is a normative annex which contains tables that give specific values for the
3 constant identifiers. These identifiers take the forms such as T_{20m} and N_{5m} . The
4 subscripted numbers vary to identify the particular constant. Typically the subscripted
5 letter “m” refers to the mobile station and the subscripted letter “b” refers to the base
6 station. The following tables provide values for identifiers given in the text:

7 Table D-1. Time Limits

8 Table D-2. Other Constants

9

Table D-1. Time Limits

Time Limit	Description	Value	References
T _{5m}	Limit of the Forward Traffic Channel fade timer	5 s	2.6.4.1.8
T _{20m}	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 _{21m}	Maximum time to receive a valid Sync Channel message	1 s	2.6.1.3
T _{30m}	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 _{31m}	Maximum time for which configuration parameters are considered valid	600 s	2.6.2.2
T _{32m}	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
T _{33m}	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
T _{34m}	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 _r equal to '001' or '101' or <i>Extended Channel Assignment Message</i> with ASSIGN_MODE _r equal to '001'	3 s	2.6.3.3
T _{40m}	Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message before aborting an access attempt (see T _{72m})	3 s	2.6.3.1.8
T _{41m}	Maximum time to obtain updated overhead messages arriving on the Paging Channel or Broadcast Control Channel	4 s	2.6.3.2

Time Limit	Description	Value	References
T42m	<p>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>.</p> <p>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>.</p> <p>The maximum time to receive connection reference after call control instance is instantiated.</p>	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"> Maximum time to obtain ($N_{5m} \times 20$) ms of sufficient signal quality on the physical channel corresponding to $FPC_PRI_CHAN_S$ when in the <i>Traffic Channel Initialization Substate</i> of the <i>Mobile Station Control on the Traffic Channel State</i> <p>When a F-CPCCH is assigned:</p> <ul style="list-style-type: none"> Maximum time to obtain ($N_{18m} \times 1.25$) 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> 	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
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

Time Limit	Description	Value	References
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
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

Time Limit	Description	Value	References
T _{69m}	Fixed portion of the full-TMSI timer	24 s	2.6.3.1.6
T _{70m}	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
T _{71m}	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
T _{72m}	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 T _{40m})	1 s	2.6.3.1.8
T _{73m}	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
T _{74m}	Default value of the slotted timer	0.0s	2.6.4.2
T _{75m}	Default value of the key set-up timer	10 s	2.3.12.5
T _{78m}	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

Time Limit	Description	Value	References
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 <i>when early reverse link transmission is allowed</i>.</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 $(N_{5m} \times 20)$ ms of sufficient signal quality on the physical channel corresponding to $FPC_PRI_CHAN_S$ 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 $(N_{18m} \times 1.25)$ 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	<p>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>.</p>	0.1s	3.6.4.2
T81m	<p>Default maximum time the mobile station's transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization.</p>	0.1s	2.6.3.3 2.6.3.5
T1b	<p>Maximum period between subsequent transmissions of an overhead message on the Paging Channel by the base station</p>	1.28 s	3.6.2.2
T2b	<p>Maximum time for the base station to send a <i>Release Order</i> after receiving a <i>Release Order</i></p>	0.8 s	3.6.4

Time Limit	Description	Value	References
T3b	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
T4b	Maximum time for the base station to respond to a service option request	5 s	3.6.4.1.2.2.1
T5b	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

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Table D-2. Other Constants

Con-stant	Description	Value	References
N _{2m}	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 _{3m}	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 _{4m}	Reserved		
N _{5m}	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 _{6m}	Supported Traffic Channel Active Set size	6	2.6.6.2.6.1 3.6.6.2.2.2 3.6.6.2.2.1 0
N _{7m}	Supported Traffic Channel Candidate Set size	10	2.6.6.2.6.2
N _{8m}	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 _{9m}	Minimum supported zone list size	7	2.6.5.1.5
N _{10m}	SID/NID list size	4	2.6.5
N _{11m}	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 _{12m}	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 _{13m}	Maximum number of pilots reported in an Access Channel message	6	2.6.3.1.7 2.7.1.3.1.3

Con-stant	Description	Value	References
N _{16m}	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 _{17m}	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 _{18m}	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 _{19m}	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

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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.

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Table E-1. Retrievable and Settable Parameters

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
MUX1_REV_DCCH_14	156	24	N	Y	[3]
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]
MUX2_REV_DCCH_10	184	24	Y	Y	[3]
MUX2_REV_DCCH_11	185	N/A	N/A	N/A	[3]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]
FPDCH0_NAK_6X	526	24	Y	Y	[3]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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	764 763	24	Y	Y	[3]
PCG_8_FOR_SCH_1	765 764	24	Y	Y	[3]
PCG_8_FOR_SCH_2	766 765	24	Y	Y	[3]
PCG_8_FOR_SCH_3	767 766	24	Y	Y	[3]
PCG_8_FOR_SCH_4	768 767	24	Y	Y	[3]
PCG_8_FOR_SCH_5	769 768	24	Y	Y	[3]
PCG_9_FOR_SCH_1	770 769	24	Y	Y	[3]
PCG_9_FOR_SCH_2	771 770	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]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
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]
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]
ACK_TX_PCG_0_FCH	805	24	Y	Y	[3]
ACK_TX_PCG_1_FCH	806	24	Y	Y	[3]
ACK_TX_PCG_2_FCH	807	24	Y	Y	[3]
ACK_TX_PCG_3_FCH	808	24	Y	Y	[3]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
ACK_TX_PCG_4_FCH	809	24	Y	Y	[3]
ACK_TX_PCG_5_FCH	810	24	Y	Y	[3]
ACK_TX_PCG_6_FCH	811	24	Y	Y	[3]
ACK_TX_PCG_7_FCH	812	24	Y	Y	[3]
ACK_TX_PCG_8_FCH	813	24	Y	Y	[3]
ACK_TX_PCG_9_FCH	814	24	Y	Y	[3]
ACK_TX_PCG_10_FCH	815	24	Y	Y	[3]
ACK_TX_PCG_11_FCH	816	24	Y	Y	[3]
ACK_TX_PCG_12_FCH	817	24	Y	Y	[3]
ACK_TX_PCG_13_FCH	818	24	Y	Y	[3]
ACK_TX_PCG_14_FCH	819	24	Y	Y	[3]
ACK_TX_PCG_15_FCH	820	24	Y	Y	[3]
ACK_TX_PCG_0_SCH	821	24	Y	Y	[3]
ACK_TX_PCG_1_SCH	822	24	Y	Y	[3]
ACK_TX_PCG_2_SCH	823	24	Y	Y	[3]
ACK_TX_PCG_3_SCH	824	24	Y	Y	[3]
ACK_TX_PCG_4_SCH	825	24	Y	Y	[3]
ACK_TX_PCG_5_SCH	826	24	Y	Y	[3]
ACK_TX_PCG_6_SCH	827	24	Y	Y	[3]
ACK_TX_PCG_7_SCH	828	24	Y	Y	[3]
ACK_TX_PCG_8_SCH	829	24	Y	Y	[3]
ACK_TX_PCG_9_SCH	830	24	Y	Y	[3]
ACK_TX_PCG_10_SCH	831	24	Y	Y	[3]
ACK_TX_PCG_11_SCH	832	24	Y	Y	[3]
ACK_TX_PCG_12_SCH	833	24	Y	Y	[3]
ACK_TX_PCG_13_SCH	834	24	Y	Y	[3]
ACK_TX_PCG_14_SCH	835	24	Y	Y	[3]
ACK_TX_PCG_15_SCH	836	24	Y	Y	[3]
ACK_RX_PCG_1_FCH	837	24	Y	Y	[3]
ACK_RX_PCG_2_FCH	838	24	Y	Y	[3]
ACK_RX_PCG_3_FCH	839	24	Y	Y	[3]
ACK_RX_PCG_4_FCH	840	24	Y	Y	[3]

Parameter Identifier	Value of PARA- METER_ID (decimal)	Length (bits) (PARA- METER_LEN is Length - 1)	Support Required ? (Y or N)	Settable Parameter ? (Y or N)	Referenc e
ACK_RX_PCG_5_FCH	841	24	Y	Y	[3]
ACK_RX_PCG_6_FCH	842	24	Y	Y	[3]
ACK_RX_PCG_7_FCH	843	24	Y	Y	[3]
ACK_RX_PCG_8_FCH	844	24	Y	Y	[3]
ACK_RX_PCG_9_FCH	845	24	Y	Y	[3]
ACK_RX_PCG_10_FCH	846	24	Y	Y	[3]
ACK_RX_PCG_11_FCH	847	24	Y	Y	[3]
ACK_RX_PCG_12_FCH	848	24	Y	Y	[3]
ACK_RX_PCG_13_FCH	849	24	Y	Y	[3]
ACK_RX_PCG_14_FCH	850	24	Y	Y	[3]
ACK_RX_PCG_15_FCH	851	24	Y	Y	[3]
ACK_RX_PCG_1_SCH	852	24	Y	Y	[3]
ACK_RX_PCG_2_SCH	853	24	Y	Y	[3]
ACK_RX_PCG_3_SCH	854	24	Y	Y	[3]
ACK_RX_PCG_4_SCH	855	24	Y	Y	[3]
ACK_RX_PCG_5_SCH	856	24	Y	Y	[3]
ACK_RX_PCG_6_SCH	857	24	Y	Y	[3]
ACK_RX_PCG_7_SCH	858	24	Y	Y	[3]
ACK_RX_PCG_8_SCH	859	24	Y	Y	[3]
ACK_RX_PCG_9_SCH	860	24	Y	Y	[3]
ACK_RX_PCG_10_SCH	861	24	Y	Y	[3]
ACK_RX_PCG_11_SCH	862	24	Y	Y	[3]
ACK_RX_PCG_12_SCH	863	24	Y	Y	[3]
ACK_RX_PCG_13_SCH	864	24	Y	Y	[3]
ACK_RX_PCG_14_SCH	865	24	Y	Y	[3]
ACK_RX_PCG_15_SCH	866	24	Y	Y	[3]

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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.

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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 _p	32	2.3.2.1	See 2.3.14 for special ESN storage and protection requirements. Includes MOB_MFG_CODE _p .
MEID _p	56	2.3.2.2	
ACCOLC _p	4	2.3.5	
SCM _p	8	2.3.3	
SLOT_CYCLE_INDEX _p	4	2.3.11	This is a signed integer that can take the values between -4 and +7 inclusive.
MOB_FIRM_REV _p	16	2.3.14	
MOB_MODEL _p	8	2.3.14	
MOB_MFG_CODE _p	8	2.3.14	
For each band class supported:			
MOB_P_REV _p	8	2.3.14	

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1 F.2.2 Semi-permanent Mobile Station Indicators

2 Semi-permanent mobile station indicators are retained when the mobile station power is
 3 turned off. These indicators are associated with mobile station registration and lock. They
 4 are independent of the NAM in use. CDMA indicators are listed in Table F.2.2-1.

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6 **Table F.2.2-1. CDMA Semi-permanent Mobile Station Indicators**

Indicator	Number of Bits	Where Defined	Notes
ZONE_LIST _{s-p}		2.3.4	
REG_ZONE _{s-p}	12	2.3.4	
SID _{s-p}	15	2.3.4	
NID _{s-p}	16	2.3.4	
SID_NID_LIST _{s-p}		2.3.4	
SID _{s-p}	15	2.3.4	
NID _{s-p}	16	2.3.4	
BASE_LAT_REG _{s-p}	22	2.3.4	
BASE_LONG_REG _{s-p}	23	2.3.4	
REG_DIST_REG _{s-p}	11	2.3.4	
LCKRSN _P _{s-p}	4	2.3.13	
MAINTRSN _{s-p}	4	2.3.13	

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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.

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Table F.3-1. NAM Indicators

Indicator	Number of Bits	Where Defined	Notes
A_KEY	64	2.3.12.1.5	
SSD_A _{s-p}	64	2.3.12.1.1	Shared Secret Data A
SSD_B _{s-p}	64	2.3.12.1.1	Shared Secret Data B
COUNT _{s-p}	6	2.3.12.1.3	Call History Parameter
IMSI_M_CLASS _p	1	2.3.1	
IMSI_T_CLASS _p	1	2.3.1	
IMSI_M_S _p	34	2.3.1.1	Includes IMSI_M_S1 _p and IMSI_M_S2 _p .
IMSI_T_S _p	34	2.3.1.1	Includes IMSI_T_S1 _p and IMSI_T_S2 _p .
IMSI_M_ADDR_NUM _p	3	2.3.1	Applies to IMSI_M.
IMSI_T_ADDR_NUM _p	3	2.3.1	Applies to IMSI_T.
IMSI_M_11_12 _p	7	2.3.1.2	
IMSI_T_11_12 _p	7	2.3.1.1	
MCC_M _p	10	2.3.1.1	
MCC_T _p	10	2.3.1.1	
MDN _p	See Notes	2.3.1.4	An MDN consists of up to 15 digits based on manufacturer specific coding.
ASSIGNING_TMSI_ZONE_LEN _{s-p}	4	23.15.2	
ASSIGNING_TMSI_ZONE _{s-p}	64	2.3.15.2	
TMSI_CODE _{s-p}	32	2.3.15.2	
TMSI_EXP_TIME _{s-p}	24	2.3.15.2	
SID _p	15	2.3.8	
NID _p	16	2.3.8	
MOB_TERM_HOME _p	1	2.3.8	
MOB_TERM_FOR_SID _p	1	2.3.8	
MOB_TERM_FOR_NID _p	1	2.3.8	

Indicator	Number of Bits	Where Defined	Notes
IMSI_10_Mp	4	2.3.1.1	
IMSI_10_Tp	4	2.3.1.1	

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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

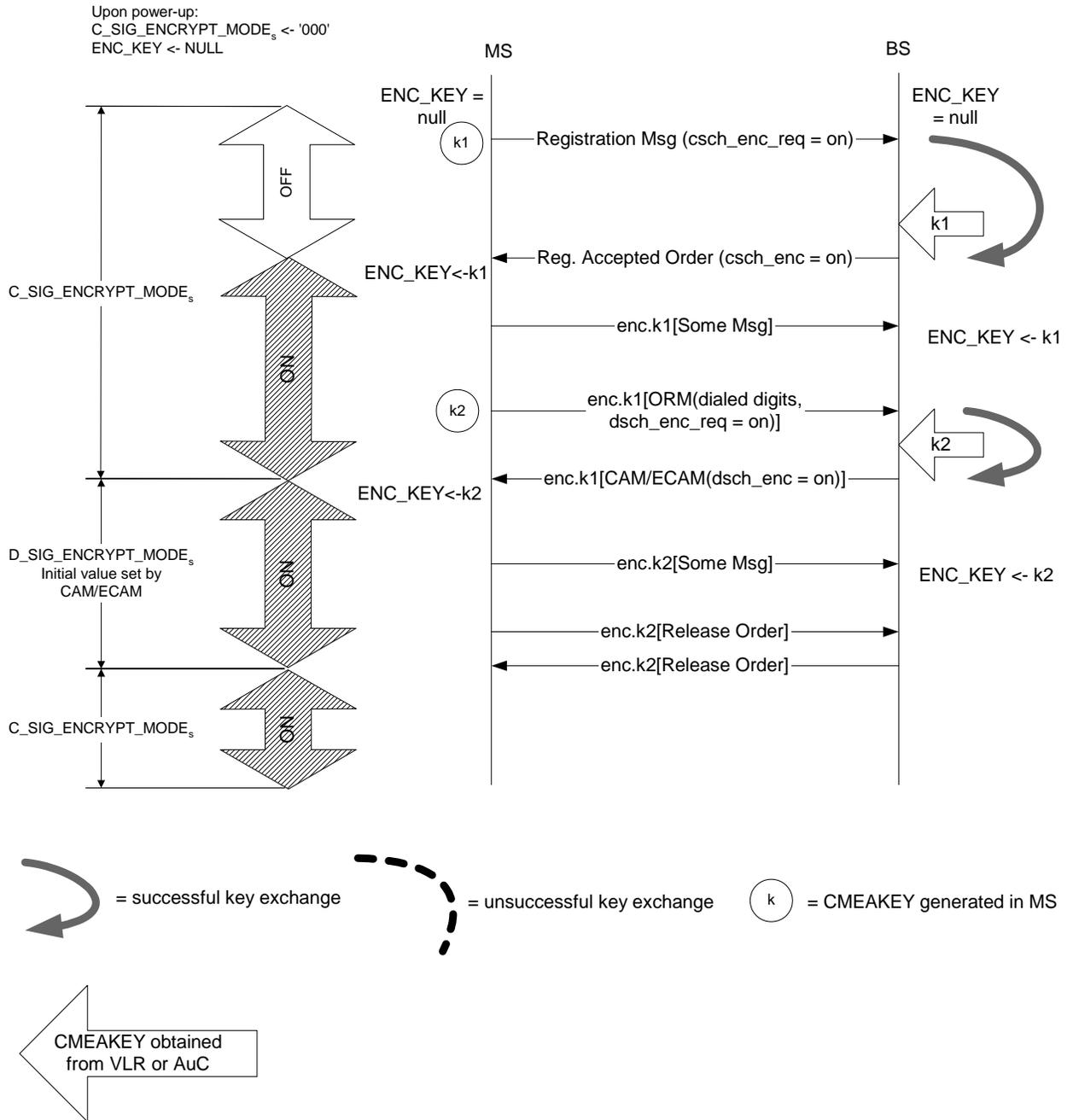
16 dsch_enc_req: D_SIG_ENCRYPT_REQs

17 csch_enc: C_SIG_ENCRYPT_MODE

18 dsch_enc: D_SIG_ENCRYPT_MODE

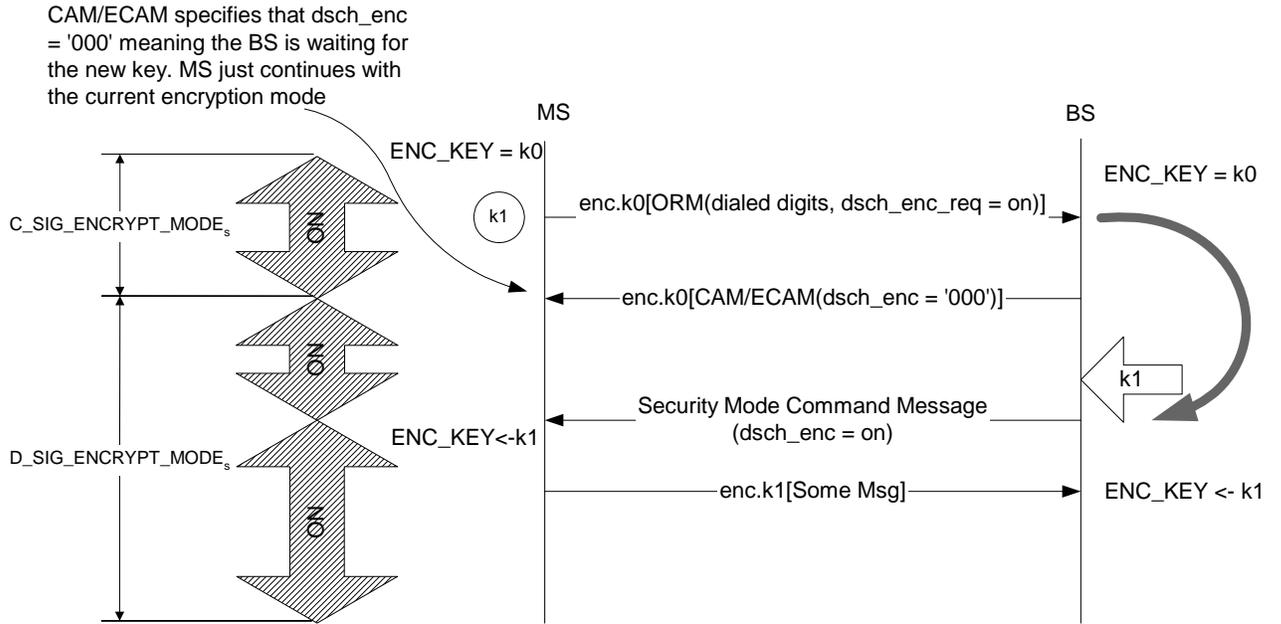
19 A <- B: assign value B to variable A

20



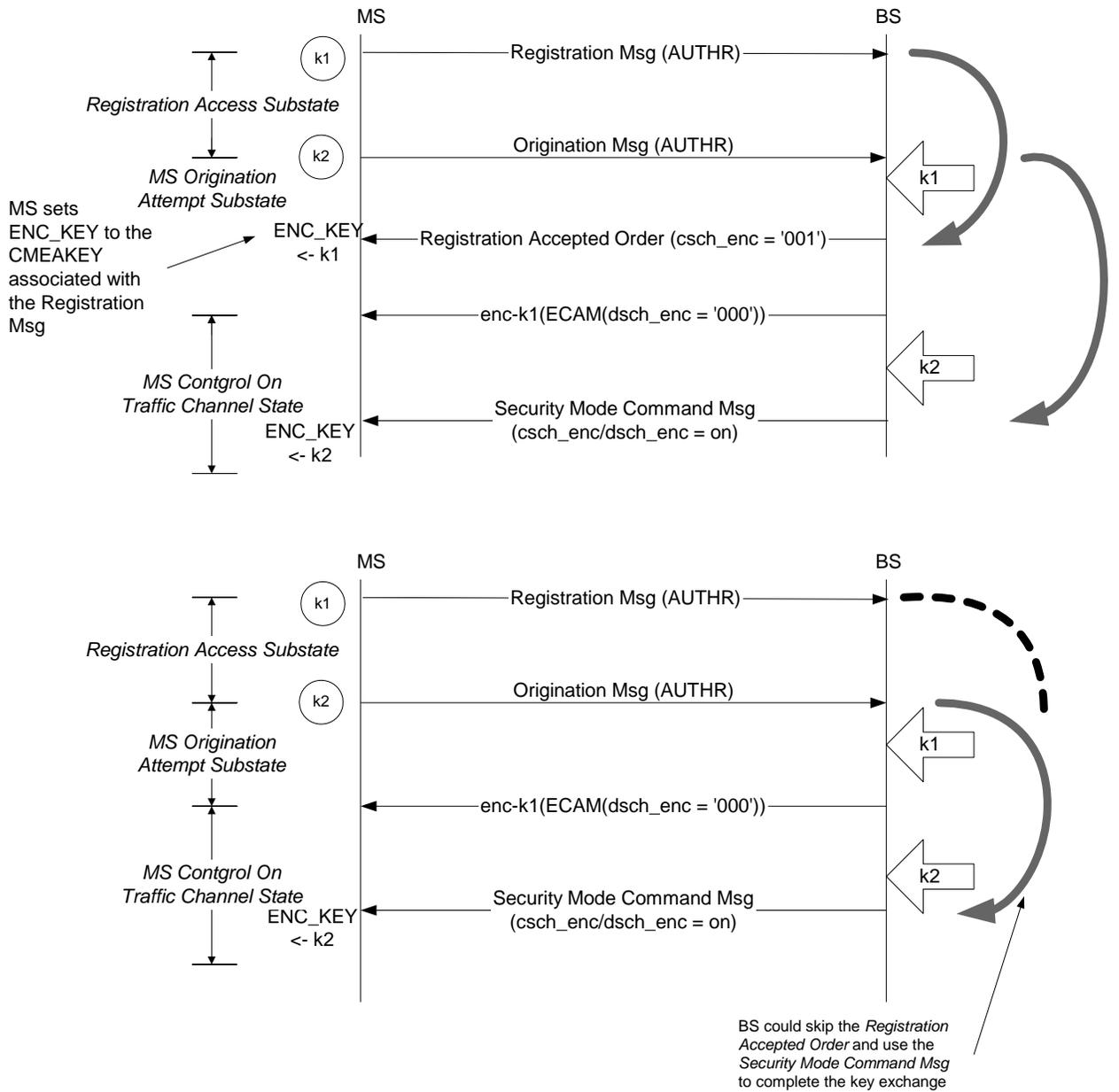
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Figure G-1. Power-Up Registration, Origination, and Call Release (BS waits for the new CMEKEY before sending CAM/ECAM)



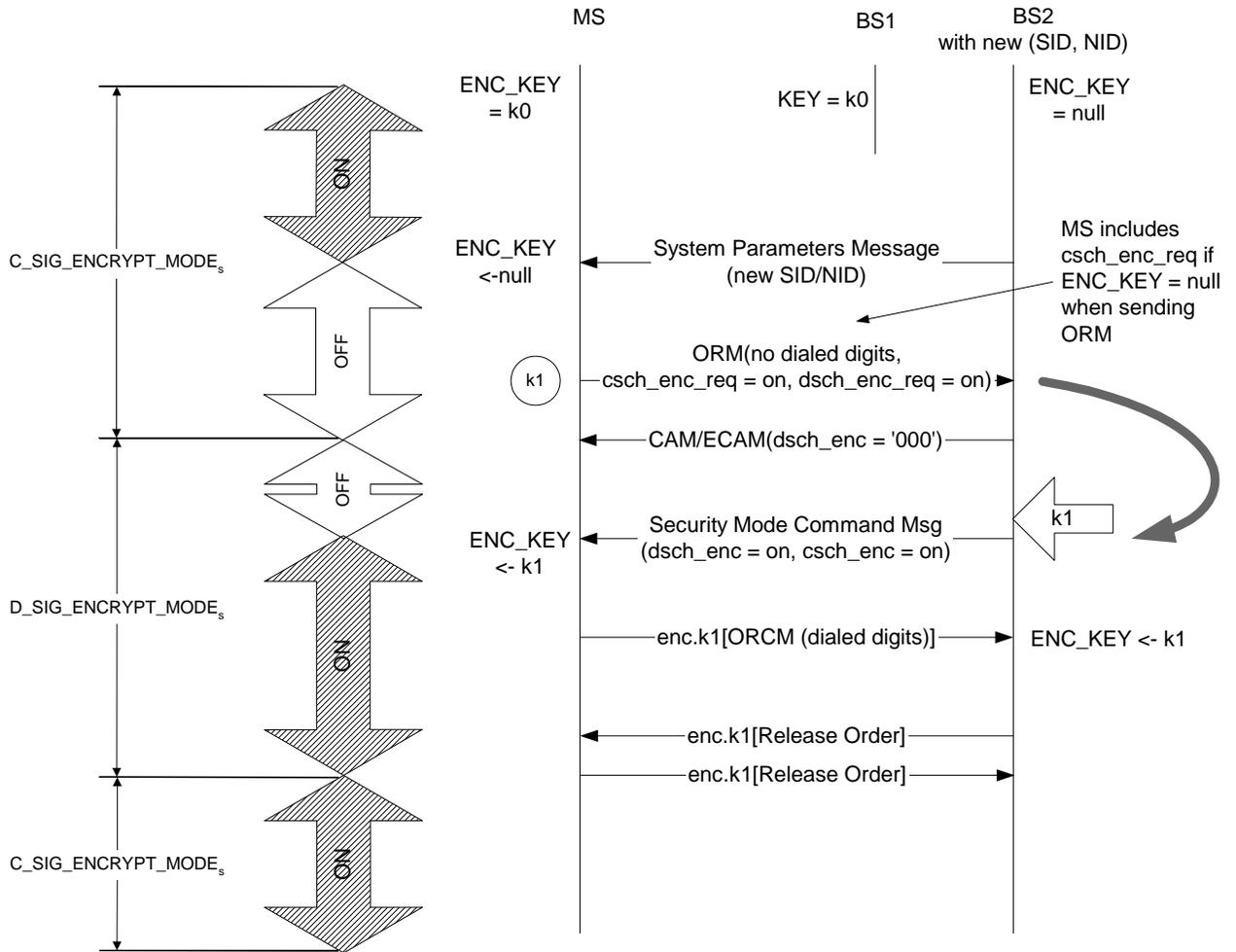
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Figure G-2. Quick Channel Assignment (BS does not wait for the new key before sending CAM/ECAM)



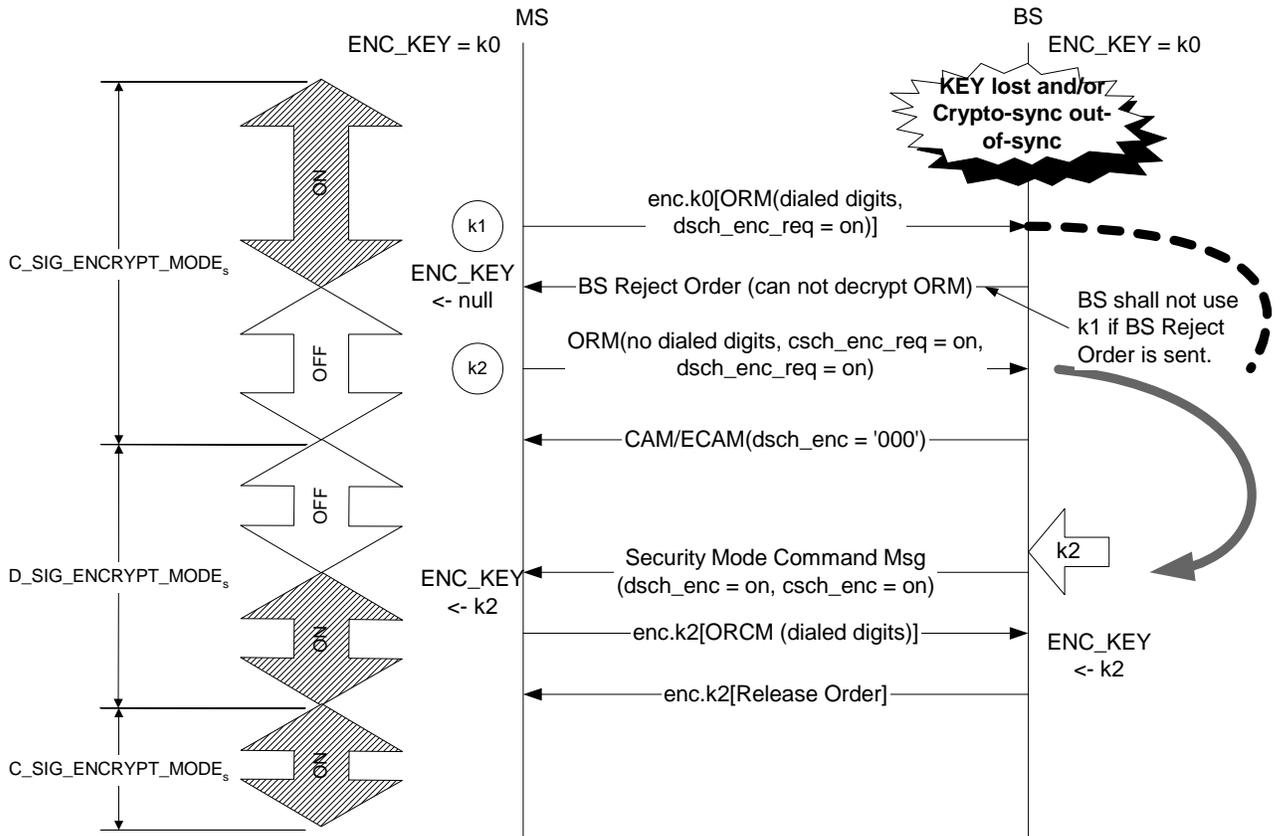
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Figure G-3. MS Initiates Call Origination During the Registration Access Substate



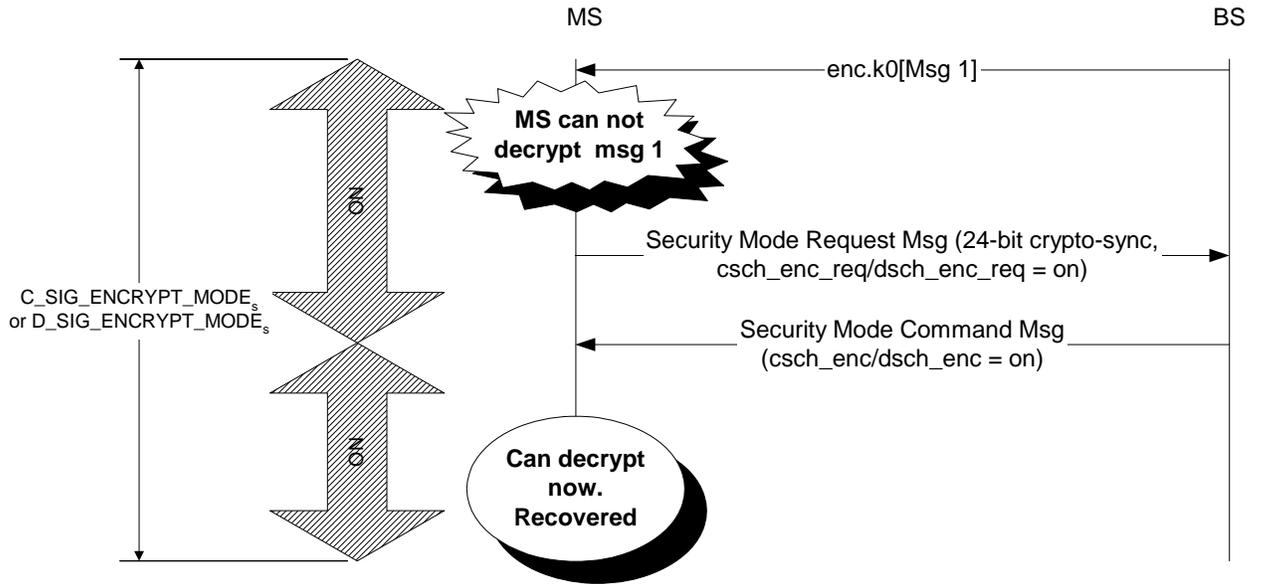
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Figure G-4. Implicit Registration (MS crosses a SID/NID boundary during MS Idle State. MS originates before registering)



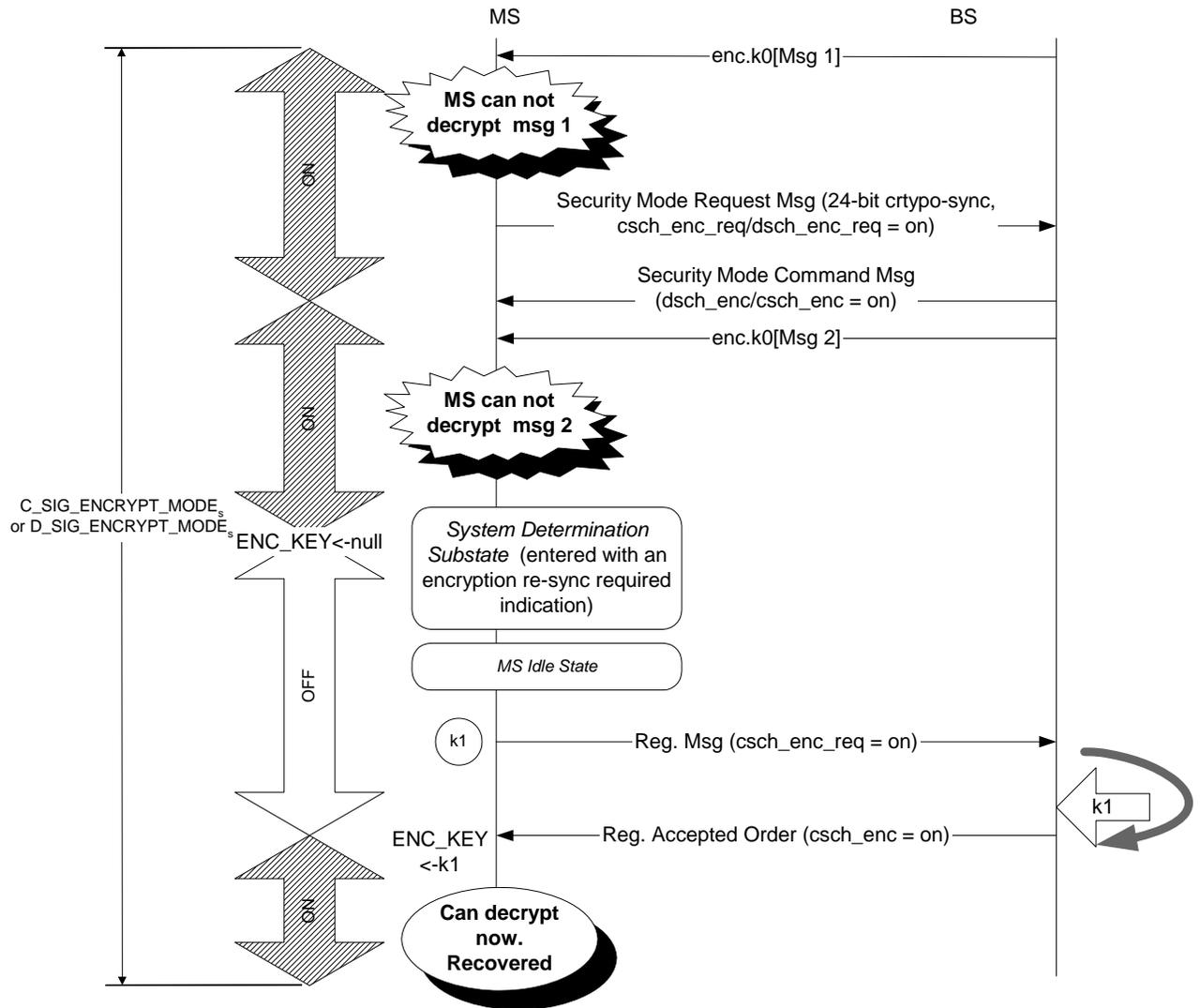
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Figure G-5. BS Lost the Stored Key (A rare out-of-sync case)



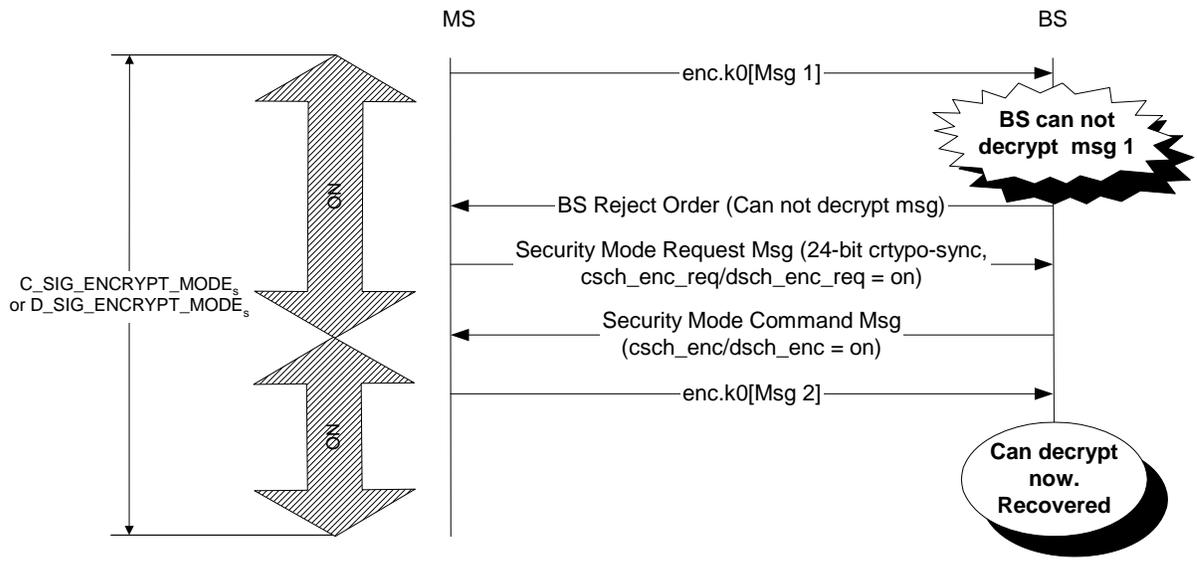
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Figure G-6. MS Fails to Decrypt Messages (MS recovers by re-synchronizing the crypt-sync)



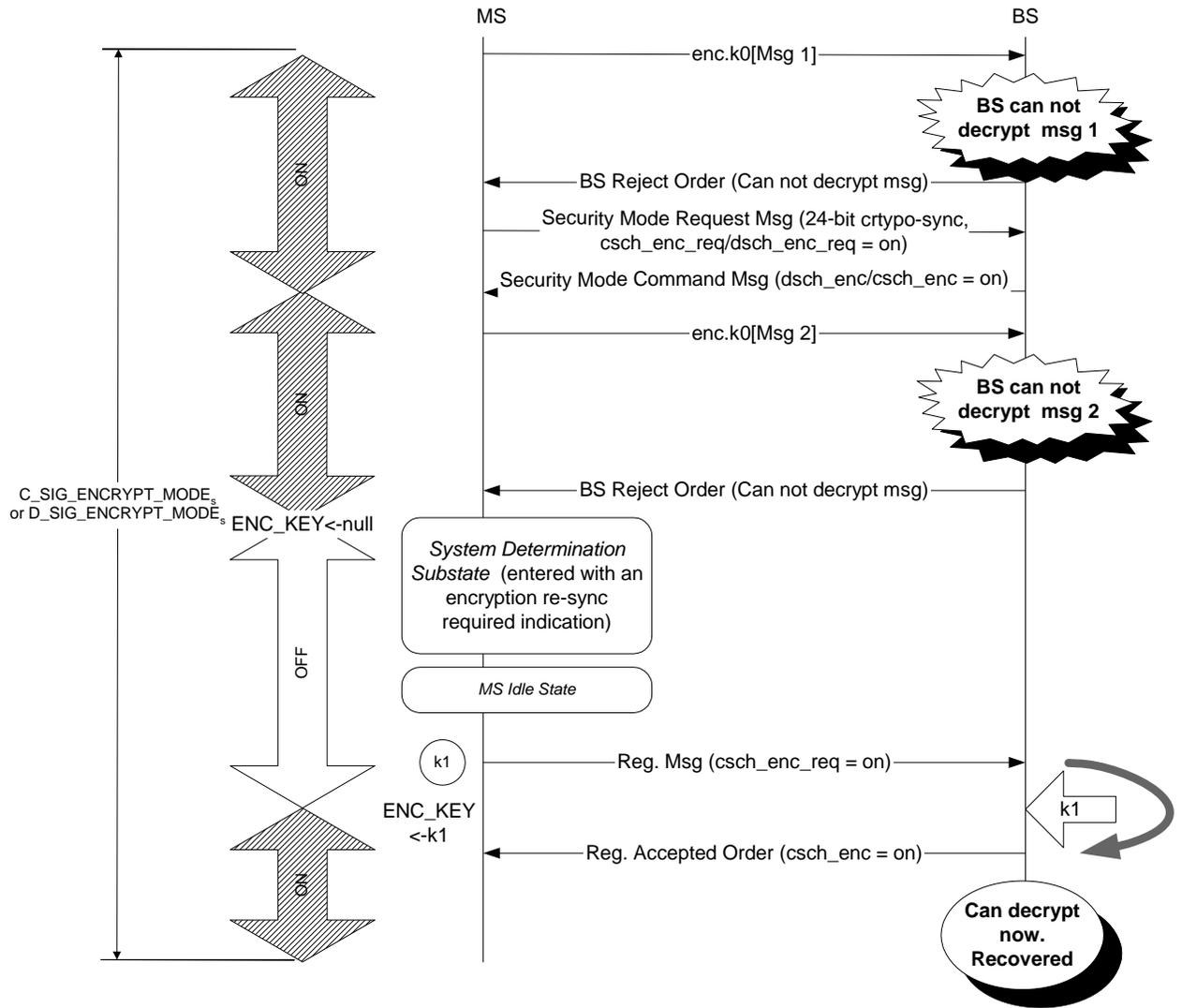
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Figure G-7. MS Fails to Decrypt Messages (MS recovers by re-registering after failing to re-synchronize the crypto-sync)



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Figure G-8. BS Fails to Decrypt Messages (BS recovers by re-synchronizing the crypt-sync)



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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)