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

Release D
Note: This is a replacement version of C.S0005-D version 2.0. This version clarifies in the foreword section that Annex C is informative.
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FOREWORD

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 CDMA-analog dual-mode 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.

Annex F. Mobile Station Database. This informative annex describes a database model that can be used for dual-mode mobile stations complying with this document.

Annex G. Encryption Call Flows. This informative annex provides examples of extended encryption call flows in the CDMA system.
1 No text.
1. Compatibility, as used in connection with cdma2000®, 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. The term “dual-mode mobile station” indicates a mobile station capable of both analog (FM) and spread spectrum (CDMA) operation.

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:

   - \( \times \) 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 \( x \): \( |-17| = 17, |17| = 17 \).

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1 “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.”
⊕ indicates exclusive OR (modulo-2 addition).

min (x, y) indicates the minimum of x and y.

max (x, y) indicates the maximum of x and y.

x mod y indicates the remainder after dividing x by y: x mod y = x - (y × ⌊x/y⌋).

weight(x) indicates the number of ‘1’s in the binary representation of x.

>> indicates binary right shift operation.

<< indicates binary left shift operation.

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

11. The following indentation is advised:

“No indentation

• bullet 1
  – bullet 2
  + bullet 3.

bullet 4.

◊ bullet 5.
  – bullet 6.
  + bullet 7.
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.
5. Reserved.


29. TSB50, User Interface for Authentication Key Entry, March 1993. (Informative reference)


34. ANSI T1.625, Integrated Services Digital Network (ISDN) – Calling Line Identification Presentation and Restriction Supplementary Services.


36. CCITT 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.


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<td>42.</td>
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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.

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

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

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

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

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

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

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

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

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

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

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

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

**Authentication.** A procedure used by a base station to validate a mobile station’s identity.

**Authentication Center (AC).** An entity that manages the authentication information related to the mobile station.
1 **Authentication Response (AUTHR).** An 18-bit output of the authentication algorithm. It is used, for example, to validate mobile station registrations, originations and terminations.

2 **Autonomous Registration.** A method of registration in which the mobile station registers without an explicit command from the base station.

3 **Auxiliary Pilot Channel.** A non-data-bearing, direct-sequence spread spectrum signal optionally transmitted by a CDMA base station.

4 **Auxiliary Transmit Diversity Pilot Channel.** A pilot channel, counterpart to an Auxiliary Pilot Channel, that is transmitted by a CDMA base station from the non-primary antenna when orthogonal transmit diversity is employed.

5 **AV.** Authentication Vector used by AKA.

6 **Bad Frames.** Frames classified as insufficient frame quality or as 9600 bps primary traffic only, with bit errors. See also Good Frames.

7 **Band Class.** A set of CDMA frequency assignments and a numbering scheme for these channels. See also CDMA Frequency Assignment.

8 **Base Station.** A fixed station used for communicating with mobile stations. Depending upon the context, the term base station may refer to a cell, a sector within a cell, an MSC, or other part of the wireless system. See also MSC.

9 **Base Station Authentication Response (AUTHBS).** An 18-bit pattern generated by the authentication algorithm. AUTHBS is used to confirm the validity of base station orders to update the Shared Secret Data.

10 **Base Station Random Variable (RANDBS).** A 32-bit random number generated by the mobile station for authenticating base station orders to update the Shared Secret Data.

11 **BCMC Service Layer.** The functional components residing above the signaling layer (Layer 3) that provide BCMC services.

12 **BCMC TDM Mode.** A mode of operation where a time-division multiplexing (TDM) structure is used on a Forward Supplemental Channel (F-SCH) for BCMC content transmission to mobile stations in Mobile Station Idle State.

13 **Blank-and-Burst.** The preemption of an entire Traffic Channel frame’s primary traffic by signaling traffic or secondary traffic. Blank-and-burst is performed on a frame-by-frame basis.

14 **BLOB.** Block of Bits.

15 **bps.** Bits per second.

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

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

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

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

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

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

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

**Candidate Frequency.** The frequency, either analog or CDMA, for which the base station specifies a search set, using a *Candidate Frequency Search Request Message*.

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

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

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

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

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

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

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

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

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

**CDMA Tiered Services.** System features and services that are based on location, potentially including private networks. User zones establish the availability of services. See also User Zone, Broadcast User Zone, Mobile-Specific User Zone, Active User Zone, and Passive User Zone.
**Center SR3 Frequency.** The Spreading Rate 3 frequency that has the center frequency assignment.

**Chip.** See PN Chip.

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

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

**CMEA.** Cellular Message Encryption Algorithm.

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

**Code Combining Soft Handoff (CCSH).** A Soft Handoff method for Supplemental Channels on the forward link in Radio Configurations 4 and 5. In this mode, certain base stations encode and transmit the data with the default Turbo Encoder, whereas others use the complementary Turbo Encoder. Mobile stations in soft handoff can then combine both codes to achieve lower code rate.

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

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

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

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

**Convolutional Code.** A type of error-correcting code. A code symbol can be considered as modulo 2 the convolution of the input data sequence with the impulse response of a generator function.

**CRC.** See Cyclic Redundancy Code.

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

**dBc.** The ratio (in dB) of the sideband power of a signal, measured in a given bandwidth at a given frequency offset from the center frequency of the same signal, to the total inband power of the signal.

**dBm.** A measure of power expressed in terms of its ratio (in dB) to one milliwatt.
**dBm/Hz.** A measure of power spectral density. The ratio, dBm/Hz, is the power in one Hertz of bandwidth, where power is expressed in units of dBm.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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


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

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

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

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

**Erasure Indicator Bit.** See [2].

**ERP.** See Effective Radiated Power.

**ESN.** See Electronic Serial Number.

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

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

**EXT_UIM_ID.** An extended (length more than 32-bits) electronic identification (ID) number that is unique to the R-UIM. See [40].
**F-ACKCH.** Forward Acknowledgement Channel. A channel used by the base station to acknowledge the successful receipt and decoding of the encoder packets (ACK) sent by the mobile station on Reverse Packet Data Channel or the failure to do so (NAK).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Good Frames.** Frames not classified as bad frames. See also Bad Frames.

**GPS.** See Global Positioning System.

**Handoff.** The act of transferring communication with a mobile station from one base station to another.

**Hard Handoff.** A handoff characterized by a temporary disconnection of the Traffic Channel. Hard handoffs occur when the mobile station is transferred between disjoint Active Sets, when the CDMA Frequency Assignment changes, when the frame offset changes, or when the mobile station is directed from a CDMA Traffic Channel to an analog voice channel. See also Soft Handoff.

**Hash Function.** A function used by the mobile station to select one out of N available resources. The hash function distributes the available resources uniformly among a random sample of mobile stations.

**HARQ.** Hybrid ARQ (Automatic Repeat Request). A “hybrid ARQ” is a combination of an ARQ with an error correction mechanism to repair some errors in the encoder packet.
Highest SR3 Frequency. The SR3 frequency that has the highest frequency assignment.

HLR. See Home Location Register.

Home Location Register (HLR). The location register to which a MIN/IMSI is assigned for record purposes such as subscriber information.

Home System. The wireless system in which the mobile station subscribes for service.

Hopping Pilot Beacon. A pilot beacon that changes CDMA Frequency periodically to simulate multiple base stations operating on different frequencies. The transmission of the hopping pilot beacon is discontinuous on any CDMA Channel.

Idle Handoff. The act of transferring reception of the Paging Channel, Broadcast Control Channel or the Forward Common Control Channel from one base station to another, when the mobile station is in the Mobile Station Idle State.

IK. Integrity Key. A 128-bit pattern produced by AKA that is used for integrity protection.

Implicit Registration. A registration achieved by a successful transmission of an origination or page response on the r-csch.

IMSI. See International Mobile Subscriber Identity.

IMSI_M. MIN-based IMSI using the lower 10 digits to store the MIN.

IMSI_O. Operational value of IMSI used by the mobile station for operation with the base station.

IMSI_T. True IMSI not associated with MIN. This could be 15 digits or fewer.

Interleaving. The process of permuting a sequence of symbols.

International Mobile Subscriber Identity (IMSI). A method of identifying stations in the land mobile service as specified in [18].

kHz. Kilohertz (10^3 Hertz).

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

LAC. See Link Access Control.

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

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

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

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

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

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

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

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

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


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

**LSB.** Least significant bit.

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

**MAC.** See Medium Access Control.

**MAC-I.** Message Authentication Code for message integrity. The 32-bit output of the message integrity algorithm that allows the receiver to authenticate the message.

**MACI.** A 32-bit LAC Layer field that carries either the MAC-I or the UMAC of a signaling message.

**Maximal Length Sequence (m-Sequence).** A binary sequence of period $2^n - 1$, n being a positive integer, with no internal periodicities. A maximal length sequence can be generated by a tapped n-bit shift register with linear feedback.

**MC System.** Multi Carrier CDMA System (1x and 3x).

**MCC.** See Mobile Country Code.

**Mcps.** Megachips per second ($10^6$ chips per second).

**MCSB.** See Message Control and Status Block.

**ME.** Mobile Equipment. The part of a mobile station that does not include the UIM.
**Mean Input Power.** The total received calorimetric power measured in a specified bandwidth at the antenna connector, including all internal and external signal and noise sources.

**Mean Output Power.** The total transmitted calorimetric power measured in a specified bandwidth at the antenna connector when the transmitter is active.

**Medium Access Control.** See MAC. The MAC Sublayer is the lower sublayer of Layer 2. It implements the medium access protocol and is responsible for transport of LAC protocol data units using the services provided by Layer 1.

**MEID.** See Mobile Equipment Identifier.

**Message.** A data structure that conveys control information or application information. A message consists of a length field (MSG_LENGTH), a message body (the part conveying the information), and a CRC.

**Message Body.** The part of the message contained between the length field (MSG_LENGTH) and the CRC field.

**Message Capsule.** A sequence of bits comprising a single message and padding. The padding always follows the message and may be of zero length.

**Message Control and Status Block.** In this document, a parameter block representing the PCI being transferred between Layer 3 and Layer 2.

**Message CRC.** The CRC check associated with a message. See also Cyclic Redundancy Code.

**Message Field.** A basic named element in a message. A message field may consist of zero or more bits.

**Message Record.** An entry in a message consisting of one or more fields that repeats in the message.

**MHz.** Megahertz ($10^6$ Hertz).

**MIN.** See Mobile Identification Number.

**MNC.** See Mobile Network Code.

**Mobile Country Code (MCC).** A part of the E.212 IMSI identifying the home country. See [18].

**Mobile Directory Number.** A dialable directory number that is not necessarily the same as the mobile station’s air interface identification, i.e., MIN, IMSI_M or IMSI_T.

**Mobile Equipment Identifier (MEID).** A 56-bit number assigned by the mobile station manufacturer, uniquely identifying the mobile station equipment.

**Mobile Identification Number (MIN).** The 34-bit number that is a digital representation of the 10-digit number assigned to a mobile station.

**Mobile Network Code (MNC).** A part of the E.212 IMSI identifying the home network within the home country. See [18].
Mobile Protocol Capability Indicator (MPCI). A 2-bit field used to indicate the mobile station’s capabilities.

Mobile-Specific User Zone. A user zone that is identified by the mobile station. The mobile station may consider parameters such as the identity of the serving system, cell, and sector, and the geographic location of that station in making the determination. See also CDMA Tiered Services, User Zone, Broadcast User Zone, Active User Zone, and Passive User Zone.

Mobile Station. A station in the Public Wireless Radio Telecommunications Service intended to be used while in motion or during halts at unspecified points. Mobile stations include portable units (e.g., hand-held personal units) and units installed in vehicles. A mobile station consists of two parts – ME and UIM.

Mobile Station Class. A classification of mobile stations based on characteristics such as slotted operation and transmission power. See [12] and Table 2.3.3-1 of this document.

Mobile Station Identification Number (MSIN). A part of the E.212 IMSI identifying the mobile station within its home network. See [18].

Mobile Station Originated Call. A call originating from a mobile station.

Mobile Station Terminated Call. A call received by a mobile station (not to be confused with a disconnect or call release).

ms. Millisecond ($10^{-3}$ second).

MSB. Most significant bit.

MSC. See Mobile Switching Center.

MSIN. See Mobile Subscriber Identification Number.

Multiplex Option. The ability of the multiplex sublayer and lower layers to be tailored to provide special capabilities. A multiplex option defines such characteristics as the frame format, the maximum number of Supplemental Code Channels supported, and the rate decision rules. See also Multiplex Sublayer.

Multiplex Sublayer. One of the conceptual layers of the system that multiplexes and demultiplexes primary traffic, secondary traffic, and signaling traffic.

NAM. See Number Assignment Module.

National Mobile Subscriber Identity (NMSI). A part of the E.212 IMSI identifying the mobile station within its home country. The NMSI consists of the MNC and the MSIN. See [18].

NDSS. See Network Directed System Selection.

Neighbor Set. The set of pilots associated with the CDMA Channels that are probable candidates for handoff. Normally, the Neighbor Set consists of the pilots associated with CDMA Channels that cover geographical areas near the mobile station. See also Active Set, Candidate Set, Remaining Set, and Private Neighbor Set.

Network. A network is a subset of a wireless system, such as an area-wide cellular network, a private group of base stations, or a group of base stations set up to handle a
special requirement. A network can be as small or as large as needed, as long as it is fully contained within a system. See also System.

**Network Directed System Selection (NDSS).** A feature that allows the mobile station to automatically register with a preferred system while roaming, or to be automatically directed by a service provider, typically the home service provider, to a suggested system, regardless of the frequency band class, cellular band, or PCS frequency block.

**Network Identification (NID).** A number that uniquely identifies a network within a wireless system. See also System Identification.

**NEW_KEY_ID.** In ROP, this is the index of the pending (CIK, CCK) and NEW_SSEQ_H associated with AUTHR. In Authentication Response Message, this is the index of the pending (IK, CK) and NEW_SSEQ_H associated with the (RANDA, AUTHN).

**NEW_SSEQ_H.** The pending 24-bit security sequence number used for encryption and/or integrity protection.

**NEW_SSEQ_H_SIG.** An 8-bit digital signature of NEW_SSEQ_H computed by RANDₘ, SSD_A, and NEW_SSEQ_H.

**NID.** See Network Identification.

**NMSI.** See National Mobile Subscriber Identity.

**Non-Autonomous Registration.** A registration method in which the base station initiates registration. See also Autonomous Registration.

**Non-Slotted Mode.** An operation mode of the mobile station in which the mobile station continuously monitors the Paging Channel, or the Forward Common Control Channel/Broadcast Control Channel.

**ns.** Nanosecond (10⁻⁹ second).

**NULL.** Any value that is not in the specified range of a field.

**Null Traffic Channel Data.** One or more frames of a specified data sequence sent at the lowest agreed-upon rate of the negotiated radio configuration. Null Traffic Channel data may be sent when there is no primary, secondary, or signaling traffic available. Null Traffic Channel data serves to maintain the connectivity between the mobile station and the base station.

**Number Assignment Module (NAM).** A set of MIN/IMSI-related parameters stored in the mobile station.

**Numeric Information.** Numeric information consists of parameters that appear as numeric fields in messages exchanged by the base station and the mobile station and information used to describe the operation of the mobile station.

**Optional Field.** A field defined within a message structure that is optionally transmitted to the message recipient.

**Order.** A type of message that contains control codes for either the mobile station or the base station.
Ordered Registration. A registration method in which the base station orders the mobile station to send registration related parameters.

Orthogonal Transmit Diversity (OTD). An optional method of transmission of the Forward CDMA Channel that uses two antennas, each transmitting a fraction of the code symbols. It can be used to enhance performance in the presence of multipath fading radio propagation.

OTD. See Orthogonal Transmit Diversity

Overhead Message. A message sent by the base station on the Paging Channel or the Primary Broadcast Control Channel to communicate base-station-specific and system-wide information to mobile stations.

Overload Class (OLC). The means used to control system access by mobile stations, typically in emergency or other overloaded conditions. Mobile stations are assigned one (or more) of sixteen overload classes. Access to the CDMA system can then be controlled on a per class basis by persistence values transmitted by the base station.

PACA. Priority Access and Channel Assignment. See PACA Call.

PACA Call. A priority mobile station originated call for which no traffic channel or voice channel was immediately available, and which has been queued for a priority access channel assignment.

Packet. The unit of information exchanged between the service option applications of the base station and the mobile station.

Padding. A sequence of bits used to fill from the end of a message to the end of a message capsule, typically to the end of the frame or half frame. All bits in the padding are ‘0’.

Paging. The act of seeking a mobile station when a call has been placed to that mobile station.

Paging Channel. A code channel in a Forward CDMA Channel used for transmission of control information and pages from a base station to a mobile station.

Paging Channel Slot. An 80 ms interval on the Paging Channel. Mobile stations operating in the slotted mode are assigned specific slots in which they monitor messages from the base station.

Paging Indicator. A one-bit datum, sent on the Quick Paging Channel. Quick paging indicators are associated with mobile stations, in pairs, via a hashing algorithm. Appearance of both of its indicators in its assigned Quick Paging Channel slot serves to alert a slotted mode mobile station, operating in the idle state, that it should monitor the Paging Channel or the Forward Common Control Channel starting in the next slot. See also Quick Paging Channel.

Parameter-Change Registration. A registration method in which the mobile station registers when certain of its stored parameters change.

Parity Check Bits. Bits added to a sequence of information bits to provide error detection, correction, or both.
Passive User Zone. A user zone in which the implicit registration that takes place at call set-up is sufficient to trigger a change in tiered service features. See also CDMA Tiered Services, User Zone, and Active User Zone.

PCI. See Protocol Control Information.

PCS. See Personal Communications Services.

PCSC. See Personal Communications Switching Center.

PCS System. See Personal Communications Services System.

PDU. See Protocol Data Unit.

Personal Communications Services System. A configuration of equipment that provides PCS radiotelephone services.

Personal Communications Services (PCS). A family of mobile and portable radio communications services for individuals and businesses that may be integrated with a variety of competing networks. Broadcasting is prohibited and fixed operations are to be ancillary to mobile operations.

Personal Communications Switching Center (PCSC). See Mobile Switching Center (MSC).

Physical Channel. A communication path between stations, described in terms of the RF characteristics such as coding, power control policies, etc.

Physical Layer. The part of the communication protocol between the mobile station and the base station that is responsible for the transmission and reception of data. The physical layer in the transmitting station is presented a frame by the multiplex sublayer and transforms it into an over-the-air waveform. The physical layer in the receiving station transforms the waveform back into a frame and presents it to the multiplex sublayer above it.

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

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

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

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

Pilot PN Sequence Offset. The time offset of a Forward Pilot Channel from CDMA System time, as transmitted by the base station, expressed modulo the pilot period.
**Pilot PN Sequence Offset Index.** The pilot PN sequence offset in units of 64 PN chips of a Forward Pilot Channel, relative to the zero offset pilot PN sequence.

**Pilot Strength.** The ratio of pilot power to total power in the signal bandwidth of a CDMA Forward or Reverse Channel. See also $E_{c}/I_{0}$.

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

**PN.** Pseudonoise.

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

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

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

**Power Control Group.** A 1.25 ms interval on the Forward Traffic Channel and the Reverse Traffic Channel. See also Power Control Bit.

**Power-Down Registration.** An autonomous registration method in which the mobile station registers on power-down.

**Power Up Function.** A method by which the mobile station increases its output power to support location services.

**Power-Up Registration.** An autonomous registration method in which the mobile station registers on power-up.

**PPM.** Parts per million.

**Preamble.** See Access Channel Preamble and Traffic Channel Preamble.

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

**Primary Paging Channel (CDMA).** The default code channel (code channel 1) assigned for paging on a CDMA Channel.

**Primary Pilot.** One of the three pilots on the Spreading Rate 3 Forward Channels. The primary pilot may be on any one of the SR3 frequencies and may have a higher
transmission power comparing to the pilots on the other two SR3 frequencies.

**Primary Traffic.** The main traffic stream carried between the mobile station and the base station on the Traffic Channel. See also Secondary Traffic and Signaling Traffic.

**Primitive.** An atomic, well-defined method of transferring data and control information between two adjacent layers and sublayers. Conventionally represented as a function invocation with the data and/or control information as parameters.

**Private Long Code.** The long code characterized by the private long code mask. See also Long Code.

**Private Long Code Mask.** The long code mask used to form the private long code. See also Public Long Code Mask and Long Code.

**Private Neighbor Set.** The set of pilots associated with the private system base stations that are probable candidates for idle handoff. See also Active Set, Neighbor Set, Remaining Set, and CDMA Tiered Services.

**Protocol Control Information (PCI).** Data passed between adjacent layers in the protocol stack, together with the SDU, to assist a layer to properly encapsulate/decapsulate the SDU. Examples of PCI in this document are the MCSB and the PCSB.

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

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

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

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

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

**PUF.** See Power Up Function.

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

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

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

**PUF Target Frequency.** The CDMA frequency assignment to which the base station directs a mobile station for transmitting the PUF probe.
Punctured Code. An error-correcting code generated from another error-correcting code by deleting (i.e., puncturing) code symbols from the coder output.

QoS. See Quality of Service.

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

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

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

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

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

r-csch. Reverse common signaling logical channel.

r-dsch. Reverse dedicated signaling logical channel.

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

R-PDCH. Reverse Packet Data Channel. A portion of a Radio Configuration Reverse Traffic Channel which carries higher-level data and control information from a mobile station to a base station.

R-REQCH. Reverse Request Channel. A control channel used by the mobile station to report available power headroom and buffer status.

R-SPICH. Reverse Secondary Pilot Channel. An unmodulated, direct-sequence spread spectrum signal transmitted by a CDMA mobile station in conjunction with certain transmissions on the Reverse Packet Data Channel. The secondary pilot channel provides additional phase reference for the Reverse Packet Data Channel for coherent demodulation and may provide a means for signal strength measurement.

Radio Configuration. A set of Forward Traffic Channel and Reverse Traffic Channel transmission formats that are characterized by physical layer parameters such as transmission rates, modulation characteristics and spreading rate. See [2].

Radio Configuration Class. A group of Radio Configurations. All Radio Configurations,
for the Forward Traffic Channel and the Reverse Traffic Channel, are divided into three
classes by the types of pre-spreading symbols (BPSK and QPSK) and spreading rates. RC
Class 1 consists of RC 1 and RC 2 for the Forward Traffic Channel and the Reverse Traffic
Channel. RC Class 2 consists of RC 3 and RC 4 of the Reverse Traffic Channel, and RC 3,
RC 4 and RC 5 of the Forward Traffic Channel. RC Class 3 consists of RC 5 and RC 6 of
the Reverse Traffic Channel, and RC 6, RC 7, RC 8, and RC 9 of the Forward Traffic
Channel.

**Radio Environment Reporting Mode.** A fast call setup mode of the mobile station in the
*Mobile Station Idle State*, in which *Radio Environment Messages* are triggered based on a
radio environment report pilot list (RER_PILOT_LIST). This mode may be used to assist the
base station with direct channel assignment. See also Direct Channel Assignment.

**RANDA.** The random challenge number contained in an AV.

**RC.** See Radio Configuration.

**Reduced Slot Cycle Mode.** A fast call setup mode of the mobile station in which the
mobile station operates in the slotted mode with a shorter slot cycle than the registered slot
cycle or in the non-slotted mode for the negotiated duration of time, or in the
non-slotted mode for a specified duration of time. See also Slotted Mode and Non-Slotted
Mode.

**RES.** A *Registration Accepted Order*, *Extended Channel Assignment Message*, or *Security
Mode Command Message*.

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

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

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

**Remaining Set.** The set of all allowable pilot offsets as determined by PILOT_INC,
excluding the pilot offsets of the pilots in the Active Set, Candidate Set, and Neighbor Set.
See also Active Set, Candidate Set, and Neighbor Set.

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

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

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

**Response.** A Layer 3 message generated as a result of another message, typically a
request.
**Reverse Acknowledgment Channel.** A portion of Reverse CDMA Channel used for the transmission of acknowledgments from the mobile station to the base station in response to the data transmitted on the Forward Packet Data Channel.

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

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

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

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

**Reverse Pilot Channel.** A non-data-bearing direct-sequence spread spectrum signal transmitted by each CDMA mobile station whenever the Enhanced Access Channel, Reverse Common Control Channel, or Reverse Traffic Channel is enabled. The Reverse Pilot Channel allows a base station to acquire the timing of the Reverse CDMA Channel and provides a phase reference for coherent demodulation. The Reverse Pilot Channel may be transmitted either continuously or in gated mode.

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

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

**Reverse Traffic Channel.** A Traffic Channel on which data and signaling are transmitted from a mobile station to a base station. The Reverse Traffic Channel is composed of zero or one Reverse Fundamental Channel, zero to seven Reverse Supplemental Code Channels, zero to two Reverse Supplemental Channels, and zero or one Reverse Dedicated Control Channel.  

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

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

**R-UIM.** Removable UIM.

**SAP.** See Service Access Point.

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

**SDU.** See Service Data Unit.

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3 The Reverse Traffic Channel does not include R-CQICH, R-ACKCH.
Search Window. The range of PN sequence offsets that a mobile station searches for a pilot.

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

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

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

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

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

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

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

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

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

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

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

Service Option Negotiation. The procedures used by the mobile station and base station to establish a service configuration. Service option negotiation is similar to service negotiation, but allows less flexibility for specifying the attributes of the service configuration. See also Service Negotiation.
Service Redirection. The process by which the base station alters the system selection made by a mobile station. It can be used temporarily during maintenance and testing to divert subscribers to an alternate system.

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

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

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

SID. See System Identification.

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

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

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

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

SOM. Start-of-Message bit.

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

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

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

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

sps. Symbols per second.

SR. See Spreading Rate.

SR1. See Spreading Rate 1.
SR3. See Spreading Rate 3.

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

SR3 Primary Pilot. See Primary Pilot.

SSD. See Shared Secret Data.

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

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

Status Information. The following status information is used to describe mobile station operation when using the analog system:

- Serving-System Status. Indicates whether a mobile station is tuned to channels associated with System A or System B.
- First Registration ID Status. A status variable used by the mobile station in association with its processing of received Registration ID messages.
- First Location Area ID Status. A status variable used by the mobile station in association with its processing of received Location Area ID messages.
- Location Registration ID Status. A status variable used by the mobile station in association with its processing of power-up registrations and location-based registrations.
- First Idle ID Status. A status variable used by the mobile station in association with its processing of the Idle Task.
- Local Control Status. Indicates whether a mobile station must respond to local control messages.
- Roam Status. Indicates whether a mobile station is in its home system.
- Termination Status. Indicates whether a mobile station must terminate the call when it is on an analog voice channel.
- Update Protocol Capability Status. Indicates whether the mobile station should report its protocol capability to the serving system.

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

Supplemental Channel. An optional portion of a Traffic Channel (Forward or Reverse Radio Configurations 3 and above) that operates in conjunction with a Fundamental Channel in that Traffic Channel, and (optionally) with other Supplemental Channels to provide higher data rate services.
Supplemental Code Channel. An optional portion of a Traffic Channel (Forward or Reverse Radio Configurations 1 and 2) that operates in conjunction with a Fundamental Channel in that Traffic Channel, and (optionally) with other Supplemental Code Channels to provide higher data rate services. On this channel a combination of primary data, secondary data, or both (but never signaling information) are transmitted.


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

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

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

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

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

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

TD. See Transmit Diversity.

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

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

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

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

TMSI. See Temporary Mobile Subscriber Identity.

TMSI Zone. The administrative zone that allows the TMSI to be reused. The TMSI_CODE has to be unique within a TMSI zone but may be reused in a different TMSI zone. The TMSI zone is identified by the field TMSI_ZONE.
Traffic Channel. A communication path between a mobile station and a base station used for user and signaling traffic. The term Traffic Channel implies a Forward Traffic Channel and Reverse Traffic Channel pair. See also Forward Traffic Channel and Reverse Traffic Channel.

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

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

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

UIM. User Identity Module.

UIM_ID. A 56-bit electronic identification (ID) number that is unique to the R-UIM. Currently only 32 bits are used. The mobile station uses UIM_ID in place of ESN, with an exception of ESN_ME information record, when configured with a R-UIM which indicates that UIM ID is to be used (see [40]).

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

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

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

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

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

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

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

Upper Layers. General reference to Layer 3 and the layers above it.
1 **User Zone Exit parameter.** A parameter used by the mobile station to determine if it should exit a User Zone.

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

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

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

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

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

7 **WLL.** See Wireless Local Loop.

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

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

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

1.1.2 Numeric Information

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

- “s” indicates a value stored in a mobile station’s temporary memory.
- “sv” indicates a stored value that varies as a mobile station processes various tasks.
- “sl” indicates the stored limits on values that vary.
- “r” indicates a value received by a mobile station over a forward analog control channel or a CDMA Forward Channel.
- “p” indicates a value set in a mobile station’s permanent security and identification memory.
- “s-p” indicates a value stored in a mobile station’s semi-permanent security and identification memory.

1.1.2.1 Reserved

1.1.2.2 CDMA Numeric Information

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

1. **1XRL_FREQ_OFFSETs** – Frequency offset of the 1X reverse link.
A41_SYS_PAR_MSG_SEQs – ANSI-41 System Parameters Message sequence number.

ACC_CHANs – Number of Access Channels supported by the current Paging Channel.

ACC_ENT_HO_ORDERs – Access entry handoff permitted from the Mobile Station Order and Message Processing Operation of the Mobile Station Idle State.

ACCESS_ENTRY_HOs – Idle handoff permitted when entering the System Access State.

ACCESS_HOs – Handoff permitted after performing an access attempt while the mobile station is in the System Access State.

ACCESS_HO_ALLOWEDs – Handoff permitted to the corresponding neighbor base station while in the System Access State.

ACCESS_HO_LIST – List of pilots to which access handoff or access probe handoff is permitted.

ACC_HO_LIST_UPDs – Access handoff list update permitted indicator.

ACCESS_HO_MSG_RSPs – Access handoff permitted in the System Access State between the time that the mobile station receives a message and responds to that message.

ACCESS_PROBE_HOs – Access probe handoff permitted during an access attempt in the Mobile Station Origination Attempt Substate or the Page Response Substate.

ACC_MSG_SEQs – Last received Access Parameters Message or Enhanced Access Parameters Message sequence number.

ACC_PROBE_HO_OTHER_MSGs – Access probe handoff permitted for Access Channel messages other than the Origination Message, Reconnect Message, and the Page Response Message.

ACCT_INCL_EMGs – Access Control based on Call Type (ACCT) applies to emergency calls indicator.

ACCT_SO_GRP_LIST – List of service option groups that have Access Control based on Call Type (ACCT) enabled.

ACCT_SO_LIST – List of individual service options that have Access Control based on Call Type (ACCT) enabled.

ACH_ACC_TMOs – Access Channel acknowledgment timeout, in units of 80 ms.

ACK_WAITINGs[i] – Acknowledgment status indicator for message sequence number i. Set to YES if an acknowledgment is pending for the message; otherwise, set to NO.

ADD_INTERCEPTs – The intercept in the inequality criterion for adding a pilot to the Active Set.

ADD_PLCM_FOR_FCH_39s – The 39 least significant bits of the additional Public Long Code Mask for the forward Fundamental Channel.

ADD_PLCM_FOR_FCH_TYPEs – Additional Public Long Code Mask for forward Fundamental Channel type indicator.

AGEs – Neighbor list age. For each pilot in the Neighbor Set, the mobile station increments this counter each time a Neighbor List Update Message or an Extended Neighbor List Update
Message is received. When AGE exceeds NGBHR_MAX_AGE, the pilot is deleted from the Neighbor Set.

ALIGN_TIMING_USED – Indicates whether the mobile station aligns the times of visits away from the Serving Frequency, as requested by the base station, in the periodic search procedures.

ANALOG_CHAN – Analog channel number for CDMA-to-analog handoff.

ANALOG_NGHBR_LIST – List containing information about neighboring analog systems.

AN_CHAN_TYPE – Analog voice channel type.

ASSIGNED_QPAGECH – Assigned Quick Paging Channel number.

AUTH – Current authentication mode.

AUTO_FCSO_ALLOWED – Base station support of autonomous Fast Call Setup Order indicator.

AUTO_MSG_INTERVAL – Autonomous message interval.

AUTO_MSG_SUPPORTED – Autonomous message supported indicator.

BAD_FRAMES – Forward Fundamental Channel bad frames count. The number of received bad Forward Fundamental Channel frames.

BAND_SUBCLASS_IND_REC – Band subclass indicator record. This record specifies the band subclasses that the base station requires the mobile station to report whether it supports.

BASE_CLASS – Base station class of the current base station.

BASE_ID – Base station identification of the current base station.

BASE_LAT – Latitude of the current base station, in units of 0.25 seconds.

BASE_LONG – Longitude of the current base station, in units of 0.25 seconds.

BCMC_FLOW_LIST[i,j] – BCMC Flow Information. This is an array that contains information corresponding to each BCMC flow being transmitted by the base station in this sector:

- BCMC_FLOW_ID - BCMC flow identifier.
- REGISTRATION_REQ_FLAG – Registration required flag.
- AUTH_SIGNATURE_REQ_IND – Authorization signature required indication.
- BCMC_FLOW_ON_TRAFFIC_IND – BCMC flow on traffic channel supported indicator.
- BCMC_FLOW_ON_IND – BCMC flow On indicator.
- LPM_INFO[j] - For each BCMC_FLOW_ID, one or more Logical-to-Physical Mapping entries:
- FSCH_ID - Forward Broadcast Supplemental Channel identifier.

- TDM_USED_IND - TDM used indicator.

- TDM_MASK - TDM mask.

- TDM_SUPER_PERIOD_MASK - TDM super period mask.

- TDM_MEGA_PERIOD_MASK - TDM mega period mask.

- BSR_ID - BCMC Service Reference identifier.

- NGHBR_INFO[k] - For each Logical-to-Physical Mapping entries, information on one or more neighbor base stations:
  - NGHBR_PN - Neighbor pilot PN sequence offset index.
  - NGHBR_BCMC_CONFIG - Neighbor BCMC Configuration.
  - NGHBR_FSCH_BAND_CLASS - Neighbor band class of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_CDMA_FREQ - Neighbor Frequency assignment of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_CODE_CHAN - Neighbor Forward Broadcast Supplemental Channel Code Channel Index.
  - NGHBR_FSCH_MUX_OPTION - Neighbor Multiplex Option of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_RC - Neighbor Radio configuration of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_CODING - Neighbor Coding Type of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_OUTERCODE_RATE - Neighbor outer code rate of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_OUTERCODE_OFFSET - Neighbor outer coding buffer offset of the Forward Broadcast Supplemental Channel.
  - NGHBR_FSCH_NUM_BITS_IDX - Neighbor number of information bits index of the Forward Broadcast Supplemental Channel.
NGHBR_FSCH_FRAME_40_USED - Neighbor Forward Broadcast Supplemental Channel 40ms frame used indicator.

NGHBR_FSCH_FRAME_80_USED - Neighbor Forward Broadcast Supplemental Channel 80ms frame used indicator.

TDM_STRUCTURE_IND — Forward Broadcast Supplemental Channel TDM structure used indicator.

TDM_SLOT_LENGTH — Forward Broadcast Supplemental Channel TDM slot length

TDM_PERIOD — Forward Broadcast Supplemental Channel TDM period.

BCMC_RETRY_DELAY_LISTs[i] – BCMC Retry Delay List. This is an array that contains retry time corresponding to each BCMC flow rejected with BCMC Reason indicating RETRY_LATER:

- BCMC_FLOW_ID - BCMC flow identifier.
- RETRY_DELAY – Retry time for this BCMC flow.

BEGIN_PREAMBLEs — A stored variable in the mobile station that contains the size of the preamble that shall be transmitted on a Reverse Supplemental Code Channel at the beginning of a Reverse Supplemental Code Channel transmission.

BKOFFs — Access Channel probe sequence backoff range.

BRATs — Data rate of the Primary Broadcast Control Channel.

BSPM_MSG_SEQs — BCMC Service Parameters Message sequence number.

BSPM_WAIT_TIME — The maximum duration the mobile station waits to receive a BCMC Service Parameters Message after sending a Registration Message requesting a BCMC flow.

BYPASS_ALERT_ANSWERs — Mobile station termination bypass indicator. This is set to ‘1’ if the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate, and proceed directly to the Conversation Substate when Layer 3 receives a forward dedicated channel-acquired indication from Layer 2.

CAND_BAND_CLASS_REC — Candidate band class record. This record specifies the band classes that the base station requires the mobile station to report whether it supports.

CCSH_ENCODER_ACTION_TIMEs — Specifies the time at which Code Combining Soft Handoff Turbo Encoder swapping takes effect.

CDMABANDs. CDMA band class. The CDMA band class currently used by the mobile station.

CDMACHs — CDMA Channel number. The CDMA Channel number currently used by the mobile station.

CDMA_OFF_TIME_REP_SUP_INDs — CDMA off time report supported indicator.

CDMA_OFF_TIME_REP_THRESHOLDs — CDMA off time report threshold.
**CF_CDMABANDs** – Candidate Frequency CDMA band class. The CDMA band class specified in the *Candidate Frequency Search Request Message*.

**CF_CDMACHs** – Candidate Frequency CDMA Channel number. The CDMA Channel number specified in the *Candidate Frequency Search Request Message*.

**CF_PILOT_INCs** – PILOT_INC to be used by the mobile station after an inter-frequency hard handoff to the CDMA Candidate Frequency is successfully completed.

**CF_SEARCH_PRIORITY_INCLs** – Candidate Frequency neighbor pilots’ search priority included indicator.

**CF_SRCH_OFFSET_INCLs** – Candidate Frequency neighbor pilot search window offset included indicator.

**CF_SRCH_WIN_NGHBR_INCLs** – Candidate Frequency neighbor pilots’ search window included indicator.

**CF_SRCH_WIN_NSs** – Search window size for the Candidate Frequency Search Set.

**CF_SRCH_WIN_RSs** – Search window size to be used for the Remaining Set after an inter-frequency hard handoff to the CDMA Candidate Frequency is successfully completed.

**CF_T_ADDs** – Pilot detection threshold to be used on the CDMA Candidate Frequency. The stored value is a positive value in units of 0.5 dB.

**CH_INDs** – A two-bit physical channel indicator, based on the currently established physical channels. The least significant bit denotes the Fundamental Channel, and the most significant bit denotes the Dedicated Control Channel.

**CHAN_LST_MSG_SEQs** – CDMA Channel List Message sequence number.

**CHM_SUPPORTEDs** – Indicates whether the base station supports Control Hold Mode operation.

**CODE_CHAN_LIST** – Code Channel List. A descriptive structure used to manage the Forward Fundamental Channel, and Forward Supplemental Code Channels, if any, associated with the mobile station’s Active Set.

**COMPLETE_PUF_FRAMEs** – Number of power control groups required to make the PUF probe an integer number of frames.

**COMPLETE_SEARCHs** – Flag to indicate if the mobile station is to complete the search of the Candidate Frequency Search Set after it has determined that the inter-frequency handoff attempt to the CDMA Candidate Frequency is unsuccessful.


**COUNTER_ENABLEDs** – Timer-based registration indicator. Set to YES if timer-based registration is enabled; otherwise, set to NO.
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1. **C_SIG_ENCRYPT_MODE** – Common Channel signaling message encryption mode.
2. **CS_SUPPORTED** – Base station Concurrent Services supported indicator. This 1-bit field is set to ‘1’ if the base station supports concurrent connection of at least two services that use either Primary or Secondary traffic type.
3. **CURR_ACC_MSG_SEQ** – Current Access Parameters Message or Enhanced Access Parameters Message sequence number.
4. **CURRENT_ACTIVE_PILOT** – Identifies the current pilot in the Active Set during an access attempt.
5. **CURRENT_PUF_PROBE** – Number of the next PUF probe to be transmitted within the PUF attempt.
7. **DCCH_BAD_FRAMES** – Forward Dedicated Control Channel bad frames count. The number of received bad Forward Dedicated Control Channel frames.
8. **DCCH_TOT_FRAMES** – Total Forward Dedicated Control Channel frames received. The total number of received Forward Dedicated Control Channel frames, counted for Forward Traffic Channel power control.
9. **DECORR** – Hashing function input used to decorrelate hashing function applications for the same mobile station.
10. **DEFAULT_CONFIG** – Mobile station current default configuration.
11. **DELETE_FOR_TMSI** – A storage variable in the mobile station that indicates whether the mobile station should delete its current TMSI if the TMSI was assigned in a different TMSI zone.
12. **DIFF_RX_PWR_THRESH** – Threshold for the difference between the received power on the Serving Frequency and the received power on the CDMA Candidate Frequency for the mobile station to search for pilots on the CDMA Candidate Frequency.
14. **DISTANCE** – Distance from registered base station to current base station, used for distance-based registration.
15. **DROP_INTERCEPT** – The intercept in the inequality criterion for dropping a pilot from the Active Set.
17. **D_SIG_ENCRYPT_MODE** – Dedicated Channel signaling message encryption mode.
18. **DTX** – Discontinuous transmission mode for analog channel assignment and CDMA-to-analog handoff.
20. **EACH_SLOT** – See [2].
**EACH SLOT OFFSET** – See [2].

**EACH SLOT OFFSET** – See [2].

**EARLY RL TRANSMIT IND** – The early reverse link transmission flag indicates whether, upon channel assignment, the mobile station is allowed to enable its transmitter and transmit the preamble prior to receiving sufficient energy on the forward link.

**EC_100 THRESH** – Pilot $E_c/I_0$ threshold used for system reselection.

**EC THRESH** – Pilot power threshold used for system reselection.

**ENC KEY SIZE** – The key size used for signaling and user information encryption on common channel and dedicated channel.

**ENC KEY** – An array of encryption keys for signaling and user information encryption on common channel and dedicated channel, where $j$ is the key identifier that ranges from ‘00’ to ‘11’.

**SSEQ** – An 8-bit temporary variable for encryption/decryption and message integrity.

**ENCRYPT MODE** – Current message encryption mode.

**EXCL_P_REV_MS** – Exclude from redirection by MOB_P_REV indicator.

**EXT_CHAN_LST** – *Extended CDMA Channel List Message* sent indicator.

**EXT_CHAN_LST_MSG_SEQ** – *Extended CDMA Channel List Message* sequence number.

**EXT_NGHB_R_LST_MSG_SEQ** – Extended Neighbor List Message sequence number.

**EXT_PREF_MSID_TYPE** – Extended preferred mobile station identifier field type.

**RX_EXT_SSEQ[i][j]** – An array of 32-bit crypto-sync counters used for encryption and message integrity, where $i = 0$ is for unassured messages and $i = 1$ is for assured messages, where $j$ is the key identifier that ranges from ‘00’ to ‘11’.

**TX_EXT_SSEQ[i][j]** – An array of 32-bit crypto-sync counters used for encryption and message integrity, where $i = 0$ is for unassured messages and $i = 1$ is for assured messages, where $j$ is the key identifier that ranges from ‘00’ to ‘11’.

**EXT SSEQ** – A 32-bit temporary variable for encryption and message integrity.

**INT KEY** – An array of 128-bit integrity keys for message integrity, where $j$ is the key identifier that ranges from ‘00’ to ‘11’.

**KEY ID** – A 2-bit index of **INT KEY[.], ENC KEY[.], TX_EXT_SSEQ[.].**, and

---

4 Formerly called ENC_SEQ.

5 Formerly called EXT_DECRYPT_SEQ.$[i]$.

6 Formerly called EXT_ENCRYPT_SEQ.$[i]$.

7 Formerly called EXT_ENC_SEQ.$[i]$.
RX_EXT_SSEQ[.] that are “in use”. The values ‘00’ to ‘01’ are used to index 2G keys and security sequence numbers. The values ‘10’ to ‘11’ are used to index 3G keys and security sequence numbers.

**EXT_GLOBAL_REDIRECTs** – *Extended Global Service Redirection Message* sent indicator.

**EXT_GLOB_SERV_REDIR_MSG_SEQs** – *Extended Global Service Redirection Message* sequence number.

**EXT_SYS_PARAMETERs** – *Extended System Parameters Message* sent indicator.

**EXT_SYS_PAR_MSG_SEQs** – *Extended System Parameters Message* sequence number.

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

- FSCH_ID - Forward Broadcast Supplemental Channel identifier.
- FSCH_BAND_CLASS - Band class of the Forward Broadcast Supplemental Channel.
- FSCH_FREQ - Frequency assignment of the Forward Broadcast Supplemental Channel.
- FSCH_CODE_CHAN - Code Channel index of the Forward Broadcast Supplemental Channel.
- FSCH_PLCM – Public Long Code Mask of the Forward Broadcast Supplemental Channel
- FSCH_MUX_OPTION - Multiplex Option of the Forward Broadcast Supplemental Channel
- FSCH_RC - Radio configuration of the Forward Broadcast Supplemental Channel.
- FSCH_CODING - Coding Type of the Forward Broadcast Supplemental Channel.
- FSCH_OUTERCODE_RATE - Outer code rate of the Forward Broadcast Supplemental Channel.
- FSCH_OUTERCODE_OFFSET - Outer coding buffer offset of the Forward Broadcast Supplemental Channel.
- FSCH_NUM_BITS_IDX - Number of information bits index of the Forward Broadcast Supplemental Channel.
- FSCH_FRAME_40_USED - Forward Broadcast Supplemental Channel 40ms frame used indicator.
- FSCH_FRAME_80_USED - Forward Broadcast Supplemental Channel 80ms frame used indicator.
• **TDM_STRUCTURE_IND** - Forward Broadcast Supplemental Channel TDM structure used indicator.

• **TDM_SLOT_LENGTH** - Forward Broadcast Supplemental Channel TDM slot length

• **TDM_SUPER_PERIOD_MASK_LEN** - TDM super period mask length indicator.

• **TDM_MEGA_PERIOD_MASK_LEN** - TDM mega period mask length indicator.

**FCCCH** – Current Forward Common Control Channel number.

**FIRST_ACTIVE_PILOT** – While the mobile station is in the *System Access State*, identifies the pilot to which the first access probe was transmitted, upon entering the *System Access State*.

**FIXED_NUM_PREAMBLE** – Traffic Channel preamble length for fixed preamble transmission.

**FIXED_PREAMBLE_TRANSMIT_IND** – The *fixed_preamble_early_reverse_link_traffic* transmission flag indicates whether the mobile station is allowed to enter the *Traffic Channel Substate* of the *Mobile Station Control on the Traffic Channel State*, after sending the number of preambles specified in *Extended Channel Assignment Message*.

**FOR_ACKCH_ASSIGNED** – Forward Acknowledgment Channel assignment indicator.

**FOR_ACKCH_COMB_SEL** – Forward Acknowledgment Channel combining method selector.

**FOR_ACKCH_MODE** – Forward Acknowledgment Channel Mode.

**FOR_ACKCH_WALSH_INDEX** – Forward Acknowledgement Channel Walsh Code index.

**FOR_ACKSCH_INDEX** – Forward Acknowledgement Channel subchannel index.

**FOR_CPCCH_RATE** – Forward Common Power Control Channel Rate.

**FOR_DCCH_MUX_OPTION** – Forward Dedicated Control Channel Multiplex Option.

**FOR_DURATION** – A stored variable in the mobile station that contains the duration (in units of 80 ms) of a forward Supplemental Code Channel transmission that begins at time **FOR_START_TIME**.

**FOR_FCH_MUX_OPTION** – Forward Fundamental Channel Multiplex Option.

**FOR_FCH_RC** – Forward Fundamental Channel Radio Configuration.

**FOR_FRAME_40_MAX_RATE** – The maximum data rate for the mobile station’s transmission at 40 ms frame length on the Forward Supplemental Channel.

**FOR_FRAME_80_MAX_RATE** – The maximum data rate for the mobile station’s transmission at 80 ms frame length on the Forward Supplemental Channel.

**FOR_GCH_ASSIGNED** – Forward Grant Channel assigned indicator.

**FOR_GCH_WALSH_INDEX** – Forward Grant Channel Walsh Index. The Walsh index of
the Forward Grant Channel assigned to a mobile station.

**FOR_LINKED_HDM_SEQs** – Storage variable containing the most recent forward sequence number of the *General Handoff Direction Message* to which a *Supplemental Channel Assignment Message* forward assignment was linked.

**FOR_NID_REGs** – Foreign NID roamer autonomous registration enable.

**FOR_RCCH_ASSIGNEDs** – Assigned Forward Rate Control Channel. An on or off indicator used to determine if Forward Rate Control Channel is assigned or not.

**FOR_RCCH_MODEs** – Forward Rate Control Channel mode.

**FOR_RCCH_REPETITIONs** – Forward Rate Control Channel Subchannel repetition factor.

**FOR_RCCH_WALSH_INDEXs** – Forward Rate Control Channel Walsh code.

**FOR_RCSCH_INDEXs** – Forward Rate Control Channel subchannel index.

**FOR_PDCH_SUPPORTEDs** – Forward Packet Data Channel supported indicator.

**FOR_PDCH_INCLs** – Forward Packet Data Channel assigned indicator for each pilot in the active set.

**FOR_RCs** – Forward Channel Radio Configuration.

**FOR_RCCH_WALSH_INDEXs** – Walsh Code for the Forward Rate Control Channel Subchannel.

**FOR_RCSCH_INDEXs** – Forward Rate Control Subchannel.

**FOR_SCH_CC_INDEXs** – Supplemental code channel index used on the Supplemental Channel.

**FOR_SCH_DURATIONs** – A stored variable in the mobile station, which contains the duration of a forward Supplemental Channel transmission, which begins at time **FOR_SCH_START_TIMEs**.

**FOR_SCH_FRAME_LENGTHs** – The Forward Supplemental Channel frame length.

**FOR_SCH_RATEs** – The rate of the Forward Supplemental Channel.

**FOR_SCH_START_TIMEs** – A stored variable in the mobile station which contains the System Time, in units of time specified by **START_TIME_UNITs**, (modulo 32) at which the mobile station shall start (or resume) processing Forward Supplemental Channels.

**FOR_SID_REGs** – Foreign SID roamer autonomous registration enable.

**FOR_START_TIMEs** – A stored variable in the mobile station that contains the System Time, in units of 80 ms, (modulo 64) at which the mobile station shall start (or resume) processing Forward Supplemental Code Channels.

**FPC_DCCH_CURR_SETPTs** – Current power control subchannel outer loop setpoint for the Forward Dedicated Control Channel.

**FPC_DCCH_FERs** – Target frame error rate for the Forward Dedicated Control Channel.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_DCCH_MAX_SETPTs</td>
<td>Maximum value of the power control subchannel outer loop setpoint for the Forward Dedicated Control Channel.</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPTs</td>
<td>Minimum value of the power control subchannel outer loop setpoint for the Forward Dedicated Control Channel.</td>
</tr>
<tr>
<td>FPC_DELTA_SCH_SETPTs</td>
<td>The difference between the Fundamental Channel current power control subchannel outer loop setpoint and the Supplemental Channel current power control subchannel outer loop setpoint.</td>
</tr>
<tr>
<td>FPC_DELTA_SETPTs</td>
<td>The difference between the Fundamental Channel current power control subchannel outer loop setpoint and the Dedicated Control Channel current power control subchannel outer loop setpoint.</td>
</tr>
<tr>
<td>FPC_FCH_CURR_SETPTs</td>
<td>Current power control subchannel outer loop setpoint for the Forward Fundamental Channel.</td>
</tr>
<tr>
<td>FPC_FCH_FERs</td>
<td>Target frame error rate for the Forward Fundamental Channel.</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPTs</td>
<td>Maximum value of the power control subchannel outer loop setpoint for the Forward Fundamental Channel.</td>
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<td>Minimum value of the power control subchannel outer loop setpoint for the Forward Fundamental Channel.</td>
</tr>
<tr>
<td>FPC_MODEs</td>
<td>Forward power control operating mode.</td>
</tr>
<tr>
<td>FPC_MODE_NO_SCHs</td>
<td>Forward power control operating mode except during the forward Supplemental Channel assignment interval.</td>
</tr>
<tr>
<td>FPC_MODE_SCHs</td>
<td>Forward power control operating mode during the forward Supplemental Channel assignment interval.</td>
</tr>
<tr>
<td>FPC_PRI_CHANs</td>
<td>Primary power control subchannel measured channel.</td>
</tr>
<tr>
<td>FPC_SEC_CHANs</td>
<td>Index of Forward Supplemental Channel to be measured by the secondary power control subchannel.</td>
</tr>
<tr>
<td>FPC_SCH_CURR_SETPTs[i]</td>
<td>Current power control subchannel outer loop setpoint for Forward Supplemental Channel i.</td>
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<tr>
<td>FPC_SCH_FERs[i]</td>
<td>Target frame error rate for Forward Supplemental Channel i.</td>
</tr>
<tr>
<td>FPC_SCH_MAX_SETPTs[i]</td>
<td>Maximum value of the power control subchannel outer loop setpoint for Forward Supplemental Channel i.</td>
</tr>
<tr>
<td>FPC_SCH_MIN_SETPTs[i]</td>
<td>Minimum value of the power control subchannel outer loop setpoint for Forward Supplemental Channel i.</td>
</tr>
<tr>
<td>FPC_SETPT_THRESHs</td>
<td>Power control subchannel outer loop setpoint report threshold for the Dedicated Control Channel.</td>
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<td>FPC_SETPT_THRESH_SCHs</td>
<td>Power control subchannel outer loop setpoint report threshold for the Supplemental Channel.</td>
</tr>
<tr>
<td>FRAME_OFFSETs</td>
<td>Current Traffic Channel frame offset, in units of 1.25 ms.</td>
</tr>
</tbody>
</table>
FULL_BSPM_IND – Indicates whether mobile station had the complete BSPM information at the time it received the last Full or Differential BCMC Service Parameters Message.

FUNDICATED_BCMC_IND – Broadcast-Multicast services on Fundicated Channel Indicator.

GEN_NGHBR_LST_MSG_SEQ – General Neighbor List Message sequence number.

GLOBAL_REDIRECT – Global Service Redirection Message sent indicator.

GLOB_SERV_REDIR_MSG_SEQ – Global Service Redirection Message sequence number.

GRANTED_MODE – Mobile station current granted mode.

HASH_KEY – Hashing function input that determines the return value. Derived from IMSI_O.

HDM_SEQ – Last received Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message sequence number.

HOME_REG – Home (non-roaming) autonomous registration enable.

IGNORE_ESCAM – Identifies whether a mobile station will process the reverse supplemental channel assignment portion of the subsequent Supplemental Channel Assignment Message or Reverse Supplemental Channel Assignment Mini Message.

IGNORE_QPCH – Ignore QPCH indicators flag. Indicates whether the mobile station is to ignore its assigned paging indicators on the QPCH while operating in the reduced slot cycle mode if the reduced slot cycle index is -3 or -4.

IGNORE_SCAM – Identifies whether a mobile station will process the reverse supplemental code channel assignment portion of the subsequent Supplemental Channel Assignment Message.

IMSI_10 – The least significant digit of MNC when the MNC is 3-digit.

IMSI_11_12 – The 11th and 12th digits of the IMSI used for address matching.

IMSI_O_ADDR_NUM – The number of digits in the NMSI of the Operational IMSI (IMSI_O) minus four.


INIT_PWR – Initial power offset for Access Channel probes.

LC_STATE – Long code state obtained from the Sync Channel Message.

LOGICAL_TO_PHYSICAL_MAPPING_TABLE – This table contains the logical to physical mapping for signaling and user traffic.

LP_SEC – Leap seconds count (offset of CDMA system time from UTC).

LTM_OFF – Local time offset from UTC, in units of 30 minutes.

MAX_ADD_SERV_INSTANCE – Maximum number of additional service reference identifiers allowed in origination.
### Definitions

- **MAX_CAP_SZs**: Maximum number of Access Channel or Enhanced Access Channel frames in an Access Channel message capsule, less 3.
- **MAX_NUM_ALT_SOs**: The maximum number of alternative service option numbers that the mobile station is allowed to include in the *Origination Message* or in the *Page Response Message*.
- **MAX_NUM_PROBE_HOs**: The maximum number of times that a mobile station is permitted to perform an access probe handoff.
- **MAX_PWR_PUFs**: Maximum number of PUF probes to be transmitted at maximum mobile station output power during a PUF attempt.
- **MAX_REQ_SEQs**: Maximum number of access probe sequences for an Access Channel or Enhanced Access Channel request.
- **MAX_RER_PILOT_LIST_SIZEs**: Maximum number of pilots to be maintained in the radio environment report pilot list while in the radio environment reporting mode.
- **MAX_RSP_SEQs**: Maximum number of access probe sequences for an Access Channel or Enhanced Access Channel response.
- **MAX_SLOT_CYCLE_INDEXs**: Maximum value of the slot cycle index allowed by the current base station. This parameter can take values between 0 and 7, inclusive.
- **MCCs**: The Mobile Country Code used for address matching.
- **MCC_Os**: The Mobile Country Code of IMSI_O.
- **MC_RR_PAR_MSG_SEQs**: *MC-RR Parameters Message* sequence number.
- **MEMs**: Analog message encryption mode for CDMA-to-analog handoff.
- **MIN_PILOT_EC_I0 THRESHs**: Threshold for total $E_c/I_0$ of pilots in the Serving Frequency Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- **MIN_PILOT_PWR_THRESHs**: Threshold for total $E_c$ of pilots in the Serving Frequency Active Set used in the Periodic Serving Frequency Pilot Report Procedure.
- **MIN_P_REVs**: Minimum mobile station protocol revision level required for access to the CDMA system.
- **MIN_SLOT_CYCLE_INDEX**: Minimum value of the slot cycle index allowed by the current base station. This parameter can take the values -4 or 0.
- **MIN_TOTAL_PILOT_EC_I0s**: Total pilot strength threshold for the mobile station to attempt to demodulate the Forward Traffic Channel on the CDMA Candidate Frequency.
- **MOB_QOSs**: Indicator of whether the mobile station is allowed to request QoS settings in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*.
- **MOB_TERMs**: Mobile station termination indicator. Set to ‘1’ if the mobile station will accept mobile station terminated calls in its current roaming status.
- **MSG_PSISTs**: Persistence modifier for Access Channel message and Enhanced Access data transmissions.
\textbf{MS\_LAT}_s – The latitude of the mobile station as estimated by the base station.
\textbf{MS\_LOC\_TSTAMP}_s – The time corresponding to the estimate of mobile station’s latitude and longitude.
\textbf{MS\_LONG}_s – The longitude of the mobile station as estimated by the base station.
\textbf{MS\_INIT\_POS\_LOC\_SUP\_IND}_s – Mobile station initiated position location determination supported indicator.
\textbf{MULT\_NIDS}_s – Multiple NID storage indicator. Set to ‘1’ if the mobile station may store more than one entry in SID\_NID\_LIST_s for each SID.
\textbf{MULT\_SIDS}_s – Multiple SID storage indicator. Set to ‘1’ if the mobile station may store entries in SID\_NID\_LIST_s having different SIDs.
\textbf{NAR\_AN\_CAP}_s – Narrow analog voice channel capability.
\textbf{NDSS\_ORIG}_s – NDSS Origination Indicator. Indicator used when the mobile station is NDSS-redirected while originating a call.
\textbf{NEW\_BAND\_RECORD} – Record carrying information pertaining to a channel on a new band to which the mobile station has hashed. The record includes the following fields:
  * \textbf{NEW\_BAND\_CLASS} – The new band class.
  * \textbf{NEW\_FREQ} – The new frequency in the new band class.
\textbf{NGHBR\_BAND}_s – Neighbor band class.
\textbf{NGHBR\_CONFIG}_s – Neighbor base station channel allocation configuration.
\textbf{NGHBR\_FREQ}s – Neighbor CDMA channel number.
\textbf{NGHBR\_LST\_MSG\_SEQ}_s – \textit{Neighbor List Message} sequence number.
\textbf{NGHBR\_MAX\_AGE}_s – Neighbor set maximum age for retention in the set.
\textbf{NGHBR\_PN}_s – Neighbor base station Pilot Channel PN sequence offset in units of 64 PN chips.
\textbf{NGHBR\_REC} – Record containing information about a neighbor base station (see also NGHBR\_REC\_LIST).
\textbf{NGHBR\_REC\_LIST} – Neighbor base station record list. A descriptive structure used to manage the base station’s information records about neighbor base stations (see also NGHBR\_REC).
\textbf{NGHBR\_SET\_ACCESS\_INFO}_s – Neighbor Set access handoff or access probe handoff information included indicator.
\textbf{NGHBR\_SET\_ENTRY\_INFO}_s – Neighbor Set access entry handoff information included indicator.
\textbf{NGHBR\_SET\_SIZE}_s – Size of the Neighbor Set.
\textbf{NGHBR\_TIMING\_INCL}_s – Indicates that hopping pilot beacon timing information is included.
**NGHBR_TX_DURATIONs** – Hopping pilot beacon transmit time duration.

**NGHBR_TX_OFFSETs** – Hopping pilot beacon transmit time offset.

**NGHBR_TX_PERIODs** – Hopping pilot beacon transmit time period.

**NID** – Network identification. A network is a subset of the base stations within a wireless system.

**NOM_PWRs** – Nominal transmit power offset. A correction factor to be used by mobile stations in the open loop power estimate.

**NUM_ANALOG_NGHBRs** – Number of neighboring analog systems.

**NUM_FCCCHs** – Number of Forward Common Control Channels supported on the current CDMA channel.

**NUM_PREAMBLEs** – Number of Traffic Channel preamble length for hard handoff.

**NUM_QPCHs** – Number of Quick Paging Channels supported on the current CDMA channel.

**NUM_REV_CODESs** – A storage variable in the mobile station that contains the number of Reverse Supplemental Code Channels that will be utilized in the next Reverse Supplemental Code Channel transmission beginning at time **REV_START_TIMEs**. A value of 0 indicates no Reverse Supplemental Code Channel transmission will be permitted (i.e., there is no pending Reverse Supplemental Code Channel transmission).

**NUM_SOFT_SWITCHING_FRAMESs** – Number of frames for R-CQICH soft switching. The duration of the cell switching period, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups.

**NUM_SOFT_SWITCHING_FRAMES_CHMs** – Number of frames for R-CQICH soft switching while in Control Hold. The duration of the cell switching period, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups.

**NUM_SOFT_SWITCHING_SLOTSs** – Number of slots per frame for R-CQICH soft switching. The duration of the cell switching slots within a switching frame, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH channel when it switches between two pilots which are in different groups.

**NUM_SOFT_SWITCHING_SLOTS_CHMs** – Number of slots per frame for R-CQICH soft switching while in Control Hold. The duration of the cell switching slots within a switching frame, during which the mobile station, while in Control Hold, is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH channel when it switches between two pilots which are in different groups.

**NUM_SOFTER_SWITCHING_FRAMESs** – Number of frames for R-CQICH softer switching. The duration of the cell switching period, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.
NUM_SOFTER_SWITCHING_FRAMES_CHMs – Number of frames for R-CQICH softer switching while in Control Hold. The duration of the cell switching period, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

NUM_SOFTER_SWITCHING_SLOTSs – Number of slots per frame for R-CQICH softer switching. The duration of the cell switching slots within a switching frame. During this time the mobile station is to transmit the cell switch indication by using the Walsh cover of the target sector in the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

NUM_SOFTER_SWITCHING_SLOTS_CHMs – Number of slots per frame for R-CQICH softer switching while in Control Hold. The duration of the cell switching slots within a switching frame. During this time the mobile station, while in Control Hold, is to transmit the cell switch indication by using the Walsh cover of the target sector in the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

NUM_STEPs – Number of access probes or enhanced access probes in a single access probe sequence or enhanced access probe sequence.

NUM_SYNC_ID_SUPPORTED – Number of SYNC_IDS supported by the mobile station.

OTHER_REPORTED_LIST – List of other pilots that have pilot strengths exceeding T_ADD and that are not included in ACCESS_HO_LIST.

PACAs – PACA call indicator. Set to enabled to indicate that the mobile station is waiting for a priority access channel assignment; otherwise, set to disabled. In Sections 2 and 3, PACAs = 0 is equivalent to setting PACAs to disabled and PACAs = 1 is equivalent to setting PACAs to enabled.

PACA_CANCEL – PACA call cancel indicator. Set to ‘1’ when the mobile station is directed by the user to cancel the PACA call; otherwise, set to ‘0’.

PACA_SIDs – PACA system identifier. Equal to the SID of the system on which the mobile station originated a PACA call.

PACA_TIMEOUTs – PACA state timer duration. Specifies how long the mobile station should wait for a PACA Message from the base station.

PACKET_ZONE_IDs – Packet data services zone identifier of the base station.

PAGECHs – Current CDMA Paging Channel number.

PAGED – Indicator for a page match detected while the mobile station is in the System Access State.

PAGE_CHANbs – Number of Paging Channels supported on the current CDMA channel.

PAM_SZbs – Number of frames in the Access Channel or Enhanced Access Channel preamble, less 1.

PARAMETER_REGbs – Parameter-change registration enable.

PDCH_CHM_SUPPORTEDbs – Indicates whether the base station supports PDCH Control Hold Mode operation.

PDCH_GROUP_IDENTIFIERbs – A three-bit Packet Data Channel
group identifier. It is used to determine whether the mobile station should use the softer or
soft reselection parameters when repointing between pilots in its Active Set (See [3]).

**PDCH_SOFT_SWITCHING_DELAY**s – PDCH soft switching delay. The minimum
interruption seen by the mobile station when the mobile station is to transmit the cell
switch sequence on the R-CQICH channel when it switches between two pilots which are in
different groups.

**PDCH_SOFTER_SWITCHING_DELAY**s – PDCH softer switching delay. The minimum
interruption seen by the mobile station when the mobile station is to transmit the cell
switch sequence on the R-CQICH channel when it switches between two pilots which are in
the same group.

**PERIODIC_SEARCH**s – Flag to indicate if the mobile station is to perform a periodic search
on the Candidate Frequency.

**PGSLOT** – Value obtained from the hashing function, used to determine the mobile
station’s assigned Paging Channel slots.

**PILOT_ARRIVAL** – Time of occurrence, as measured at the mobile station antenna
connector, of the earliest arriving usable multipath component of the pilot. The arrival time
is measured relative to the mobile station’s time reference.

**PILOT_INFO_REQ_SUPPORTED**s – Pilot information request supported indicator.

**PILOT_GATING_RATE**s – Reverse pilot gating rate on the Reverse Pilot Channel.

**PILOT_GATING_USE_RATE** – Reverse pilot gating rate enable indicator. It indicates
whether or not the Reverse Pilot Channel is gated.

**PILOT_INC**s – Pilot PN sequence offset index increment. The interval between pilots, in
units of 64 PN chips, for base stations in a system.

**PILOT_PN**s – Pilot Channel PN sequence offset, in units of 64 PN chips, for a base station.

**PILOT_PN_PHASE** – Calculated Pilot Channel PN phase, in chips, including the PN
sequence offset and the arrival time relative to the mobile station’s time reference.

**PILOT_REPORT**s – Pilot reporting indicator.

**PLCM_TYPE**s – Public long code mask type. Indicates the long code mask generation
algorithm when Public Long Code Mask is in use. See 2.3.6.

**POTENTIAL_CDMACH**s – The CDMA Channel number that could potentially be used by
the mobile station.

**POWER_DOWN_REG**s – Power down registration enable indicator.

**POWER_UP_REG**s – Power up registration enable indicator.

**PPSMM_PERIOD**s – The period used in the Periodic Serving Frequency Pilot Report
Procedure.

**PRAT**s – Data rate of the Paging Channels.

**P_REV**s – Protocol revision level supported by a base station.
P_REV_IN_USEs – Protocol revision level currently in use by a mobile station.

PREF_MSID_TYPEs – Preferred mobile station identifier field type.

PREVIOUS_ACTIVE_PILOTs – Identifies the pilot, if any, which was in the Active Set immediately prior to the current pilot in the Active Set, during the current access attempt.

PRI_NGHBR_LSTs – Private Neighbor List Message sent indicator.

PRI_NGHBR_PNs – Private Neighbor base station Pilot Channel PN sequence offset in units of 64 PN chips.

PRI_NGHBR_REC – Record containing information about a private neighbor base station (see also PRI_NGHBR_REC_LIST).

PRI_NGHBR_REC_LIST – Private neighbor base station record list. A descriptive structure used to manage the base station’s information records about private neighbor base stations (see also PRI_NGHBR_REC).

PRI_NGHBR_LST_MSG_SEQs – Private Neighbor List Message sequence number.

PROBE_BKOFS – Access Channel probe backoff range, in slots.

PROBE_PN_RANS – Range for hashing function selection of the delay prior to transmission of Access Channel probes. Value is log2(range + 1).

PSISTS – Persistence value for the mobile station’s overload class.

PUF_FREQ_INCLs – Flag to indicate whether the mobile station is to transmit a PUF probe on the serving frequency or on a target frequency.

PUF_INIT_PWRs – Power increase (in dB) of the first PUF pulse in a PUF attempt.

PUF_INTERVALs – Number of frames between the start of each PUF probe.

PUF_PULSE_SIZEs – Duration of a PUF pulse in power control groups.

PUF_PWR_STEPs – Amount (in dB) by which the mobile station is to increment the power of a PUF pulse above nominal power from one PUF pulse to the next.

PUF_SETUP_SIZEs – Number of power control groups within a PUF probe before the transmission of the PUF pulse.

PUF_SF_CDMABANDs – Serving Frequency CDMA band class.

PUF_SF_CDMACHs – Serving Frequency CDMA Channel number.

PUF_TX_PWRs – Mobile station’s output power for the PUF pulse.

PUF_TP_CDMABANDs – Target Frequency CDMA band class.

PUF_TP_CDMACHs – Target Frequency CDMA Channel number.

PWR_CNTL_STEPs – Power control step size assigned by the base station that the mobile station is to use for closed loop power control.

PWR_PERIOD_ENABLEs – Forward power control periodic reporting enabled indicator.
**PWR_REP_DELAYs** – Power report delay. The period that the mobile station waits following an autonomous *Power Measurement Report* before restarting frame counting for power control purposes.

**PWR_REP_FRAMESs** – Power control reporting frame count. The number of frames over which the mobile station is to count frame errors. Value is $2 \times \log_2(\text{frames} / 5)$.

**PWR_REP_THRESHs** – Power control reporting threshold. The number of bad frames to be received in a measurement period before the mobile station is to generate a *Power Measurement Report Message*.

**PWR_STEPs** – Power increment for successive access probes, in units of 1.0 dB.

**PWR_THRESH_ENABLEs** – Forward power control threshold reporting enabled indicator.

**QOF_IDs** – Quasi-orthogonal function index on the Supplemental Channel.

**QPAGECHs** – Current Quick Paging Channel number.

**QPCH_CCI_SUPPORTEDs** – Flag to indicate if configuration change indicators are supported on the Quick Paging Channel.

**QPCH_POWER_LEVEL_PAGEs** – Relative power level of the transmitted Quick Paging Channel Paging Indicator modulation symbols, relative to the Forward Pilot Channel.

**QPCH_POWER_LEVEL_CONFIGs** – Relative power level of the transmitted Quick Paging Channel Configuration Change Indicator modulation symbols, relative to the Forward Pilot Channel.

**QPCH_RATEs** – Indicator rate of the current Quick Paging Channel(s).

**QPCH_SUPPORTEDs** – Flag to indicate if the Quick Paging Channel is supported by the base station.

**RA** – Random access channel number. The Access Channel number generated (pseudo-randomly) by the mobile station.

**RANDs** – Authentication random challenge value.

**RANDC** – The eight most-significant bits of the random challenge value used by the mobile station.

**RANDOM_TIME** – Random time. A portion of SYS_TIME used to seed the random number generator.

**RC_CAP_REQUESTEDs** – Radio Configuration Capability indicator. When set to “1” the mobile station shall include the Radio Configuration capabilities that it supports in the *Origination Message and Page Response Message*.

**RCCCH_SLOTs** – See [2].

**RCCCH_SLOT_OFFSET1s** – See [2].

**RCCCH_SLOT_OFFSET2s** – See [2].

**REDIRECTIONs** – Service redirection indicator. Set to enabled to indicate that service redirection is currently in effect; otherwise, set to disabled.
REDIRECT_REC – Holds the service redirection criteria specified in the redirection record of the most recently received Extended Global Service Redirection Message, Global Service Redirection Message or Service Redirection Message.

REDIRECT_REC_LIST – An array of redirection records selected from the most recently received Extended Global Service Redirection Message. Each redirection record in this array specifies a redirection criteria. See REDIRECT_REC.

REG_COUNT – The timer-based registration counter.

REG_COUNT_MAX – Timer-based registration count limit. The timer-based registration counter expiration value computed from REG_PRD.

REG_DIST – Registration distance. Distance from last registration that causes a distance-based registration to occur.

REG_ENABLED – Autonomous registrations enabled indicator.

REG_NID – Network identification corresponding to the base station where the mobile station is considered registered upon receiving confirmation of delivery of Registration Message, Origination Message, Page Response Message, or Reconnect Message.

REG_REG_ZONE – Registration zone number corresponding to the base station where the mobile station is considered registered upon receiving confirmation of delivery of Registration Message, Origination Message, Page Response Message, or Reconnect Message.

REG_SECURITY_RESYNC – Security re-sync required registration indicator.

REG_SID – System identification corresponding to the base station where the mobile station is considered registered upon receiving confirmation of delivery of Registration Message, Origination Message, Page Response Message, or Reconnect Message.

REG_ZONE – Mobile station registered indicator.

REG_PRD – Registration period. The time interval between timer-based registrations. Value is $4 \times \log_2(\text{time} / 0.08 \text{ s})$.

REG_PSIST – Persistence modifier for registration accesses (except ordered registrations).

REG_ZONE – Registration zone number of the base station.

REJECT_UZID – User Zone identifier of the User Zone rejected by the base station.

RELEASE_TO_IDLE_IND – Indicator of whether the mobile station is allowed to transition directly to the Mobile Station Idle State upon releasing all the dedicated channels.

RER_MAX_NUM_MSG – The maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in the radio environment reporting mode.

RER_MODE_ENABLED – Flag that indicates whether the radio environment reporting mode is currently enabled at the mobile station.
**RER_PILOT_LIST** – Radio environment report pilot list used while in the radio environment reporting mode.

**RER_MODE_SUPPORTED** – Base station support of radio environment reporting mode indicator.

**RESELECT_INCLUDED** – System reselection information included indicator. When this is set to ‘1’, the system reselection procedure is enabled.

**RESPOND_IND** – Respond Requested Indicator. Indicating if the mobile station is to acknowledge direct channel assignment by sending a page response message or a reconnect message in unassured mode.

**RESQ_ENABLED** – Call rescue feature enabled indicator. Flag to indicate if the call rescue feature is enabled in the network.

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

**RESQ_ATTEMPT_TIME** – Call rescue attempt timer. Specifies the maximum time a mobile station is allowed to keep its transmitter re-enabled while waiting to receive N3m consecutive good frames during a call rescue soft handoff attempt.

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

**RESQDELAY_TIME** – Call rescue delay timer. Specifies the minimum delay before the mobile station can attempt call rescue soft handoff, after the mobile station disables its transmitter due to receiving N2m consecutive bad frames or declaring an acknowledgment failure.

**RESQ_MIN_PERIOD** – Minimum time between consecutive call rescues. Specifies the minimum time after a successful call rescue (i.e., receipt of N3m consecutive good frames by the mobile station after the rescue attempt timer is enabled) before any subsequent call rescue attempts can be initiated.

**RESQ_NUM_PREAMBLE_RC1_RC2** – The Traffic Channel preamble length for Call Rescue Soft Handoff when operating in Radio Configuration 1 or 2.

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

**RESQ_NUM_TOT_TRANS_20MS** – The required number of transmissions of a regular PDU before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.

**RESQ_NUM_TOT_TRANS_5MS** – The required number of transmissions of a mini PDU before declaring a L2 Acknowledgment Failure when Call Rescue is enabled.

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

**RESQ_QOF** – The Quasi-Orthogonal Function mask identifier of the Rescue Channel for neighbor base stations that are configured with a Rescue Channel.
**RESUME_PREAMBLEs** – A storage variable in the mobile station that contains the size of the preamble that shall be transmitted on a Reverse Supplemental Code Channel at the beginning of transmission on a Reverse Supplemental Code Channel when resuming transmission following an interruption when discontinuous transmission is occurring.

**RETRY_DELAYs[i]** – A storage variable in the mobile station that contains the system time before which the mobile station may not transmit a specific message. The type of message that cannot be transmitted is specified by RETRY_TYPE, represented here by i. A RETRY_DELAYs[i] value of 0 indicates no retry delay is in effect, and a value of ‘11111111’ indicates an infinite retry delay.

**RETRY_DELAY_UNITs** – The units for the value of RETRY_DELAYs. Possible values are 1000ms and 60000ms.

**RETRY_DELAY_VALUEs** – The unitless value of the retry delay.

**RETRY_TYPEs** – The retry delay type. It specifies the type of message to which the retry delay value applies. If set to a value of 0, it indicates that all retry delay values should be cleared.

**RETURN_CAUSEs** – Reason for the mobile station registering or accessing the system.

**RETURN_IF_FAILs** – Return if fail indicator. Set to ‘1’ to indicate that mobile station is to return to the system from which it was redirected if it fails to acquire service on a system using specified redirection criteria. Otherwise, set to ‘0’.

**RETURN_IF_HANDOFF_FAILs** – Return if handoff fail indicator. Indicates if the mobile station is to resume using the Active Set on the Serving Frequency following an unsuccessful hard handoff attempt.

**REV_DCCH_MUX_OPTIONs** – Reverse Dedicated Control Channel Multiplex Option.

**REV_DTX_DURATIONs** – Maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmitting on a Reverse Supplemental Code Channel within the reverse assignment duration.

**REV_DURATIONs** – A stored variable in the mobile station that contains the duration (in units of 80 ms) of the Reverse Supplemental Code Channel transmission that will begin at time REV_START_TIMEs.

**REV_FCH_GATING_MODEs** – The reverse Fundamental Traffic Channel gating mode in Radio Configurations 3, 4, 5, and 6 where 50% of the PCGs in the 1500 bps and 1800 bps frames are gated off (see [2]). Set to ‘1’ if the mobile station is operating in the reverse fundamental channel gating mode.

**REV_FCH_MUX_OPTIONs** – Reverse Fundamental Channel Multiplex Option.

**REV_FCH_RCs** – Reverse Fundamental Channel Radio Configuration.

**REV_FRAME_40_MAX_RATEs** – The maximum data rate for the mobile station’s transmission at 40 ms frame length on the Reverse Supplemental Channel.

**REV_FRAME_80_MAX_RATEs** – The maximum data rate for the mobile station’s transmission at 80 ms frame length on the Reverse Supplemental Channel.
**REV_LINKED_HDM_SEQs** – Storage variable containing the most recent reverse sequence number of the *General Handoff Direction Message* to which a *Supplemental Channel Assignment Message* reverse assignment was linked.

**REV_PDCH_AUTO_ALLOWEDs[i]** – Reverse Packet Data Channel Autonomous Transmission allowed indicator. An on or off indicator used to identify whether autonomous transmission is allowed or not allowed for each SR_ID.

**REV_PDCH_BOOST_ALLOWEDs[i]** – Reverse Packet Data Channel boost allowed indicator. An on or off indicator that identifies whether traffic to pilot ratio boosting is allowed or not allowed for each SR_ID.

**REV_PDCH_BOOST_OVERSHOOTs** – Reverse Packet Data Channel Boost Overshoot.

**REV_PDCH_BUFFER_SIZEs[i]** – Reverse Packet Data Buffer size. An array of buffer sizes that correspond to the buffer status.

**REV_PDCH_DEFAULT_PERSISTENCEs** – Reverse Packet Data Default Persistence. The initial default persistence value.

**REV_PDCH_GRANT_PRECEDENCEs** – Reverse Packet Data Channel Grant Precedence Indicator.

**REV_PDCH_HEADROOM_DURATIONs** – Reverse Packet Data Channel Headroom Duration. The minimum power headroom update trigger interval that is allowed.

**REV_PDCH_INIT_TARGET_TPRs** – Reverse Packet Data Channel Initial Target for Traffic to pilot ratio. The initial target traffic to pilot ratio.

**REV_PDCH_MAX_AUTO_RATEs** – Reverse Packet Data Channel maximum autonomous rate.

**REV_PDCH_MAX_AUTO_TPRs** – The maximum traffic to pilot ratio for autonomous transmission.

**REV_PDCH_MAX_POWER_UPDATE_DURATIONs** – Reverse Packet Data Maximum Power Update Duration.

**REV_PDCH_MAX_RATE_SUPPORTEDs** – Reverse Packet Data Channel maximum rate of 1.5384 Mbps supported indicator.

**REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKETs** – Maximum Allowed Reverse Packet Data Channel encoder packet size.

**REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET** – Maximum supported Reverse Packet Data Channel encoder packet size by the mobile station.

**REV_PDCH_MAX_TARGET_TPRs** – Reverse Packet Data Maximum Target Traffic to Pilot Ratio. The maximum target traffic to pilot ratio that is allowed.

**REV_PDCH_MSIB_SUPPORTEDs** – Reverse Packet Data Channel Mobile Station Indicator Supported Bit.

**REV_PDCH_MUX_OPTION_HIGH_RATEs** – Reverse Packet Data Channel Multiplex Option for higher data rates indicator.
**REV_PDCH_MUX_OPTION_LOW_RATE** – Reverse Packet Data Channel Multiplex Option for lower data rates indicator.

**REV_PDCH_NUM_ARQ_ROUNDS_BOOST** – The maximum number of ARQ rounds for boosted transmission that can be performed on the Reverse Packet Data Channel.

**REV_PDCH_NUM_ARQ_ROUNDS_NORMAL** – The maximum number of ARQ rounds for non-boosted transmission that can be performed on the Reverse Packet Data Channel.

**REV_PDCH_POWER_HEADROOM_DECREASE** – Reverse Packet Data Power Headroom Decrease. Power headroom increase delta to trigger a power report.

**REV_PDCH_POWER_HEADROOM_INCREASE** – Reverse Packet Data Channel Power Headroom Increase. Power headroom increase delta to trigger a power report.

**REV_PDCH_QUICK_REPEAT_ALLOWED** – Reverse Packet Data Quick Repeat Allowed. An on or off indicator used to determine if quick repeat is allowed or not.

**REV_PDCH_QUICK_START_THRESH** – Reverse Packet Data Quick Start Threshold. The Quick start threshold for the Reverse Packet Data Control Channel.

**REV_PDCH_RC** – Reverse Packet Data Channel radio configuration.

**REV_PDCH_RESET_PERSISTENCE** – Reverse Packet Data Channel Reset Persistence. The reset persistence at the end of a persistent grant for the Reverse Packet Data Channel Determines the value of current persistence [3] at the end of a non-persistent grant for the Reverse Packet Data Channel.

**REV_PDCH_REQCH_TRIGGER[i]** – Reverse Packet Data Request Channel Trigger. The following parameters are contained in this array and will be triggered for the REQCH.

- **REV_REQCH_MIN_DURATION** – Minimum duration between REQCH messages for this SR_ID.
- **REV_REQCH_USE_BUFFER_REPORTS** – An on or off indicator used to allow buffer reports.
- **REV_REQCH_USE_POWER_REPORTS** – An on or off indicator used to allow power status reports.
- **REV_REQCH_USE_WATERMARKS** – An on or off indicator used to allow watermark reports.
- **REV_REQCH_HIGH_WATERMARK** – The high watermark level, in octets.
- **REV_REQCH_LOW_WATERMARK** – The low watermark level, in octets.
- **REV_REQCH_CEILING** – The high ceiling level, in octets, used for high priority reporting.
- **REV_REQCH_FLOOR** – The low floor level, in octets, used for high priority reporting.

**REV_PDCH_SOFT_HANDOFF_RESET_IND** – Reverse Packet Data Channel Soft Handoff Reset Indicator. An indicator used to determine whether the Reverse Packet Data Channel control function must be initialized when soft selection is to occur or not.

**REV_PDCH_STEP_DOWN[i]** – Reverse Packet Data Channel Step “down” for rate control.

**REV_PDCH_STEP_UP[i]** – Reverse Packet Data Channel Step “up” for rate control.
control.

- **REV_PDCH_TABLE_SEL** – Reverse Packet Data Channel Table selector.
- **REV_PDCH_TPR_BOOSTED[i]** – Reverse Packet Data Traffic to Pilot Ratio Boosted. An array indicating the traffic to pilot ratio for boosted traffic.
- **REV_PDCH_TPR_NORMAL[i]** – Reverse Packet Data Channel Traffic to Pilot Normal. An array indicating the traffic to pilot ratio for non-boosted traffic.
- **REV_PWR_CNTL_DELAY** – The reverse link power control delay for the reverse fundamental channel gating mode in Radio Configurations 3, 4, 5, and 6 and the gated preamble transmission on the Enhanced Access Channel or the Reverse Common Control Channel. The delay is the time between the end of the reverse link PCG and the beginning of the forward link PCG minus one, when the round trip delay is zero.
- **REV_RCs** – Reverse Channel Radio Configuration.
- **REV_REQCH_ADJ_GAIN** – Reverse Request Channel Adjustment Gain.
- **REV_REQCH_HEADROOM_DURATIONS** – Reverse Request Channel minimum power headroom update trigger interval.
- **REV_REQCH_MAX_POWER_UPDATE_DURATIONS** – Reverse Request Channel maximum power headroom update trigger interval.
- **REV_REQCH_MIN_DURATION[i]** – Reverse Request Channel Minimum Duration.
- **REV_REQCH_POWER_HEADROOM_DECREASEs** – Reverse Request Channel Power headroom decrease delta to trigger power report.
- **REV_REQCH_POWER_HEADROOM_INCREASEs** – Reverse Request Channel Power headroom increase delta to trigger power report.
- **REV_REQCH_QUICK_REPEAT_ALLOWEDs** – Reverse Request Channel Quick Repeat Allowed indicator.
- **REV_REQCH_USE_BUFFER_REPORTS** – Reverse Request Channel Use of Buffer Status Reports indicator.
- **REV_REQCH_USE_POWER_REPORTS** – Reverse Request Channel Use of Power Status Reports indicator.
- **REV_REQCH_USE_WATERMARKS[i]** – Reverse Request Channel Use of Watermark Reports indicator.
- **REV_SCH_DTX_DURATIONS** – Maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmitting on a Reverse Supplemental Channel within the reverse assignment duration.
- **REV_SCH_DURATIONS** – A stored variable in the mobile station which contains the duration of the Reverse Supplemental Channel transmission which will begin at time REV_SCH_START_TIMES.
- **REV_SCH_FRAME_LENGTHs** – The Reverse Supplemental Channel frame length.
- **REV_SCH_RATES** – The rate of the Reverse Supplemental Channel.
1 \textbf{REV\_SCH\_START\_TIME}s – A stored variable in the mobile station which contains the System Time, in units of time specified by \texttt{START\_TIME\_UNIT}s, (modulo 32) at which the mobile station shall start (or resume) processing Reverse Supplemental Channels.

2 \textbf{REV\_SPICH\_ADJ\_GAIN}s – Reverse Secondary Pilot Channel Adjustment Gain.

3 \textbf{REV\_SPICH\_EP\_SIZE}s – Minimum Encoder Packet Size for which the Reverse Secondary Pilot Channel is used.

4 \textbf{REV\_START\_TIME}s – A stored variable in the mobile station that contains the next 80 ms frame boundary (modulo 64) on which the mobile station is assigned to start Reverse Supplemental Code Channel transmission.

5 \textbf{REV\_WALSH\_IDS}s – Reverse Supplemental Channel Walsh cover Identifier.

6 \textbf{RLGAIN\_ACKCH\_PILOT}s – Reverse Acknowledgment Channel to pilot adjustment gain.

7 \textbf{RLGAIN\_CQICH\_PILOT}s – Reverse Channel Quality Indicator Channel to pilot adjustment gain.

8 \textbf{RLGAIN\_PDCCH\_PILOT}s – Reverse Packet Data Channel to pilot adjustment gain.

9 \textbf{RLGAIN\_REQCH\_PILOT}s – Reverse Request Channel to pilot adjustment gain.

10 \textbf{RLGAIN\_SPICH\_PILOT}s – Reverse Secondary Pilot Channel to pilot adjustment gain.

11 \textbf{RN\_HASH\_KEY}s – Name of an internal variable having the same value as the mobile station’s ESN. This variable is used by procedures defined in [3].

12 \textbf{ROAM\_INDI}s – Enhanced roaming indicator used for mobile station roaming condition display.

13 \textbf{RS} – Inter-probe sequence backoff. The delay in slots generated (pseudorandomly) by the mobile station following an unsuccessful access probe sequence or prior to the first access probe in a response attempt.

14 \textbf{RSC\_END\_TIME} – Reduced slot cycle mode end time. The system time at which a mobile station operating in the reduced slot cycle mode will exit the mode.

15 \textbf{RSC\_MODE\_ENABLED} – Mobile Station flag that indicates whether the reduced slot cycle index mode is enabled.

16 \textbf{RSCI}s – Reduced slot cycle index.

17 \textbf{RT} – Inter-probe backoff. The delay in slots generated (pseudorandomly) by the mobile station following an unacknowledged access probe.

18 \textbf{RTC\_NOM\_PWR}s – Reverse Traffic Channel Nominal Power. The nominal power to be used by the mobile station for its initial transmission on the Reverse Traffic Channel when Direct Channel Assignment is used.

19 \textbf{RTC\_NOM\_PWR\_USE\_IND} – Reverse Traffic Channel Nominal Power Used Indicator. Indicates if the mobile station uses RTC\_NOM\_PWRs. See RTC\_NOM\_PWRs.

20 \textbf{SCC}s – SAT color code for analog channel assignment and CDMA-to-analog handoff.
SCAM_FOR_DURATIONS – Indicator for a specific or an indefinite Forward Supplemental Code Channel assignment duration.

SCAM_FOR_ORDERS – The stop or start command set by a Supplemental Channel Assignment Message that is linked to a General Handoff Direction Message.

SCAM_REV_DURATIONS – Indicator for a specific or an indefinite Reverse Supplemental Code Channel assignment duration.

SCH_BAD_FRAMES – Forward Supplemental Channel bad frames count. The number of received bad Forward Supplemental Channel frames.

SCH_TOT_FRAMES – Total Forward Supplemental Channel frames received. The total number of received Forward Supplemental Channel frames, counted for Forward Traffic Channel power control.

SCRM_SEQ_NUMS – Storage variable containing the most recently transmitted Supplemental Channel Request Message sequence number.

SEARCH_MODES – Search mode to be used in a periodic search on the Candidate Frequency.

SEARCH_OFFSETS – Time offset of the start of the first search from the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that starts a search.

SEARCH_PERIODS – Period for search on the Candidate Frequency.

SEARCH_PRIORITYs – Neighbor Pilot Channel search priority.

SEARCH_PRIORITY_INCLs – Search priorities included indicator.

SEARCH_TIME_RESOLUTIONS – Unit of delay used in the Candidate Frequency Search Report Message to report the total and maximum times away from the Serving Frequency.

SENDING_BSPMs – BCMC Service Parameters Message is being transmitted indicator.

SENDING_RANDs – ANSI-41 RAND Message sent indicator.

SERV_NEGs – Service negotiation indicator. Indicates whether the mobile station is to use service negotiation or service option negotiation.

SERV_REQ_NUMs – Service request sequence number. Sequence number to use when requesting a new service configuration.

SERVSYSs – Selected serving system indicator for Band Class 0. Set to SYS_A if the mobile station operates in system A; otherwise, set to SYS_B.

SETTING_SEARCH_WIN – SRCH_WIN_NGHBR Setting flag. Set to ‘1’ if the mobile station shall set the SRCH_WIN_NGHBR field of each NGHBR_REC to SEARCH_WIN_Ns for all NGHBR_SET_SIZEs entries upon receiving the System Parameters Message.

SF_ADD_INTERCEPTs – Intercept of the handoff add criterion for the Serving Frequency, stored during hard handoff.

SF_CDMABANDs – Serving Frequency CDMA band class, stored during hard handoff.
SF_CDMACHs – Serving Frequency CDMA Channel number, stored during hard handoff.

SF_CODE_CHAN_LISTs – Serving Frequency Code Channel List, stored during hard handoff.

SF_DROP_INTERCEPTs – Intercept of the handoff drop criterion for the Serving Frequency, stored during hard handoff.

SF_ENCRYPT_MODEs – Message encryption indicator for the Serving Frequency, stored during hard handoff.

SF_FRAME_OFFSETs – Traffic Channel frame offset used on the Serving Frequency, stored during hard handoff.

SF_NOM_PWRs – Nominal transmit power offset used on the Serving Frequency, stored during hard handoff.

SF_NOM_PWR_EXTs – Extended nominal transmit power offset indicator for the Serving Frequency, stored during hard handoff.

SF_P_REVs – Protocol revision level supported by the base station on the Serving Frequency.

SF_P_REV_IN_USEs – Protocol revision level currently used by the mobile station on the Serving Frequency.

SF_PLCM_TYPEs – Public long code mask type for the Serving Frequency, stored during hard handoff.

SF_PLCM_39s – 39-bit public long code mask specified by the base station for the Serving Frequency, stored during hard handoff.

SF_PRIVATE_LCMs – Private long code mask indicator for the Serving Frequency, stored during hard handoff.

SF_PVTLCM_42s – Private long code mask for the Serving Frequency, stored during hard handoff.

SF_SERV_NEGs – Service negotiation indicator for the Serving Frequency, stored during hard handoff.

SF_SERVICE_CONFIGs – Service configuration (service configuration record and non-negotiable service configuration record) for the Serving Frequency.

SF_SOFT_SLOPEs – Slope of the handoff add/drop criterion for the Serving Frequency, stored during hard handoff.

SF_SRCH_WIN_As – Search window size for the Active Set and Candidate Set used on the Serving Frequency, stored during hard handoff.

SF_SRCH_WIN_Ns – Search window size for the Neighbor Set used on the Serving Frequency, stored during hard handoff.

SF_SRCH_WIN_Rs – Search window size for the Remaining Set used on the Serving Frequency, stored during hard handoff.
\textbf{SF}_T_{ADDs} – Pilot detection threshold used on the Serving Frequency, stored during hard handoff.

\textbf{SF}_T_{COMP}s – Active Set versus Candidate Set comparison threshold used on the Serving Frequency, stored during hard handoff.

\textbf{SF}_T_{DROP}s – Pilot drop threshold used on the Serving Frequency, stored during hard handoff.

\textbf{SF}_T_{TDROP}s – Pilot drop timer value used on the Serving Frequency, stored during hard handoff.

\textbf{SF}_T_{TDROP\_RANGE}s – Pilot drop timer range value used on the Serving Frequency, stored during hard handoff.

\textbf{SF\_TOTAL\_EC\_THRESH}s – Threshold for total $E_c$ of pilots in the Serving Frequency Active Set used in the Candidate Frequency periodic search procedures.

\textbf{SF\_TOTAL\_EC\_IO\_THRESH}s – Threshold for total $E_c/I_o$ of pilots in the Serving Frequency Active Set used in the Candidate Frequency periodic search procedures.

\textbf{SIDs} – System identifier.

\textbf{SID\_NID\_LIST}s – Registration SID, NID list. The SID, NID pairs in which the mobile station has registered.

\textbf{SLOT\_CYCLE\_INDEX}s – Slot cycle index. This is a signed parameter that can take values between -4 and +7, inclusive. It is computed from the SLOT\_CYCLE\_INDEX\_REG, and bounded by the minimum and maximum slot cycle indices allowed by the current base station.

\textbf{SLOT\_CYCLE\_INDEX\_REG} – Slot cycle index registered. This is a signed parameter that can take values between -4 and +7, inclusive. It is computed based on the slot cycle index value included in the last registration attempt.

\textbf{SLOT\_NUM} – Paging Channel or Forward Common Control Channel slot number.

\textbf{SOFT\_SLOPE}s – The slope in the inequality criterion for adding a pilot to the Active Set, or dropping a pilot from the Active Set.

\textbf{SO\_REQ}s – Service option request number. The number of the service option requested by the mobile station during service option negotiation.

\textbf{SR1\_BRAT\_NON\_TD}s – Spreading Rate 1 Primary Broadcast Control Channel data rate with no transmit diversity.

\textbf{SR1\_BRAT\_TD}s – Spreading Rate 1 Primary Broadcast Control Channel data rate with transmit diversity.

\textbf{SR1\_CRAT\_NON\_TD}s – Spreading Rate 1 coding rate with no transmit diversity.

\textbf{SR1\_CRAT\_TD}s – Spreading Rate 1 coding rate with transmit diversity.

\textbf{SR1\_TD\_MODE}s – Spreading Rate 1 transmit diversity mode in support of OTD or STS.

\textbf{SR1\_TD\_LEVEL}s – Spreading Rate 1 transmit diversity power level.
SR3_BRAT – Data rate of the Broadcast Control Channel on SR3 frequencies.
SR3_PRIMARY_PILOT – Frequency offset of the primary SR3 pilot.
SR3_PILOT_POWER1 – 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 power level of the primary pilot with respect to the pilot on the higher frequency of the two remaining SR3 frequencies.
SRCH_OFFSET_INCL – Neighbor pilot search window offset included indicator.
SRCH_OFFSET_NGHBR – Neighbor pilot search window offset.
SRCH_WIN_A – Search window size for the Active Set and Candidate Set.
SRCH_WIN_NGHBR – Neighbor Pilot Channel search window size.
SRCH_WIN_NGHBR_INCL – Neighbor Pilot Channel search window size included indicator.
SRCH_WIN_N – Search window size for the Neighbor Set.
SRCH_WIN_R – Search window size for the Remaining Set.
START_TIME_UNIT – A stored variable in the mobile station which contains the time unit used for determining FOR_SCH_START_TIME and REV_SCH_START_TIME on Supplemental Channels.
SYNC_ID – Service Configuration Synchronization Identifier identifying the service configuration currently in use (i.e. Service Configuration information record and Non-negotiable Service Configuration information record).
SYS_PAR_MSG_SEQ – System Parameters Message sequence number.
SYS_TIME – Current value of CDMA system time as received in the Sync Channel Message.
TA – Acknowledgment response timeout.
T_ADD – Pilot detection threshold. The stored value is a positive value in units of 0.5 dB.
T_COMP – Active Set versus Candidate Set comparison threshold. The stored value is a positive value in units of 0.5 dB.
T_DROP – Pilot drop threshold. The stored value is a positive value in units of 0.5 dB.
T_TDROP_RANGE – Pilot drop timer range value.
T_SLOTTED – Slotted timer, used for the slotted timer feature.
TAG – Transaction identifier. This is a 4-bit parameter maintained by the mobile station which is used to uniquely identify a new call origination (via an Enhanced Origination Message) by the mobile station. When the mobile station is to send an Enhanced Origination Message, the mobile station increments the stored value of TAG and includes it in the message.
TAG_OUTSTANDING_LIST – List of outstanding TAG values. This corresponds to those values of TAG sent in the Enhanced Origination Message which have neither been accepted by the base station (by assigning the requested call) nor rejected by the base station.

TBR_RAND_SUPPR_ENABLEs – Flag to indicate if suppression of timer-based registration randomization based upon frequent implicit registrations is enabled.

TBR_RAND_WINDOWs – Indicates the window over which the next timer-based registration following call release is randomized.

TEMP_SUBs – User Zone temporary subscription flag.

TF_CDMABANDs – Target Frequency CDMA band class. The CDMA band class specified in the Extended Handoff Direction Message or the General Handoff Direction Message.

TF_CDMACHs – Target Frequency CDMA Channel number. The CDMA Channel number specified in the Extended Handoff Direction Message or the General Handoff Direction Message.

TF_RESET_FPCs – Flag to initialize the Forward Traffic Channel power control counters on the Target Frequency.

TF_RESET_L2s – Flag to reset acknowledgment procedures on the Target Frequency.

TF_T_ADDs – Pilot detection threshold to be used on the Target Frequency. The stored value is a positive value in units of 0.5 dB.

TF_WAIT_TIMEs – Maximum time that the mobile station may wait to receive a period of \((N_{11m} \times 20)\) ms with sufficient signal quality on the CDMA Target Frequency.

TKZ_IDs – Tracking zone identifier used while in tracking zone mode.

TKZ_LIST_LENs – Number of tracking zone identifiers to be maintained in the tracking zone list while in tracking zone mode.

TKZ_MAX_NUM_MSGs – The maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in the tracking zone mode.

TKZ_MODE_ENABLED – Flag that indicates whether the tracking zone mode is currently enabled at the mobile station.

TKZ_MODE_PENDING – Flag that indicates whether the tracking zone mode is currently pending at the mobile station. If the tracking zone mode is pending, then it becomes enabled when the radio environment reporting mode is disabled.

TKZ_MODE_SUPPORTEDs – Base station support of tracking zone mode indicator.

TKZ_LIST – Tracking zone list. A list of most recent TKZ_IDs that the mobile station has received while in the tracking zone mode.

TMSI_ZONEs – TMSI zone number of the base station.

TMSI_ZONE_LENs – The number of octets in TMSI zone.

T_MULCHANs – The threshold offset that the mobile station is to use when reporting...
neighbor pilot strength measurements in a Supplemental Channel Request Message. The stored value is a positive value in units of 0.5 dB.

TOTAL_PUF_PROBES_s – Maximum number of PUF probes transmitted in a PUF attempt.

TOTAL_ZONES_s – Number of registration zones to be retained in ZONE_LIST_s.

TOT_FRAMES_s – Total Forward Fundamental Channel frames received. The total number of received Forward Fundamental Channel frames, counted for Forward Traffic Channel power control.

TX_PWR_LIMIt_s – Transmit Power Limit. If the mobile station is operating in the 1915MHz – 1920MHz block of the PCS band, the mobile station is to limit its transmission power to no more than the value indicated by this field.

T_TDROP_s – Pilot drop timer value.

USE_ERAM_s – Use ERAM indicator. Indicates whether ERAM is to be used on the flexible and variable data rate Supplemental Channel with turbo codes in RC4 and RC5 Forward Link and RC4 Reverse Link.

USE_FOR_HDM_SEQ_s – Storage variable containing a flag indicating a pending Supplemental Channel Assignment Message forward assignment that is linked to a General Handoff Direction Message.

USE_REV_HDM_SEQ_s – Storage variable containing a flag indicating a pending Supplemental Channel Assignment Message reverse assignment that is linked to a General Handoff Direction Message.

USE_T_ADD_ABORT_s – A storage variable in the mobile station that contains the Reverse Supplement Code Channel assignment T_ADD abort indicator.

USE_TMSI_s – Base station’s preference of the use of TMSI.

USER_ZONE_ID_s – User Zone Identification Message sent indicator.

USER_ZONE_ID_MSG_SEQ_s – User Zone Identification Message sequence number.

UZ_EXIT_IN_USE_s – The User Zone Exit parameter that the mobile station received from the User Zone Identification Message broadcast by the last base station of the old user zone.

UZ_EXIT_RCVD_s – The User Zone Exit parameter that the mobile station just received from the User Zone Identification Message broadcast by the currently serving base station.

UZID_s – User Zone identifier.

UZ_REC – Record containing information about a User Zone broadcast by the base station (see also UZ_REC_LIST).

UZ_REC_LIST – Broadcast User Zone record list. A descriptive structure used to manage the base station’s information records about broadcast User Zones (see also UZ_REC).

UZ_REVs – User Zone update revision number.

VMAC_s – Analog voice mobile station attenuation code for analog channel assignment or CDMA-to-analog handoff.
1  **ZONE_LIST**s – Registration zone list. List of zones in which the mobile station has
2  registered.
3  **ZONE_TIMER**s – Zone timer length.
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.

![cdma2000 Signaling – General Architecture](image)

1.3.2 Interface to Layer 2

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

The MCSB is a parameter block for the defined primitives, containing relevant information about an individual Layer 3 message (PDU), as well as instructions on how the message may be handled or how it is to be (for transmission), or was (for reception), processed by Layer 2. The MCSB is a conceptual construct and is not subject to detailed specification in this document; see [4] for more information on the content of the MCSB.

1.3.2.2 Interface Primitives

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

Name: **L2-Data.Request**

Type: Request

Direction: Layer 3 to Layer 2

Parameters: PDU, MCSB

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

Name: **L2-Data.Confirm**

Type: Confirm

Direction: Layer 2 to Layer 3

Parameters: MCSB

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

Name: **L2-Data.Indication**

Type: Indication

Direction: Layer 2 to Layer 3

Parameters: PDU, MCSB

Action: The received PDU is handed to Layer 3.

Name: **L2-Condition.Notification**

Type: Indication

Direction: Layer 2 to Layer 3

Parameters: MCSB

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

**Name:** L2-Supervision.Request  
**Type:** Request  
**Direction:** Layer 3 to Layer 2  
**Parameters:** MCSB  
**Action:** Layer 2 executes a control command as directed by Layer 3. This could be, for example, an order to abandon retransmission of a message or an order for local reset for the message sequence number, acknowledgment sequence number and duplicate detection.

1.3.3 Reserved

1.3.4 Functional Description

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

1.3.5 PDU Transmission and Reception

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

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

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

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

Layer 3 can also request Layer 2 to perform a reset of the Layer 2 ARQ procedures (for example, by using the L2-Supervision.Request primitive).
No text.
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). 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.

<table>
<thead>
<tr>
<th>MCC</th>
<th>MNC</th>
<th>MSIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 digits</td>
<td>NMSI</td>
<td>IMSI (≤15 digits)</td>
</tr>
</tbody>
</table>

- MCC: Mobile Country Code
- MNC: Mobile Network Code
- MSIN: Mobile Station Identifier Number
- NMSI: National Mobile Station Identity
- IMSI: International Mobile Station Identity

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).

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8 See [18].
IMSI_M is an IMSI that contains a MIN in the lower ten digits of the NMSI. An IMSI_M is always a class 0 IMSI. If the IMSI_M is not programmed, the mobile station shall set the four least-significant digits of the IMSI_M to the value of the ESN_p, converted directly from binary to decimal, modulo 10000, and the mobile station shall set the other digits to 0.

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

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

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

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

The mobile station shall have memory to store the 34-bit IMSI_M_S p and the 34-bit IMSI_T_S p. IMSI_M_S p is represented by the 10-bit IMSI_M_S2 p and the 24 bit IMSI_M_S1 p. IMSI_T_S p is represented by the 10-bit IMSI_T_S2 p and the 24 bit IMSI_T_S1 p.

<table>
<thead>
<tr>
<th>First 3 Digits</th>
<th>Second 3 Digits</th>
<th>Thousands Digit</th>
<th>Last 3 Digits</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXX</td>
<td>XXX</td>
<td>X</td>
<td>XXX</td>
</tr>
</tbody>
</table>

**Figure 2.3.1-2. IMSI_S Binary Mapping**

When an IMSI has 15 digits, IMSI_11_12 is equal to the 11th and 12th digits of the IMSI. When an IMSI has fewer than 15 digits, zeros are added to the most significant side of
MSIN to obtain a 15-digit padded IMSI; the IMSI_11_12 is equal to the 11th and 12th digits of the resulting number.

IMSI_11_12 is encoded as described in 2.3.1.2. The mobile station shall have memory to store the 7-bit IMSI_M_11_12 and the 7-bit IMSI_T_11_12.

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

If the mobile station has a class 1 IMSI_T, it shall have memory to store IMSI_T_ADDR_NUM. IMSI_T_ADDR_NUM is equal to the number of digits in the NMSI minus four.

2.3.1.1 Encoding of IMSI_M_S and IMSI_T_S

The IMSI_M_S and IMSI_T_S binary mapping is defined as follows:

1. The first three digits of the IMSI_M_S and the first three digits of the IMSI_T_S are mapped into ten bits (corresponding to IMSI_M_S2 and IMSI_T_S2, respectively) by the following coding algorithm:

   a. Represent these three digits as D1 D2 D3 with the digit equal to zero being given the value of ten.
   b. Compute $100 \times D_1 + 10 \times D_2 + D_3 - 111$.
   c. Convert the result in step b to binary by the standard decimal-to-binary conversion as shown in Table 2.3.1.1-1.

9 It is assumed that the number of digits in NMSI is greater than three.
2. The second three digits of IMSI_M_S and the second three digits of IMSI_T_S are mapped into the ten most significant bits of IMSI_M_S1p and IMSI_T_S1p, respectively, by the coding algorithm indicated in 1.

3. The last four digits of IMSI_M_S and the last four digits of IMSI_T_S are mapped into the 14 least significant bits of IMSI_M_S1p and IMSI_T_S1p, respectively, as follows:

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

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

---

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

<table>
<thead>
<tr>
<th>Decimal Number</th>
<th>Binary Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0000000000</td>
</tr>
<tr>
<td>1</td>
<td>0000000001</td>
</tr>
<tr>
<td>2</td>
<td>0000000010</td>
</tr>
<tr>
<td>3</td>
<td>0000000011</td>
</tr>
<tr>
<td>4</td>
<td>0000000100</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>998</td>
<td>1111100110</td>
</tr>
<tr>
<td>999</td>
<td>1111100111</td>
</tr>
</tbody>
</table>
Table 2.3.1.1-2. BCD Mapping

<table>
<thead>
<tr>
<th>Decimal Digit</th>
<th>Binary Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0001</td>
</tr>
<tr>
<td>2</td>
<td>0010</td>
</tr>
<tr>
<td>3</td>
<td>0011</td>
</tr>
<tr>
<td>4</td>
<td>0100</td>
</tr>
<tr>
<td>5</td>
<td>0101</td>
</tr>
<tr>
<td>6</td>
<td>0110</td>
</tr>
<tr>
<td>7</td>
<td>0111</td>
</tr>
<tr>
<td>8</td>
<td>1000</td>
</tr>
<tr>
<td>9</td>
<td>1001</td>
</tr>
<tr>
<td>0</td>
<td>1010</td>
</tr>
</tbody>
</table>

The following example illustrates the IMSI_T_S2p and IMSI_T_S1p calculation procedure.

Let the IMSI_T be the 9-digit number 123456789. Since the IMSI_T has fewer than ten
digits, the nine least significant digits of the IMSI_T_S are equal to the IMSI_T digits and
the most significant IMSI_T_S digit is set to zero. So the 10-digit IMSI_T_S is 012 345 6 789. IMSI_T_S2p and IMSI_T_S1p are calculated as follows:

- **IMSI_T_S2p.** The ten-bit IMSI_T_S2p is derived from the first three digits of the
  IMSI_T_S (i.e., 012):
  a. D1 = 10; D2 = 1; D3 = 2.
  b. $100 \times D1 + 10 \times D2 + D3 - 111 = 100 \times 10 + 10 \times 1 + 2 - 111 = 901$.
  c. 901 in binary is ‘11 1000 0101’.
  Therefore, IMSI_T_S2p is ‘11 1000 0101’.

- **IMSI_T_S1p.** The ten most significant bits of IMSI_T_S1p are derived from the
  second three digits of the IMSI_T_S (i.e., 345):
  a. D1= 3; D2 = 4; D3 = 5.
  b. $100 \times D1 + 10 \times D2 + D3 - 111 = 100 \times 3 + 10 \times 4 + 5 - 111 = 234$.
  c. 234 in binary is ‘0011 1010 10’.

The next four most significant bits of IMSI_T_S1p are derived from the thousands digit of
the IMSI_T_S (i.e., 6) by BCD conversion: 6 in BCD is ‘0110’.

The ten least significant bits of IMSI_T_S1p are derived from the last three digits of the
IMSI_T_S (i.e., 789):

a. D1 = 7; D2 = 8; D3 = 9.

b. $100 \times D1 + 10 \times D2 + D3 - 111 = 100 \times 7 + 10 \times 8 + 9 - 111 = 678$.  

2-5
2.3.1.2 Encoding of IMSI_M_11_12 and IMSI_T_11_12

The IMSI_M_11_12 and IMSI_T_11_12 binary mapping is defined as follows:

1. Represent the 11th digit as D_{11} and the 12th digit as D_{12} with the digit equal to zero being given the value of ten.

2. Compute \(10 \times D_{12} + D_{11} - 11\).

3. Convert the result in step 2 to binary by a standard decimal-to-binary conversion as described in Table 2.3.1.1-1 and limit the resulting number to the 7 least significant bits.

2.3.1.3 Encoding of the MCC_M and MCC_T

The MCC_M and MCC_T binary mapping is defined as follows:

1. Represent the 3-digit Mobile Country Code as D_1 D_2 D_3 with the digit equal to zero being given the value of ten.

2. Compute \(100 \times D_1 + 10 \times D_2 + D_3 - 111\).

3. Convert the result in step (2) to binary by a standard decimal-to-binary conversion as described in Table 2.3.1.1-1.

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

The mobile station shall be configured with 32-bit ESN or 56-bit MEID, but not both. All mobile stations with MOB_P_REV_p less than 11 shall be configured with ESN. All mobile stations with MOB_P_REV_p greater than or equal to 11 shall be configured with MEID. The ESN or MEID is used to uniquely identify a mobile station in a wireless system.

2.3.2.1 Electronic Serial Number (ESN)

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

2.3.2.2 Mobile Equipment Identifier (MEID)

The MEID value is available to procedures in the mobile station as the value of the variable
MEID\textsubscript{p}. If the mobile station is configured with MEID, ESN\textsubscript{p} stores 32-bit pseudo-ESN value derived from MEID as defined in 2.3.2.2.1.

2.3.2.2.1 Pseudo-ESN

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

Mobile station shall use the following procedure to derive pseudo-ESN from MEID\textsuperscript{10}:

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

2.3.2.3 R-UIM Identifier (UIM\_ID)

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

2.3.3 Station Class Mark

Class-of-station information referred to as the station class mark (SCM\textsubscript{p}) must be stored in a mobile station. The digital representation of this class mark is specified in Table 2.3.3-1.

\textsuperscript{10} 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

<table>
<thead>
<tr>
<th>Function</th>
<th>Bit(s)</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended SCM Indicator</td>
<td>7</td>
<td>Band Classes 1, 4, 14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1XXXXXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other bands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0XXXXXXXX</td>
</tr>
<tr>
<td>Dual Mode</td>
<td>6</td>
<td>CDMA Only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X0XXXXXXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dual Mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X1XXXXXXXX</td>
</tr>
<tr>
<td>Slotted Class</td>
<td>5</td>
<td>Non-Slotted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XX0XXXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Slotted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XX1XXXXX</td>
</tr>
<tr>
<td><strong>MEID support indicator</strong>&lt;sup&gt;11&lt;/sup&gt; IS-54 Power Class</td>
<td>4</td>
<td>Always 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXX0XXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEID not configured</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXX0XXXX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MEID configured</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXX1XXXX</td>
</tr>
<tr>
<td>25 MHz Bandwidth</td>
<td>3</td>
<td>Always 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXX1XXX</td>
</tr>
<tr>
<td>Transmission</td>
<td>2</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXX0XX</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Discontinuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXX1XX</td>
</tr>
<tr>
<td>Power Class for Band Class 0 Analog Operation</td>
<td>1-0</td>
<td>Class I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXXXX00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class II</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXXXX01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Class III</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXXXX10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reserved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>XXXXXXX11</td>
</tr>
</tbody>
</table>

If the mobile station supports analog mode operation in Band Class 0, the mobile station shall set the Power Class function bits to reflect its analog power class at Band Class 0, regardless of the band class in which it is operating; otherwise, the mobile station shall set these 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<sub>s-p</sub> (see 2.6.5.1.5 and 2.6.5.5). This stored element shall include both

---

<sup>11</sup> The corresponding bit ‘4’ was previously defined as the IS-54 Power Class which was always set to ‘0’. The base station uses this field to identify mobile stations that comply with [47].
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_LISTs-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_LISTs-p (see 2.6.5.1.5 and 2.6.5.5). 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 SID_NID_LISTs-p shall be deleted upon power-on.

The mobile station shall have memory to store the distance-based registration variables BASE_LAT_REGs-p, BASE_LONG_REGs-p, and REG_DIST_REGs-p (see 2.6.5.1.4 and 2.6.5.5). 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 REG_DIST_REGs-p shall be set to zero upon power-on.

2.3.5 Access Overload Class

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

The mobile station shall store 4-bit access overload class (ACCOLC_p). Mobile stations that are not for test or emergency use should be assigned to overload classes ACCOLC 0 through ACCOLC 9. For mobile stations that are classified as overload classes ACCOLC 0 through ACCOLC 9, the mobile station’s 4-bit access overload class indicator (ACCOLC_p) shall be automatically derived from the last digit of the associated decimal representation of the IMSI_M by a decimal to binary conversion as specified in Table 2.3.5-1. When a mobile station’s IMSI_M is updated, the mobile station shall re-calculate the ACCOLC_p as indicated above. Mobile stations designated for test use should be assigned to ACCOLC 10; mobile stations designated for emergency use should be assigned to ACCOLC 11. ACCOLC 12 through ACCOLC 15 are reserved. Programming the 4-bit ACCOLC_p for overload classes ACCOLC 10 through ACCOLC 15 as specified in Table 2.3.5-2 shall require a special facility only available to equipment manufacturers and system operators.

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

---

12 For more information, refer to [28].
Table 2.3.5-1. ACCOLCp Mapping for ACCOLC 0 through ACCOLC 9

<table>
<thead>
<tr>
<th>Last Digit of the Decimal Representation of the IMSI (decimal)</th>
<th>ACCOLCp</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0000</td>
</tr>
<tr>
<td>1</td>
<td>0001</td>
</tr>
<tr>
<td>2</td>
<td>0010</td>
</tr>
<tr>
<td>3</td>
<td>0011</td>
</tr>
<tr>
<td>4</td>
<td>0100</td>
</tr>
<tr>
<td>5</td>
<td>0101</td>
</tr>
<tr>
<td>6</td>
<td>0110</td>
</tr>
<tr>
<td>7</td>
<td>0111</td>
</tr>
<tr>
<td>8</td>
<td>1000</td>
</tr>
<tr>
<td>9</td>
<td>1001</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Overload Class (decimal)</th>
<th>ACCOLCp</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1010</td>
</tr>
<tr>
<td>11</td>
<td>1011</td>
</tr>
<tr>
<td>12</td>
<td>1100</td>
</tr>
<tr>
<td>13</td>
<td>1101</td>
</tr>
<tr>
<td>14</td>
<td>1110</td>
</tr>
<tr>
<td>15</td>
<td>1111</td>
</tr>
</tbody>
</table>

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. When using the Private Long Code Mask, the value of PLCM_TYPE is maintained unless updated by the base station.

2.3.6.1 Public Long Code Mask Formats

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

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

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

If PLCM_TYPEs is equal to ‘0000’ and P_REV_IN_USEs is less than 11, the 37 least significant bits (PLCM_37) are set as follows:

- Bits M36 through M32 shall be set to ‘11000’;
- Bits M31 through M0 shall be set to a permutation of the mobile station’s ESN as follows:

  $\text{ESN} = (E_{31}, E_{30}, E_{29}, E_{28}, E_{27}, E_{26}, E_{25}, \ldots E_{2}, E_{1}, E_{0})$


If PLCM_TYPEs is equal to ‘0000’ and P_REV_IN_USEs is greater than or equal to 11, the 40 least significant bits (PLCM_40) are set as follows:

- Bit M39 shall be set to ‘0’;
- Bits M38 through M0 shall be set as follows:

  The 39 least significant bits of the SHA-1 digest of the MEID\(^{\text{13}}\). See [41] for the specification of the SHA-1 algorithm.

If PLCM_TYPEs is equal to ‘0001’, the 40 least significant bits (PLCM_40) are set as follows:

- Bit M39 shall be set to ‘1’;
- Bits M38 through M0 of the public long code mask shall be specified by PLCM_39s and shall be set as follows:

  $\text{PLCM}_{39s} = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \ldots P_{2}, P_{1}, P_{0})$

If ADD_PLCM_FOR_FCH_TYPEs is equal to ‘1’, the 40 least significant bits (ADD_PLCM_FOR_FCH_40) are set as follows:

- Bit M39 shall be set to ‘1’;

---

\(^{13}\) Example: if the 56-bit MEID is (hexadecimal) FF 00 00 01 12 34 56, the bits M38 through M0 of PLCM are (hexadecimal) 1A 0E 07 37 E1, i.e. (binary) 001 1010 0000 1110 0000 0111 0011 0111 1110 0001.\(^{13}\)
• Bits $M_{38}$ through $M_0$ of the public long code mask shall be specified by ADD_PLCM_FOR_FCH_39s and shall be set as follows:

\[
\text{ADD_PLCM_FOR_FCH_39s} = (P_{38}, P_{37}, P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, \ldots P_2, P_1, P_0)
\]

If ADD_PLCM_FOR_SCH_TYPEs is equal to ‘1’, the 40 least significant bits (ADD_PLCM_FOR_SCH_3540) are set as follows:

- Bit $M_{39}$ shall be set to ‘1’;
- Bits $M_{34}$ through $M_0$ of the public long code mask shall be specified by ADD_PLCM_FOR_SCH_3540s and shall be set as follows:

\[
\text{ADD_PLCM_FOR_SCH_3540s} = (P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, \ldots P_2, P_1, P_0)
\]

If PLCM_TYPEs is equal to ‘0010’, the 37 least significant bits (PLCM_37) are set as follows:

- Bits $M_{36}$ through $M_{34}$ shall be set to ‘001’;
- Bits $M_{33}$ through $M_0$ shall be set to IMSI_O_S.

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

- Bits $M_{36}$ through $M_{34}$ shall be set to ‘000’;
- Bits $M_{33}$ through $M_0$ shall be set to IMSI_O_S.

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

- Bit $M_{39}$ shall be set to ‘0’;
- Bits $M_{38}$ through $M_0$ shall be set as follows:

  - The 39 least significant bits of the SHA-1 digest of the MEID. See [41] for the specification of the SHA-1 algorithm.

2.3.6.1.1 Public Long Code Mask PLCM_42, ADD_PLCM_FOR_FCH_42 and ADD_PLCM_FOR_SCH_42

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

If PLCM_40 is defined, the public long code mask PLCM_42 shall be as follows: bits $M_{39}$ through $M_0$ of the public long code mask shall be specified by PLCM_40 (see 2.3.6.1). Bits $M_{41}$ through $M_{40}$ shall be set to ‘10’. The resulting public long code mask PLCM_42 is

---

14 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 0110 0001'.
shown in Figure 2.3.6.1-1 (b).

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

If ADD_PLCM_FOR_SCH_3540 is defined, the public long code mask ADD_PLCM_FOR_SCH_42 shall be as follows: bits M34 through M0 of the public long code mask shall be specified by ADD_PLCM_FOR_SCH_3540 (see 2.3.6.1). Bits M41 through M3540 shall be set to ‘110111110’. The resulting public long code mask ADD_PLCM_FOR_SCH_42PLCM_42 is shown in Figure 2.3.6.1-1 (d).
b) Public Long Code Mask PLCM_42 given PLCM_40

<table>
<thead>
<tr>
<th>41 40 39 ... 37 36 ... 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 000  PLCM_37</td>
</tr>
</tbody>
</table>

a) Public Long Code Mask PLCM_42 given PLCM_37

<table>
<thead>
<tr>
<th>41 40 39 ... 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>10  PLCM_40</td>
</tr>
</tbody>
</table>

b) Public Long Code Mask PLCM_42 given PLCM_40

<table>
<thead>
<tr>
<th>41 40 39 ... 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>10  ADD_PLMC_FOR_FCH_40</td>
</tr>
</tbody>
</table>

c) Public Long Code Mask ADD_PLMC_FOR_FCH_42 given ADD_PLMC_FOR_FCH_40

<table>
<thead>
<tr>
<th>41 40 39 ... 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>10  ADD_PLMC_FOR_SCH_40</td>
</tr>
</tbody>
</table>

d) Public Long Code Mask ADD_PLMC_FOR_SCH_42 given ADD_PLMC_FOR_SCH_40
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

Figure 2.3.6.1-1. Public Long Code Mask PLCM_42, ADD_PLCM_FOR_FCH_42, or ADD_PLCM_FOR_SCH_42 Format

2.3.6.2 Private Long Code Mask PVTLCM_42

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. The private long code mask is not to be changed during a call. 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.
2.3.7 Reserved

2.3.8 Home System and Network Identification

In addition to the HOME_SIDp parameter that the mobile station stores for 800 MHz analog operation, the mobile station shall provide memory to store at least one home (SIDp, NIDp) pair. The mobile station shall also provide memory to store the 1-bit parameters MOB_TERM_HOMEp, MOB_TERM_FOR_SIDp, and MOB_TERM_FOR_NIDp (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 Preferred CDMA or Analog

If the mobile station supports operation in Band Class 0 (see [2]), a means may be provided within the mobile station to identify the preferred operation type as either CDMA mode or analog mode. In addition, the mobile station may provide a means for allowing operation only in the preferred mode.

2.3.11 Discontinuous Reception

The mobile station shall provide memory to store the preferred slot cycle index, SLOT_CYCLE_INDEXp (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

<table>
<thead>
<tr>
<th>Procedure</th>
<th>RAND_CHALLENGE</th>
<th>ESN</th>
<th>AUTH_DATA</th>
<th>SSD_AUTH</th>
<th>SAVE_REGISTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Challenge (2.3.12.1.4)</td>
<td>RANDU and 8 LSBs of IMSI_S2</td>
<td>ESNp</td>
<td>IMSI_S1</td>
<td>SSD_A</td>
<td>TRUE if GEN_CMEAKEY is set to 1 in the AUCM; otherwise FALSE</td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>Contents</th>
<th>SSD_A</th>
<th>SSD_B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length (bits)</td>
<td>64</td>
<td>64</td>
</tr>
</tbody>
</table>

### 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.

RANDs 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 (COUNTs-p)

COUNTs-p is a modulo-64 count held in the mobile station. COUNTs-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 Authentication Challenge Message, the mobile station shall set the input parameters of the Auth_Signature procedure (see [23] section 2.3) as illustrated in Figure 2.3.12.1.5-3. The 24 most significant bits of the RAND_CHALLENGE input parameter shall be filled with RANDU, and the 8 least significant bits of RAND_CHALLENGE shall be filled with the 8 least significant bits of IMSI_S2.

The mobile station shall set the SAVE_REGISTERS input parameter to TRUE if the GEN_CMEAKEY field is set to ‘1’ and FALSE if the GEN_CMEAKEY is set to ‘0’.

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

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

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

- If neither encryption nor integrity protection is turned on and mobile station wants to turn on encryption or integrity protection or both.

- If the encryption or integrity protection is turned on and mobile station wants to switch to new keys based on new SSD.

the mobile station shall perform the following procedures:

- If MSG_INTEGRITY_SUPs is equal to ‘1’, the mobile station then associates a pending key id NEW_KEY_ID with the pending CMEAKEY.
• The mobile station shall send a Security Mode Request Message. If
MSG_INTEGRITY_SUPs is equal to ‘0’, the mobile station shall select a 24-bit
number and include this number in the NEW_SSEQ_H field in the Security Mode
Request Message; otherwise, the mobile station shall select a 24-bit number and
deliver this number to the LAC Layer along with the Security Mode Request Message.

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

2.3.12.1.5 Updating the Shared Secret Data (SSD)

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

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

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

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

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

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

The mobile station and base station shall set the SAVE_REGISTERS input parameter to
FALSE.
The mobile station and base station shall execute the Auth_Signature procedure. AUTHBS is set to the 18-bit result AUTH_SIGNATURE. The base station sends its computed value of AUTHBS to the mobile station in a *Base Station Challenge Confirmation Order* on the f-csch or the f-dsch.

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.

Upon receipt of the *SSD Update Confirmation Order*, the base station sets SSD_A and SSD_B to the values received from the HLR/AC (see [13]).

If the mobile station fails to receive the *Base Station Challenge Confirmation Order* within T64m seconds of when the acknowledgment to the *Base Station Challenge Order* was received, the mobile station shall discard SSD_A_NEW and SSD_B_NEW. The mobile station shall then terminate the SSD update process.
MOBILE STATION

SSD Update Message

RANDSSD → A-key

SSD_Generation Procedure

SSD_A_NEW

SSD_B_NEW

BASE STATION

RANDSSD → A-key

SSD_Generation Procedure

SSD_B_NEW

SSD_A_NEW

Base Station Challenge Order

RANDBS → (RANDBS)

Auth_Signature Procedure

AUTHBS

AUTHBS = AUTHBS?

SSD Update Confirmation Order (success)
SSD Update Rejection Order (failure)
Figure 2.3.12.1.5-1. SSD Update Message Flow
**Figure 2.3.12.1.5-2. Computation of Shared Secret Data (SSD)**

**Figure 2.3.12.1.5-3. Computation of AUTHBS**
2.3.12.2 Signaling Message Encryption

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

The following is a description of the messages on f-dsch (see 2.3.12.2.1) and r-dsch (see 2.3.12.2.2) that are enciphered using the Cellular Message Encryption Algorithm (see section 2.5.1, [15]) or the Enhanced Cellular Message Encryption Algorithm (see section 2.5.2, [15]), and when ENCRYPT_MODE 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 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 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 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’
- Analog Handoff Direction Message with the MEM field set to ‘1’
- 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’

2-24
• Analog Handoff Direction Message with the MEM field set to ‘0’
• Message Encryption Mode Order with the ENCRYPT_MODE field set to ‘00’

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

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

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

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

• The mobile station and base station shall each maintain an 8-bit encryption sequence counter. The encryption sequence counter shall be incremented modulo 256 for each new encryption. The counter value, hereafter called ES_COUNT, shall be used to form the SYNC parameter of the Enhanced Cellular Message Encryption Algorithm as described below.

• As part of each encryption, an additional octet of value ES_COUNT shall be inserted immediately following the encrypted part of the message. This additional octet shall not be encrypted. The additional octet shall be removed from the message after decryption.

2.3.12.2.1 Encrypted Messages on the f-dsch

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

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

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

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

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

• The DATA_TYPE parameter shall be set to ‘0’.
• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
2. Flash With Information Message (see 3.7.3.3.2.14) and Extended Flash With Information Message (see 3.7.3.3.2.43) are encrypted.

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

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

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

• The DATA_TYPE parameter shall be set to ‘0’.
• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
  – SYNC[1] = RECORD_TYPE

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

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

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE equal to binary ‘10’), the following requirements apply:

• The DATA_TYPE parameter shall be set to ‘0’.
• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
  – SYNC[1] = MSG_TYPE = ‘00001001’

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

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

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE equal to binary ‘10’), the following requirements apply:
• The DATA_TYPE parameter shall be set to ‘0’.
• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
  – SYNC[1] = MSG_TYPE = ‘00000001’

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

  If BURST_TYPE is equal to ‘111110’ or ‘111111’, all CHARi fields after the first two shall be encrypted; otherwise, all CHARi fields shall be encrypted.

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

  If the Cellular Message Encryption Algorithm is used (ENCRYPT_MODEs equal to binary ‘01’), the following requirements apply:
  • If BURST_TYPE is equal to ‘000011’ (SMS) or ‘000100’ (OTASP), the message shall be encrypted.
  • For all other values of BURST_TYPE, the message shall be encrypted only if encryption is required by the service option standard governing use of the Data Burst Message; otherwise, the message shall not be encrypted.

  If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODEs equal to binary ‘10’), the following requirements apply:
  • If BURST_TYPE is equal to ‘000100’ (OTASP), the DATA_TYPE parameter shall be set to ‘0’. Otherwise, the DATA_TYPE parameter shall be set to ‘1’.
  • The SYNC parameter shall be set as follows:
    – SYNC[0] = ES_COUNT
    – SYNC[1] = MSG_TYPE = ‘00000100’

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

  If the LOC_IND field is set to ‘1’, the fields RESERVED (3 bits), MS_LAT (22 bits), MS_LONG (23 bits), and MS_LOC_TSTAMP (24 bits) are encrypted. These fields shall be treated by the encryption procedure as a new single message.

  Otherwise, if the LOC_IND field is set to ‘0’, no fields in this message are encrypted.

  If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODEs equal to binary ‘10’), the following requirements apply:
  • The DATA_TYPE parameter shall be set to ‘1’.
  • The SYNC parameter shall be set as follows:
    – SYNC[0] = ES_COUNT
2.3.12.2.2 Encrypted Messages on the r-dsch

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

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

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

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

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

   • The DATA_TYPE parameter shall be set to '0'.
   • The SYNC parameter shall be set as follows:
     - SYNC[0] = ES_COUNT
     - SYNC[1] = MSG_TYPE = '00011110' for *Origination Continuation Message*
     - SYNC[1] = MSG_TYPE = '00001001' for *Origination Continuation Message*
     - SYNC[1] = MSG_TYPE = '00011010' for *Enhanced Origination Message*

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

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

   • The DATA_TYPE parameter shall be set to '0'.
   • The SYNC parameter shall be set as follows:
     - SYNC[0] = ES_COUNT
2. Flash With Information Message (see 2.7.2.3.2.3) and Extended Flash With Information Message (see 2.7.2.3.2.32) are encrypted.

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

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

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

- The DATA_TYPE parameter shall be set to ‘0’.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES_COUNT
  - SYNC[1] = RECORD_TYPE

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

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

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE equal to binary ‘10’), the following requirements apply:

- The DATA_TYPE parameter shall be set to ‘0’.
- The SYNC parameter shall be set as follows:
  - SYNC[0] = ES_COUNT
  - SYNC[1] = MSG_TYPE = ‘00000111’

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

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

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODE equal to binary ‘10’), the following requirements apply:
• The DATA_TYPE parameter shall be set to ‘0’.

• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
  – SYNC[1] = MSG_TYPE = ‘00000001’

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

If BURST_TYPE is equal to ‘111110’ or ‘111111’, all CHARi fields after the first two shall be encrypted; otherwise, all CHARi fields shall be encrypted.

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

If the Cellular Message Encryption Algorithm is used (ENCRYPT_MODEs equal to binary ‘01’), the following requirements apply:

• If BURST_TYPE is equal to ‘000011’ (SMS) or ‘000100’ (OTASP), the message shall be encrypted.

• For all other values of BURST_TYPE, the message shall be encrypted only if encryption is required by the service option standard governing use of the Data Burst Message; otherwise, the message shall not be encrypted.

If the Enhanced Cellular Message Encryption Algorithm is used (ENCRYPT_MODEs equal to binary ‘10’), the following requirements apply:

• If BURST_TYPE is equal to ‘000100’ (OTASP), the DATA_TYPE parameter shall be set to ‘0’. Otherwise, the DATA_TYPE parameter shall be set to ‘1’.

• The SYNC parameter shall be set as follows:
  – SYNC[0] = ES_COUNT
  – SYNC[1] = MSG_TYPE = ‘0000100’

2.3.12.3 Voice Privacy

Also see [2].

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

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

The transition to private long code mask shall not be performed if authentication is not performed (AUTHs is set to ‘00’ or mobile station unable to perform authentication).
To initiate a transition to the private or public long code mask, either the base station or the mobile station sends a Long Code Transition Request Order on the f-dsch or r-dsch. The mobile station actions in response to receipt of this order are specified in 2.6.4, and the base station actions in response to receipt of this order are specified in 3.6.4.

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

2.3.12.4 Extended Encryption for Signaling Message and User Information

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

Signaling messages or user information shall not be encrypted if authentication is not performed (i.e., when MSG_INTEGRITY_SUPs is equal to ‘0’ and AUTHs is set to ‘00’ (see 2.3.12.1)) or authentication has not been performed (i.e., when MSG_INTEGRITY_SUPs is equal to ‘1’ and the INT_KEY[KEY_ID] is equal to NULL (see 2.3.12.5)).

2.3.12.4.1 Extended Encryption for Signaling Messages

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

All mini messages shall be sent un-encrypted.

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

2.3.12.4.1.1 Extended Encryption for Signaling on f/r-csch

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

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

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

On the r-csch, Registration Message, Page Response Message, Reconnect Message (if sent in response to a General Page Message or a Universal Page Message), Authentication

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

- The base station supports extended encryption;
- C_SIG_ENCRYPT_MODEs is equal to ‘000’ or ENC_KEY[KEY_ID] is equal to NULL;
- C_SIG_ENCRYPT_REQ is set to ‘1’ or D_SIG_ENCRYPT_REQ is set to ‘1’ in the Origination Message;
- The mobile station does not recognize that this is an emergency call.

2.3.12.4.1.2 Extended Encryption for Signaling on f/r-dsch

The initial mode of extended encryption for f/r-dsch signaling messages is established by sending a Channel Assignment Message or Extended Channel Assignment Message with the ENCRYPT_MODE field set to ‘11’ and the D_SIG_ENCRYPT_MODE field set to one of the values specified in Table 3.7.4.5-1. The value of D_SIG_ENCRYPT_MODEr is then stored in D_SIG_ENCRYPT_MODEs.

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

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

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


2.3.12.4.1.3 Signaling Encryption/Decryption Procedures

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

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\( ^{15} \) If ENCRYPT_MODE is set to a value other than ‘11’, see section 2.3.12.2.1.
counters:

- TX_EXT_SSEQ[i][j] (the 32-bit crypto-sync for encryption and message integrity. \( i = 0 \) and \( j = '00' \) to \('11' \))
- RX_EXT_SEQ[i][j] (the 32-bit crypto-sync for decryption and message integrity. \( i = 0 \) and \( j = '00' \) to \('11' \))

The above counters in the base station and the mobile station shall only be initialized by a Registration Accepted Order, Channel Assignment Message, Extended Channel Assignment Message, or Security Mode Command Message in response to a Registration Message, Origination Message, Page Response Message, or Security Mode Request Message that carries a NEW_SSEQ_H field with a valid NEW_SSEQ_H_SIG field.\(^\text{16}\) The response to a Registration Message is a Registration Accepted Order. The response to an Origination Message or Page Response Message is a Channel Assignment Message or Extended Channel Assignment Message. The response to a Security Mode Request Message is a Security Mode Command Message.

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

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

1. Append between 0 and 7 inclusive padding bits (set to any random combination of '0's and '1's) to the Layer 3 PDU such that the padded Layer 3 PDU in bits is an integer multiple of eight (the padding bits become part of the L3 PDU).
2. Compute an 8-bit Layer 3 PDU CRC as specified in 2.3.12.1.4 over the un-encrypted Layer 3 PDU (including the padding bits, if any).
3. Append the 8-bit CRC to the end of the Layer 3 PDU.
4. If the PDU is to be transmitted on f/r-csch, let SDU_ENCRYPT_MODE equal C_SIG_ENCRYPT_MODEs. If the PDU is to be transmitted on f/r-dsch, let SDU_ENCRYPT_MODE equal D_SIG_ENCRYPT_MODEs. If the Layer 3 PDU uses unassured mode, let \( i = 0 \); otherwise, let \( i = 1 \).
5. Let EXT_SSEQ equal TX_EXT_SSEQ[i][KEY_ID]. Encrypt the concatenated Layer 3 PDU and the 8-bit CRC by using EXT_SSEQ and the encryption algorithm specified by SDU_ENCRYPT_MODE, in accordance with 2.3.12.4.3.

\(^{16}\) 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.
6. The sender shall pass the encrypted concatenated Layer 3 PDU, the 8-bit Layer 3 CRC, the 32-bit EXT_SSEQ, SDU_ENCRYPT_MODE, and an indication whether the Layer 3 PDU shall be integrity-protected to the LAC layer.

7. Set TX_EXT_SSEQ[i][KEY_ID] to (TX_EXT_SSEQ[i][KEY_ID] + 1) mod 2^{32}.

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

1. If the Layer 3 PDU uses unassured mode, let $i = 0$ and $N = 8$; otherwise, let $i = 1$ and $N = 4$. Let $V$ be the 8 least significant bits of RX_EXT_SSEQ[i][SDU_KEY_ID]. Perform the duplicate detection procedures in accordance with 2.3.12.4.1.5 using $N$ and $V$, before proceeding further.

2. If SDU_SSEQ is supplied by the LAC Layer, the mobile station shall construct EXT_SSEQ as follows:

   If $(SDU_SSEQ - V) \mod 256 < 128$:
   $$\text{EXT_SSEQ} = (\text{RX_EXT_SSEQ}[i][SDU_KEY_ID] + (SDU_SSEQ - V) \mod 256) \mod 2^{32}$$

   Else:
   $$\text{EXT_SSEQ} = (\text{RX_EXT_SSEQ}[i][SDU_KEY_ID] - (V - SDU_SSEQ) \mod 256) \mod 2^{32}$$

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

4. Decrypt the concatenated Layer 3 PDU and the 8-bit Layer 3 CRC using EXT_SSEQ and the encryption algorithm specified by SDU_ENCRYPT_MODE, in accordance with 2.3.12.4.3.

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

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

7. If the decryption was unsuccessful, the message shall be discarded; otherwise, if SDU_SSEQ is supplied by the LAC Layer and $((SDU_SSEQ - V) \mod 256) < 128$, the receiver shall set RX_EXT_SEQ[i] to EXT_SSEQ constructed in step 2 above.

8. If the base station can not decrypt an Origination Message or the LAC Layer indicates that the MACI is not valid in an Origination Message, the base station should send a Base Station Reject Order (ORDQ = ‘0000000’). If the base station can not decrypt any other message or the LAC Layer indicates that the MACI is not valid for other message, the base station should send a Base Station Reject Order (ORDQ = ‘00000001’).
2.3.12.4.1.4 Computation of the 8-bit Layer 3 PDU CRC Field

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

\[ g(x) = x^8 + x^7 + x^4 + x^3 + x + 1 \]

The Layer 3 PDU CRC field shall be computed according to the following procedure using the logic shown in Figures 2.3.12.4.1.4-1:

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

![Figure 2.3.12.4.1.4-1. 8-Bit Layer 3 SDU CRC Field Calculation](image)

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

---

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., \(w[i-1], w[i-2], \ldots, w[1], w[0]\)). Let \(w[0]\) represent \(V\), \(w[1]\) represent \((V - 1) \mod 256\), 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 \(w\) \(((V_2 - V_1) \mod 256)\) times. Each time \(w\) is left-shifted, stuff a \('0'\) at the eight end of \(w\). After all the shifting, set \(w(0)\) to \('1'\).
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.

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

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

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

2.3.12.4.2.1 User Information Encryption/Decryption Procedures

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

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

If P_REV_IN_USE_s is greater than or equal to nine and extended encryption for user information is turned on for a voice service option\(^\text{18}\), the sender shall encrypt each data block from the voice service, in accordance with 2.3.12.4.3, before passing the data blocks to MAC Layer. On the receiver side, the receiver shall decrypt each data block for the voice service from MAC Layer, in accordance with 2.3.12.4.3, before passing them to that service.

2.3.12.4.3 Interface to the Encryption Algorithms

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

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\(^{18}\) Voice service option refers to SO 60, SO 61 or any service option in Service Option Group 0 in [30].
in Figure 2.3.12.4.3-1. The actual inputs to the algorithm are specified in the rest of this section.

Figure 2.3.12.4.3-1. Encryption Input Parameters

The inputs to the encryption algorithm are described as follows:

- **EXT_SSEQ** - A 32-bit Security Encryption Sequence Number for encryption/decryption.
- **sr_id** - Service Reference Identifier (see [3]), which identifies the associated service option instance.
- **Direction** - The direction of the data being encrypted/decrypted. This shall be set to ‘0’ if the data is transmitted on or received on a forward link. Otherwise, it shall be set to ‘1’.
- **Encryption Key** – Session Key for Encryption. This shall be a result of successful Session Key Agreement between the base station and the mobile station. The Encryption Key shall be stored by the mobile station in ENC_KEY[KEY_ID].

Notes:
(1) For encryption only
(2) For decryption only
(3) The following value shall be used instead of EXT_SSEQ for user information: ⌊sys_time/20⌋ mod 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.
• Channel_id – Channel identifier, which identifies the physical channel that carries the data to be encrypted or decrypted. This is applicable only to user information encryption on f/r-dtch. Channel_id shall be set to, ‘000’ for Fundamental Channel, ‘001’ for Dedicated Control Channel, ‘010’ for Supplemental Code Channel, ‘011’ for Supplemental Channel 0, and ‘101’ for Supplemental Channel 1.

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

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

• The DATA_TYPE parameter shall be set to ‘0’.

• The SYNC parameter shall be set as follows:

• The CMEAKEY[0-7] parameter shall be set to the first 64 bits of ENC_KEY[KEY_ID].

If the Rijndael Encryption Algorithm is used for encrypting/decrypting signaling messages, the input parameters of ESP_AES (see [3344]) shall be set as follows:

• The encryption key parameter shall be set to ENC_KEY[KEY_ID].

• The FRESH parameter shall be set to (ACK_Mode | sr_id [2:0] | Direction | EXT_SSEQ [31:0] | ‘000’).

• The FRESHSIZE parameter shall be set to 5.

• The BUF parameter shall be set to the pointer of the most significant bit of the buffer20 that contains the data to be encrypted or decrypted.

• The BIT_OFFSET parameter shall be set to the offset between the bit position of the most significant bit of the data to be encrypted/decrypted and the bit position of the most significant bit of the buffer (e.g., if the bit position of the most significant bit of the data to be encrypted/decrypted and the bit position of the most significant bit of the buffer are equal, BIT_OFFSET = 0).

---

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

20 “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.
• The BIT_COUNT parameter shall be set to the number of bits of the data to be encrypted/decrypted.

• The full 128 bits of ENC_KEY[KEY_ID] shall be used.

If the Rijndael Encryption Algorithm is used for encrypting/decrypting user information, the input parameters of ESP_AES (see [3344]) shall be set as follows:

• The encryption key parameter shall be set to ENC_KEY[KEY_ID].

• The FRESH parameter shall be set to (sr_id [2:0] | Direction | \(\lfloor \text{sys_time}/20 \rfloor \mod 2^{32}) [31:0] | Channel_id [2:0] | '0'), where sys_time is the system time, in units of ms, corresponding to the start of the physical layer frame that carries the data block(s).

• The FRESHSIZE parameter shall be set to 5.

• The BUF parameter shall be set to the pointer of the most significant bit of the buffer\(^2\) that contains the data to be encrypted or decrypted.

• The BIT_OFFSET parameter shall be set to the offset between the bit position of the most significant bit of the data to be encrypted/decrypted and the bit position of the most significant bit of the buffer (e.g., if the bit position of the most significant bit of the data to be encrypted/decrypted and the bit position of the most significant bit of the buffer are equal, BIT_OFFSET = 0).

• The BIT_COUNT parameter shall be set to the number of bits of the data to be encrypted/decrypted.

• The full 128 bits of ENC_KEY[KEY_ID] shall be used.

2.3.12.4.4 Encryption Negotiation

The mobile station shall indicate to the base station the encryption algorithms supported by using SIG_ENCRYPT_SUP and UI_ENCRYPT_SUP 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)

---

\(\text{Buffer}\)^ 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.
The base station may turn on or turn off the encryption of the voice, data services, or signaling encryption with a *Security Mode Command Message*, *Universal Handoff Direction Message*, or *General Handoff Direction Message* sent on f-dsch or *Security Mode Command Message* sent on f-csch. Similarly, the mobile station may propose to turn on or turn off the user information encryption or signaling encryption with a *Security Mode Request Message* sent on r-dsch or r-csch.
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 \( \lfloor \text{sys_time}/20000 \rfloor \mod 2^{32} \), where sys_time is the system time in ms at which the message is assembled.

<table>
<thead>
<tr>
<th>MSB</th>
<th>LSB</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSD_A</td>
<td>X</td>
</tr>
<tr>
<td>(64 bits)</td>
<td>(32 bits)</td>
</tr>
</tbody>
</table>

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 [3744]).

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

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

Upon power-up, if P_REV_IN_USE is greater than or equal to ten, the mobile station sets AUTH to ‘01’ (regardless of the AUTH value carried in the Extended Access Parameters Message) to guarantee that the mobile station will perform at least the 2G authentication when registering. The mobile station requests (IK, CK) from the UIM. If (IK, CK) are available, the mobile station has already performed the 3G authentication and the (IK, CK) may still be valid, in which case, the mobile station needs to perform the (IK, CK) restoration procedures in 2.3.12.5.3 to restore the (IK, CK).

If (IK, CK) in the UIM are not available, the mobile station sets KEY_ID to NULL to indicate that the mobile station does not have any integrity key and encryption key and thus not authenticated. The mobile station then registers and sends an ROP. The ROP contains a new key id (NEW_KEY_ID) and a new security sequence number (NEW_SSEQ_H) associated with the AUTHR (see [4]) of the message. The mobile station also starts a Key Set-Up timer. If for any reason the keys can not be established before the timer expires, the mobile station enters the System Determination Substate with an encryption/message integrity failure indication upon the expiration of the timer, which triggers re-registrations. If after several attempts of re-registrations such that the integrity key and encryption key still can not be established, the mobile station may reject the serving base station, and the base station may reject serving the mobile station.

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

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

In the 2G authentication, the mobile station concatenates the CMEA key with a copy of itself to form a 128-bit key to be used as both the integrity key, CIK, and the encryption

22 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.
The key, CCK. The CIK and CCK will be referred to as the (CIK, CCK) pair.

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

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

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

- On the f-csch, the General Page Message, Universal Page Message, Registration Request Order, Authentication Request Message and Authentication Challenge Message shall not include a MACI. The Extended Channel Assignment Message may not include a MACI. All overhead messages and all signaling messages with a broadcast address type shall not include a MACI.

- On the f-dsch, the Authentication Challenge Message shall not include a MACI.

- On the r-csch or r-dsch, the Authentication Response Message, Authentication Resynchronization Message and Mobile Station Reject Order (ORDQ = ‘00010110’, ‘00011000’, ‘00011001’ or ‘00011010’) shall not include a MACI.

- All mini messages shall not include a MACI.

When the mobile station sends a Registration Message, Origination Message, or Page Response Message when RESTORE_KEYS is equal to ‘1’, Layer 3 shall deliver the message with a 24-bit number (selected by Layer 3) to LAC. The 24-bit number is used to perform the MAC-I computation and to initialize TX_EXT_SSEQ[i][j] and RX_EXT_SSEQ[i][j], where i = ‘0’ or ‘1’, j = ‘00’ to ‘11’.

2.3.12.5.1 2G Authentication when P_REV_IN_USE >= 10

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

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

If an ROP does not include a MACI, it implies that the mobile station does not have an integrity key, in which case, the base station gets a CMEA key from the network and authenticates the mobile station’s AUTHR (which is always included, see [4]). If the authentication is successful, when the CMEA key is available at the base station, the base station uses assured mode to send a RES that includes a Message Authentication Code generated using the pending CIK, and the pending NEW_SSEQ_H (proposed by the mobile station). Upon reception of the RES, the mobile station validates the MACI. If the validation is successful, the pending (CIK, CCK) and NEW_SSEQ_H can become “in use” in the mobile station. The mobile station stores the NEW_KEY_ID in KEY_ID, the CIK in INT_KEY[KEY_ID], and the CCK in ENC_KEY[KEY_ID].
The mobile station then stops the Key Set-Up timer and sends a *Security Mode Completion Order* using assured mode to the base station that includes a Message Authentication Code. At this point, if the base station successfully validates the *Security Mode Completion Order* that the mobile station sends, the pending (CIK, CCK) and NEW_SSEQ_H can become “in use” in the base station; otherwise, the base station resends the *RES* until it receives a valid *Security Mode Completion Order* from the mobile station. If the mobile station receives a *RES* with an invalid MACI, the mobile station shall enter the *System Determination Substate* with an encryption/message integrity failure indication.

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

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

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

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

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

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

---

23 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).
2.3.12.5.2 3G Authentication (AKA) when P_REV_IN_USEs >= 10

This section applies to a base station that performs 3G authentication (AKA) with the mobile station. The AKA procedure and related algorithms take mobile station specific information, data received from base station and the mobile station’s subscriber authentication key as inputs. The subscriber authentication key is 128-bits long. It is assigned to the mobile station and is stored in the mobile station’s permanent security and identification memory. The subscriber authentication key is known only to the mobile station and to its associated Authentication Center (AC) (see [13]). Refer to Figures 2.3.12.5.2-1, 2.3.12.5.2-2, 2.3.12.5.2-3, and 2.3.12.5.2-4. In these figures, the input K is the mobile station’s subscriber authentication key.

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

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

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

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

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

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

If the UIM determines that the received SQN is not in the correct range [see [46]], the mobile station sends an Authentication Resync Message to the base station that includes the concealed value of the sequence number stored in the UIM (CON_MS_SQN). If the SQN is in the correct range, the UIM computes the (IK, CK) pair and the RES and passes the (IK, CK) pair and RES to the mobile station. The mobile station then starts the Key Set-Up timer. The mobile station then associates a pending key id NEW_KEY_ID and a pending NEW_SSEQ_H with the pending (IK, CK) pair and sends an Authentication Response Message containing RES to the base station. The Authentication Response Message shall contain a Message Authentication Code that is computed based on the pending NEW_SSEQ_H and the pending IK.

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

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

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

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

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

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

MOBILE STATION

BASE STATION

<table>
<thead>
<tr>
<th>RANDA, AUTN</th>
<th>User Authentication Request Message (RANDA,AUTN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS uses f1 to compute XMAC</td>
<td>CON_SQN, AMF, and MAC-A</td>
</tr>
<tr>
<td>XMAC = MAC-A?</td>
<td>MS aborts AKA and enters the System Determination Substate</td>
</tr>
<tr>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>SQN is in correct range</td>
<td>MS uses f1* and f5* to compute MAC-S and AK</td>
</tr>
<tr>
<td>Yes</td>
<td>MS then sends User Authentication Response Message (MAC-S, AK, CON_MS_SQN) and aborts AKA</td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>MS uses the f2, f3, and f4 to compute RES, CK, IK, respectively</td>
<td>User Authentication Response Message (RES)</td>
</tr>
<tr>
<td>RESr == XRES</td>
<td>BS uses CK, IK, UAK</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Performed only if SQN is in the correct range
Figure 2.3.12.5.2-1. Authentication and Key Agreement Procedures Message Flow
Figure 2.3.12.5.2-2. User Authentication Function used by the Mobile Station
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 NEW_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 [3744].

![Diagram of Key Strength Reduction Algorithm]

The Key Strength Reduction Algorithm is defined in [37]

Encryption key (128 bits)
SaltLength (an integer)
Salt (8*SaltLength bits)
KeyEntropy (an integer: 0..16)

Key Strength Reduction Algorithm

RedStrengthKey (128 bits)
The input parameters of KeyStrengthRedAlg (see [37][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 RAND8.
- **KeyEntropy** shall be set to ENC_KEY_SIZEr.

The mobile station shall set the ENC_KEY[KEY_ID] to RedStrengthKey.

2.3.12.5.5 Message Integrity Check Negotiation and Other Requirements

The base station shall indicate the supported user integrity algorithms in the SIG_INTEGRITY_SUP field in the Extended System Parameters Message and ANSI-41 System Parameters Message.

The mobile station shall indicate to the base station the message integrity algorithms supported and preferred by using SIG_INTEGRITY_SUP and SIG_INTEGRITY_REQ in one of the following messages:

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

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

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

2.3.13 Lock and Maintenance Required Orders

The mobile station shall have memory to store the lock reason code (LCKRSN_Ps-p) received in the Lock Until Power-Cycled Order. The data retention time under power-off conditions shall be at least 48 hours.

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

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

2.3.14 Mobile Station Revision Identification

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

- Mobile manufacturer code (MOB_MFG_CODEp)
- Manufacturer’s model number (MOB_MODELp)
- Firmware revision number (MOB_FIRM_REVP)

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

- Protocol revision number (MOB_P_REVP)

---

24 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.
2.3.15 Temporary Mobile Subscriber Identity

2.3.15.1 Overview

The Temporary Mobile Subscriber Identity (TMSI) is a temporary locally assigned number used for addressing the mobile station. The mobile station obtains a TMSI when assigned by the base station. The TMSI as a number does not have any association with the mobile station’s IMSI, ESN, or directory number all of which are permanent identifications.

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

![TMSI Zone Example Diagram](image)

Figure 2.3.15-1. TMSI Zone Example

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

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

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

2.3.15.2 TMSI Assignment Memory
The mobile station shall provide memory to store the following parameters:
- 4-bit assigning TMSI zone length (ASSIGNING_TMSI_ZONE_LEN_p)
- 8-octet assigning TMSI zone (ASSIGNING_TMSI_ZONE_p)
- 4-octet TMSI code (TMSI_CODE_p)
- 3-octet TMSI expiration time (TMSI_EXP_TIME_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>
<thead>
<tr>
<th>Table 2.4.1-1. Monitored Quantities and Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Identifier</td>
</tr>
<tr>
<td>-----------------------</td>
</tr>
<tr>
<td>OTHER_SYS_TIME</td>
</tr>
</tbody>
</table>

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

The mobile station shall increment the counter PAG_6 each time that it declares a loss of the Paging Channel (see 2.6.2.1.1.4). The mobile station shall increment the counter PAG_7 for each idle handoff it performs. The mobile station shall increment the counter FCCCH_4 each time that it declares a loss of the Forward Common Control Channel (see 2.6.2.1.1.4). The mobile station shall increment the counter BCCH_5 each time that it declares a loss of the Broadcast Control Channel (see 2.6.2.1.1.4).
### Table 2.4.2-1. Accumulated PCH/BCCH/F-CCCH Channel Statistics

<table>
<thead>
<tr>
<th>Counter Identifier</th>
<th>Length (bits)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAG_6</td>
<td>16</td>
<td>Number of times that the mobile station declared a loss of the Paging Channel</td>
</tr>
<tr>
<td>PAG_7</td>
<td>16</td>
<td>Number of mobile station idle handoffs</td>
</tr>
<tr>
<td>FCCCH_4</td>
<td>16</td>
<td>Number of times that the mobile station declared a loss of the Forward Common Control Channel</td>
</tr>
<tr>
<td>BCCH_5</td>
<td>16</td>
<td>Number of times that the mobile station declared a loss of the Broadcast Control Channel</td>
</tr>
</tbody>
</table>
2.5 Reserved
2 SECTION (CONTINUED)

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).
Figure 2.6-1. Mobile Station Layer 3 Processing States
2.6.1 Mobile Station Initialization State

In this state, the mobile station first selects a system to use. If the selected system is a CDMA system, the mobile station proceeds to acquire and then synchronize to the CDMA system. If the selected system is an analog system, the mobile station begins analog mode operation (see [6]).

As illustrated in Figure 2.6.1-1, the Mobile Station Initialization State consists of the following substates:

- **System Determination Substate** - In this substate, the mobile station selects which system to use.
- **Pilot Channel Acquisition Substate** - In this substate, the mobile station acquires the Pilot Channel of a CDMA system.
- **Sync Channel Acquisition Substate** - In this substate, the mobile station obtains system configuration and timing information for a CDMA system.
- **Timing Change Substate** - In this substate, the mobile station synchronizes its timing to that of a CDMA system.

While in the Mobile Station Initialization State, the mobile station shall update all active registration timers as specified in 2.6.5.1.2.
System Determination Substate (2.6.1.1)

Power-up or Any Other State

CDMA system selected

Pilot Channel Acquisition Substate (2.6.1.2)

Acquires Pilot Channel

Sync Channel Acquisition Substate (2.6.1.3)

Receives Sync Channel Message

Timing Change Substate (2.6.1.4)

Mobile Station Idle State

Note: Not all state transitions are shown.

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 RANDₜ to 0 (see 2.3.12.1.2), PACAₜ to disabled, PACA_CANCEL to ‘0’, the PACA state timer to disabled, NDSS_ORIGₜ to disabled, MAX_REDIRECT_DELAYₜ to 31, REDIRECTIONₜ to disabled, all entries of SDB_SO_OMITₜ to ‘0’, RER_MODE_ENABLED to NO, TKZ_MODE_ENABLED to NO, TKZ_MODE_PENDING to NO, RSC_MODE_ENABLED to NO, and T_SLOTTEDₜ to T₇₄ₘₜ. If the mobile station supports analog mode operation in Band Class 0, the mobile station shall set the First-Idle ID status to enabled (see [6]). 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 PACAₜ is equal to enabled, the mobile station shall also set PACAₜ 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 REDIRECTIONₜ 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 REDIRECTIONₜ to disabled.
  - The mobile station shall set RETURN_CAUSEₜ to ‘0001’.
  - If RETURN_IF_FAILₜ 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_FAILₜ 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).

If the mobile station enters the System Determination Substate with a new system indication, the mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call origination has been canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a new band indication, the mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call origination has been canceled. The mobile station shall attempt to acquire the system found on the frequency and band defined in NEW_BAND_RECORD (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a CDMA available indication, the mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call origination is canceled. The mobile station should set CDMACH_s to the CDMA Channel (CDMA_FREQ) specified in the CDMA Capability Global Action Message and should attempt to acquire a CDMA system on the specified CDMA channel (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with an additional CDMA available indication, the mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call origination is canceled. The mobile station should set CDMACH_s to the CDMA Channel (CDMA_FREQ) specified in the CDMA Info Order and should attempt to acquire a CDMA system on the specified CDMA channel (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a reselection indication, the mobile station shall set REDIRECTION_s to disabled. If NDSS_ORIG_s is enabled, the mobile station shall set NDSS_ORIG_s to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with an encryption/message integrity failure indication, the mobile station shall set REDIRECTION_s to disabled, KEY_ID to ‘00’, D_SIG_ENCRYPT_MODE_s to ‘000’, C_SIG_ENCRYPT_MODE_s to ‘000’,
LAST_2G_KEY_ID to ‘00’, LAST_3G_KEY_ID to ‘10’, ENC_KEY[j] to NULL, INT_KEY[j] to NULL, TX_EXT_SSEQ[i][j] to 0, RX_EXT_SSEQ[i][j] to 0, where i ranges from ‘0’ to ‘1’ and j ranges from ‘00’ to ‘11’. If NDSS_ORIGs is enabled, the mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a system reselection indication, the mobile station shall set REDIRECTIONs to disabled. If NDSS_ORIGs is enabled, the mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the call origination is canceled. The mobile station should attempt to select a system available for system reselection as specified in 2.6.1.1.3, and should attempt to acquire the selected system (see 2.6.1.1.4). The precise process for determining how to select such a system is left to the mobile station manufacturer. If the mobile station does not attempt to select such a system, the mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a rescan indication, the mobile station shall set REDIRECTIONs to disabled. If NDSS_ORIGs is enabled, the mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the System Determination Substate with a protocol mismatch indication, the mobile station shall perform the following:

- If REDIRECTIONs 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 REDIRECTIONs to disabled.
  - The mobile station shall set RETURN_CAUSEs to ‘0010’.
  - If RETURN_IF_FAILs 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 \( \text{RETURN\_IF\_FAIL}_s \) 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 for determining how to avoid the system from which the mobile station was redirected is left to the mobile station manufacturer.

• If \( \text{REDIRECTION}_s \) 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).

If the mobile station enters the **System Determination Substate** with a system lost indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the mobile station shall set \( \text{NDSS\_ORIG}_s \) to disabled and should indicate to the user that the call origination is canceled. The mobile station should attempt to select the same system that was lost, and should attempt to acquire the selected system (see 2.6.1.1.4). The precise process for determining how to select the same system is left to the mobile station manufacturer. If the mobile station does not attempt to select the same system, the mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the **System Determination Substate** with a lock indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the mobile station shall set \( \text{NDSS\_ORIG}_s \) to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the **System Determination Substate** with an unlock indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the mobile station shall set \( \text{NDSS\_ORIG}_s \) to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the **System Determination Substate** with an access denied indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the mobile station shall set \( \text{NDSS\_ORIG}_s \) to disabled and should indicate to the user that the call origination is canceled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the **System Determination Substate** with an ACCT blocked indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the mobile station shall set \( \text{NDSS\_ORIG}_s \) to disabled. The mobile station shall select a system in accordance with the custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4).

If the mobile station enters the **System Determination Substate** with an NDSS off indication, the mobile station shall set \( \text{REDIRECTION}_s \) to disabled. If \( \text{NDSS\_ORIG}_s \) is enabled, the
mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the 
call origination is canceled. The mobile station shall select a system in accordance with the 
custom system selection process (see 2.6.1.1.1) and shall attempt to acquire the selected 
system (see 2.6.1.1.4).

If the mobile station enters the *System Determination Substate* with a release indication and 
REDIRECTIONs is equal to enabled, the mobile station shall attempt to select the same 
system on which the release occurred and shall attempt to acquire the selected system (see 
2.6.1.1.4). The precise process for determining how to select the same system is left to the 
mobile station manufacturer. If REDIRECTIONs is equal to disabled, the mobile station 
shall select a system in accordance with the custom system selection process (see 
2.6.1.1.1) and shall attempt to acquire the selected system (see 2.6.1.1.4). If NDSS_ORIGs 
is enabled, the mobile station shall set NDSS_ORIGs to disabled.

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

If the mobile station enters the *System Determination Substate* with a redirection indication, 
the mobile station shall set REDIRECTIONs to enabled. The mobile station shall delete all 
entries from the ZONE_LISTs and SID_NID_LISTs. The mobile station shall select a system 
in accordance with the current redirection criteria (see 2.6.1.1.2) and shall attempt to 
acquire the selected system (see 2.6.1.1.4).

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

- The mobile station shall delete the newly generated encryption key (if any).
- If REDIRECTIONs is equal to enabled, the mobile station shall perform the 
  following:
  - The mobile station shall set REDIRECTIONs to disabled.
  - The mobile station shall set RETURN_CAUSEs to ‘0011’.
  - If RETURN_IF_FAILs 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_FAILs 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 for determining how to 
    avoid the system from which the mobile station 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).

If the mobile station enters the System Determination Substate with a wrong system 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 '0100'.

  – 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 for determining how to avoid the system from which the mobile station 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).

If the mobile station enters the System Determination Substate with a wrong network 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 '0101'.
If RETURN_IF_FAILs 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_FAILs 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 for determining how to
avoid the system from which the mobile station was redirected is left to the
mobile station manufacturer.

- If REDIRECTIONs 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).

2.6.1.1.1 Custom System Selection Process

The precise process for custom system selection is left to the mobile station manufacturer.
The mobile station shall perform the custom system selection process as follows:

- The mobile station shall determine which system to use.

- If the mobile station is to use a CDMA system, it shall set CDMABANDs to the band
class (see [30]) for the selected system.

- If the mobile station is to use a CDMA system with CDMABANDs = ‘00000’ or
  CDMABANDs = ‘00011’, it shall perform the following:

  - If the mobile station is to use System A, it shall set SERVSYSs to SYS_A. If the
    mobile station is to use System B, it shall set SERVSYSs to SYS_B.

  - The mobile station shall set CDMACHs either to the Primary or Secondary
    CDMA Channel number (see [2]) for the selected serving system (SERVSYSs). If
    the mobile station fails to acquire a CDMA system on the first CDMA Channel it
    tries, the mobile station should attempt to acquire on the alternate CDMA
    Channel (Primary or Secondary) before attempting other alternatives.

- If the mobile station is to use a CDMA system with CDMABANDs other than ‘00000’
or ‘00011’, it shall set CDMACHs to the CDMA Channel number (see [2]) for the
selected system.

If the mobile station is to use System A of the 800 MHz analog system, it shall set
SERVSYSs to SYS_A. If the mobile station is to use System B of the 800 MHz analog
system, it shall set SERVSYSs to SYS_B.

2.6.1.1.2 System Selection Using Current Redirection Criteria

To perform system selection using current redirection criteria:

- When a single redirection record is received in the mobile station shall use
  information received either in a Service Redirection Message, a Global Service
Redirection Message, or an Extended Global Service Redirection Message, the mobile station shall use the information received and stored in the variable REDIRECT_RECs to perform current system selection as specified in 2.6.1.2.1.

- If multiple redirection records are received in an Extended Global Service Redirection Message, the mobile station shall process at most \( j \) sequential redirection records, where \( j \) is equal to the number of redirection records in REDIRECT_REC_LIST as follows:
  - If the DELETE_TMSI field of REDIRECT_REC_LIST\([k]\) is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE\(s-p\) to ‘1’; otherwise the mobile station shall set TMSI_CODE\(s-p\) to TEMP_TMSI_CODE.
  - Store the redirection record (REDIRECT_REC\(s\) = REDIRECT_REC_LIST\([k]\)).
  - If the RECORD_TYPE field of REDIRECT_REC_LIST\([k]\) is equal to ‘00000001’ the mobile station shall:
    + Set CDMA_MODE\(s\) to ‘1’.
    + Set DIGITAL_REG\(s-p\) to ‘00000000’.
    + Set the maximum delay upon redirection (MAX_REDIRECT_DELAY\(s\) = MAX_REDIRECT_DELAY field of REDIRECT_REC_LIST\([k]\)).
  - If the mobile station has not exhausted all possible selections using the REDIRECT_REC_LIST\([k]\), the mobile station shall attempt to select a system according to 2.6.1.2.1; otherwise, if \( k \) is not the last record in REDIRECT_REC_LIST, the mobile station shall continue the system selection with REDIRECT_REC_LIST\([k+1]\).

2.6.1.2.1 System Selection Using Current Redirection Record

If the RECORD_TYPE field of REDIRECT_REC\(s\) is equal to ‘00000001’ and the mobile station supports Band Class 0, the mobile station shall perform system selection as follows:

- If the SYS_ORDERING field is equal to ‘000’, the mobile station shall make sequential system selections as follows:
  - The mobile station shall set SERVSYS\(s\) either to SYS_A or SYS_B. The precise process for determining how many system selections to make and for determining whether to use SYS_A or SYS_B is left to the mobile station manufacturer.
- If the SYS_ORDERING field is equal to ‘001’, the mobile station shall select no more than one system selection as follows:
  - The mobile station shall set SERVSYS\(s\) to SYS_A.
- If the SYS_ORDERING field is equal to ‘010’, the mobile station shall select no more than one system selection as follows:
  - The mobile station shall set SERVSYS\(s\) to SYS_B.
• If the SYS_ORDERING field is equal to ‘011’, the mobile station shall make at most two sequential system selections as follows:
  – For the first system selection, the mobile station shall set SERVSYSs to SYS_A.
  – For the second system selection, the mobile station shall set SERVSYSs to SYS_B.

• If the SYS_ORDERING field is equal to ‘100’, the mobile station shall make at most two sequential system selections as follows:
  – For the first system selection, the mobile station shall set SERVSYSs to SYS_B.
  – For the second system selection, the mobile station shall set SERVSYSs to SYS_A.

• If the SYS_ORDERING field is equal to ‘101’, the mobile station shall make at most two sequential system selections as follows:
  – For the first system selection, the mobile station shall set SERVSYSs either to SYS_A or SYS_B. The precise process for determining whether to use SYS_A or SYS_B first is left to the mobile station manufacturer.
  – For the second system selection, the mobile station shall set SERVSYSs to SYS_B if SYS_A was used for the first selection, or to SYS_A if SYS_B was used for the first selection.

If the RECORD_TYPE field of REDIRECT_RECs is equal to ‘00000010’, the mobile station shall perform system selection as follows:

• If the mobile station supports CDMA mode operation in the band class identified by the BAND_CLASS field, the mobile station shall make at most $n$ sequential system selections, where $n$ is equal to the value of the NUM_CHANS field, as follows:
  – For the $i^{th}$ system selection, where $i$ ranges from 1 to $n-1$:
    + If the mobile station supports operation on the CDMA channel associated with the value of the $i^{th}$ occurrence of the CDMA_CHAN field and the CDMA channel is supported for at least one band subclass listed in the record (when included), the mobile station shall set CDMACHs to the value of the $i^{th}$ occurrence of the CDMA_CHAN field and shall set CDMABANDs to the value specified in the BAND_CLASS field. If the mobile station does not support operation on the CDMA Channel associated with the value of the $i^{th}$ occurrence of the CDMA_CHAN field, otherwise, the mobile station shall not make the $i^{th}$ system selection.

2.6.1.1.3 System Selection Using System Reselection Criteria

The precise process for selecting a system using system reselection criteria is left to the mobile station manufacturer. The mobile station should use information received in the Neighbor List Message, Extended Neighbor List Message, General Neighbor List Message, or the Universal Neighbor List Message to perform the system reselection process as follows:
If there are pilots in the Neighbor List on a different Frequency Assignment than that of the mobile station, the mobile station may select the CDMA system consisting of these neighbor pilots. If the mobile station is to use a CDMA system, it shall set $CDMABAND_s$ to the band class (see [30]) for the selected system and shall set $CDMACH_s$ to the CDMA Channel number (see [2]) for the selected system.

If $NUM\_ANALOG\_NGHBR_s$ is not equal to ‘000’, the mobile station may select an analog system as specified by $ANALOG\_NGHBR\_LIST$. If the mobile station is to use System A of the 800 MHz analog system, it shall set $SERVSYS_s$ to SYS_A. If the mobile station is to use System B of the 800 MHz analog system, it shall set $SERVSYS_s$ to SYS_B.

### 2.6.1.1.4 Acquiring the Selected System

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

- If the selected system is an analog system, the mobile station shall enter the Initialization Task (see [6]).

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

### 2.6.1.2 Pilot Channel Acquisition Substate

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

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

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

### 2.6.1.3 Sync Channel Acquisition Substate

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

Upon entering the Sync Channel Acquisition Substate, the mobile station shall set its code channel for the Sync Channel (see [2]).
If the mobile station does not receive a valid Sync Channel Message within $T_{21m}$ seconds, the mobile station shall enter the System Determination Substate with an acquisition failure indication.

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

If the mobile station receives a valid Sync Channel Message within $T_{21m}$ seconds, but the values of the PRATr, the SR1_BRAT_NON_TD, the SR1_BRAT_TD, or the SR3_BRATr fields are designated as reserved by the protocol revision level supported by the mobile station (MOB_P_REVp of the current band class), the mobile station shall enter the System Determination Substate with a protocol mismatch indication (see 2.6.1.1).

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

- Protocol revision level ($P_{REVs} = P_{REVs}$)
- Minimum protocol revision level ($MIN_{P\_REVs} = MIN_{P\_REVs}$)
- System identification ($SID_s = SID_r$)
- Network identification ($NID_s = NID_r$)
- Pilot PN sequence offset index ($PILOT\_PN_s = PILOT\_PN_r$)
- Long code state ($LC\_STATE_s = LC\_STATE_r$)
- System Time ($SYS\_TIME_s = SYS\_TIME_r$)
- Paging Channel data rate ($PRAT_s = PRAT_r$)
- Protocol revision level currently in use ($P_{REV\_IN\_USEs} = \text{the lesser value of } P_{REVs}$ and $MOB_{P\_REVp}$ of the current band class)
- SR1 Non-TD BCCH support indicator ($SR1\_BCCH\_NON\_TD\_INCL_s = SR1\_BCCH\_NON\_TD\_INCL_r$)
- SR1 TD BCCH support indicator ($SR1\_TD\_INCL_s = SR1\_TD\_INCL_r$)
- If $SR1\_BCCH\_NON\_TD\_INCL_r$ is equal to ‘1’:
  - $SR1\_BRAT\_NON\_TD_s = SR1\_BRAT\_NON\_TD_r$;
  - $SR1\_CRAT\_NON\_TD_s = SR1\_CRAT\_NON\_TD_r$;
  - $BCCH\_CODE\_CHAN\_NON\_TD_s = SR1\_BCCH\_CODE\_CHAN\_NON\_TD_r$.
- If $SR1\_TD\_INCL_r$ is included and is equal to ‘1’, and the mobile station supports the Transmit Diversity indicated by $SR1\_TD\_MODE_r$:
SR1_BRAT_TDs = SR1_BRAT_TDr;
SR1_CRAT_TDs = SR1_CRAT_TDr;
BCCH_CODE_CHAN_TDs = SR1_BCCH_CODE_CHAN_TDr.

- If the mobile station supports the Transmit Diversity, SR1_BCCH_NON_TD_INCLr is equal to ‘1’, and SR1_TD_INCLr is equal to ‘0’:
  - SR1_BRAT_TDs = SR1_BRAT_NON_TDr;
  - SR1_CRAT_TDs = SR1_CRAT_NON_TDr;
  - BCCH_CODE_CHAN_TDs = SR1_BCCH_CODE_CHAN_NON_TDr.

- SR3 support indicator \( (SR3\_INCLs = SR3\_INCLr) \)

The mobile station shall ignore any fields at the end of the **Sync Channel Message** that are not defined according to the protocol revision level \( (MOB\_P\_REVp \) of the current band class) being used by the mobile station.

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

- Number of leap seconds that have occurred since the start of System Time \( (LP\_SECs = LP\_SECr) \)
- Offset of local time from System Time \( (LTM\_OFFs = LTM\_OFFr) \)
- Daylight savings time indicator \( (DAYLTs = DAYLTr) \)

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

If REDIRECTIONs is equal to enabled, the EXPECTED_SID field of REDIRECT_RECs is not equal to 0, and SIDr is not equal to EXPECTED_SID, the mobile station shall enter the **System Determination Substate** with a wrong system indication (see 2.6.1.1). If REDIRECTIONs is equal to enabled, the EXPECTED_NID field of REDIRECT_RECs is not equal to 65535, and NIDr is not equal to EXPECTED_NID, the mobile station shall enter the **System Determination Substate** with a wrong network indication.

If P_REV_IN_USEs is less than 6, the mobile station shall set POTENTIAL_CDMACHs to CDMA_FREQr.

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

- If the mobile station supports the Quick Paging Channel or any radio configuration in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile station shall set POTENTIAL_CDMACHs equal to EXT_CDMA_FREQr; otherwise, the mobile station shall set POTENTIAL_CDMACHs equal to CDMA_FREQr.

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

- If the mobile station supports Spreading Rate 3 on the common channels and SR3_INCLs is equal to ‘1’, the mobile station shall set:
  - \( BRATs = SR3\_BRATr; \)
  - \( BCCH\_CODE\_RATEs = 1/3; \)
− BCCH_s = SR3_BCCH_CODE_CHAN_r;
− SR3_PRIMARY_PILOT_s = SR3_PRIMARY_PILOT_r;
− SR3_PILOT_POWER1_s = SR3_PILOT_POWER1_r;
− SR3_PILOT_POWER2_s = SR3_PILOT_POWER2_r;
− If SR3_CENTER_FREQ_INCL_r is equal to ‘1’, POTENTIAL_CDMACH_s = 
  SR3_CENTER_FREQ_r; otherwise, POTENTIAL_CDMACH_s = EXT_CDMA_FREQ_r.

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

  − If SR1_TD_INCL_r is equal to ‘1’ and the mobile station supports the Transmit
    Diversity mode specified by SR1_TD_MODE_r, the mobile station shall set:

    + SR1_TD_MODE_s = SR1_TD_MODE_r
    + SR1_TD_POWER_LEVEL_s = SR1_TD_POWER_LEVEL_r
    + BRAT_s = SR1_BRAT_TD_r
    + BCCH_CODE_RATE_s = SR1_CRAT_TD_r,
    + BCCH_s = SR1_BCCH_CODE_CHAN_TD_r,
    + POTENTIAL_CDMACH_s = SR1_CDMA_FREQ_TD_r

  − Otherwise, if SR1_BCCH_NON_TD_INCL_r is equal to ‘1’, the mobile station shall set:

    + BRAT_s = SR1_BRAT_NON_TD_r
    + BCCH_CODE_RATE_s = SR1_CRAT_NON_TD_r,
    + BCCH_s = SR1_BCCH_CODE_CHAN_NON_TD_r,
    + If SR1_NON_TD_FREQ_INCL_r is equal to ‘1’, POTENTIAL_CDMACH_s = 
      SR1_CDMA_FREQ_NON_TD_r; otherwise, POTENTIAL_CDMACH_s = 
      EXT_CDMA_FREQ_r

  − Otherwise, the mobile station shall perform the following:

    + If the mobile station supports the Quick Paging Channel or any radio
      configuration in the Radio Configuration Class 2 or 3 (see 1.1.1), the mobile
      station shall set POTENTIAL_CDMACH_s = EXT_CDMA_FREQ_r; otherwise,
      the mobile station shall set POTENTIAL_CDMACH_s = CDMA_FREQ_r.

If POTENTIAL_CDMACH_s is different from CDMACH_s, the mobile station shall set
CDMACH_s = POTENTIAL_CDMACH_s and then tune to the CDMA Channel (CDMACH_s).

The mobile station shall enter the Timing Change Substate.
CDMA system, using the PILOT_PNs, LC_STATEs, and SYS_TIMEs values obtained from the received *Sync Channel Message*. SYS_TIMEs is equal to the System Time (see [2]) corresponding to 320 ms past the end of the last 80 ms superframe (see [2]) of the received *Sync Channel Message* minus the pilot PN sequence offset. LC_STATEs is equal to the system long code state (see [2]) corresponding to SYS_TIMEs.

In the *Timing Change Substate*, the mobile station shall synchronize its long code timing to the CDMA system long code timing derived from LC_STATEs, and synchronize its system timing to the CDMA system timing derived from SYS_TIMEs.

The mobile station shall perform the following:

- If SR1_BCCH_NON_TD_INCLs is equal to ‘1’, or if SR1_TD_INCLs is equal to ‘1’ and the mobile supports the transmit diversity mode specified by SR1_TD_MODEs, or if the mobile station supports Spreading Rate 3 on the common channel and SR3_INCLs is equal to ‘1’, the mobile station shall:
  - Set the stored message sequence numbers CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, ACC_MSG_SEQs, MC_RR_PAR_MSG_SEQs, UNI_NGHBRS_LST_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs and PRI_NGHBRS_LST_MSG_SEQs variables to NULL (see 2.6.2.2);
  - Set the index number of the Primary Broadcast Control Channel (BCN) to 1;
  - Set IMSI_11_12s, IMSI_10s and MCCs to NULL;
  - Perform registration initialization as specified in 2.6.5.1.3; and
  - If the bits of TMSI_CODEs-p are not all equal to ‘1’ and if SYS_TIMEs exceeds TMSI_EXP_TIMEs-p × 2^12, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’.

- Otherwise, the mobile station shall:
  - Set PAGECHs to the Primary Paging Channel (see [2]);
  - Set PAGE_CHANs to ‘1’;
  - Set the stored message sequence numbers CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, ACC_MSG_SEQs, NGHBRS_LST_MSG_SEQs, GEN_NGHBRS_LST_MSG_SEQs, EXT_NGHBRS_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs and PRI_NGHBRS_LST_MSG_SEQs variables to NULL (see 2.6.2.2);
  - Set IMSI_11_12s, IMSI_10s and MCCs to NULL;
  - Perform registration initialization as specified in 2.6.5.1.3; and
  - If the bits of TMSI_CODEs-p are not all equal to ‘1’ and if SYS_TIMEs exceeds TMSI_EXP_TIMEs-p × 2^12, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’.
1 The mobile station shall enter the Mobile Station Idle State.

Figure 2.6.1.4-1. Mobile Station Internal Timing
2.6.2 Mobile Station Idle State

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

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

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

• Set SLOTTEDs to YES if T_SLOTTEDs is equal to 0 or if the mobile station does not support the slotted timer; otherwise, enable the TMS_Slotted timer with the duration specified by T_SLOTTEDs if it is not already enabled, and set SLOTTEDs to NO.

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

• If SR1_BCCH_NON_TD_INCLs is equal to ‘1’, or if SR1_TD_INCLs is equal to ‘1’ and the mobile station supports the transmit diversity mode specified by SR1_TD_MODEs, or if the mobile station supports Spreading Rate 3 on the common channel and SR3_INCLs is equal to ‘1’, the mobile station shall perform the following:
  – Set its Primary Broadcast Control Channel code channel to BCCHs,
  – Set the Primary Broadcast Control Channel data rate as determined by BRATs,
  – Set the Primary Broadcast Control Channel code rate as determined by BCCH_CODE_RATEs, and
  – Perform common channel supervision as specified in 2.6.2.1.1.4.

• Otherwise, the mobile station shall perform the following:
  – Set its code channel to PAGECHs,
  – Set the Paging Channel data rate as determined by PRATs, and
  – Perform Paging Channel supervision as specified in 2.6.2.1.1.4.

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

• Perform common channel supervision as specified in 2.6.2.1.1.4.

If REDIRECTIONs, PACAs, and NDSS_ORIGs are equal to disabled, the mobile station may exit the Mobile Station Idle State at any time and enter the System Determination Substate of the Mobile Station Initialization State with a reselection indication (see 2.6.1.1).

While in the Mobile Station Idle State, the mobile station shall perform the following procedures:
• The mobile station shall perform Paging Channel or Forward Common Control Channel monitoring procedures as specified in 2.6.2.1.1.

• The mobile station shall perform message acknowledgment procedures as specified in [4].

• The mobile station shall perform registration procedures as specified in 2.6.2.1.3.

• The mobile station shall perform idle handoff procedures as specified in 2.6.2.1.4.

• The mobile station shall perform system reselection procedures as specified in 2.6.2.1.6.


• The mobile station shall perform the Mobile Station Page Match Operation as specified in 2.6.2.3 whenever it receives a mobile station-directed page.

• The mobile station shall perform the Mobile Station Order and Message Processing Operation as specified in 2.6.2.4 whenever a message or order directed to the mobile station is received other than a mobile station-directed page.

• The mobile station shall set NDSS_ORIG_s to disabled if directed by the user to cancel the call origination.

• The mobile station shall perform the Mobile Station Origination Operation as specified in 2.6.2.5 if directed by the user to initiate a call, or if NDSS_ORIG_s is equal to enabled.

• If RETRY_DELAY_s[001] or RETRY_DELAY_s[101] is not set to 0:
  - The mobile station shall not send any Origination Message containing a packet data service option 1 or Reconnect Message (with ORIG_IND set to ‘1’) for connecting a packet data service option until the maximum of the system time stored in RETRY_DELAY_s[001] and RETRY_DELAY_s[101].
  - At the system time stored in RETRY_DELAY_s[001], the mobile station shall reset RETRY_DELAY_s[001] to 0.

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1 Packet data service option refers to SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]
At the system time stored in RETRY_DELAYs[101], the mobile station shall reset RETRY_DELAYs[101] to 0.

- The mobile station shall perform the Mobile Station PACA Cancel Operation as specified in 2.6.2.8, if PACAs is equal to enabled and any one of the following conditions is met:
  - PACA.Cancel is equal to ‘1’; or
  - The mobile station is directed by the user to cancel the PACA call.

- If the PACA state timer expires, the mobile station shall perform the following:
  - The mobile station should enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-originete the PACA call.
  - Otherwise, the mobile station shall perform the Mobile Station PACA Cancel Operation as specified in 2.6.2.8.

- If the mobile station supports Data Burst Message transmission, it shall perform the Mobile Station Message Transmission Operation as specified in 2.6.2.6 if directed by the user to transmit a message.

- If the mobile station supports BCMC operation, it shall perform the procedures as specified in 2.6.13.

- If RETRY_DELAYs[100] or RETRY_DELAYs[101] is not set to 0:
  - The mobile station shall not send any Short Data Burst (see [30], [42]) until the maximum of the system time stored in RETRY_DELAYs[100] and RETRY_DELAYs[101].
  - At the system time stored in RETRY_DELAYs[100], the mobile station shall reset RETRY_DELAYs[100] to 0.
  - At the system time stored in RETRY_DELAYs[101], the mobile station shall reset RETRY_DELAYs[101] to 0.

- If the mobile station supports the Device Information Message on the r-csch, AUTO_MSG_SUPPORTEDs is equal to ‘1’, and the mobile station has detected a change in hook status since the last time when the mobile station sent hook status information, the mobile station shall perform the following:
  - If the autonomous message timer has expired or is disabled, the mobile station shall perform the Mobile Station Message Transmission Operation as specified in 2.6.2.6.
  - If the autonomous message timer has not expired, the mobile station shall set the autonomous message timer equal to AUTO_MSG_INTERVALs and shall restart the timer.
• If the mobile station supports the Fast Call Setup Order with ORDQ equal to ‘00000000’ on the r-csch, AUTO_FCSO_ALLOWED is equal to ‘1’, RSC_MODE_ENABLED is equal to NO, SLOTTED is equal to YES, and the mobile station would like to request operation in reduced slot cycle mode, it shall perform the Mobile Station Message Transmission Operation as specified in 2.6.2.6.

• The mobile station shall perform the Mobile Station Power-Down Operation as specified in 2.6.2.7 if directed by the user to power down.

• If the bits of TMSI_CODE_s-p are not all equal to ‘1’ and if System Time (in 80 ms units) exceeds TMSI_EXP_TIME_s-p × 2^{12}, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’ within T_{66m} seconds.

• If the full-TMSI timer expires or has expired, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’. The mobile station shall update the registration variables as described in 2.6.5.5.2.5.

• If the key setup timer expires or has expired and mobile station determines that it is not originating an emergency call, the mobile station shall may set REG_SECURITY_RESYNC to YES and the mobile station shall go to the System Determination Substate with an encryption/message integrity failure indication [see 2.3.12.5 for details].

• If TKZ_MODE_ENABLED is set to YES, the mobile station shall perform the following:
  – If TKZ_ID_s is not equal to any entry in TKZ_LIST, TKZ_SID_s is equal to SID_s, TKZ_NID_s is equal to NID_s, and TKZ_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.
  – If the TKZ timer of any entry in TKZ_LIST has expired, the mobile station shall delete that entry.
  – If the tracking zone update timer expires, the mobile station shall disable the tracking zone update timer and set TKZ_MODE_ENABLED to NO.

• If P_REV_IN_USE_s is less than 11 after the mobile station performs an idle handoff, the mobile station shall set TBR_RAND_SUPPR_ENABLE_s to ‘0’, and shall set TBR_RAND_WINDOW_s to ‘11’.

2 REG_SECURITY_RESYNC was formerly called REG_ENCRYPT_RESYNC.
control messages for a mobile station operating in the non-slotted mode can be received in any of the Paging Channel slots; therefore, the non-slotted mode of operation requires the mobile station to monitor all slots.

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

2.6.2.1.1.1 General Overview for Individually Addressed Messages

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

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

$$T = 2^i,$$

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

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

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

\[\text{\textsuperscript{3}}\] 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.
• if \( P \text{REV}_\text{IN USE} \) is greater than or equal to eleven, the mobile station reports its last registered slot cycle, \( \text{SLOT CYCLE INDEX REG} \) with the \( \text{SLOT CYCLE INDEX} \) and \( \text{SIGN SLOT CYCLE INDEX} \) fields.

Using the Extended Terminal Information record of the \textit{Extended Status Response Message}, the mobile station reports its last registered slot cycle, \( \text{SLOT CYCLE INDEX REG} \), using the \( \text{SLOT CYCLE INDEX} \) and \( \text{SIGN SLOT CYCLE INDEX} \) fields of the Terminal Information record of the \textit{Status Response Message} or the \textit{Extended Status Response Message}.

When in the \textit{Mobile Station Control on the Traffic Channel State}, using the Terminal Information record of the \textit{Status Response Message} or the \textit{Status Message}, in addition, the mobile station can also report:

• if \( P \text{REV}_\text{IN USE} \) is less than eleven, the mobile station reports \( \max(0, \text{SLOT CYCLE INDEX REG}) \) with the \( \text{SLOT CYCLE INDEX} \) field.

• if \( P \text{REV}_\text{IN USE} \) is greater than or equal to eleven, the mobile station reports its last registered slot cycle, \( \text{SLOT CYCLE INDEX REG} \) with the \( \text{SLOT CYCLE INDEX} \) and \( \text{SIGN SLOT CYCLE INDEX} \) fields.

When in the \textit{Mobile Station Control on the Traffic Channel State}, using the Extended Terminal Information record of the \textit{Status Response Message}, the mobile station reports its last registered slot cycle, \( \text{SLOT CYCLE INDEX REG} \), using with the \( \text{SLOT CYCLE INDEX} \) and \( \text{SIGN SLOT CYCLE INDEX} \) fields of the Terminal Information record of the \textit{Status Response Message} or the \textit{Status Message} when in the \textit{Mobile Station Control on the Traffic Channel State}.

A mobile station operating in the slotted mode may optionally monitor additional slots to receive broadcast messages and/or broadcast pages (see 2.6.2.1.1.3.3 and 2.6.2.1.1.3.4).

There are \( 16 \times T \) slots in a slot cycle.

\( \text{SLOT NUM} \) is the Paging Channel or the Forward Common Control Channel slot number, modulo the maximum length slot cycle (2048 slots). That is, the value of \( \text{SLOT NUM} \) is

\[
\text{SLOT NUM} = \lfloor t/4 \rfloor \mod 2048,
\]

where \( t \) is the System Time in 20ms frames. For each mobile station, the starting times of its slot cycles are offset from the slot in which \( \text{SLOT NUM} \) equals zero by a fixed, randomly selected number of slots as specified in 2.6.2.1.1.3.

Figure 2.6.2.1.1.1-1 shows an example for a slot cycle length of 1.28 seconds, in which the computed value of \( \text{PGSLOT} \) (see 2.6.2.1.1.3) is equal to 6, so that one of the mobile station’s slot cycles begins when \( \text{SLOT NUM} \) equals 6. The mobile station begins monitoring the Paging Channel or the Forward Common Control Channel at the start of the slot in which \( \text{SLOT NUM} \) equals 6. The next slot in which the mobile station must begin monitoring the Paging Channel or the Forward Common Control Channel is 16 slots later, i.e., the slot in which \( \text{SLOT NUM} \) is 22.
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.
The field ORDERED_TMSIS, when set to ‘1’ during a mobile station’s assigned slot, indicates that the base station has ordered TMSI page records directed to mobile stations operating in the slotted mode so that the resulting TMSI_CODE values are in ascending order in the General Page Messages in the slot.

A mobile station which is operating in the slotted mode, has a class 0 IMSI assigned, and does not have a TMSI assigned (all the bits of TMSI_CODEs-p are equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a General Page Message containing CLASS_0_DONE equal to ‘1’.

A mobile station which is operating in the slotted mode, has a class 1 IMSI assigned, and does not have a TMSI assigned (all the bits of TMSI_CODEs-p are equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a General Page Message containing CLASS_1_DONE equal to ‘1’.

A mobile station which is operating in the slotted mode, has a class 0 IMSI assigned, and has a TMSI assigned (the bits of TMSI_CODEs-p are not all equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a page record containing both CLASS_0_DONE equal to ‘1’ and TMSI_DONE equal to ‘1’.

A mobile station which is operating in the slotted mode, has a class 1 IMSI assigned, and has a TMSI assigned (the bits of TMSI_CODEs-p are not all equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a page record containing both CLASS_1_DONE equal to ‘1’ and TMSI_DONE equal to ‘1’.

If ORDERED_TMSIS is equal to ‘1’ and CLASS_0_DONE is equal to ‘1’, a mobile station which has a class 0 IMSI assigned, is operating in the slotted mode, and has a TMSI assigned (the bits of TMSI_CODEs-p are not all equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a page record with a TMSI_CODE value of higher numerical value than TMSI_CODEs-p.

If ORDERED_TMSIS is equal to ‘1’ and CLASS_1_DONE is equal to ‘1’, a mobile station which has a class 1 IMSI assigned, is operating in the slotted mode, and has a TMSI assigned (the bits of TMSI_CODEs-p are not all equal to ‘1’), may stop monitoring the Paging Channel or the Forward Common Control Channel after processing a page record with a TMSI_CODE value of higher numerical value than TMSI_CODEs-p.

The mobile station continues to monitor the Paging Channel or the Forward Common Control Channel for one additional slot unless, within its assigned slot, the mobile station receives a General Page Message containing the appropriate indicator permitting it to stop monitoring the Paging Channel or the Forward Common Control Channel (CLASS_0_DONE, CLASS_1_DONE, TMSI_DONE, or ORDERED_TMSIS equal to ‘1’, whichever is appropriate).

This allows the base station to carry over a message begun in the assigned slot into the following slot, if necessary.
2.6.2.1.1.1.1.2 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.

2.6.2.1.1.2.1 Method 1: Multi-Slot Broadcast Message Transmission

According to this method, a broadcast message is sent in a sufficient number of assigned slots such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.2.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. In this example, the broadcast message fits in a single slot. The Data Burst Message is transmitted in 16 consecutive slots.
2.6.2.1.1.2.2 Method 2: Periodic 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; see 2.6.2.1.1.3.3). There are two methods of sending broadcast messages used with Periodic 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 broadcast pages may be transmitted in the first slot of a broadcast paging cycle. Each broadcast page is associated with a subsequent broadcast slot. For each 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 the position of the broadcast page within the General Page Message transmitted in the first slot of the broadcast paging cycle.
Figure 2.6.2.1.1.1.2.2-1 shows an example of Periodic Broadcast Paging when the broadcast index is set to 1. A General Page Message containing three broadcast pages is transmitted in the first slot of the broadcast paging cycle. For each of the three broadcast pages, a Data Burst Message is transmitted in a subsequent slot.

![Diagram of Broadcast Paging Example]

### 2.6.2.1.1.1.3 Overview of Broadcast Messages on Broadcast Control Channel and Forward Common 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 $\text{NUM_BCCH_BCAST} \neq 000$, or when $\text{NUM_BCCH_BCAST} = 0$, to receive broadcast messages on the Forward Common Control Channel. 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, or when $\text{NUM_BCCH_BCAST} = 0$, to inform mobile stations that a broadcast message will be transmitted in a specified Forward Common Control Channel slot. The enhanced broadcast page identifies the Broadcast Control Channel, or when $\text{NUM_BCCH_BCAST} = 0$, the Forward Common Control Channel, and the slot the mobile station is to monitor to receive the broadcast message.
2.6.2.1.1.3.1 Method 1: Multi-Slot Enhanced Broadcast Paging

According to this method, an enhanced broadcast page is sent in a sufficient number of assigned slots on the Forward Common Control Channel such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.3.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. The enhanced broadcast page is transmitted in 16 consecutive slots.

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**Figure 2.6.2.1.1.3.1-1.** Multi-Slot Enhanced Broadcast Paging Example

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2.6.2.1.1.3.2 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).

One or more enhanced broadcast pages may be transmitted in the first slot of a broadcast paging cycle and/or in the subsequent slot. Each enhanced broadcast page is associated with a 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.

2.6.2.1.1.4 Overview of Broadcast Messages on Forward Common Control Channel

The 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 Forward Common Control Channel when NUM_BCCH_BCAST equals ‘000’. A broadcast message on the Forward Common 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). An enhanced broadcast page is a record within a General Page Message or a Universal Page Message that has a broadcast address type. A base station may transmit an enhanced broadcast page in an assigned slot to inform mobile stations monitoring that slot that a broadcast message will be transmitted in the same F-CCCH where the enhanced broadcast page is received. A slot that a mobile station monitors in order to receive either an enhanced broadcast page or a broadcast message is referred to as a broadcast slot.

2.6.2.1.1.4.1 Method 1: Multi-Slot Broadcast Message Transmission

According to this method, a broadcast message is sent in a sufficient number of assigned slots on the Forward Common Control Channel such that it may be received by all mobile stations that are operating in the slotted mode.

Figure 2.6.2.1.1.4.1-1 shows an example for the case when the maximum slot cycle index is equal to 0. In this example, the broadcast message fits in a single slot. The Data Burst Message is transmitted in 16 consecutive slots.

2.6.2.1.1.4.2 Method 2: Periodic Enhanced Broadcast Paging

According to this method, mobile stations configured to receive broadcast messages monitor a specific broadcast slot (the first slot of a broadcast paging cycle). There are two
methods of sending broadcast messages used with Periodic Enhanced Broadcast Paging.

If all of the broadcast messages to be transmitted fit within the first slot of a broadcast paging cycle, they may all be transmitted in this broadcast slot. If there is a single broadcast message to be transmitted, it may be transmitted beginning in this broadcast slot.

Alternately, one or more enhanced broadcast pages may be transmitted in the first slot of a broadcast paging cycle. Each enhanced broadcast page is associated with a subsequent broadcast slot. For each enhanced broadcast page, an associated broadcast message may be transmitted in the associated subsequent broadcast slot. The broadcast slot for the associated broadcast message is determined according to a time offset specified in the enhanced broadcast page. In addition, a broadcast slot for a repeat of the broadcast message can be specified via a time offset from the slot of the first broadcast message.

### 2.6.2.1.1.2 Non-Slotted Mode Requirements

A mobile station operating in the non-slotted mode shall monitor the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel at all times. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel (see 2.6.2.1.1.4), the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

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

A mobile station monitoring the Paging Channel shall operate in the non-slotted mode when PACA₈ is equal to enabled.

A mobile station monitoring the Paging Channel shall operate in the non-slotted mode when SLOTTED₈ is equal to NO.

### 2.6.2.1.1.3 Slotted Mode Requirements

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

- SLOTTED₈ is equal to NO,
- Bit 5 of the station class mark is set to ‘0’ (see 2.3.3),
- PACA₈ is equal to enabled, or
- The mobile station’s configuration parameters are not current (see 2.6.2.2).

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

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

A mobile station monitoring the Forward Common Control Channel with bit 5 of the station
class mark set to ‘1’ shall monitor all Forward Common Control Channel slots (see 2.6.2.1.3.1) if either of the following conditions is true:

- SLOTTED_s is equal to NO, or
- PACA_s is equal to enabled.

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

If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel (see 2.6.2.1.4), the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

### 2.6.2.1.3.1 Monitoring Assigned Slots

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

- The mobile station does not support Quick Paging Channel operation, or
- QPCH_SUPPORTED_s is equal to ‘0’, or
- RSC_MODE_ENABLED is equal to YES, IGNORE_QPCH_s is equal to ‘1’, and RSCI_s is equal to -3 or -4.

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

- The mobile station should check its assigned paging indicators in the complete Quick Paging Channel slot immediately preceding its assigned Paging Channel or Forward Common Control Channel slot, as specified in 2.6.2.1.2.1; the mobile station shall monitor the assigned Paging Channel or Forward Common Control Channel slot if the paging indicators meet the conditions specified in 2.6.2.1.2.2.

- If the mobile station does not check its assigned paging indicators, the mobile station shall monitor its assigned Paging Channel or Forward Common Control Channel slot.

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

- The mobile station should check the broadcast indicators in the complete Quick Paging Channel broadcast slot immediately preceding its assigned broadcast slot, as specified in 2.6.2.1.3.3.

- The mobile station should receive its assigned broadcast slot on the Forward Common Control Channel or Paging Channel if the broadcast indicators meet the conditions specified in 2.6.2.1.2.1.

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

If SLOTTED$_s$ is equal to NO or PACA$_s$ is equal to enabled, the mobile station may stop monitoring a Forward Common Control Channel slot when Layer 3 receives an address mismatch indication from Layer 2. When the mobile station stops monitoring a Forward Common Control Channel slot when SLOTTED$_s$ is equal to NO or PACA$_s$ is equal to enabled, the mobile station shall begin monitoring the subsequent Forward Common Control Channel slot in time to receive the first bit of the slot.

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

- Layer 3 receives an address mismatch indication from Layer 2 (see [4]); or
- The mobile station monitors the assigned slot and the slot following the assigned slot, and the mobile station receives at least one valid message (see [4]).

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

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

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

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

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

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

\[ \lfloor \frac{t}{4} \rfloor - PGSLOT \mod (16 \times T) = 0, \]

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

\[ T = 2^i, \]

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

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

• The mobile station has monitored all frames of a Broadcast Control Channel slot and the frame quality for all of the frames of the slot was insufficient; or

• The mobile station monitors the Broadcast Control Channel slot specified by the enhanced broadcast page and the slot did not contain an SCI bit set to ‘1’ (see [4]).

• The mobile station has received a broadcast Data Burst Message having the same BURST_TYPE and broadcast address as the enhanced broadcast page which announced the Data Burst Message.

2.6.2.1.1.3.2 Determination of the Slot Cycle Index

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

• If RSC_MODE_ENABLED is equal to YES, the mobile station shall use a slot cycle index no greater than min(RSCI_s, SLOT_CYCLE_INDEX_s).

• Otherwise, the mobile station shall use a slot cycle index no greater than SLOT_CYCLE_INDEX_s (see 2.6.2.2.1.6).

If the mobile station is directed by the user to modify the preferred slot cycle index (SLOT_CYCLE_INDEX_p), the mobile station shall perform parameter-change registration (see 2.6.5.1.6).
2.6.2.1.3.3 Slot Cycles for Broadcast Message Transmission

2.6.2.1.3.3.1 Slot Cycles for Broadcast Message Transmission on the Paging Channel

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

**Maximum paging cycle:** On the Paging Channel, a maximum paging cycle is a Paging Channel slot cycle (see 2.6.2.1.3.1) having a duration of $M$ slots such that:

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

where $i = \text{MAX}_{-}\text{ SLOT}_{-}\text{ CYCLE\_INDEX}_s$ as received in the *System Parameters Message*.

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

$$\left\lfloor \frac{t}{4} \right\rfloor \mod M = 0,$$

where $t$ represents system time in 20ms frames.

**Broadcast paging cycle:** On the Paging Channel, a broadcast paging cycle is a Paging Channel slot cycle (see 2.6.2.1.3.1) having a duration of $B + 3$ slots where:

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

where $i = \text{BCAST}_{-}\text{ INDEX}_s$ as received in the *Extended System Parameters Message*, or set by default when the *Extended System Parameters Message* is not sent.

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

$$\left\lfloor \frac{t}{4} \right\rfloor \mod (B + 3) = 0,$$

where $t$ represents system time in 20ms frames.

2.6.2.1.3.3.2 Slot Cycles for Broadcast Message Transmission on the Forward Common Control Channel

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

**Maximum paging cycle:** On the Forward Common Control Channel, a maximum paging cycle is a Forward Common Channel slot cycle (see 2.6.2.1.3.1) having a duration of $M$ slots such that:

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

where $i = \text{MAX}_{-}\text{ SLOT}_{-}\text{ CYCLE\_INDEX}_s$ as received in the *MC-RR Parameters Message*.

The first slot of each maximum paging cycle is any Forward Common Control Channel slot in which
$\lfloor t/4 \rfloor \mod M = 0,$

where $t$ represents system time in 20ms frames.

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

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

where $i = $BCAST_INDEX$_s$ as received in the MC-RR Parameters Message.

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

$$\lfloor t/4 \rfloor \mod (B + 7) = 0,$$

where $t$ represents system time in 20ms frames.

2.6.2.1.1.3.4 Monitoring Paging Channel Broadcasts

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

If BCAST_INDEX$_s$ is equal to ‘000’, the mobile station shall monitor only its assigned Paging Channel slots (see 2.6.2.1.1.3.1).

If BCAST_INDEX$_s$ is not equal to ‘000’, and the mobile station is configured to receive messages addressed to broadcast addresses, the mobile station should also monitor the Paging Channel beginning with the first slot of each broadcast paging cycle (see 2.6.2.1.1.3.3).

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

- The mobile station shall consider a broadcast page to have been received in the paging slot in which the General Page Message containing the broadcast page began.
- If BCAST_INDEX$_s$ is not equal to ‘000’, the paging slot containing the broadcast page is defined as the reference slot.
- Let $n$ represent the ordinal number of the broadcast page relative to other broadcast pages that are contained in the same General Page Message ($n = 1, 2, 3,...$). The mobile station should monitor the Paging Channel slot that occurs $n \times 3$ paging slots after the reference slot.

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

After receiving a broadcast message or a broadcast page for a Data Burst Message and a corresponding broadcast Paging Channel message when BCAST_INDEXs is equal to ‘000’, the mobile station should discard all further broadcast pages and all further broadcast Paging Channel messages containing the same BURST_TYPE and BC_ADDR fields that are received within \(16 \times 2^{\text{MAX_SLOT_CYCLE_INDEX}}\) slots of the paging slot in which the broadcast page or broadcast message was first received.

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

- If the burst type and broadcast address indicates that response to the broadcast page is required, then the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3.2) with a page response indication within T33m seconds after the page message is received.

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

### 2.6.2.1.1.3.5 Support of Broadcast Delivery Options on the Paging Channel

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

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

### 2.6.2.1.1.3.6 Monitoring the Forward Common Control Channel for the Enhanced Broadcast Page

The following requirements apply to mobile stations monitoring the Forward Common

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4 Format of broadcast address for BCMC is defined in BCMC service document (see [30]).
Control Channel and supporting the reception of broadcast messages.

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

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

If the mobile station receives an enhanced broadcast page containing a burst type and broadcast address for a *Data Burst Message* that the mobile station has been configured to receive and NUM_BCCH_BCASTs does not equal '000', the mobile station should monitor at least one Broadcast Control Channel slot, or when NUM_BCCH_BCASTs equals 0, the mobile station should monitor at least one Forward Common Control Channel slot, in which the corresponding broadcast message will be sent, determined as follows:

- When NUM_BCCH_BCASTs is greater than 0, the mobile station shall monitor the Broadcast Control Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$ later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Broadcast Control Channel slot which begins $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$ later than the Broadcast Control Channel slot in which the first transmission began.

- When NUM_BCCH_BCASTs equals 0, the mobile station shall monitor the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$ later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$ later than the Forward Common Control Channel slot in which the first transmission began.

If the mobile station receives an enhanced broadcast page containing a burst type and broadcast address for a *Data Burst Message* that the mobile station has been configured to receive and NUM_BCCH_BCASTs equals '000', the mobile station should monitor the slot in which the corresponding broadcast Forward Common Control Channel message will be sent, determined as follows:

- The mobile station shall consider an enhanced broadcast page to have been received in the Forward Common Control Channel slot in which the *General Page Message* or the *Universal Page Message* containing the enhanced broadcast page began.

- When NUM_BCCH_BCASTs equals 0, the mobile station shall monitor the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$ later than the beginning of the slot in which the message containing the enhanced broadcast page began or the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{REPEAT\_TIME\_OFFSET})$ later than the Forward Common Control Channel slot in which the first transmission began.

After receiving an enhanced broadcast page for a *Data Burst Message* and a corresponding
broadcast message when $\text{BCAST\_INDEX}_s$ is not equal to ‘000’, the mobile station should
discard all further enhanced broadcast pages containing the same BURST\_TYPE and
having the same broadcast address that are received within $4 \times (\text{B} + 7)$ slots of the first slot
in the broadcast paging cycle in which the enhanced broadcast page was received. ($\text{B} + 7$
is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3.1). The mobile
station should ignore broadcast messages for which a corresponding enhanced broadcast
page was not received.

After receiving an enhanced broadcast page for a Data Burst Message and a corresponding
broadcast message when $\text{BCAST\_INDEX}_s$ is equal to ‘000’, the mobile station should
discard all further enhanced broadcast pages containing the same BURST\_TYPE and
having the same broadcast address that are received within $16 \times 2^\text{MAX\_SLOT\_CYCLE\_INDEX}_s$
slots of the slot in which the enhanced broadcast page was received. The mobile station
should ignore broadcast messages for which a corresponding enhanced broadcast page was
not received.

If the mobile station received an enhanced broadcast page for a Data Burst Message and a
broadcast message, and the broadcast message announced by a pending
enhanced broadcast page containing the same BURST\_TYPE and having the same
broadcast address has not yet been received, the mobile station shall ignore the pending
enhanced broadcast page.

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

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

- If the burst type and broadcast address indicates to monitor broadcast messages,
  then the mobile station shall monitor the Primary Broadcast Control Channel slot
  for a BCMC Service Parameters Message containing the BCMC\_FLOW\_ID in the
  broadcast address, determined as follows:

  - The mobile station shall start monitoring the Primary Broadcast Control
    Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME\_OFFSET})$ later than the beginning
    of the slot in which the message containing the enhanced broadcast page began
    or the Primary Broadcast Control Channel slot which begins $40 \text{ ms} \times (1 +
    \text{REPEAT\_TIME\_OFFSET})$ later than the Primary Broadcast Control Channel slot
    in which the first transmission began.

  - The mobile station shall continue to monitor the Primary Broadcast Control
    Channel for the duration of four F-BCCH slots or until the BCMC Service
    Parameters Message containing the BCMC\_FLOW\_ID is received; if the mobile
    station detects the start of the BCMC Service Parameters Message, the mobile
    station shall monitor the F-BCCH until the entire BCMC Service Parameters
    Message is received.

2.6.2.1.1.3.7 Support of Broadcast Delivery Options on the Forward Common Control Channel/Broadcast Control Channel when \( \text{NUM\_BCCH\_BCAST}_8 \) does not equal ‘000’

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Multi-Slot Enhanced Broadcast Paging (see 2.6.2.1.1.3.1).

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Periodic Enhanced Broadcast Paging (see 2.6.2.1.1.3.2).

2.6.2.1.1.3.7.1 Support of Broadcast Delivery Options on the Forward Common Control Channel when \( \text{NUM\_BCCH\_BCAST}_8 \) equals ‘000’

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Multi-Slot Enhanced Broadcast Message Transmission (see 2.6.2.1.1.4.1).

A mobile station configured to receive broadcast messages shall support reception of broadcast messages transmitted using Periodic Enhanced Broadcast Paging (see 2.6.2.1.1.4.2).

2.6.2.1.1.3.8 Slot Cycles for BSPM Transmission

2.6.2.1.1.3.8.1 BSPM Slot Cycle on the Paging Channel

On the Paging Channel, a BSPM slot cycle is a Paging Channel slot cycle having a duration of \( B + 1 \) slots where:

\[
B = 2^i \times 16, \quad 0 \leq i \leq 15
\]

where \( i = \text{BSPM\_PERIOD\_INDEX}_8 \) as received in the Extended System Parameters Message. The first slot of each BSPM slot cycle is any Paging Channel slot in which

\[
\left\lfloor \frac{t}{4} \right\rfloor \mod (B + 1) = 0,
\]

where \( t \) represents system time in 20ms frames.

2.6.2.1.1.3.8.2 BSPM Slot Cycle on the Primary Broadcast Control Channel

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

\[
B = 2^i \times 16, \quad 0 \leq i \leq 15
\]

where \( i = \text{BSPM\_PERIOD\_INDEX}_8 \) as received in the MC-RR Parameters Message.
The first slot of each BSPM slot cycle is any Primary Broadcast Control Channel slot in which

\[
|t/2| \mod (B + 1) = 0, (40\text{ms})
\]

\[
|t/4| \mod (B + 1) = 0, (80\text{ms})
\]

\[
|t/8| \mod (B + 1) = 0, (160\text{ms})
\]

\[
|t/4| \mod (B + 1) = 0,
\]

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

2.6.2.1.4 Common Channel Supervision

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

2.6.2.1.2 Quick Paging Channel Monitoring Procedures

2.6.2.1.2.1 Overview

The Quick Paging Channel is divided into 80 ms slots called Quick Paging Channel slots. The Quick Paging Channel protocol provides for scheduling the transmission of paging indicators for a mobile station in Quick Paging Channel slots assigned to the mobile station. Support of this feature is optional.

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

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

If the mobile station is operating in the slotted mode and it supports the Quick Paging
Channel, and QPCH_SUPPORTEDs is equal to ‘1’, the mobile station monitors paging indicators on the Quick Paging Channel\(^5\) as follows:

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

- The first paging indicator for the mobile station is assigned between \((t^*-100)\) ms and \((t^*-80)\) ms (marked as 1 in Figure 2.6.2.1.2.1-1) and the second paging indicator is assigned between \((t^*-60)\) ms and \((t^*-40)\) ms (marked as 3 in the figure); or

- The first paging indicator for the mobile station is assigned between \((t^*-80)\) ms and \((t^*-60)\) ms (marked as 2 in the figure) and the second paging indicator is assigned between \((t^*-40)\) ms and \((t^*-20)\) ms (marked as 4 in the figure).

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

If the mobile station is operating in the slotted mode, is configured to receive the broadcast messages, supports the Quick Paging Channel, BCAST_INDEXs is not equal to ‘000’, QPCH_SUPPORTEDs is equal to ‘1’, and QPCH_BI_SUPPORTEDs is equal to ‘1’, the mobile station monitors broadcast indicators on the Quick Paging Channel as follows:

- The mobile station’s assigned Quick Paging Channel broadcast slots are offset from its assigned Forward Common Control Channel or Paging Channel broadcast slots by 100 ms, as shown in Figure 2.6.2.1.2.1-1.

- The mobile station monitors one or more broadcast indicators in an assigned Quick Paging Channel broadcast slot.

---

\(^5\) 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_QPCHs is equal to ‘1’.
Figure 2.6.2.1.2.1-1. Quick Paging Channel Timeline
2.6.2.1.2.2 Requirements

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

- The mobile station supports the Quick Paging Channel;
- QPCH_SUPPORTED = ‘1’; and
- The mobile station is not monitoring the Paging Channel or the Forward Common Control Channel.

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

$$\left\lfloor \frac{(t+5)}{4} \right\rfloor - \text{PGSLOT} \mod (16 \times T) = 0.$$  

where $t$ is the System Time in 20ms frames, PGSLOT is selected in the range 0 to 2047 by using the hash function specified in 2.6.7.1, and $T$ is the slot cycle length in units of 1.28 seconds such that

$$T = 2^i,$$

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

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

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

- If the mobile station detects that one of the paging indicators is set to “OFF”, the mobile station need not detect another paging indicator.
- If the mobile station does not detect that at least one of the paging indicators is set to “OFF”, the mobile station shall monitor its assigned Paging Channel or Forward Common Control Channel slot immediately following its assigned Quick Paging Channel slot.\(^6\)

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

\(^6\) 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.
slotted mode should monitor one or more configuration change indicators on the first 
Quick Paging Channel for the new base station 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 the Quick 
Paging Channel;
- The mobile station has knowledge that the new base station supports configuration 
change indicators,
- The mobile station is not monitoring the Paging Channel or the Forward Common 
Control Channel; and
- No more than $T_{31m}$ seconds have elapsed since the mobile station last received a 
valid message on the new Paging Channel or the new Forward Common Control 
Channel.

Before monitoring a configuration change indicator, the mobile station shall perform the 
following:

- The mobile station shall set $ASSIGNED_{QPAGECH}s$ equal to $QPAGECH_s$, and
- The mobile station shall set $QPAGECH_s$ equal to 1.

Before monitoring a paging indicator subsequent to monitoring a configuration change 
indicator, the mobile station shall set $QPAGECH_s$ equal to $ASSIGNED_{QPAGECH}s$.

If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit 
positions of the mobile station’s first pair of configuration change indicators shall be the 
last two bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the 
mobile station’s second pair of configuration change indicators shall be the last two bits in 
a Quick Paging Channel slot.

If the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the bit 
positions of the mobile station’s first four configuration change indicators shall be the last 
four bits in the first 40 ms half of a Quick Paging Channel slot. The bit positions of the 
mobile station’s second four configuration change indicators shall be the last four bits in a 
Quick Paging Channel slot.

If the mobile station monitors a configuration change indicator and determines that it is set 
to “OFF”, the mobile station can enter or remain in the slotted mode after an idle handoff 
(see 2.6.2.1.4.2).

If a mobile station is operating in the slotted mode and is configured to receive broadcast 
messages, it should monitor the broadcast indicators in the mobile station’s assigned 
Quick Paging Channel broadcast slot if all of the following conditions hold:

- The mobile station supports the Quick Paging Channel;
- $BCAST_{INDEX_s}$ is not equal to ‘000’
- $QPCH_{BI\_SUPPORTED_s} = ‘1’$; and
- The mobile station is not monitoring the Forward Common Control Channel, the 
Primary Broadcast Control Channel, or the Paging Channel.
The mobile station’s assigned Quick Paging Channel broadcast slots shall be those slots in which
\[
\left\lfloor \frac{(t+5)}{4} \right\rfloor \mod (B + 7) = 0.
\]
where \( t \) is the System Time in 20ms frames, and \( B \) is the broadcast paging cycle such that \( B = 2^{1+i} \times 16 \), \( 1 \leq i \leq 7 \) and \( i = \text{BCAST_INDEX}_s \) as received in the \textit{MC-RR Parameters Message}.

The mobile station’s assigned Quick Paging Channel broadcast slots shall be those slots in which
\[
\left\lfloor \frac{(t+5)}{4} \right\rfloor \mod (B + 3) = 0.
\]
where \( t \) is the System Time in 20ms frames, and \( B \) is the broadcast paging cycle such that \( B = 2^i \times 16 \), \( 1 \leq i \leq 7 \) and \( i = \text{BCAST_INDEX}_s \) as received in the \textit{Extended System Parameters Message}.

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

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

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

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

2.6.2.1.3 Registration
While in the \textit{Mobile Station Idle State}, the mobile station shall perform the registration procedures specified in 2.6.5.5.2.1.

2.6.2.1.4 Idle Handoff

2.6.2.1.4.1 Pilot Search
An idle handoff occurs when a mobile station has moved from the coverage area of one base station into the coverage area of another base station during the \textit{Mobile Station Idle State}. If the mobile station detects a Pilot Channel signal from another base station that is sufficiently stronger than that of the current base station, the mobile station determines that an idle handoff should occur. When multiple idle handoff candidates are available, the
mobile station should select, if any, a candidate which supports Primary Broadcast Control
Channel.

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

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

- **Active Set**: The pilot offset of the Forward CDMA Channel whose Paging Channel or
  Forward Common Control Channel is being monitored.

- **Neighbor Set**: The offsets of the Pilot Channels that are likely candidates for idle
  handoff. The members of the Neighbor Set are specified in the Neighbor List
  Message, Extended Neighbor List Message, and the General Neighbor List Message on
  the Paging Channel, and the Universal Neighbor List Message on the Primary
  Broadcast Channel.

- **Remaining Set**: The set of all possible pilot offsets in the current system (integer
  multiples of PILOT_INCs) on the current CDMA Frequency Assignment, excluding
  the pilots in the Neighbor Set and the Active Set.

- **Private Neighbor Set**: The offsets of the Pilot Channels for the private systems that
  are likely candidates for idle handoff. The members of the Private Neighbor Set are
  specified in the Private Neighbor List Message.

The mobile station shall support a Neighbor Set size of at least N8m pilots (see Annex D).

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

The mobile station may search other frequencies and band classes. For example, if a pilot
in the Neighbor Set or in the Private Neighbor Set is on a different Frequency Assignment
than that of the mobile station, this frequency should be included in the search criteria.

Search performance criteria are defined in [11].

This search should be governed by the following:

- **Active Set**: The search window size for the pilot in the Active Set shall be the
  number of PN chips specified in Table 2.6.6.2.1-1 corresponding to SRCH_WIN_A8.
  The mobile station should center the search window for the pilot of the Active Set
  around the earliest arriving usable multipath component of the pilot. If the mobile
  station receives a value greater than or equal to 13 for SRCH_WIN_Ar, it may store
  and use the value 13 in SRCH_WIN_A8.
• Neighbor Set: The search window size for each pilot in the Neighbor Set shall be the 
number of PN chips specified in Table 2.6.6.2.1-1 corresponding to 
SRCH_WIN_NGHBRs field of the NGHBR_REC for the pilot. The mobile station 
should center the search window for each pilot in the Neighbor Set around the 
pilot’s PN sequence offset plus the corresponding SRCH_OFFSET_NGHBRs (see 
Table 2.6.6.2.1-2) using timing defined by the mobile station’s time reference (see 
[2]). The mobile station should use the SEARCH_PRIORITY field of the 
NGHBR_REC for the corresponding pilot to schedule its neighbor search. If 
ADD_PILOT_REC_INCL field of the NGHBR_REC for the corresponding pilot is equal 
to ‘1’, the mobile station shall use the information included in the 
NGHBR_PILOT_REC field for searching the neighbor.

If the mobile station supports hopping pilot beacons and the TIMING_INCL field of 
the NGHBR_REC for the corresponding pilot is equal to ‘1’, then the mobile station 
shall use the information included in the NGHBR_TX_OFFSET, 
NGHBR_TX_DURATION, and NGHBR_TX_PERIOD fields of the NGHBR_REC for the 
corresponding pilot to schedule the time for searching the neighbor.

• Remaining Set: The search window size for each pilot in the Remaining Set shall be 
the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to 
SRCH_WIN_Rs. The mobile station should center the search window for each pilot 
in the Remaining Set around the pilot’s PN sequence offset using timing defined by 
the mobile station’s time reference (see [2]). The mobile station should only search 
for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer 
multiples of PILOT_INCs.

• Private Neighbor Set: The search window size for each pilot in the Private Neighbor 
Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to 
SRCH_WIN_PRI_NGHBRs field of the PRI_NGHBR_REC for the pilot. The mobile 
station should center the search window for each pilot in the Private Neighbor Set 
around the pilot’s PN sequence offset using timing defined by the mobile station’s 
time reference (see [2]).

If the mobile station determines that one of the Neighbor Set, Private Neighbor Set or 
Remaining Set Pilot Channel signals is sufficiently stronger (see [11]) than the Pilot 
Channel of the Active Set, the mobile station should perform an idle handoff as follows:

• If the mobile station is currently monitoring a Forward Supplemental Channel, the 
mobile station shall perform an idle handoff as specified in 2.6.13.4;

• 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 is equal to 
SID, RER_NID is equal to NID, and RER_MODE_SUPPORTED 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 2.6.2.1.3.1).

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 2.6.2.1.3. 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.
- The mobile station shall not perform any of the remaining procedures in this section.

If the NGHBR_CONFIG field is ‘000’, the mobile station shall perform the following:

- The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL (see 2.6.2.2) and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel.
If the mobile station has not stored configuration parameters for the new Paging Channel or Forward Common Control Channel and Primary Broadcast Control Channel, or if the stored information is not current, the mobile station shall perform the following:

- If the mobile station has monitored the Paging Channel before the idle handoff, the mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

- If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff, the mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

- If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel. The mobile station shall begin monitoring the Paging Channel or the Forward Common Control Channel/Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel, as applicable.

- If PACAs is equal to enabled, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-origin the PACA call using the new base station.

If the NGHBR_CONFIG field is ‘001’, the mobile station shall perform the following:

- The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Paging Channel.
• If the stored information for Primary Paging Channel or any of the Paging Channels
  on the associated NGHBR_FREQs of the new base station in NGHBR_REC_LIST of
  the old base station is current, the mobile station shall perform the following:

  - The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a
    new Paging Channel number in the range 1 to PAGE_CHANs, where
    PAGE_CHANs is the value stored for the Paging Channel whose stored
    information is current. The mobile station shall store the new Paging Channel
    number as PAGECHs. The mobile station shall perform the following:

      + If the mobile station has not stored configuration parameters for the new
        Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the
        mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs,
        NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs,
        GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs,
        EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs,
        PRI_NGHBR_LST_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs,
        EXT_CHAN_LST_MSG_SEQs, and GLOB_SERV_REDIR_MSG_SEQs to NULL.

      + If the stored information for the new Paging Channel is current, the mobile
        station shall set CONFIG_MSG_SEQs to the stored information for the new
        Paging Channel and set NGHBR_REC_LIST to the stored information for the
        new Paging Channel.

  - If the mobile station has monitored the Forward Common Control
    Channel/Primary Broadcast Control Channel before the idle handoff, the mobile
    station shall set Paging Channel data rate, PRATs = ‘00’.

  - If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in
    NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and
    CDMACHs respectively, the mobile station shall set CDMABANDs to
    NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA
    Channel. The mobile station shall begin monitoring the new Paging Channel of
    the new base station.

• If none of the Paging Channel stored information on the associated NGHBR_FREQs
  of the new base station in NGHBR_REC_LIST of the old base station are current, the
  mobile station shall perform the following:

  - The mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs,
    NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs,
    GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs,
    EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs,
    EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs,
    USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.
- If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff, the mobile station shall set Paging Channel data rate, PRATs = ‘00’.

- The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel. The mobile station shall begin monitoring the Primary Paging Channel of the new base station.

  • If PACA is equal to enabled, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-originate the PACA call using the new base station.

If the NGHBR_CONFIG field is ‘010’, the mobile station shall perform the following:

  • The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel.

  • If the mobile station has monitored the Paging Channel before the idle handoff, the mobile station shall perform the following:

    - If the stored information for Primary Paging Channel or any of the Paging Channels on the target frequency or any of the frequencies of the new base station is current, the mobile station shall perform the following:

      + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the stored value of the number of CDMA channels to determine the new CDMA Channel and shall set FREQ_NEW to this new CDMA Channel. The mobile station shall perform the following:

        o If the stored information for any of the Paging Channels on the CDMA channel specified by FREQ_NEW is current, the mobile station shall perform the following:

          ◊ The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to PAGE_CHANs, where PAGE_CHANs is the value stored for the Paging Channel whose stored information is current. The mobile station shall store the new Paging Channel number as PAGECHs. The mobile station shall perform the following:
– If the mobile station has not stored configuration parameters for the new Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, and GLOB_SERV_REDIR_MSG_SEQs to NULL.

– If the stored information for the new Paging Channel is current, the mobile station shall set CONFIG_MSG_SEQs to the stored information for the new Paging Channel and set NGHBR_REC_LIST to the stored information for the new Paging Channel.

◊ If the band class corresponding to FREQ_NEW is not equal to CDMABANDs of the old base station or FREQ_NEW is not equal to CDMACHs of the old base station, the mobile station shall set CDMABANDs to band class corresponding to FREQ_NEW and shall set CDMACHs to FREQ_NEW, and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Paging Channel of the new base station.

◊ If none of the Paging Channel stored information on the CDMA channel specified by FREQ_NEW are current, the mobile station shall perform the following:

◊ The mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

◊ The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. If the band class corresponding to FREQ_NEW is not equal to CDMABANDs of the old base station or FREQ_NEW is not equal to CDMACHs of the old base station, the mobile station shall set CDMABANDs to band class corresponding to FREQ_NEW and shall set CDMACHs to FREQ_NEW, and tune to the new CDMA Channel. The mobile station shall begin monitoring the Primary Paging Channel of the new base station.
If none of the Paging Channel stored information on any of the frequencies of the new base station are current, the mobile station shall perform the following:

+ The mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

+ The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station is not equal to CDMABANDs and CDMACHs of the old base station respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, and CDMACHs to NGHBR_FREQs; otherwise, the mobile station shall set CDMACHs as follows:

  o If the Extended CDMA Channel List Message is being sent on the old base station, set CDMACHs to the first CDMA Channel given in the Extended CDMA Channel List Message for the old base station.

  o Otherwise, set CDMACHs to the first CDMA Channel given in the CDMA Channel List Message for the old base station.

Then the mobile station shall tune to the new CDMA channel and begin monitoring the Primary Paging Channel of the new base station.

If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff, the mobile station shall perform the following:

− If the stored information for any of the Forward Common Control Channels and Primary Broadcast Control Channel on any of the frequencies of the new base station is current, the mobile station shall perform the following:

  + The mobile station shall use the hash algorithm specified in 2.6.7.1 and the stored value of the number of CDMA channels to determine the new CDMA Channel and shall set FREQ_NEW to this new CDMA Channel. The mobile station shall perform the following:

  o If the stored information for any of the Forward Common Control Channels and Primary Broadcast Control Channel on the CDMA channel specified by FREQ_NEW is current, the mobile station shall perform the following:
The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common Control Channel number in the range 1 to NUM_FCCCHs, where NUM_FCCCHs is the stored value. The mobile station shall store the new Forward Common Control Channel number as FCCCH_IDs.

If the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel is current, the mobile station shall perform the following:

- The mobile station shall set CONFIG_MSG_SEQs to the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel and the mobile station shall set NGHBR_REC_LIST to the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel.

- If the band class corresponding to FREQ_NEW is not equal to CDMABANDs of the old base station or FREQ_NEW is not equal to CDMACHs of the old base station, the mobile station shall set CDMABANDs to band class corresponding to FREQ_NEW and shall set CDMACHs to FREQ_NEW, and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Forward Common Control Channel/Primary Broadcast Control Channel of the new base station.

If the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel is not current, the mobile station shall perform the following:

- The mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

- If the band class corresponding to FREQ_NEW is not equal to CDMABANDs of the old base station or FREQ_NEW is not equal to CDMACHs of the old base station, the mobile station shall set CDMABANDs to band class corresponding to FREQ_NEW and shall set CDMACHs to FREQ_NEW, and tune to the new CDMA Channel. The mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station.

If none of the Forward Common Control Channel and Primary Broadcast Control Channel stored information on the CDMA channel specified by FREQ_NEW are current, the mobile station shall perform the following:
◊ The mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

◊ If the associated NGHBR_BANDs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs or the associated NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMACHs of the old base station, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel. Otherwise, the mobile station shall set CDMACHs to the first CDMA Channel given in the Extended CDMA Channel List Message for the old base station and tune to the new CDMA channel.

◊ Then the mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel.

If none of the Forward Common Control Channel and Primary Broadcast Control Channel stored information on any of the frequencies of the new base station are current, the mobile station shall perform the following:

+ The mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

+ If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs of the old base station respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel. Otherwise, the mobile station shall set CDMACHs to the first CDMA Channel given in the Extended CDMA Channel List Message for the old base station and tune to the new CDMA channel.

+ Then the mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel.

• If PACAs is equal to enabled, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-originate the PACA call using the new base station.

If the NGHBR_CONFIG field is ‘011’, the mobile station shall perform the following:
• Enter the System Determination Substate of the Mobile Station Initialization State with a new system indication (see 2.6.1.1).

If the NGHBR_CONFIG field is ‘100’, the mobile station shall perform the following:

• The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL (see 2.6.2.2) and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Forward Common Control Channel/Primary Broadcast Control Channel.

• If the stored information for any of the Forward Common Control Channels and Primary Broadcast Control Channel on the associated NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is current, the mobile station shall perform the following:

  – The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common Control Channel number in the range 1 to NUM_FCCCHs, where NUM_FCCCHs is the stored value. The mobile station shall store the new Forward Common Control Channel number as FCCCH_IDs.

  – If the mobile station has not stored configuration parameters for this new Forward Common Control Channel and Primary Broadcast Control Channel, or if the stored information is not current, the mobile station shall perform the following:

    + The mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

    + If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel.

    + Then the mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel.

    – If the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel is current, the mobile station shall perform the following:
The mobile station shall set CONFIG_MSG_SEQs to the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel and the mobile station shall set NGHBR_REC_LIST to the stored information for this new Forward Common Control Channel and Primary Broadcast Control Channel.

If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Forward Common Control Channel/Primary Broadcast Control Channel of the new base station.

If none of the Forward Common Control Channel and Primary Broadcast Control Channel stored information on the associated NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station are current, the mobile station shall perform the following:

- The mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

- If the associated NGHBR_BANDs or NGHBR_FREQs of the new base station in NGHBR_REC_LIST of the old base station is not equal to CDMABANDs and CDMACHs respectively, the mobile station shall set CDMABANDs to NGHBR_BANDs, CDMACHs to NGHBR_FREQs, and tune to the new CDMA Channel.

- The mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel.

If PACAs is equal to enabled, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-originate the PACA call using the new base station.

2.6.2.1.5 Primary Broadcast Control Channel Monitoring

2.6.2.1.5.1 General Overview

The Broadcast Control Channel is divided into 40, 80, or 160 ms slots called the Broadcast Control Channel slots (see 3.1.3.5 in [2]). The Primary Broadcast Control Channel will be used for control messages. Support for the Primary Broadcast Control Channel is mandatory for mobile stations. The Primary Broadcast Control Channel will operate with
the Forward Common Control Channels and the Quick Paging Channels, or only with the Forward Common Control Channels.

After a mobile station acquires and synchronizes with a new base station that supports a Primary Broadcast Control Channel, the mobile station monitors the Primary Broadcast Control Channel to receive overhead information. Once the mobile station has received the updated overhead information from the Primary Broadcast Control Channel, the mobile station may begin to monitor a Forward Common Control Channel or a Quick Paging Channel, if it is supported.

2.6.2.1.5.2 Requirements

If the base station supports the Primary Broadcast Control Channel, the mobile station shall monitor the Primary Broadcast Control Channel for overhead messages. If the mobile station determines that the CONFIG_MSG_SEQ has changed, the mobile station shall monitor the Primary Broadcast Control Channel to receive updated overhead messages.

2.6.2.1.6 System Reselection Procedures

If the mobile station supports more than one operating mode or the Remaining Set/Neighbor Set contains pilots on frequencies different from the current frequency, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system reselection indication (see 2.6.1.1) if all of the following are true:

• RESELECT_INCLUDED is equal to ‘1’;
• The following inequality is satisfied:
  \[-20 \times \log_{10} \left( \frac{E_c}{I_0} \right) > EC_{I_0, THRESH} \]
  where \( E_c/I_0 \) is the measured \( E_c/I_0 \) of the active pilot; and
• The following inequality is satisfied:
  \[ \text{pilot\_power} < \text{EC\_THRESH} -115 \]
  where \( \text{pilot\_power} (\text{dBm/1.23 MHz}) = 10 \times \log_{10} (\text{PS}) (\text{dB}) + \text{mean input power} \]
  (dBm/1.23 MHz) and PS is the strength of the active pilot, as specified in 2.6.6.2.2.

2.6.2.1.7 Slotted Timer Expiration

Upon expiration of the slotted T_MS Slotted timer, the mobile station shall disable the timer, set \( T_{SLOTTED} = T_{T_74m} \), and set SLOTTED to YES.

2.6.2.1.8 Exiting the Reduced Slot Cycle Mode

If RSC_MODE_ENABLED is equal to YES, then at the system time specified by RSC_END_TIME, the mobile station shall set RSC_MODE_ENABLED to NO and set SLOTTED to YES.
2.6.2.1.9 Radio Environment Report Timer Expiration

Upon expiration of the radio environment report timer, the mobile station shall disable the timer and set RER_MODE_ENABLED to NO. If TKZ_MODE_PENDING is equal to YES, then the mobile station shall perform the following:

- Set TKZ_MODE_ENABLED to YES and TKZ_MODE_PENDING to NO.
- Initialize the tracking zone list (TKZ_LIST) to NULL.
- Enable the tracking zone update timer with an initial value of infinity if TKZ_UPDATE_PRD is equal to ‘1111’; otherwise, the mobile station shall enable the tracking zone update timer with an initial value of $2^{TKZ\_UPDATE\_PRD} + 6$ seconds.

2.6.2.2 Response to Overhead Information Operation

The overhead messages on the Primary Broadcast Control Channel are:

- ANSI-41 System Parameters Message
- MC-RR Parameters Message
- Enhanced Access Parameters Message
- Universal Neighbor List Message
- User Zone Identification Message
- Private Neighbor List Message
- Extended Global Service Redirection Message
- Extended CDMA Channel List Message
- ANSI-41 RAND Message
- BCMC Service Parameters Message

The overhead messages on the Paging Channel are:

- System Parameters Message
- Access Parameters Message
- Neighbor List Message
- CDMA Channel List Message
- Extended System Parameters Message
- Global Service Redirection Message
- Extended Neighbor List Message
- General Neighbor List Message
- User Zone Identification Message
- Private Neighbor List Message
- Extended Global Service Redirection Message

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The **Response to Overhead Information Operation** is performed whenever the mobile station receives an overhead message. The mobile station updates internally stored information from the received message’s data fields.

Configuration parameters and access parameters are received in the configuration messages and the *Access Parameters Message* or the *Enhanced Access Parameters Message*.

The configuration messages on the Primary Broadcast Control Channel are:

- **ANSI-41 System Parameters Message**
- **MC-RR Parameters Message**
- **Universal Neighbor List Message**
- **User Zone Identification Message**
- **Private Neighbor List Message**
- **Extended Global Service Redirection Message**
- **Extended CDMA Channel List Message**

The configuration messages on the Paging Channel are:

- **System Parameters Message**
- **Neighbor List Message**
- **CDMA Channel List Message**
- **Extended System Parameters Message**
- **Global Service Redirection Message**
- **Extended Neighbor List Message**
- **General Neighbor List Message**
- **User Zone Identification Message**
- **Private Neighbor List Message**
- **Extended Global Service Redirection Message**
- **Extended CDMA Channel List Message**

Associated with the set of configuration messages sent on each Paging Channel or Primary Broadcast Control Channel is a configuration message sequence number (CONFIG_MSG_SEQ). When the contents of one or more of the configuration messages change, the configuration message sequence number is incremented. For each of the configuration messages received, the mobile station stores the configuration message sequence number contained in the configuration message (A41_SYS_PAR_MSG_SEQs, MC_RR_PAR_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs).
EXT_CHAN_LST_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, or PRI_NGHBR_LST_MSG_SEQs. The mobile station also stores the most recently received configuration message sequence number (CONFIG_MSG_SEQs) contained in any message (see 2.6.2.2.1, 2.6.2.2.3, 2.6.2.2.4, 2.6.2.2.5, 2.6.2.2.6, 2.6.2.2.7, 2.6.2.2.8, 2.6.2.2.9, 2.6.2.2.10, 2.6.2.2.11, 2.6.2.2.12, 2.6.2.2.13, 2.6.2.2.14, 2.6.2.2.17, and 2.6.2.3). The mobile station examines the stored values of the configuration message sequence numbers to determine whether the configuration parameters stored by the mobile station are current.

The field EXT_SYS_PARAMETER in the System Parameters Message, when set equal to '0', indicates that the base station is not sending the Extended System Parameters Message. When the mobile station receives the System Parameters Message with the EXT_SYS_PARAMETER field set equal to '0', the mobile station shall set EXT_SYS_PAR_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Extended System Parameters Message is current.

The field EXT_CHAN_LST in the System Parameters Message, when set equal to '0', indicates that the base station is not sending the Extended CDMA Channel List Message. When the mobile station receives the System Parameters Message with the EXT_CHAN_LST field set equal to '0', the mobile station shall set EXT_CHAN_LST_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Extended CDMA Channel List Message is current.

The field GEN_NGHBR_LST in the System Parameters Message, when set equal to '0', indicates that the base station is not sending the General Neighbor List Message. When the mobile station receives the System Parameters Message with the GEN_NGHBR_LST field set equal to '0', the mobile station shall set the GEN_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the General Neighbor List Message is current.

The field EXT_NGHBR_LST in the System Parameters Message, when set equal to '0', indicates that the base station is not sending the Extended Neighbor List Message. When the mobile station receives the System Parameters Message with the EXT_NGHBR_LST field set equal to '0', the mobile station shall set EXT_NGHBR_LIST_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Extended Neighbor List Message is current.

The field GLOBAL_REDIRECT in the System Parameters Message, when set equal to '0', indicates that the base station is not sending the Global Service Redirection Message. When the mobile station receives the System Parameters Message with the GLOBAL_REDIRECT field set equal to '0', the mobile station shall set GLOB_SERV_REDIR_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Global Service Redirection Message is current.

The field EXT_GLOBAL_REDIRECT in the System Parameters Message or MC-RR Parameters Message, when set equal to '0', indicates that the base station is not sending the Extended Global Service Redirection Message. When the mobile station receives the System Parameters Message or MC-RR Parameters Message with the EXT_GLOBAL_REDIRECT field set equal to '0', the mobile station shall set EXT_GLOB_SERV_REDIR_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Extended Global Service Redirection Message is current.

The field USER_ZONE_ID in the System Parameters Message or MC-RR Parameters Message, when set equal to '0', indicates that the base station is not sending the User Zone
Identification Message. When the mobile station receives the System Parameters Message or MC-RR Parameters Message with the USER_ZONE_ID field set equal to ‘0’, the mobile station shall set USER_ZONE_ID_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the User Zone Identification Message is current.

The field PRI_NGHBR_LST in the System Parameters Message or MC-RR Parameters Message, when set equal to ‘0’, indicates that the base station is not sending the Private Neighbor List Message. When the mobile station receives the System Parameters Message or MC-RR Parameters Message with the PRI_NGHBR_LST field set equal to ‘0’, the mobile station shall set PRI_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs to indicate that the Private Neighbor List Message is current.

The configuration message sequence number is also included in the General Page Message and the Universal Page Message. This allows the mobile station to determine whether the stored configuration parameters are current without waiting for a configuration message.

Access Parameters Messages or Enhanced Access Parameters Messages are independently sequence-numbered by the ACC_MSG_SEQ field. The mobile station stores the most recently received Access Parameters Message or Enhanced Access Parameters Messages sequence number (ACC_MSG_SEQs).

Paging Channels, Broadcast Control Channels, and Forward Common Control Channels shall be considered different if they are transmitted by different base stations, if they are transmitted on different code channels, or if they are transmitted on different CDMA Channels. Configuration and access parameters from one Paging Channel or Primary Broadcast Control Channel shall not be used while monitoring a different Paging Channel or Primary Broadcast Control Channel/Forward Common Control Channel except for registration and authentication parameters while the mobile station is performing an access probe handoff or access handoff. The mobile station shall ignore any overhead message whose PILOT_PN field is not equal to the pilot offset index (PILOT_PN_s) of the base station whose Paging Channel or Primary Broadcast Control Channel is being monitored.

The mobile station may store the configuration parameters from Paging Channels or Primary Broadcast Control Channel it has recently monitored. When a mobile station starts monitoring a Paging Channel or a Primary Broadcast Control Channel/Forward Common Control Channel that it has recently monitored, the mobile station can determine whether the stored parameters are current by examining the CONFIG_MSG_SEQs in a configuration message or a page message.

The mobile station shall use a special value, NULL, to be stored in place of sequence numbers for messages that have not been received or are marked as not current. The special value NULL shall be unequal to any valid message sequence number.

The mobile station shall consider the stored configuration parameters to be current only if all of the following conditions are true:
• If the mobile station is monitoring the Paging Channel, all stored configuration message sequence numbers (SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs and GLOB_SERV_REDIR_MSG_SEQs) are equal to CONFIG_MSG_SEQs; and

• If the mobile station is monitoring the Forward Common Control Channel/Primary Broadcast Control Channel, all stored configuration message sequence numbers (A41_SYS_PAR_MSG_SEQs, MC_RR_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs) are equal to CONFIG_MSG_SEQs; and

• CONFIG_MSG_SEQs is not equal to NULL; and

• No more than T31m seconds (see Annex D) have elapsed since the mobile station last received a valid message on the Paging Channel or the Primary Broadcast Control Channel/Forward Common Control Channel for which the parameters were stored.

If the configuration parameters are not current, the mobile station shall process the stored parameters upon receipt of the configuration messages as described in 2.6.2.2.1, 2.6.2.2.3, 2.6.2.2.4, 2.6.2.2.5, 2.6.2.2.6, 2.6.2.2.7, 2.6.2.2.8, 2.6.2.2.9, 2.6.2.2.10, 2.6.2.2.11, 2.6.2.2.12, 2.6.2.2.13, 2.6.2.2.14, and 2.6.2.2.17.

2.6.2.2.1 System Parameters Message

Whenever a System Parameters Message is received on the Paging Channel, the configuration message sequence number, CONFIG_MSG_SEQr, shall be compared to that stored in SYS_PAR_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as described in 2.6.2.2.1.1, 2.6.2.2.1.2, 2.6.2.2.1.3, 2.6.2.2.1.4, 2.6.2.2.1.5, 2.6.2.2.1.6, 2.6.2.2.1.7, 2.6.2.2.1.8, and 2.6.2.2.1.9.

If PAGE_CHAN, REG_PRD, BASE_LAT, BASE_LONG, or PWR_REP_THRESH are not within the valid ranges specified in 3.7.2.3.2.1, then the mobile station shall ignore the System Parameters Message that contains them.

If BAND_CLASS is equal to ‘00001’ and if EXT_SYS_PARAMETERSr is not equal to ‘1’, the mobile station shall ignore the System Parameters Message containing these fields.

2.6.2.2.1.1 Stored Parameters

The mobile station shall store the following parameters:

• Configuration message sequence number
  (CONFIG_MSG_SEQs = CONFIG_MSG_SEQr, SYS_PAR_MSG_SEQs = CONFIG_MSG_SEQr)

• Base station identification (BASE_IDs = BASE_IDr)
• Base station class (BASE_CLASS_s = BASE_CLASS_r)
• Maximum slot cycle index
  (MAX_SLOT_CYCLE_INDEX_s = MAX_SLOT_CYCLE_INDEX_r)
• Home registration indicator (HOME_REG_s = HOME_REG_r)
• SID roamer registration indicator (FOR_SID_REG_s = FOR_SID_REG_r)
• NID roamer registration indicator (FOR_NID_REG_s = FOR_NID_REG_r)
• Power-up registration indicator (POWER_UP_REG_s = POWER_UP_REG_r)
• Power-down registration indicator (POWER_DOWN_REG_s = POWER_DOWN_REG_r)
• Parameter-change registration indicator (PARAMETER_REG_s = PARAMETER_REG_r)
• Search window size for the Active Set and Candidate Set
  (SRCH_WIN_A_s = SRCH_WIN_A_r)
• Search window size for the Neighbor Set (SRCH_WIN_N_s = SRCH_WIN_N_r)
• Search window size for the Remaining Set (SRCH_WIN_R_s = SRCH_WIN_R_r)
• Maximum age for retention of Neighbor Set members
  (NGHBR_MAX_AGE_s = NGHBR_MAX_AGE_r)
• Power control reporting threshold (PWR_REP_THRESH_s = PWR_REP_THRESH_r)
• Power control reporting frame count (PWR_REP_FRAMES_s = PWR_REP_FRAMES_r)
• Threshold report mode indicator
  (PWR_THRESH_ENABLE_s = PWR_THRESH_ENABLE_r)
• Periodic report mode indicator (PWR_PERIOD_ENABLE_s = PWR_PERIOD_ENABLE_r)
• Power report delay (PWR_REP_DELAY_s = PWR_REP_DELAY_r)
• Pilot detection threshold (T_ADD_s = T_ADD_r)
• Pilot drop threshold (T_DROP_s = T_DROP_r)
• Active Set versus Candidate Set comparison threshold (T_COMP_s = T_COMP_r)
• Drop timer value (T_TDROP_s = T_TDROP_r)
• Drop timer range value (T_TDROP_RANGE_s = T_TDROP_RANGE_r) if
  T_TDROP_RANGE_INCL_r is equal to ‘1’; otherwise, T_TDROP_RANGE_s = ‘0000’

• Extended System Parameters Message sent
  (EXT_SYS_PARAMETER_s = EXT_SYS_PARAMETER_r)
• Global Service Redirection Message sent
  (GLOBAL_REDIRECT_s = GLOBAL_REDIRECT_r)
• Extended Global Service Redirection Message sent
  (EXT_GLOBAL_REDIRECT_s = EXT_GLOBAL_REDIRECT_r)
• Extended Neighbor List Message sent
  (EXT_NGHB_R_LST_s = EXT_NGHB_R_LST_r)
• General Neighbor List Message sent
  \( (GEN\_NGHBRLST_S = GEN\_NGHBRLST_T) \)

• User Zone Identification Message sent
  \( (USER\_ZONE\_ID_S = USER\_ZONE\_ID_T) \)

• Private Neighbor List Message sent
  \( (PRI\_NGHBRLST_S = PRI\_NGHBRLST_T) \)

• Extended CDMA Channel List Message sent
  \( (EXT\_CHAN\_LST_S = EXT\_CHAN\_LST_T) \)

• If \( NEG\_SLOT\_CYCLE\_INDEX\_SUP \) is included and equal to \('1'\), the mobile station
  shall set \( MIN\_SLOT\_CYCLE\_INDEX \) to \(-4\); otherwise, the mobile station shall set
  \( MIN\_SLOT\_CYCLE\_INDEX \) to \(0\).

The mobile station shall also store the following parameters:

• If the mobile station is not in the \textit{Origination Attempt Substate}, or \textit{Page Response Substate}, or \textit{Registration Access Substate}, the mobile station shall store the following
  prior to storing the remaining parameters:
  – Registered system identification \( (REG\_SID_S = SID_S) \).
  – Registered network identification \( (REG\_NID_S = NID_S) \).
  – Registered registration zone \( (REG\_REG\_ZONE_S = REG\_ZONE_S) \).
  – Registered zone timer length \( (REG\_ZONE\_TIMER_S = ZONE\_TIMER_S) \).

• System identification \( (SID_S = SID_T) \)

• Network identification \( (NID_S = NID_T) \)

• Registration zone \( (REG\_ZONE_S = REG\_ZONE_T) \)

• Number of registration zones to be retained \( (TOTAL\_ZONES_S = TOTAL\_ZONES_T) \)

• Zone timer length \( (ZONE\_TIMER_S = ZONE\_TIMER_T) \)

• Multiple SID storage indicator \( (MULT\_SIDS_S = MULT\_SIDS_T) \)

• Multiple NID storage indicator \( (MULT\_NIDS_S = MULT\_NIDS_T) \)

• Registration period \( (REG\_PRD_S = REG\_PRD_T) \)

• Base station latitude \( (BASE\_LAT_S = BASE\_LAT_T) \)

• Base station longitude \( (BASE\_LONG_S = BASE\_LONG_T) \)

• Registration distance \( (REG\_DIST_S = REG\_DIST_T) \)

If \( EXT\_SYS\_PARAMETER_S \) is equal to \('0'\), then the mobile station shall perform the
following:

• Set \( EXT\_SYS\_PAR\_MSG\_SEQ_S \) to \( CONFIG\_MSG\_SEQ_S \),

• Set \( BCAST\_INDEX_S \) to \( MAX\_SLOT\_CYCLE\_INDEX_S \),
• Set IMSI_O to IMSI_M by setting IMSI_O_Ss to IMSI_M_Sp (i.e., setting IMSI_O_S1s to IMSI_M_S1p, IMSI_O_11_12s to IMSI_M_11_12p, and IMSI_O_ADDR_NUMs to IMSI_M_ADDR_NUMp),
• Set RESELECT_INCLUDEDs to ‘0’,
• For Band Class 0, if the mobile station determines it is operating in Korea, set P_REVs to ‘00000010’; otherwise, set P_REVs to ‘00000011’. For Band Class 3, set P_REVs to ‘00000011’. For Band Class 1 and Band Class 4, set P_REVs to ‘00000001’, and
• Set P_REV_IN_USEs to the lesser value of P_REVs and MOB_P_REVp of the current band class.
If EXT_CHAN_LSTs is equal to ‘0’, then the mobile station shall set EXT_CHAN_LST_MSG_SEQs to CONFIG_MSG_SEQs.
If GLOBAL_REDIRECTs is equal to ‘0’, then the mobile station shall set GLOB_SERV_REDIRECT_MSG_SEQs to CONFIG_MSG_SEQs.
If EXT_GLOBAL_REDIRECTs is equal to ‘0’, then the mobile station shall set EXT_GLOB_SERV_REDIRECT_MSG_SEQs to CONFIG_MSG_SEQs.
If EXT_NGHBR_LSTs is equal to ‘0’, then the mobile station shall set EXT_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs.
If GEN_NGHBR_LSTs is equal to ‘0’, then the mobile station shall perform the following:
• Set GEN_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs.
• Set the SRCH_WIN_NGHBR field of NGHBR_REC to SRCH_WIN_Ns for all entries.
• Set the SRCH_OFFSET_NGHBR field of NGHBR_REC to ‘000’ for all entries.
• Set the TIMING_INCL field of NGHBR_REC to ‘0’ for all entries.
• Set NUM_ANALOG_NGHBRs to ‘000’ and ANALOG_NGHBR_LIST to NULL.
• Set RESQ_ENABLEDs to ‘0’.
• Set the NGHBR_RESQ_CONFIGURED field of NGHBR_REC to ‘0’ for all entries.
• If EXT_NGHBR_LSTs is equal to ‘0’:
  – Set the SEARCH_PRIORITY field of the NGHBR_REC to ‘10’ (high) for all entries.
  – Set the NGHBR_BAND field of the NGHBR_REC to CDMABANDs for all entries.
  – Set the NGHBR_FREQ field of the NGHBR_REC to CDMACHs for all entries.
If GEN_NGHBR_LSTs is equal to ‘1’, GEN_NGHBR_LST_MSG_SEQs is equal to CONFIG_MSG_SEQs, and SETTING_SEARCH_WIN is equal to ‘1’, the mobile station shall perform the following:
• Set the SRCH_WIN_NGHBR field of each NGHBR_REC to SEARCH_WIN_Ns for all NGHBR_SET_SIZEs entries.
• Set SETTING_SEARCH_WIN to ‘0’.

If USER_ZONE_IDs is equal to ‘0’, then the mobile station shall perform the following:
• Set USER_ZONE_ID_MSG_SEQs to CONFIG_MSG_SEQs.
• Set the UZID field of the UZ_REC to ‘0000000000000000’ for all entries.
• Set the UZ_REV field of the UZ_REC to ‘0000’ for all entries.
• Set the TEMP_SUB field of the UZ_REC to ‘0’ for all entries.

If USER_ZONE_IDs is equal to ‘1’ and the mobile station does not support Tiered Services, then the mobile station shall set USER_ZONE_ID_MSG_SEQs to CONFIG_MSG_SEQs.

If PRI_NGHBR_LSTs is equal to ‘0’, then the mobile station shall set PRI_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs.

If PRI_NGHBR_LSTs is equal to ‘1’ and the mobile station does not support Tiered Services, then the mobile station shall set PRI_NGHBR_LST_MSG_SEQs to CONFIG_MSG_SEQs.

The mobile station shall ignore any fields at the end of the System Parameters Message that are not defined according to the protocol revision level (MOB_P_REVp of the current band class) being used by the mobile station.

2.6.2.2.1.2 Paging Channel Assignment Change
If the number of Paging Channels specified in the System Parameters Message (PAGE_CHANr) is different from PAGE_CHANs, the mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to PAGE_CHANr. The mobile station shall store the new Paging Channel number as PAGECHs. The mobile station shall then set PAGE_CHANs to PAGE_CHANr. The mobile station shall set ACC_MSG_SEQs to NULL. If the mobile station has not stored configuration parameters for the new Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, and GLOB_SERV_REDIR_MSG_SEQs to NULL. The mobile station shall then begin monitoring the new Paging Channel as specified in 2.6.2.1.1.

2.6.2.2.1.3 RESCAN Parameter
If the RESCANr field in the System Parameters Message equals ‘1’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a rescan indication (see 2.6.1.1).

2.6.2.2.1.4 Roaming Status
The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3). The mobile station should indicate to the user whether the mobile station is roaming.
2.6.2.2.1.5 Registration
The mobile station shall update stored variables and perform other registration procedures as specified in 2.6.5.5.2.2.

2.6.2.2.1.6 Slot Cycle Index
The mobile station shall set SLOT_CYCLE_INDEX to:

\[
\max \left( \min(SLOT_CYCLE_INDEX_REG, MAX_SLOT_CYCLE_INDEX) \right)
\]

Where, SLOT_CYCLE_INDEX_REG is computed based on the slot cycle index value included in the last registration attempt (see 2.6.5.5.3.1 and 2.6.5.5.3.2).

If the mobile station is operating in the slotted mode, it shall set its slot cycle length as described in 2.6.2.1.1.3.

2.6.2.2.1.7 PACA Disable for SID Change
If PACA is equal to enabled, and SID is not equal to PACA_SID, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

2.6.2.2.1.8 Retry Delay Disable for Packet Zone ID or SID/NID Change
The mobile station shall set RETRY_DELAYs[RETRY_TYPE] to 0 when the mobile station determines that the Packet Zone Identification or the System Identification/Network Identification (SID/NID pair) has been changed, where RETRY_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.

2.6.2.2.1.9 Encryption key reset for SID/NID Change
When the mobile station determines that the System Identification/Network Identification (SID/NID pair) has been changed, it shall perform the following:

• The mobile station shall disable the key setup timer if the timer is running.
• If there is an entry in the mobile station’s SID_NID_LIST that matches the previous SID/NID pair, the mobile station shall perform the following:
  -- The mobile station shall save the following encryption/integrity related parameters associated with previous SID/NID pair:
    + KEY_ID,
    + ENC_KEY[KEY_ID] and INT_KEY[KEY_ID],
    + TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] and
    + C_SIG_ENCRYPT_MODEs.
If there are more than one SID/NID pairs in the SID_NID_LISTs for which there are associated encryption/integrity related parameters saved, the mobile station may remove the parameters associated with the SID/NID pair that was visited at the earliest time.

If there is an entry in the mobile station’s SID_NID_LISTs that matches the base station’s SID and NID and the following encryption/integrity related parameters last used in that system (SID/NID pair) are stored in the mobile station, the mobile station shall restore them:

- KEY_ID,
- ENC_KEY[KEY_ID] and INT_KEY[KEY_ID],
- TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] and
- C_SIG_ENCRYPT_MODEs.

Otherwise, the mobile station shall set ENC_KEY['00'], ENC_KEY['01'], INT_KEY['00'], and INT_KEY['01'] to NULL.

2.6.2.2.2 Access Parameters Message

Whenever an Access Parameters Message is received on the Paging Channel, the sequence number, ACC_MSG_SEQr, shall be compared to ACC_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

If PROBE_PN_RAN, MAX_REQ_SEQ, or MAX_RSP_SEQ are not within the valid ranges specified in 3.7.2.3.2.2, then the mobile station shall ignore the Access Parameters Message that contains them.

The mobile station shall store the following parameters:

- Access Parameters Message sequence number (ACC_MSG_SEQs = ACC_MSG_SEQr)
- Number of Access Channels (ACC_CHANs = ACC_CHANr)
- Nominal transmit power offset (NOM_PWRs = NOM_PWRr)
- Initial power offset for access (INIT_PWRs = INIT_PWRr)
- Power increment (PWR_STEPs = PWR_STEPr)
- Number of access probes (NUM_STEPs = NUM_STEPr)
- Maximum Access Channel message capsule size (MAX_CAP_SZs = MAX_CAP_SZr)
- Access Channel preamble length (PAM_SZs = PAM_SZr)
- Persistence modifier for Access Channel attempts for registrations which are not responses to the Registration Request Order (REG_PSISTs = REG_PSISTr)
- Persistence modifier for Access Channel attempts for message transmissions (MSG_PSISTs = MSG_PSISTr)
If PSIST\_EMG\_INCL\_r is equal to ‘0’, the mobile station shall set the persistence modifier for emergency calls from mobile stations in access overload classes 0 to 9 (PSIST\_EMG\_s) to ‘000’; otherwise, the mobile station shall set PSIST\_EMG\_s equal to PSIST\_EMG\_r.

- Time randomization for Access Channel probes (PROBE\_PN\_RAN\_s = PROBE\_PN\_RAN\_r)
- Acknowledgment timeout (ACH\_ACC\_TMO\_s = ACC\_TMO\_r)
- Access Channel probe backoff range (PROBE\_BKOFF\_s = PROBE\_BKOFF\_r)
- Access Channel probe sequence backoff range (BKOFF\_s = BKOFF\_r)
- Maximum number of probe sequences for an Access Channel request (MAX\_REQ\_SEQs = MAX\_REQ\_SEQr)
- Maximum number of probe sequences for an Access Channel response (MAX\_RSP\_SEQs = MAX\_RSP\_SEQr)
- If CDMABAND\_s is equal to ‘0’, the mobile station shall set extended nominal transmit power NOM\_PWR\_EXT\_s to ‘0’; otherwise, the mobile station shall store extended nominal transmit power (NOM\_PWR\_EXT\_s = NOM\_PWR\_EXT\_r).
- IC threshold (IC\_THRESH\_s = -7)

The mobile station shall also store the following parameters:
- Authentication mode (if AUTH\_r is equal to ‘00’ or ‘01’, then AUTH\_s = AUTH\_r; otherwise AUTH\_s = ‘01’)
- Random challenge value (RAND\_s = RAND\_r)

The mobile station shall ignore any fields at the end of the Access Parameters 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.

The mobile station shall store the persistence parameter number according to the following rule: If the mobile station’s access overload class is in the range 0-9, set PSIST\_s equal to PSIST\_(0-9)\_r; otherwise set PSIST\_s equal to PSIST\_n\_r, where n is equal to the mobile station access overload class.

The mobile station shall store the Access Control based on Call Type (ACCT) information as follows:
- Set ACCT\_SO\_LIST to NULL.
- Set ACCT\_SO\_GRP\_LIST to NULL.
- If ACCT\_INCL\_r is equal to ‘1’ and ACCOLC\_p is in the range 0 to 9, then the mobile station shall perform the following:
  - Set ACCT\_INCL\_EMG\_s to ACCT\_INCL\_EMG\_r.
  - If ACCT\_SO\_INCL\_r is equal to ‘1’, then for each ACCT\_SO\_r included in this message:
If ACCT_AOC_BITMAP_INCL \(r\) is equal to ‘0’, or if ACCT_AOC_BITMAP_INCL \(r\) is equal to ‘1’ and the bit in the associated ACCT_AOC_BITMAP1 \(r\) corresponding to the mobile station’s ACCOLCp (see Table 3.7.2.3.2.2-1) is equal to ‘1’, then add ACCT_SO \(r\) to ACCT_SO_LIST.

- If ACCT_SO_GRP_INCL \(r\) is equal to ‘1’, then for each ACCT_SO_GRP \(r\) included in this message:
  
  + If ACCT_AOC_BITMAP_INCL \(r\) is equal to ‘0’, or if ACCT_AOC_BITMAP_INCL \(r\) is equal to ‘1’ and the bit in the associated ACCT_AOC_BITMAP2 \(r\) corresponding to the mobile station’s ACCOLCp (see Table 3.7.2.3.2.2-1) is equal to ‘1’, then add ACCT_SO_GRP \(r\) to ACCT_SO_GRP_LIST.

The mobile station shall set CURR_ACC_MSG_SEQ equal to ACC_MSG_SEQs.

2.6.2.2.3 Neighbor List Message

Whenever a valid Neighbor List Message is received on the current Paging Channel (PAGECHs), the configuration message sequence number, CONFIG_MSG_SEQ \(r\), shall be compared to that stored in NGHBR_LST_MSG_SEQs. If the comparison results in a match, the mobile station shall process the remaining fields in the message as follows. If the comparison results in a mismatch, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.3, then the mobile station shall ignore the Neighbor List Message that contains it.

The mobile station shall store the following parameters:

- Configuration message sequence number
  
  \[ \text{CONFIG_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r, \]
  \[ \text{NGHBR_LST_MSG_SEQ}_s = \text{CONFIG_MSG_SEQ}_r \]

- Pilot PN sequence offset increment \(\text{PILOT_INC}_s = \text{PILOT_INC}_r\)

The mobile station shall set NGHBR_SET_SIZEs to the number of neighboring base stations contained in the Neighbor List Message.

For each of the neighboring base stations contained in the Neighbor List Message, the mobile station shall perform the following:

- If the \(i^{th}\) occurrence of NGHBR_CONFIG \(r\) is equal to ‘000’, ‘001’, or ‘010’, set the NGHBR_CONFIG field of NGHBR_REC\([i]\) to the \(i^{th}\) occurrence of NGHBR_CONFIG \(r\); otherwise, set the NGHBR_CONFIG field of NGHBR_REC \([i]\) to ‘011’.
- Set the NGHBR_PN field of NGHBR_REC \([i]\) to the \(i^{th}\) occurrence of NGHBR_PN \(r\).

If GEN_NGHBR_LST_MSG_SEQ \(s\) is not equal to CONFIG_MSG_SEQ \(s\), the mobile station shall perform the following:

- Set the SEARCH_PRIORITY field of the NGHBR_REC to ‘10’ (high) for all NGHBR_SET_SIZEs entries.
- Set the NGHBR_BAND field of NGHBR_REC to CDMABAND \(s\) for all NGHBR_SET_SIZEs entries.
• If NGHBR_CONFIG equals ‘010’, set the NGHBR_FREQ field of NGHBR_REC to the first CDMA Channel listed in the CDMA Channel List Message or Extended CDMA Channel List Message transmitted by the current base station for all NGHBR_SET_SIZEs entries; otherwise, set the NGHBR_FREQ field of NGHBR_REC to CDMACHs for all NGHBR_SET_SIZEs entries.

• Set the SRCH_WIN_NGHBR field of NGHBR_REC to SRCH_WIN_Ns for all NGHBR_SET_SIZEs entries.

• Set the SRCH_OFFSET_NGHBR field of NGHBR_REC to ‘000’ for all entries.

• Set NUM_ANALOG_NGHBRs to ‘000’ and set ANALOG_NGHBR_LIST to NULL.

The mobile station shall set the ACCESS_ENTRY_HO field of the NGHBR_REC to ‘0’ for all NGHBR_SET_SIZEs entries if any of the following conditions are met:

• EXT_SYS_PARAMETERs is equal to ‘0’,

• NGHBR_SET_ENTRY_INFOs is equal to ‘0’, or

• EXT_SYS_PAR_MSG_SEQs is not equal to CONFIG_MSG_SEQs.

The mobile station shall set the ACCESS_HO_ALLOWED field of the NGHBR_REC to ‘0’ for all NGHBR_SET_SIZEs entries if any of the following conditions are met:

• EXT_SYS_PARAMETERs is equal to ‘0’,

• NGHBR_SET_ACCESS_INFOs is equal to ‘0’, or

• EXT_SYS_PAR_MSG_SEQs is not equal to CONFIG_MSG_SEQs.

The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it consists only of pilot offsets listed in the Neighbor List Message. If the Neighbor List Message contains more pilot offsets than the mobile station can store, the mobile station shall store the pilot offsets beginning at the start of the Neighbor List Message, up to the limits of the mobile station’s Neighbor Set storage capacity.

2.6.2.2.4 CDMA Channel List Message

Whenever a CDMA Channel List Message is received on the Paging Channel, the configuration message sequence number, CONFIG_MSG_SEQr, shall be compared to that stored in CHAN_LST_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

The mobile station shall store the following parameters:

• Configuration message sequence number
  (CONFIG_MSG_SEQs = CONFIG_MSG_SEQr,  
  CHAN_LST_MSG_SEQs = CONFIG_MSG_SEQr)

The mobile station shall perform the following:

• If both SYS_PAR_MSG_SEQs and EXT_SYS_PAR_MSG_SEQs are current,
  – If EXT_CHAN_LSTs is equal to ‘1’, the mobile station shall ignore this message.
If EXT_CHAN_LSTₚ is equal to ‘0’, the mobile station shall process this message as described below.

- Otherwise, the mobile station shall process this message after SYS_PAR_MSG_SEQₚ and EXT_SYS_PAR_MSG_SEQₚs become current.

The mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of channels listed in the *CDMA Channel List Message* to determine the CDMA Channel (Frequency Assignment) for its Paging Channel. If the CDMA Frequency Assignment has changed (the computed CDMA Channel is different from CDMAChₚ), the mobile station shall perform the following actions:

- Set CDMAChₚ to the new CDMA Channel.
- Set PAGE_CHANₚ to ‘1’.
- Set PAGECHₚ to the Primary Paging Channel.
- If the stored configuration parameters is not current (see 2.6.2.2) for the corresponding base station and frequency assignment, set CONFIG_MSG_SEQₛ, SYS_PAR_MSG_SEQₛ, NGHBR_LST_MSG_SEQₛ, CHAN_LST_MSG_SEQₛ, EXT_SYS_PAR_MSG_SEQₛ, GLOB_SERV_REDIR_MSG_SEQₛ, USER_ZONE_ID-MSG_SEQₛ, PRI_NGHBR_LST_MSG_SEQₛ, EXT_CHAN_LST_MSG_SEQₛ, EXT_GLOB_SERV_REDIR_MSG_SEQₛ, and ACC_MSG_SEQₛ to NULL.
- Tune to the new CDMA Channel.

### 2.6.2.2.5 Extended System Parameters Message

Whenever an *Extended System Parameters Message* is received on the Paging Channel, the configuration message sequence number, CONFIG_MSG_SEQᵣ, shall be compared to that stored in EXT_SYS_PAR_MSG_SEQₛ. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

If the protocol revision level supported by the mobile station (MOB_P_REVₚ) is less than the minimum protocol revision level supported by the base station (MIN_P_REVᵣ), the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a protocol mismatch indication (see 2.6.1.1). Otherwise, the mobile station shall store the following parameters:

- Configuration message sequence number
  
  (CONFIG_MSG_SEQₛ = CONFIG_MSG_SEQᵣ, EXT_SYS_PAR_MSG_SEQₛ = CONFIG_MSG_SEQᵣ)

- Preferred Access Channel MSID type (PREF_MSID_TYPEₛ = PREF_MSID_TYPEᵣ)

- Extended Preferred Access Channel MSID type
  
  (EXT_PREF_MSID_TYPEₛ = EXT_PREF_MSID_TYPEᵣ) if included; otherwise, set EXT_PREF_MSID_TYPEₛ to NULL.
• MEID Required indicator (MEID_REQD_s = MEID_REQD_r) if included; otherwise, set MEID_REQD_s to ‘0’
• Broadcast slot cycle index (BCAST_INDEX_s = BCAST_INDEX_r)
• The mobile station shall set its operational IMSI, IMSI_O, as follows:
  – If IMSI_T_SUPPORTED_r is equal to ‘0’, the mobile station shall set IMSI_O to IMSI_M_p.
  – If IMSI_T_SUPPORTED_r is equal to ‘1’ and the mobile station’s IMSI_T_p has been programmed, the mobile station shall set IMSI_O to IMSI_T_p.
  – If IMSI_T_SUPPORTED_r is equal to ‘1’ and the mobile station’s IMSI_T_p has not been programmed, the mobile station shall set IMSI_O to IMSI_M_p.
• If MCC_r = ‘1111111111’ and IMSI_11_12_r = ‘1111111’, the mobile station shall set the IMSI_O to IMSI_M_p and store:
  – Mobile Country Code (MCC_s = MCC_M_p) and
  – IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_M_11_12_p);
  otherwise, the mobile station shall store:
  – Mobile Country Code (MCC_s = MCC_r) and
  – IMSI 11th and 12th digits (IMSI_11_12_s = IMSI_11_12_r).
• Least significant digit of MNC (IMSI_10_s = IMSI_10_r), if included.
• If IMSI_O is set to the IMSI_M, the mobile station shall set:
  – 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 IMSI_M_S2_p)
  – IMSI_O_11_12_s to IMSI_M_11_12_p
  – MCC_O_s to MCC_M_p
  – IMSI_O_ADDR_NUM_s to IMSI_M_ADDR_NUM_p
• If IMSI_O is set to the IMSI_T, the mobile station shall set:
  – 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 IMSI_T_S2_p).
  – IMSI_O_11_12_s to IMSI_T_11_12_p
  – MCC_O_s to MCC_T_p
  – IMSI_O_ADDR_NUM_s to IMSI_T_ADDR_NUM_p
• If IMSI_O has been changed, the mobile station shall set SYS_PAR_MSG_SEQ_s, CHAN_LST_MSG_SEQ_s, EXT_CHAN_LST_MSG_SEQ_s to NULL, and set PAGE_CHAN_s to ‘1’, and set PAGECH_s to the Primary Paging Channel.
• Protocol revision level (P_REV_s = P_REV_r) if included in the message; otherwise, set P_REV_s as follows:
– For Band Class 0, if the mobile station determines it is operating in Korea, set P_REVs to ‘00000010’; otherwise, set P_REVs to ‘00000011’.

– For Band Class 3, set P_REVs to ‘00000011’.

– For Band Class 1 and Band Class 4, set P_REVs to ‘00000001’.

• Minimum protocol revision level (MIN_P_REVs = MIN_P_REVr) if included in the message; otherwise, MIN_P_REVs = ‘00000010’ for Band Class 0, MIN_P_REVs = ‘00000001’ for Band Class 1 and Band Class 4, and MIN_P_REVs = ‘00000011’ for Band Class 3.

• Protocol revision level currently in use (P_REV_IN_USEs = the lesser value of P_REVs and MOB_P_REVp of the current band class)

• Slope of the handoff add/drop criterion (SOFT_SLOPEs = SOFT_SLOPEr) if included in the message; otherwise, SOFT_SLOPEs = ‘000000’.

• Intercept of the handoff add criterion (ADD_INTERCEPTs = ADD_INTERCEPTr)

• Intercept of the handoff drop criterion (DROP_INTERCEPTs = DROP_INTERCEPTr)

• Delete foreign TMSI (DELETE_FOR_TMSIs = DELETE_FOR_TMSIr)

• Use TMSI (USE_TMSIs = USE_TMSIr)

• TMSI zone length (TMSI_ZONE_LENs = TMSI_ZONE_LENr)

• TMSI zone number (TMSI_ZONEs = TMSI_ZONEr)

• Maximum number of alternative service options (MAX_NUM_ALT_SOs = MAX_NUM_ALT_SOt).

• System reselection indicator (RESELECT_INCLUDEDs = RESELECT_INCLUDEDr) if included in the message; otherwise, RESELECT_INCLUDEDs = ‘0’.

• Pilot reporting indicator (PILOT_REPORTs = PILOT_REPORTr)

• Neighbor Set access entry handoff information indicator (NGHBR_SET_ENTRY_INFOs = NGHBR_SET_ENTRY_INFOr) if included in the message; otherwise, NGHBR_SET_ENTRY_INFOs = ‘0’.

• Neighbor Set access handoff information indicator (NGHBR_SET_ACCESS_INFOs = NGHBR_SET_ACCESS_INFOr) if included in the message; otherwise, NGHBR_SET_ACCESS_INFOs = ‘0’.

• Short Data Burst supported indicator (SDB_SUPPORTEDs = SDB_SUPPORTEDr)

• Nominal reverse traffic channel output power offset relative to Reverse Pilot Channel power (RLGAIN_TRAFFIC_PILOTS = RLGAIN_TRAFFIC_PILOTr)

• Broadcast GPS Assist Indicator (BROADCAST_GPS_ASSTs = BROADCAST_GPS_ASSTr)

• Reverse Power Control Delay (REV_PWR_CNTL_DELAYs = REV_PWR_CNTL_DELAYr) if included

• Permission for the mobile station to request QoS settings in the *Origination*
Message, Origination Continuation Message, or Enhanced Origination Message (MOB_QOSs = MOB_QOSr)

• If ENC_SUPPORTEDr is equal to ‘1’, the mobile station shall store:
  – Signaling encryption supported indicator (SIG_ENCRYPT_SUPs = SIG_ENCRYPT_SUPr)
  – User information encryption supported indicator (UI_ENCRYPT_SUPs = UI_ENCRYPT_SUPr)

• Sync ID supported indicator (USE_SYNC_IDs = USE_SYNC_IDr)

• Concurrent services supported indicator (CS_SUPPORTEDs = CS_SUPPORTEDr)

• Maximum number of additional service reference identifiers allowed in origination (MAX_ADD_SERV_INSTANCEs = MAX_ADD_SERV_INSTANCEr), if included; otherwise, the mobile station shall set MAX_ADD_SERV_INSTANCEs to 0.

• Primary Broadcast Control Channel supported indicator (BCCH_SUPPORTEDs = BCCH_SUPPORTEDr).

• Pilot information request supported indicator (PILOT_INFO_REQ_SUPPORTEDs = PILOT_INFO_REQ_SUPPORTEDr).

• Message integrity supported indicator (MSG_INTEGRITY_SUPs = MSG_INTEGRITY_SUPr), if P_REV_IN_USEs is greater than or equal to 10; otherwise, MSG_INTEGRITY_SUPs = 0.

• If MSG_INTEGRITY_SUPr is equal to ‘1’ and SIG_INTEGRITY_SUP_INCLr is equal to ‘1’, the mobile station shall store the message integrity algorithms that the base station supports (SIG_INTEGRITY_SUPs = SIG_INTEGRITY_SUPr); otherwise, the mobile station shall set SIG_INTEGRITY_SUPs to ‘00000000’.

• Band class information request indicator (BAND_CLASS_INFO_REQs = BAND_CLASS_INFO_REQr)

• Alternate CDMA band class (ALT_BAND_CLASSs = ALT_BAND_CLASSr), if BAND_CLASS_INFO_REQr is equal to ‘1’.

• CDMA off time report supported indicator (CDMA_OFF_TIME_REP SUP_INDs = CDMA_OFF_TIME_REP_SUP_INDr)

• If CDMA_OFF_TIME_REP_SUP_INDr is equal to ‘1’, the mobile station shall store:
  – CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLDs = CDMA_OFF_TIME_REP_THRESHOLDr in units specified by CDMA_OFF_TIME_REP_UNITr)

• Control Hold Mode supported indicator (CHM_SUPPORTEDs = CHM_SUPPORTEDr) if included; otherwise, the mobile station shall perform the following:
  – If P_REV_IN_USEs is less than six, set CHM_SUPPORTEDs to ‘0’.
  – Otherwise, set CHM_SUPPORTEDs to ‘1’.
• Release to Idle State allowed indicator (RELEASE_TO_IDLE_IND\_s = RELEASE_TO_IDLE_IND\_r).

• Reconnect Message supported indicator (RECONNECT_MSG_IND\_s = RECONNECT_MSG_IND\_r).

• Short Data Burst allowed in Reconnect Message allowed indicator (SDB_IN_RCNM_IND\_s = SDB_IN_RCNM_IND\_r), if included; otherwise, set SDB_IN_RCNM_IND\_s to ‘0’.

• Forward Packet Data Channel supported Indicator (FOR_PDCH_SUPPORTED\_s = FOR_PDCH_SUPPORTED\_r).

• PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED\_s = PDCH_CHM_SUPPORTED\_r) if included; otherwise, set PDCH_CHM_SUPPORTED\_s to ‘0’.

• If RER_MODE_SUPPORTED\_r is not included, the mobile station shall set RER_MODE_SUPPORTED\_s to ‘0’; otherwise, the mobile station shall set RER_MODE_SUPPORTED\_s to RER_MODE_SUPPORTED\_r.

• If TKZ_MODE_SUPPORTED\_r is not included, the mobile station shall set TKZ_MODE_SUPPORTED\_s to TKZ_MODE_SUPPORTED\_r. If TKZ_MODE_SUPPORTED\_s is equal to ‘1’, the mobile station shall store the tracking zone identifier (TKZ_ID\_s = TKZ_ID\_r).

• If AUTO_FCSO_ALLOWED\_r is not included, the mobile station shall set AUTO_FCSO_ALLOWED\_s to ‘0’; otherwise, the mobile station shall set AUTO_FCSO_ALLOWED\_s to AUTO_FCSO_ALLOWED\_r.

• If CAND_BAND_INFO_REQ\_r is included, the mobile station shall set CAND_BAND_INFO_REQ\_s to CAND_BAND_INFO_REQ\_r; otherwise, the mobile station shall set CAND_BAND_INFO_REQ\_s to ‘0’.

• If BYPASS_REG_IND\_r is included, the mobile station shall set BYPASS_REG_IND\_s to BYPASS_REG_IND\_r; otherwise, the mobile station shall set BYPASS_REG_IND\_s to ‘00’.

If BCCH_SUPPORTED\_s equals ‘1’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a new system indication.

If P\_REV_IN_USE\_s has been changed, the mobile station shall set ACC_MSG_SEQ\_s, CURR_ACC_MSG_SEQ, SYS_PAR_MSG_SEQ\_s, EXT_NGHBR_LST_MSG_SEQ\_s, GEN_NGHBR_LST_MSG_SEQ\_s, and GLOB_SERV_REDIR_MSG_SEQ\_s to NULL.

If NGHBR_SET_ENTRY_INFO is equal to ‘1’, the mobile station shall store the access entry handoff in order and message processing operation indicator (ACC_ENT_HO_ORDER\_s = ACC_ENT_HO_ORDER\_r).
If the mobile station supports packet data service options, the mobile station shall store the packet data services zone identifier \( \text{PACKET_ZONE_ID}_s = \text{PACKET_ZONE_ID}_r \); otherwise, the mobile station shall set \( \text{PACKET_ZONE_ID}_s \) to ‘00000000’.

If the mobile station supports packet data service options and the \( \text{PZ_HYST_ENABLED} \) field is included, the mobile station shall store the packet zone hysteresis enabled indicator \( \text{PZ_HYST_ENABLED}_s = \text{PZ_HYST_ENABLED}_r \); otherwise, the mobile station shall set \( \text{PZ_HYST_ENABLED}_s \) to ‘0’.

If the mobile station supports packet data service options and the \( \text{PZ_HYST_LIST_LEN} \) field is included, the mobile station shall store the packet zone hysteresis list length \( \text{PZ_HYST_LIST_LEN}_s = \text{PZ_HYST_LIST_LEN}_r \); otherwise, the mobile station shall set \( \text{PZ_HYST_LIST_LEN}_s \) to 4.

If the mobile station supports packet data service options and the \( \text{PZ_HYST_ACT_TIMER} \) field is included, the mobile station shall store the packet zone hysteresis activation timer \( \text{PZ_HYST_ACT_TIMER}_s = \text{PZ_HYST_ACT_TIMER}_r \); otherwise, the mobile station shall set \( \text{PZ_HYST_ACT_TIMER}_s \) to \( 30 \text{ seconds} \)

If the mobile station supports packet data service options and the \( \text{PZ_HYST_TIMER_MUL} \) field and the \( \text{PZ_HYST_TIMER_EXP} \) field are included, the mobile station shall store the packet zone hysteresis timer \( \text{PZ_HYST_TIMER}_s = \text{PZ_HYST_TIMER}_r \times 8^{\text{PZ_HYST_TIMER_EXP}_r} \); otherwise, the mobile station shall set \( \text{PZ_HYST_TIMER}_s \) to \( 60 \text{ seconds} \)

If \( \text{RESELECT_INCLUDED}_s \) is equal to ‘1’, the mobile station shall store:

- Pilot power threshold \( \text{EC_THRESH}_s = \text{EC_THRESH}_r \)
- Pilot \( E_c/I_o \) threshold \( \text{EC}_I_0\text{O}_\text{THRESH}_s = \text{EC}_I_0\text{O}_\text{THRESH}_r \)

If \( \text{NGHBR_SET_ACCESS_INFO}_s \) is equal to ‘1’, the mobile station shall store:

- Access handoff permitted indicator \( \text{ACCESS_HO}_s = \text{ACCESS_HO}_r \)
- Access probe handoff permitted indicator \( \text{ACCESS_PROBE_HO}_s = \text{ACCESS_PROBE_HO}_r \)
- If \( \text{ACCESS_PROBE_HO}_s \) is equal to ‘1’, access handoff list update permitted indicator \( \text{ACC_HO_LIST_UPD}_s = \text{ACC_HO_LIST_UPD}_r \)
- Maximum number of times that the mobile station is permitted to perform an access probe handoff \( \text{MAX_NUM_PROBE_HO}_s = \text{MAX_NUM_PROBE_HO}_r \)
- Access handoff permitted for message response indicator \( \text{ACCESS_HO_MSG_RSP}_s = \text{ACCESS_HO_MSG_RSP}_r \)
- Access probe handoff permitted for other messages indicator \( \text{ACC_PROBE_HO_OTHER_MSG}_s = \text{ACC_PROBE_HO_OTHER_MSG}_r \)

If \( \text{NGHBR_SET_ENTRY_INFO}_s \) or \( \text{NGHBR_SET_ACCESS_INFO}_s \) is equal to ‘1’, the mobile station shall store the size of the Neighbor Set \( \text{NGHBR_SET_SIZE}_s = \text{NGHBR_SET_SIZE}_r \).
If NGHBR_SET_ENTRY_INFOs is equal to ‘0’, then for all NGHBR_SET_SIZEs occurrences of
ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
NGHBR_REC[i] to ‘0’.

If NGHBR_SET_ENTRY_INFOs is equal to ‘1’, then for all NGHBR_SET_SIZEs occurrences of
ACCESS_ENTRY_HO, the mobile station shall set the ACCESS_ENTRY_HO field of
NGHBR_REC[i] to the i\textsuperscript{th} occurrence of ACCESS_ENTRY_HO\textsubscript{r}.

If NGHBR_SET_ACCESS_INFOs is equal to ‘0’, then for all NGHBR_SET_SIZEs occurrences
of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
NGHBR_REC[i] to ‘0’.

If NGHBR_SET_ACCESS_INFOs is equal to ‘1’, then for all NGHBR_SET_SIZEs occurrences
of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of
NGHBR_REC[i] to the i\textsuperscript{th} occurrence of ACCESS_HO_ALLOWED\textsubscript{r}.

The mobile station shall set all bits of TMSI_CODE\textsubscript{s-p} to ‘1’ if all of the following conditions
are met:

- The bits of TMSI_CODE\textsubscript{s-p} are not all equal to ‘1’;
- DELETE\_FOR\_TMSI\textsubscript{s} is equal to ‘1’, and
- ASSIGNING\_TMSI\_ZONE\_LEN\textsubscript{s-p} is not equal to TMSI\_ZONE\_LEN\textsubscript{s}, or the least
  significant ASSIGNING\_TMSI\_ZONE\_LEN\textsubscript{s-p} octets of ASSIGNING\_TMSI\_ZONE\textsubscript{s-p}
  are not equal to TMSI\_ZONE\textsubscript{s}.

If the mobile station supports the Quick Paging Channel operation:

- The mobile station shall set QPCH\_SUPPORTED\textsubscript{s} to QPCH\_SUPPORTED\textsubscript{r}.
- If QPCH\_SUPPORTED\textsubscript{r} = ‘1’:
  - The mobile station shall set QPCH\_RATE\textsubscript{s} to QPCH\_RATE\textsubscript{r}.
  - If the number of Quick Paging Channels specified in the received message
    (NUM\_QPCH\textsubscript{r}) is different from NUM\_QPCH\textsubscript{s}, the mobile station shall use the
    hash algorithm specified in 2.6.7.1 to select a new Quick Paging Channel
    number in the range 1 to NUM\_QPCH\textsubscript{r}. The mobile station shall store the new
    Quick Paging Channel number as QPAGECH\textsubscript{s} and as ASSIGNED\_QPAGECH\textsubscript{s}.
    The mobile station shall then set NUM\_QPCH\textsubscript{s} to NUM\_QPCH\textsubscript{r}.
  - The mobile station shall set QPCH\_POWER\_LEVEL\_PAGE\textsubscript{s} to
    QPCH\_POWER\_LEVEL\_PAGE\textsubscript{r}.
  - The mobile station shall set QPCH\_CCI\_SUPPORTED\textsubscript{s} to
    QPCH\_CCI\_SUPPORTED\textsubscript{r}.
    - If QPCH\_CCI\_SUPPORTED\textsubscript{r} = ‘1’, the mobile station shall set
      QPCH\_POWER\_LEVEL\_CONFIG\textsubscript{s} to QPCH\_POWER\_LEVEL\_CONFIG\textsubscript{r}.
  - The mobile station shall set QPCH\_BI\_SUPPORTED\textsubscript{s} to QPCH\_BI\_SUPPORTED\textsubscript{r}, if
    included.
• If QPCH_BI_SUPPORTED\(_r\) = ‘1’, the mobile station shall set
  QPCH_POWER_LEVEL_BCAST\(_s\) to QPCH_POWER_LEVEL_BCAST\(_r\).

If the mobile station supports the *Device Information Message* on the r-csch, the mobile
station shall store:

• Autonomous message supported indicator
  (AUTO_MSG_SUPPORTED\(_s\) = AUTO_MSG_SUPPORTED\(_r\))

If AUTO_MSG_SUPPORTED\(_r\) is equal to ‘1’ and the mobile station supports the *Device
Information Message* on the r-csch, the mobile station shall store:

• Autonomous message interval
  (AUTO_MSG_INTERVAL\(_s\) = AUTO_MSG_INTERVAL\(_r\))

The mobile station shall store mobile station initiated position location determination
supported indicator (MS_INIT_POS_LOC_SUP_IND\(_s\) = MS_INIT_POS_LOC_SUP_IND\(_r\)).

The mobile station shall set FOR_PDCH_COMMON_PARMS\(_s\) = ‘0’.

If both FOR_PDCH_SUPPORTED\(_r\) and PDCH_PARMS_INCL\(_r\) are included and equal to ‘1’,
the mobile station shall perform the following:

• If FOR_PDCH_RLGAIN_INCL\(_r\) is included and equal to ‘1’, the mobile station shall set:
  – (RLGAIN_ACKCH_PILOT\(_s\) = RLGAIN_ACKCH_PILOT\(_r\)).
  – (RLGAIN_CQICH_PILOT\(_s\) = RLGAIN_CQICH_PILOT\(_r\)).

• The mobile station shall set
  NUM_SOFT Switching FRAMES\(_s\) = NUM_SOFT Switching FRAMES\(_r\) + 1, and
  NUM_SOFTER Switching FRAMES\(_s\) = NUM_SOFTER Switching FRAMES\(_r\) + 1.

• The mobile station shall set
  NUM_SOFT Switching FRAMES CHM\(_s\) = NUM_SOFT Switching FRAMES\(_r\) + 1,
  and NUM_SOFTER Switching FRAMES CHM\(_s\) =
  NUM_SOFTER Switching FRAMES\(_r\) + 1.

• The mobile station shall set
  NUM_SOFT Switching SLOTS\(_s\) according to Table 3.7.2.3.2.21-9 based on the value of
  NUM_SOFT Switching SLOTS\(_r\).

• The mobile station shall set NUM_SOFTER Switching SLOTS\(_s\) according to Table
  3.7.2.3.2.21-9 based on the value of NUM_SOFTER Switching SLOTS\(_r\).

• The mobile station shall set PDCH_SOFT Switching DELAY\(_s\) to
  PDCH_SOFT Switching DELAY\(_r\) + 1, and PDCH_SOFTER Switching DELAY\(_s\)
  to PDCH_SOFTER Switching DELAY\(_r\) + 1.

• The mobile station shall set FOR_PDCH_COMMON_PARMS\(_s\) = ‘1’.

• The mobile station shall set WALSH_TABLE_ID\(_s\) = WALSH_TABLE_ID\(_r\).

• The mobile station shall set NUM_PDCCH\(_s\) = NUM_PDCCH\(_r\).

• The mobile station shall store FOR_PDCCH_WALSH\(_s\)[i] to the \(i^{th}\) occurrence of
  FOR_PDCCH_WALSH\(_r\).
If FOR_PDCH_SUPPORTED_r is included and equal to ‘1’, then the mobile station shall set
Reverse Packet Data Channel supported indicator (REV_PDCH_SUPPORTED_s =
REV_PDCH_SUPPORTED_r).

If REV_PDCH_PARMS_INCL_r is not included, or if it is included and equal to ‘0’, the mobile
station shall set REV_PDCH_PARMS_INCL_s to ‘0’; otherwise, the mobile station shall set
REV_PDCH_PARMS_INCL_s to ‘1’ and perform the following:

- If REV_PDCH_RLGAIN_INCL_r is equal to ‘1’, the mobile station shall set:
  - (RLGAIN_SPICH_PILOT_s = RLGAIN_SPICH_PILOT_r).
  - (RLGAIN_REQCH_PILOT_s = RLGAIN_REQCH_PILOT_r).
  - (RLGAIN_PDCCH_PILOT_s = RLGAIN_PDCCH_PILOT_r).

- If REV_PDCH_PARMS_1_INCL_r is equal to ‘1’, the mobile station shall set:
  - (REV_PDCH_TABLE_SEL_s = REV_PDCH_TABLE_SEL_r).
  - (REV_PDCH_MAX_AUTO_TPR_s to REV_PDCH_MAX_AUTO_TPR_r).
  - (REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s =
    REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_r+1).

- If REV_PDCH_OPER_PARMS_INCL_r is equal to ‘1’, the mobile station shall set:
  - (REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s =
    REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_r+1).
  - (REV_PDCH_DEFAULT_PERSISTENCE_s =
    REV_PDCH_DEFAULT_PERSISTENCE_r).
  - (REV_PDCH_RESET_PERSISTENCE_s = REV_PDCH_RESET_PERSISTENCE_r).
  - (REV_PDCH_GRANT_PRECEDENCE_s = REV_PDCH_GRANT_PRECEDENCE_r).
  - (REV_PDCH_MSIB_SUPPORTED_s to =
    REV_PDCH_MSIB_SUPPORTED_r).
  - (REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND_s to =
    REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND_r).

The mobile station shall store the following parameters:

- **BCMC Service Parameters Message** sent
  (SENDING_BSPMs = SENDING_BSPMr), if included; otherwise, set
  SENDING_BSPMs to ‘0’.

- **BCMC Service Parameters Message** transmission periodicity index
  (BSPM_PERIOD_INDEX_s = BSPM_PERIOD_INDEX_r) if SENDING_BSPM_r equals ‘1’;
  otherwise, BSPM_PERIOD_INDEX_s = NULL.

- If BSPM_PERIOD_INDEX_s is not equal to NULL, the mobile station shall set
  BSPM_WAIT_TIME to \((B + 1) \times 160\text{ms}\), where

\[
B = 2^i \times 16, \ 0 \leq i \leq 7_{15}
\]
and \( i = \text{BSPM\_PERIOD\_INDEX}_s \).

If \( \text{CAND\_BAND\_INFO\_REQ}_r \) is set to ‘1’, the mobile station shall store the number of candidate band classes minus one \( (\text{NUM\_CAND\_BAND\_CLASS}_s = \text{NUM\_CAND\_BAND\_CLASS}_r - 1) \).

If \( \text{CAND\_BAND\_INFO\_REQ}_r \) is set to ‘1’, the mobile station shall perform the following for each occurrence of the \( \text{CAND\_BAND\_CLASS} \) record:

- Set the \( \text{CAND\_BAND\_CLASS} \) field of \( \text{CAND\_BAND\_CLASS\_REC}[i] \) to the \( i \)th occurrence of \( \text{CAND\_BAND\_CLASS}_r \).
- Set the \( \text{SUBCLASS\_INFO\_INCL} \) field of \( \text{CAND\_BAND\_CLASS\_REC}[i] \) to the \( i \)th occurrence of \( \text{SUBCLASS\_INFO\_INCL}_r \).
- If the \( i \)th occurrence of \( \text{SUBCLASS\_INFO\_INCL}_r \) is set to ‘1’, set the \( \text{SUBCLASS\_REC\_LEN} \) field of \( \text{CAND\_BAND\_CLASS\_REC}[i] \) to the \( i \)th occurrence of \( \text{SUBCLASS\_REC\_LEN}_r \).
- If the \( i \)th occurrence of \( \text{SUBCLASS\_INFO\_INCL}_r \) is set to ‘1’, the mobile station shall perform the following for each band subclass indicator received:
  - Set the \( \text{BAND\_SUBCLASS\_IND\_REC}[j] \) field of \( \text{CAND\_BAND\_CLASS\_REC}[i] \) to the \( j \)th occurrence of \( \text{BAND\_SUBCLASS\_IND}_r \).

If \( \text{TX\_PWR\_LIMIT\_INCL}_r \) is set to ‘1’ and the mobile station is operating in the 1915MHz – 1920MHz block of the PCS band, the mobile station shall store the transmit power limit \( \text{TX\_PWR\_LIMIT}_s = (\text{TX\_PWR\_LIMIT}_r - 30\text{dBm}) \); otherwise, the mobile station shall set \( \text{TX\_PWR\_LIMIT}_s \) to the limit defined in [11].

2.6.2.2.6 Global Service Redirection Message

Whenever a Global Service Redirection Message is received on the Paging Channel, the configuration message sequence number, \( \text{CONFIG\_MSG\_SEQ}_r \), shall be compared to that stored in \( \text{GLOB\_SERV\_REDIR\_MSG\_SEQ}_s \). If the comparison results in a match or if \( \text{SYS\_PAR\_MSG\_SEQ}_s \) is not current, the mobile station may ignore the message; otherwise, the mobile station shall store the following parameters:

- Configuration message sequence number
  \( \text{CONFIG\_MSG\_SEQ}_s = \text{CONFIG\_MSG\_SEQ}_r, \text{GLOB\_SERV\_REDIR\_MSG\_SEQ}_s = \text{CONFIG\_MSG\_SEQ}_r \)
- The mobile station shall ignore this message, if any of the following conditions is true:
  - \( \text{EXT\_GLOBAL\_REDIRECT}_s = \text{‘1’} \)
  - \( \text{EXCL\_P\_REV\_MS}_s = \text{‘1’} \)
  - Type of redirection as specified by \( \text{RECORD\_TYPE}_r \) is not supported
  - \( \text{BAND\_CLASS}_r \) is not supported \( (\text{RECORD\_TYPE}_r = \text{‘00000010’}) \)
None of the included CDMA_CHAN_r are supported (RECORD_TYPE_r = ‘00000010’)

If the subfield corresponding to the access overload class, ACCOLC_p, of the mobile station is set equal to ‘1’ in the REDIRECT_ACCOLC_r field of the received message, the mobile station shall store the following parameters and then shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1):

- Return if fail indicator (RETURN_IF_FAIL_s = RETURN_IF_FAIL_r)
- If DELETE_TMSI_r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’
- Redirection record (REDIRECT_REC_s = redirection record from received message)
- If RECORD_TYPE_r = ‘00000001’, the mobile station shall:
  - Set CDMA_MODE_s to ‘1’
  - Set DIGITAL_REG_s-p to ‘00000000’
  - Set the maximum delay upon redirection (MAX_REDIRECT_DELAY_s = MAX_REDIRECT_DELAY_r)

2.6.2.2.7 Extended Neighbor List Message

Whenever a valid Extended Neighbor List Message is received on the current Paging Channel (PAGECH_s), the configuration message sequence number, CONFIG_MSG_SEQ_r, shall be compared to that stored in EXT_NGHBR_LST_MSG_SEQ_s. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.14, then the mobile station shall ignore the Extended Neighbor List Message that contains it.

The mobile station shall store the following parameters:

- Configuration message sequence number
  (CONFIG_MSG_SEQ_s = CONFIG_MSG_SEQ_r, EXT_NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r, NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r)
- Pilot PN sequence offset increment (PILOT_INC_s = PILOT_INC_r)
The mobile station shall set \textit{NGHBR\_SET\_SIZEs} to the number of neighboring base stations contained in the \textit{Extended Neighbor List Message}.

For each of the neighboring base stations contained in the \textit{Extended Neighbor List Message}, if \textit{FREQ\_INCLr} equals ‘0’, or if \textit{FREQ\_INCLr} equals ‘1’ and \textit{NGHBR\_BANDr} is supported, the mobile station shall perform the following:

- If the \textit{i}th occurrence of \textit{NGHBR\_CONFIGr} is equal to ‘000’, ‘001’, or ‘010’, set the \textit{NGHBR\_CONFIG} field of \textit{NGHBR\_REC[i]} to the \textit{i}th occurrence of \textit{NGHBR\_CONFIGr}; otherwise, set the \textit{NGHBR\_CONFIG} field of \textit{NGHBR\_REC[i]} to ‘011’.
- Set the \textit{NGHBR\_PN} field of \textit{NGHBR\_REC[i]} to the \textit{i}th occurrence of \textit{NGHBR\_PNr}.
- Set the \textit{SEARCH\_PRIORITY} field of \textit{NGHBR\_REC[i]} to the \textit{i}th occurrence of \textit{SEARCH\_PRIORITYr}.

For each of the neighboring base stations contained in the \textit{Extended Neighbor List Message}, if \textit{FREQ\_INCLr} equals ‘1’ and \textit{NGHBR\_BANDr} is supported, the mobile station shall also perform the following:

- Set the \textit{NGHBR\_BAND} field of \textit{NGHBR\_REC[i]} to the \textit{i}th occurrence of \textit{NGHBR\_BANDr}.
- Set the \textit{NGHBR\_FREQ} field of \textit{NGHBR\_REC[i]} to the \textit{i}th occurrence of \textit{NGHBR\_FREQr}.

For each of the neighboring base stations contained in the \textit{Extended Neighbor List Message}, if \textit{FREQ\_INCLr} equals ‘0’, the mobile station shall also perform the following:

- Set the \textit{NGHBR\_BAND} field of \textit{NGHBR\_REC[i]} to \textit{CDMABANDs}.
- \textbf{If} \textit{NGHBR\_CONFIGr} equals ‘010’ \textbf{set} the \textit{NGHBR\_FREQ} field of \textit{NGHBR\_REC[i]} to \textbf{the first CDMA Channel listed in the CDMA Channel List Message or Extended CDMA Channel List Message transmitted by the current base station}; otherwise, \textbf{set} the \textit{NGHBR\_FREQ} field of \textit{NGHBR\_REC[i]} to \textit{CDMACHs}.

If \textit{GEN\_NGHBR\_LST\_MSG\_SEQs} is not equal to \textit{CONFIG\_MSG\_SEQs}, the mobile station shall perform the following:

- Set the \textit{SRCH\_WIN\_NGHBR} field of \textit{NGHBR\_REC} to \textit{SRCH\_WIN\_Ns} for all \textit{NGHBR\_SET\_SIZEs} entries.
- Set the \textit{SRCH\_OFFSET\_NGHBR} field of \textit{NGHBR\_REC} to ‘000’ for all entries.
- Set \textit{NUM\_ANALOG\_NGHBRs} to ‘000’ and set \textit{ANALOG\_NGHBR\_LIST} to NULL.

The mobile station shall set the \textit{ACCESS\_ENTRY\_HO} field of the \textit{NGHBR\_REC} to ‘0’ for all \textit{NGHBR\_SET\_SIZEs} entries if any of the following conditions are met:

- \textit{EXT\_SYS\_PARAMETERs} is equal to ‘0’,
- \textit{NGHBR\_SET\_ENTRY\_INFOs} is equal to ‘0’, or
- \textit{EXT\_SYS\_PAR\_MSG\_SEQs} is not equal to \textit{CONFIG\_MSG\_SEQs}.
The mobile station shall set the ACCESS_HO_ALLOWED field of the NGHBR_REC to ‘0’ for all NGHBR_SET_SIZEs entries if any of the following conditions are met:

- EXT_SYS_PARAMETERs is equal to ‘0’,
- NGHBR_SET_ACCESS_INFOs is equal to ‘0’, or
- EXT_SYS_PAR_MSG_SEQs is not equal to CONFIG_MSG_SEQs.

The mobile station shall update the idle hand off Neighbor Set (see 2.6.2.1.4) so that it consists only of pilot offsets listed in the Extended Neighbor List Message. If the Extended Neighbor List Message contains more pilot offsets than the mobile station can store, the mobile station shall store the pilot offsets beginning at the start of the Extended Neighbor List Message, up to the limits of the mobile station’s Neighbor Set storage capacity.

2.6.2.2.8 General Neighbor List Message

Whenever a valid General Neighbor List Message is received on the current Paging Channel (PAGECHs), the configuration message sequence number, CONFIG_MSG_SEQr shall be compared to that stored in GEN_NGHBR_LST_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

If the PILOT_INC field is not within the valid range specified in 3.7.2.3.2.22, then the mobile station shall ignore the General Neighbor List Message that contains it.

The mobile station shall store the following parameters:

- Configuration message sequence number
  (CONFIG_MSG_SEQs = CONFIG_MSG_SEQr,
   GEN_NGHBR_LST_MSG_SEQs = CONFIG_MSG_SEQr).
- Pilot PN sequence offset increment (PILOT_INCs = PILOT_INCr).

If NGHBR_CONFIG_PN_INCLr is equal to ‘1’ and FREQ_FIELDS_INCLr is equal to ‘1’, the mobile station shall store the following parameters:

- Configuration message sequence number
  (EXT_NGHBR_LST_MSG_SEQs = CONFIG_MSG_SEQr,
   NGHBR_LST_MSG_SEQs = CONFIG_MSG_SEQr).

The mobile station shall set NGHBR_SET_SIZEs to the number of neighboring base stations contained in the General Neighbor List Message.

For each of the neighboring base stations contained in the General Neighbor List Message, if FREQ_INCLr equal ‘0’, or if FREQ_INCLr equal ‘1’ and NGHBR_BANDr is supported, the mobile station shall perform the following:

- If NGHBR_CONFIG_PN_INCLr is equal to ‘1’, set the NGHBR_CONFIG and NGHBR_PN fields as follows:
- If the i\textsuperscript{th} occurrence of NGHBR\_CONFIG	extsubscript{r} is equal to '000', '001', or '010', set the NGHBR\_CONFIG field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of NGHBR\_CONFIG	extsubscript{r}; otherwise, set the NGHBR\_CONFIG field of NGHBR\_REC[i] to '011'.

- Set the NGHBR\_PN field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of NGHBR\_PN	extsubscript{r}.

- If NGHBR\_SRCH\_MODE	extsubscript{r} = '00' or '10' and EXT\_NGHBR\_LST\_MSG\_SEQ	extsubscript{s} is not equal to CONFIG\_MSG\_SEQ	extsubscript{r}, set SEARCH\_PRIORITY field of each NGHBR\_REC to '10' (high) for all NGHBR\_SET\_SIZE\textsubscript{s} entries.

- If NGHBR\_SRCH\_MODE	extsubscript{r} = '01' or '11', set the SEARCH\_PRIORITY field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of SEARCH\_PRIORITY	extsubscript{r}.

- If NGHBR\_SRCH\_MODE	extsubscript{r} = '00' or '01', set the SRCH\_WIN\_NGHBR field of each NGHBR\_REC to SEARCH\_WIN\textsubscript{s} for all NGHBR\_SET\_SIZE\textsubscript{s} entries if SYS\_PAR\_MSG\_SEQ\textsubscript{s} is equal to CONFIG\_MSG\_SEQ\textsubscript{s}; otherwise, set SETTING\_SEARCH\_WIN to '1'.

- If NGHBR\_SRCH\_MODE	extsubscript{r} = '00' or '01', set the SRCH\_OFFSET\_NGHBR field of each NGHBR\_REC to '000'.

- If NGHBR\_SRCH\_MODE	extsubscript{r} = '10' or '11':
  - set the SRCH\_WIN\_NGHBR field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of SRCH\_WIN\_NGHBR	extsubscript{r}
  - if SRCH\_OFFSET\_INCL	extsubscript{r} equals '1', set the SRCH\_OFFSET\_NGHBR field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of SRCH\_OFFSET\_NGHBR	extsubscript{r}, and
  - if SRCH\_OFFSET\_INCL	extsubscript{r} equals '0', set the SRCH\_OFFSET\_NGHBR field of each NGHBR\_REC to '000'.

- If USE\_TIMING	extsubscript{r} is equal to '1', set the TIMING\_INCL field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of TIMING\_INCL	extsubscript{r}; otherwise, set the TIMING\_INCL field of NGHBR\_REC to '0' for all entries.

- If BCCH\_IND\_INCL	extsubscript{r} is equal to '1', set the BCCH\_SUPPOR field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of BCCH\_SUPPOR	extsubscript{r}; otherwise, set the BCCH\_IND\_INCL field of NGHBR\_REC to '0' for all entries.

\textbf{Set the NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of NGHBR\_PDCH\_SUPPORTED	extsubscript{r}} if included; otherwise, set the NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC to '0' for all entries.

- The mobile station shall set RESQ\_ENABLED	extsubscript{s} = RESQ\_ENABLED	extsubscript{r}. If RESQ\_ENABLED	extsubscript{s} is equal to '1', then the mobile station shall store:
  - Call rescue delay timer value (RESQ\_DELAY\_TIME\textsubscript{s} = RESQ\_DELAY\_TIME	extsubscript{r})
  - Call rescue allowed timer value (RESQ\_ALLOWED\_TIME\textsubscript{s} = RESQ\_ALLOWED\_TIME	extsubscript{r})
– Call rescue attempt timer value (RESQ_ATTEMPT_TIMEs = RESQ_ATTEMPT_TIMEr)

– Code channel index for call rescue (RESQ_CODE_CHANs = RESQ_CODE_CHANr)

– Quasi-Orthogonal Function mask identifier for call rescue (RESQ_QOFs = RESQ_QOFr)

– Minimum time between consecutive rescues (RESQ_MIN_PERIODs = RESQ_MIN_PERIODr + 1) if RESQ_MIN_PERIOD_INCLr is equal to ‘1’; otherwise, RESQ_MIN_PERIODs = ‘00000’.

– The required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled (RESQ_NUM_TOT_TRANS_20MSs = RESQ_NUM_TOT_TRANS_20MSr) if included; otherwise, set RESQ_NUM_TOT_TRANS_20MSs to N1m.

– The required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled (RESQ_NUM_TOT_TRANS_5MSs = RESQ_NUM_TOT_TRANS_5MSr) if included; otherwise, set RESQ_NUM_TOT_TRANS_5MSs to N15m.

– The Traffic Channel preamble length for Call Rescue Soft Handoff when operating in Radio Configuration 1 or 2 (RESQ_NUM_PREAMBLE_RC1_RC2s = RESQ_NUM_PREAMBLE_RC1_RC2r).

– The Traffic Channel preamble length for Call Rescue Soft Handoff when operating in Radio Configuration greater than 2 (RESQ_NUM_PREAMBLEs = RESQ_NUM_PREAMBLEr).

– The power level adjustment to be applied to the last closed-loop power level when re-enabling the transmitter for call rescue soft handoff (RESQ_POWER_DELTAs = RESQ_POWER_DELTAr).

– Set the NGHBR_RESQ_CONFIGURED field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of NGHBR_RESQ_CONFIGUREDr.

For each of the neighboring base stations contained in the General Neighbor List Message, if FREQ_FIELDS_INCLr equals ‘1’, FREQ_INCLr equals ‘1’, and NGHBR_BANDr is supported, the mobile station shall also perform the following:

• Set the NGHBR_BAND field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of NGHBR_BANDr.

• Set the NGHBR_FREQ field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of NGHBR_FREQR.

For each of the neighboring base stations contained in the General Neighbor List Message, if USE_TIMINGr is equal to ‘1’ and TIMING_INCLr equals ‘1’, the mobile station shall also perform the following:

• Set the NGHBR_TX_OFFSET field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of NGHBR_TX_OFFSETr.
• If GLOBAL_TIMING_INCL\textsubscript{r} is equal to '1', then the mobile station shall:
  
  – Set the NGHBR_TX_DURATION field of NGHBR\textsubscript{REC} to GLOBAL_TX_DURATION\textsubscript{r} for all entries.

  – Set the NGHBR_TX_PERIOD field of NGHBR\textsubscript{REC} to GLOBAL_TX_PERIOD\textsubscript{r} for all entries.

• If GLOBAL_TIMING_INCL\textsubscript{r} is equal to '0', then the mobile station shall:
  
  – Set the NGHBR_TX_DURATION field of NGHBR\textsubscript{REC[i]} to the \textit{i}th occurrence of NGHBR\_TX\_DURATION\textsubscript{r}.

  – Set the NGHBR_TX_PERIOD field of NGHBR\textsubscript{REC[i]} to the \textit{i}th occurrence of NGHBR\_TX\_PERIOD\textsubscript{r}.

For each of the neighboring base stations contained in the \textit{General Neighbor List Message}, if FREQ\_FIELDS\_INCL\textsubscript{r} equals '1' and FREQ\_INCL\textsubscript{r} equals '0', or if FREQ\_FIELDS\_INCL\textsubscript{r} equals '0' and EXT\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s} is not equal to CONFIG\_MSG\_SEQ\textsubscript{r}, the mobile station shall also perform the following:

• Set the NGHBR\_BAND field of NGHBR\textsubscript{REC[i]} to CDMABAND\textsubscript{s}.

• \textbf{If NGHBR\_CONFIG\textsubscript{r} equals '010', set the NGHBR\_FREQ field of NGHBR\textsubscript{REC[i]} to the first CDMA Channel listed in the CDMA Channel List Message or Extended CDMA Channel List Message transmitted by the current base station; otherwise, set the NGHBR\_FREQ field of NGHBR\textsubscript{REC[i]} to CDMACH\textsubscript{s}.}

The mobile station shall set the ACCESS\_ENTRY\_HO field of the NGHBR\_REC to '0' for all NGHBR\_SET\_SIZE\textsubscript{s} entries if any of the following conditions are met:

• EXT\_SYS\_PARAMETER\textsubscript{s} is equal to '0'

• NGHBR\_SET\_ENTRY\_INFO\textsubscript{s} is equal to '0', or

• EXT\_SYS\_PAR\_MSG\_SEQ\textsubscript{s} is not equal to CONFIG\_MSG\_SEQ\textsubscript{s}.

The mobile station shall set the ACCESS\_HO\_ALLOWED field of the NGHBR\_REC to '0' for all NGHBR\_SET\_SIZE\textsubscript{s} entries if any of the following conditions are met:

• EXT\_SYS\_PARAMETER\textsubscript{s} is equal to '0'

• NGHBR\_SET\_ACCESS\_INFO\textsubscript{s} is equal to '0', or

• EXT\_SYS\_PAR\_MSG\_SEQ\textsubscript{s} is not equal to CONFIG\_MSG\_SEQ\textsubscript{s}.

The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it consists only of pilot offsets listed in the \textit{General Neighbor List Message}. If the \textit{General Neighbor List Message} contains more pilot offsets than the mobile station can store, the mobile station shall store the pilot offsets beginning at the start of the \textit{General Neighbor List Message}, up to the limits of the mobile station’s Neighbor Set storage capacity.

The mobile station shall set NUM\_ANALOG\_NGHBR\textsubscript{s} to NUM\_ANALOG\_NGHBR\textsubscript{r}, the number of neighboring analog systems contained in the \textit{General Neighbor List Message}. For each of the neighboring analog systems contained in the \textit{General Neighbor List Message}, the mobile station shall perform the following:
• Set the BAND_CLASS field of ANALOG_NGHBR_LIST[i] to the $i^{th}$ occurrence of BAND_CLASS$_r$.

• Set the SYS_A_B field of ANALOG_NGHBR_LIST[i] to the $i^{th}$ occurrence of SYS_A_B$_r$.

For each of the neighboring base stations contained in the General Neighbor List Message, the mobile station shall set the ADD_PILOT_REC_INCL field of NGHBR_REC[i] to the $i^{th}$ occurrence of ADD_PILOT_REC_INCL$_r$. If ADD_PILOT_REC_INCL$_r$ equals ‘1’, for each pilot included in the message, the mobile station shall also perform the following:

• Set the NGHBR_PILOT_REC_TYPE field of NGHBR_PILOT_REC to NGHBR_PILOT_REC_TYPE$_r$.

• If NGHBR_PILOT_REC_TYPE$_r$ is equal to ‘000’, the mobile station shall:
  – Set the TD_POWER_LEVEL field of NGHBR_PILOT_REC to TD_POWER_LEVEL$_r$.
  – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE$_r$.

• If NGHBR_PILOT_REC_TYPE$_r$ is equal to ‘001’, the mobile station shall:
  – Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF$_r$.
  – Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to AUX_PILOT_WALSH$_r$ with the Walsh Code length specified by WALSH_LENGTH$_r$.

• If NGHBR_PILOT_REC_TYPE$_r$ is equal to ‘010’, the mobile station shall:
  – Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF$_r$.
  – Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to AUX_PILOT_WALSH$_r$ with the Walsh Code length specified by WALSH_LENGTH$_r$.
  – Set the AUX_TD_POWER_LEVEL field of NGHBR_PILOT_REC to AUX_TD_POWER_LEVEL$_r$.
  – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE$_r$.

• If NGHBR_PILOT_REC_TYPE$_r$ is equal to ‘011’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to SR3_PRIMARY_PILOT$_r$.
  – Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to SR3_PILOT_POWER1$_r$.
  – Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to SR3_PILOT_POWER2$_r$.

• If NGHBR_PILOT_REC_TYPE$_r$ is equal to ‘100’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to SR3_PRIMARY_PILOT$_r$.
  – Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to SR3_PILOT_POWER1$_r$. 
– Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to SR3_PILOT_POWER2r.

– Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOFr.

– Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

– If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r.

– Otherwise, set the AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTH1r.

– If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r.

– Otherwise, set the AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTH2r.

If HRPD_NGHBR_INCLr equals ‘1’, the mobile station shall set NUM_HRPD_NGHBR to NUM_HRPD_NGHBRr, the number of neighboring HRPD systems contained in the General Neighbor List Message. For each of the neighboring HRPD systems contained in the General Neighbor List Message, the mobile station shall perform the following:

• Set the PN field of HRPD_NGHBR_LIST[ij] to the i(th occurrence of NGHBR_PNr.

• Set the BAND_CLASS field of HRPD_NGHBR_LIST[ij] to the i(th occurrence of NGHBR_BANDr if NGHBR_FREQ_INCLr equals ‘1’; otherwise, set the BAND_CLASS field of HRPD_NGHBR_LIST[ij] to CDMABANDS.

• Set the CDMA_FREQ field of HRPD_NGHBR_LIST[ij] to the i(th occurrence of NGHBR_FREQr if NGHBR_FREQ_INCLr equals ‘1’; otherwise, set the BAND_CLASS field of HRPD_NGHBR_LIST[ij] to CDMACH.

• Set the PN_ASSOCIATION field of HRPD_NGHBR_LIST[ij] to the i(th occurrence of PN_ASSOCIATION_INDr.

• Set the DATA_ASSOCIATION field of HRPD_NGHBR_LIST[ij] to the i(th occurrence of DATA_ASSOCIATION_INDr.

2.6.2.2.9 User Zone Identification Message

Whenever a User Zone Identification Message is received on the Paging Channel or Primary
Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile station shall compare the configuration message sequence number, CONFIG_MSG_SEQr, to that stored in USER_ZONE_ID_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

The mobile station shall store the following parameters:

- Configuration message sequence number
  (CONFIG_MSG_SEQs = CONFIG_MSG_SEQr,
   USER_ZONE_ID_MSG_SEQs = CONFIG_MSG_SEQr)
- UZ_EXIT_RCVDs = UZ_EXITr

The mobile station shall set NUM_UZIDs to the number of User Zones contained in the User Zone Identification Message.

For each User Zone contained in the User Zone Identification Message, the mobile station shall perform the following:

- Set the UZID field of UZ_REC(i) to the i\textsuperscript{th} occurrence of UZIDr.
- Set the UZ_REV field of UZ_REC(i) to the i\textsuperscript{th} occurrence of UZ_REVr.
- Set the TEMP_SUB field of UZ_REC(i) to the i\textsuperscript{th} occurrence of TEMP_SUBr.

2.6.2.2.10 Private Neighbor List Message

Whenever a Private Neighbor List Message is received on the Paging Channel or Primary Broadcast Control Channel, and if the mobile station supports Tiered Services, the mobile station shall compare the configuration message sequence number, CONFIG_MSG_SEQr, to that stored in PRI_NGHBR_LST_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows.

The mobile station shall store the following parameters:

- Configuration message sequence number
  (CONFIG_MSG_SEQs = CONFIG_MSG_SEQr,
   PRI_NGHBR_LST_MSG_SEQs = CONFIG_MSG_SEQr)
- Common configuration included indicator (COMMON_INCLs = COMMON_INCLr)

The mobile station shall set NUM_PRI_NGHBRs to the number of Private Neighbor base stations contained in the Private Neighbor List Message.

For each Private Neighbor base station contained in the Private Neighbor List Message the mobile station shall perform the following:

- Set the SRCH_WIN_PRI_NGHBR field of PRI_NGHBR_REC(i) to SRCH_WIN_PNr.
- Set the SID field of PRI_NGHBR_REC(i) to the i\textsuperscript{th} occurrence SIDr.
- Set the NID field of PRI_NGHBR_REC(i) to the i\textsuperscript{th} occurrence NIDr.
• Set the PRI_NGHBR_PN field of PRI_NGHBR_REC(i) to the i\textsuperscript{th} occurrence of PRI_NGHBR_PNr.

• If COMMON_INCL\textsubscript{r} is equal to ‘1’, then the mobile station shall:
  – Set the BAND_CLASS field of PRI_NGHBR_REC(i) to COMMON_BAND_CLASS\textsubscript{r}.
  – Set the NGHBR_FREQ field of PRI_NGHBR_REC(i) to COMMON_NGHBR_FREQ\textsubscript{r}.

• If COMMON_INCL\textsubscript{r} is equal to ‘0’, then the mobile station shall:
  – Set the BAND_CLASS field of PRI_NGHBR_REC(i) to the i\textsuperscript{th} occurrence of BAND_CLASS\textsubscript{r}.
  – Set the NGHBR_FREQ field of PRI_NGHBR_REC(i) to the i\textsuperscript{th} occurrence of NGHBR_FREQ\textsubscript{r}.

• If i\textsuperscript{th} occurrence of UZID_INCL\textsubscript{r} is equal to ‘0’, then the mobile station shall set the PS_NUM_UZID field of PRI_NGHBR_REC(i) to ‘0000’.

• If i\textsuperscript{th} occurrence of UZID_INCL\textsubscript{r} is equal to ‘1’, then the mobile station shall set the PS_NUM_UZID field of PRI_NGHBR_REC(i) to the NUM_UZID\textsubscript{r} associated with the i\textsuperscript{th} occurrence of UZID_INCL\textsubscript{r}.

• For each User Zone supported by the i\textsuperscript{th} private system, the mobile station shall perform the following:
  – Set the PS_UZID(j) field of PRI_NGHBR_REC(i) to the j\textsuperscript{th} occurrence of UZID\textsubscript{r}.
  – Set the PS_UZ_REV(j) field of PRI_NGHBR_REC(i) to the j\textsuperscript{th} occurrence of UZ_REV\textsubscript{r}.
  – Set the PS_TEMP_SUB(j) field of PRI_NGHBR_REC(i) to the j\textsuperscript{th} occurrence of TEMP_SUB\textsubscript{r}.

2.6.2.2.11 Extended Global Service Redirection Message

Whenever an Extended Global Service Redirection Message is received on the Paging Channel or Primary Broadcast Control Channel, the configuration message sequence number, CONFIG_MSG_SEQ\textsubscript{r}, shall be compared to that stored in EXT_GLOB_SERV_REDIR_MSG_SEQ\textsubscript{r}. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, the mobile station shall store the following parameters:

• Configuration message sequence number
  (CONFIG_MSG_SEQ\textsubscript{s} = CONFIG_MSG_SEQ\textsubscript{r},
  GLOB_SERV_REDIR_MSG_SEQ\textsubscript{s} = CONFIG_MSG_SEQ\textsubscript{r},
  EXT_GLOB_SERV_REDIR_MSG_SEQ\textsubscript{s} = CONFIG_MSG_SEQ\textsubscript{r})

The mobile station shall ignore the rest of the message if any of the following conditions is satisfied:

• The subfield corresponding to the access overload class, ACCOLC\textsubscript{p}, of the mobile station is set equal to ‘0’ in the REDIRECT_ACCOLC\textsubscript{r} field of the received message;

• MOB_P_REV\textsubscript{p} is not in the redirection mobile protocol revision range (i.e.,

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REDIRECT_P_REV_INCL = ‘1’ and EXCL_P_REV_IND = ‘0’, and MOB_P_REV < REDIRECT_P_MIN or MOB_P_REV > REDIRECT_P_MAX), or

- MOB_P_REV is in the excluded mobile protocol revision range (i.e., REDIRECT_P_REV_INCL = ‘1’ and EXCL_P_REV_IND = ‘1’ and (REDIRECT_P_MIN < MOB_P_REV < REDIRECT_P_MAX)).

Otherwise, the mobile station shall store the following parameters and then shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1):

- If DELETE_TMSI is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE to ‘1’.
- Return if fail indicator (RETURN_IF_FAIL = RETURN_IF_FAIL).
- Redirection record (REDIRECT_REC = redirection record from received message)
- If RECORD_TYPE = ‘00000001’, the mobile station shall:
  - Set CDMA_MODE to ‘1’
  - Set DIGITAL_REG to ‘00000000’
  - Max delay upon redirection (MAX_REDIRECT_DELAY = MAX_REDIRECT_DELAY)

The mobile station shall perform the following:

- The mobile station shall set (RETURN_IF_FAIL = RETURN_IF_FAIL), TEMP_TMSI_CODE to TMSI_CODE, and clear the REDIRECT_REC_LIST. For i = 1 to (NUM_ADD_RECORD + 1), the mobile station shall perform the following:
  - If all the following conditions are satisfied from the i-th redirection record:
    + The subfield corresponding to the access overload class, ACCOLC, of the mobile station is set equal to ‘1’ in the REDIRECT_ACCOLC field or ADD_REDIRECT_ACCOLC of the i-th redirection record.
    + MOB_P_REV is in the redirection mobile protocol revision range associated with the i-th redirection record (REDIRECT_P_REV_INCL = ‘1’ and EXCL_P_REV_IND = ‘0’, and (REDIRECT_P_MIN < MOB_P_REV < REDIRECT_P_MAX)) where i is equal to 1.
    + MOB_P_REV is not in any of the excluded mobile protocol revision range associated with the i-th redirection record (REDIRECT_P_REV_INCL = ‘1’ and EXCL_P_REV_IND = ‘1’ and (MOB_P_REV < REDIRECT_P_MIN or MOB_P_REV > REDIRECT_P_MAX)).
    + Type of redirection as specified by RECORD_TYPE (i is equal to 1) or ADD_RECORD_TYPE is supported.
    + BAND_CLASS is supported (RECORD_TYPE = ‘00000010’ or ADD_RECORD_TYPE = ‘00000010’).
At least one of the CDMA_CHAN is supported for at least one band subclass (when included) corresponding to REDIRECT_SUBCLASS = '1'.

(RECORD_TYPE = '00000010' or ADD_RECORD_TYPE = '00000010').

then mobile station shall store the following parameters from the redirection record:

+ Set DELETE_TMSI field of REDIRECT_REC_LIST[j] to DELETE_TMSI (i is equal to 1) or ADD_DELETE_TMSI, where j (i.e., the initial j value is set to 0) is incremented by 1 whenever the i\(^{th}\) redirection record satisfies the redirection record selection conditions above.

+ Set REDIRECT_REC_LIST[j] to the i\(^{th}\) redirection record from the received message.

+ Set RECORD_TYPE field of REDIRECT_REC_LIST[j] to RECORD_TYPE (i is equal to 1) or ADD_RECORD_TYPE.

+ If RECORD_TYPE = '00000001' (i is equal to 1) or ADD_RECORD_TYPE = '00000001', the mobile station shall:
  o Set CDMA_MODE to '1'
  o Set DIGITAL_REG field of REDIRECT_REC_LIST[j] to '00000000'.
  o Set MAX_REDIRECT_DELAY field of REDIRECT_REC_LIST[j] to MAX_REDIRECT_DELAY.

+ If LAST_SEARCH_RECORD_IND or ADD_LAST_SEARCH_RECORD_IND is equal to '1', the mobile station shall ignore the rest of the message.

- If REDIRECT_REC_LIST[j] is not empty, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1); otherwise, the mobile station shall ignore the Extended Global Service Redirection Message.

2.6.2.2.12 Extended CDMA Channel List Message Overview

The mobile station may receive the Extended CDMA Channel List Message from the Paging Channel or from the Primary Broadcast Control Channel. The mobile station shall follow requirements defined in 2.6.2.2.12.1 or 2.6.2.2.12.2 to process the Extended CDMA Channel List Message.

2.6.2.2.12.1 Extended CDMA Channel List Message on Paging Channel

Whenever an Extended CDMA Channel List Message is received on the Paging Channel, the mobile station shall compare the configuration message sequence number, CONFIG_MSG_SEQ, to that stored in EXT_CHAN_LST_MSG_SEQ. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows:

If the Extended CDMA Channel List Message lists CDMA channels from more than one band class and the mobile station hashes to a band class other than the current band class, the
The mobile station shall process this message after NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs and GEN_NGHBR_LST_MSG_SEQs become current.

The mobile station shall store the following parameters:

- Configuration message sequence number
  
  \(\text{CONFIG\_MSG\_SEQs} = \text{CONFIG\_MSG\_SEQr},\)

- EXT_CHAN_LST_MSG_SEQs = CONFIG_MSG_SEQr,

- CHAN_LST_MSG_SEQs = CONFIG_MSG_SEQr).

The mobile station shall determine the CDMA Channel (Frequency Assignment) for its Paging Channel as follows:

- If \(\text{RC\_QPCH\_SEL\_INCLr} = 1\) and the mobile station is capable of RC greater than 2 or capable of supporting Quick Paging Channel, the mobile station shall eliminate those channels with \(\text{RC\_QPCH\_HASH\_INDr} = 0\) from the CDMA channel list and use the hash algorithm specified in 2.6.7.1 and the number of channels whose \(\text{RC\_QPCH\_HASH\_INDr} = 1\) in the Extended CDMA Channel List Message to determine the CDMA Channel (Frequency Assignment) for its Paging Channel.

- If \(\text{RC\_QPCH\_SEL\_INCLr} = 1\) and the mobile station is not capable of RC greater than 2 and not capable of supporting Quick Paging Channel, the mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of channels in the Extended CDMA Channel List Message to determine the CDMA Channel (Frequency Assignment) for its Paging Channel.

- If \(\text{RC\_QPCH\_SEL\_INCLr} = 0\), the mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of channels in the Extended CDMA Channel List Message to determine the CDMA Channel (Frequency Assignment) for its Paging Channel.

  Starting from an empty list, the mobile station shall generate the first CDMA Channel list from the Extended CDMA Channel List Message as follows:

  - For each band class record included in this message, the mobile station shall perform the following:

    - If band subclass information is included for this band class record \(\text{SUBCLASS\_INFO\_INCLr} = 1\) or \(\text{ADD\_SUBCLASS\_INFO\_INCLr} = 1\), the mobile station shall add only those channels belonging to the band class and band subclasses that are supported by both the mobile station and the base station, in the order they appear in the Extended CDMA Channel List Message.

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7 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 (footnote continued on next page)
Otherwise (SUBCLASS_INFO_INCL$_r$ = ‘0’, ADD_SUBCLASS_INFO_INCL$_r$ = ‘0’ or P_REV_IN_USE$_s$ is less than 11), the mobile station shall add only those channels that it supports for the associated band class, in the order they appear in the Extended CDMA Channel List Message.

If P_REV_IN_USE$_s$ is greater than or equal to 11, the mobile station shall sort the channels first by the ascending order of band class value, as specified in [30], then by the ascending order of CDMA_FREQ within each band class.

- If RC_QPCH_SEL_INCL$_r$ is equal to ‘1’ and the mobile station is capable of RC greater than 2 or capable of supporting Quick Paging Channel, the mobile station shall eliminate the channels with RC_QPCH_HASH_IND$_r$ equal to ‘0’ from the first CDMA Channel list to generate the second CDMA Channel list while preserving the order in the first CDMA Channel list. Otherwise, the mobile station shall set the second CDMA Channel list to be equal to the first CDMA Channel list.

- The mobile station shall generate the third CDMA Channel list as follows.
  - If CDMA_FREQ_WEIGHT_INCL$_r$ is equal to ‘0’, the mobile station shall set the third CDMA Channel list to be equal to the second CDMA Channel list.
  - If CDMA_FREQ_WEIGHT_INCL$_r$ is equal to ‘1’, starting with an empty third CDMA Channel list, for each entry “E” in the second CDMA Channel list in the order they appear, the mobile station shall append N consecutive entries “E” at the end of the third CDMA Channel list, where N is the weight of “E” and equals either CDMA_FREQ_WEIGHT$_r$+1 or ADD_CDMA_FREQ_WEIGHT$_r$+1 appropriately.

- The mobile station shall generate a CDMA band list as follows. Starting with an empty CDMA band list, for each channel in the third CDMA Channel list in the order they appear, the mobile station shall append an entry equal to the band class of that channel, at the end of the CDMA band list.

- The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of the CDMA band list to compute the band class for its Paging Channel.

- The mobile station shall eliminate those channels which are not in the computed band class from the third CDMA channel list to generate the final CDMA channel list.

- If the final CDMA Channel list is empty, the mobile station shall enter the System Determination Substate with an acquisition failure indication.

- The mobile station shall then use the hash algorithm specified in 2.6.7.1 and the size of the final CDMA channel list to determine the CDMA Channel (Frequency Assignment) for its Paging Channel.

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.
Figure 2.6.2.2.12.1-1 shows an example of the hashing procedure.

If the CDMA Frequency Assignment has changed but the band class is the same (the computed CDMA Channel is different from CDMACH<sub>s</sub> but the computed CDMA band class is the same as CDMABAND<sub>s</sub>), the mobile station shall perform the following actions:

- If the stored configuration parameters is not current (see 2.6.2.2) for the corresponding base station and frequency assignment, the mobile station shall perform the following actions:
  - Set CDMACH<sub>s</sub> to the new CDMA Channel.
  - Set PAGE_CHAN<sub>s</sub> to ‘1’.
  - Set PAGECH<sub>s</sub> to the Primary Paging Channel.
Set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs,
CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs,
EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs,
EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs,
EXT_GLOB_SERV_REDIR_MSG_SEQs, USER_ZONE_IDMSG_SEQs,
PRI_NGHBR_LST_MSG_SEQs, and ACC_MSG_SEQs to NULL. The mobile
station shall keep the parameters associated with the current overhead
messages until they are updated on the new Paging Channel.

Tune to the new CDMA Channel.

Otherwise, the mobile station shall perform the following actions:

- Set CDMACHs to the new CDMA Channel.
- The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a
  new Paging Channel number in the range 1 to PAGE_CHANs, where
  PAGE_CHANs is the value stored for the Paging Channel whose stored
  information is current. The mobile station shall store the new Paging Channel
  number as PAGECHs.
- Tune to the new CDMA Channel and shall begin monitoring the new Paging
  Channel.

If the band class has changed [the computed CDMA band class is different than
CDMABANDs], the mobile station shall perform the following actions:

- If BYPASS_SYS_DET_INDs is equal to ‘0’ for this CDMA channel, the mobile station
  shall perform the following:
  - Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class
  - Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel
  - The mobile station shall enter the System Determination Substate of the Mobile
    Station Initialization State with a new band indication.
- If BYPASS_SYS_DET_INDs is equal to ‘1’ for this CDMA channel, the mobile station
  shall perform the following:
  - 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 CDMACHs to the new CDMA Channel.

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8 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).
+ Set CDMABANDs to the new band class.
+ Set PAGE_CHANs to ‘1’.
+ Set PAGECHs to the Primary Paging Channel.
+ Set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, 
  CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, 
  EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, 
  EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, 
  EXT_GLOB_SERV_REDIR_MSG_SEQs, USER_ZONE_IDMSG_SEQs, 
  PRI_NGHBR_LST_MSG_SEQs, and ACC_MSG_SEQs to NULL. The mobile 
  station shall keep the parameters associated with the current overhead 
  messages until they are updated on the new Paging Channel9.
+ Tune to the new CDMA Channel.

– Otherwise, the mobile station shall perform the following actions:
+ Set CDMACHs to the new CDMA Channel.
+ Set CDMABANDs to the new band class.
+ The mobile station shall use the hash algorithm specified in 2.6.7.1 to select 
  a new Paging Channel number in the range 1 to PAGE_CHANs, where 
  PAGE_CHANs is the value stored for the Paging Channel whose stored 
  information is current. The mobile station shall store the new Paging 
  Channel number as PAGECHs.
+ Tune to the new CDMA Channel and shall begin monitoring the new Paging 
  Channel.

2.6.2.2.12.2 Extended CDMA Channel List Message on Primary Broadcast Control Channel
Whenever the Extended CDMA Channel List Message is received on the Primary Broadcast 
Control Channel, the mobile station shall compare the configuration message sequence 
number, CONFIG_MSG_SEQr, to that stored in CONFIG_MSG_SEQs. If the comparison 
results in a match, the mobile station may ignore the message. If the comparison results 
in a mismatch, the mobile station shall process the remaining fields in the message as 
follows:

If the Extended CDMA Channel List Message lists CDMA channels from more than one band 
class and the mobile station hashes to a band class other than the current band class, the 
mobile_station_shall_process_this_message_after_UNI_NGHBR_LST_MSG_SEQs_becomes 
current.

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9 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).
The mobile station shall store the following parameters:

- Configuration message sequence number
  \( \text{CONFIG\_MSG\_SEQ}_{\text{s}} = \text{CONFIG\_MSG\_SEQ}_{\text{r}}, \) \( \text{EXT\_CHAN\_LST\_MSG\_SEQ}_{\text{s}} = \text{CONFIG\_MSG\_SEQ}_{\text{r}}. \)

To determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast Control Channel, the mobile station shall first select a subset of CDMA channels from the Extended CDMA Channel List Message that will be used for channel hashing. The attributes for channel selection are support for that frequency, the band subclass (if included), RC greater than 2, Quick Paging Channel and transmit diversity. The mobile station shall first select the entire CDMA channel list for channel hashing. Starting from an empty list, the mobile station shall then select the first CDMA Channel list subset as follows:

- For each band class record included in this message, the mobile station shall perform the following:
  - If band subclass information is included for this band class record \( \text{SUBCLASS\_INFO\_INCL}_{\text{r}} = '1' \) or \( \text{ADD\_SUBCLASS\_INFO\_INCL}_{\text{r}} = '1' \), the mobile station shall add only those channels belonging to the band class and band subclasses that are supported by both the mobile station and the base station, in the order they appear in the Extended CDMA Channel List Message\(^{10}\).
  - Otherwise (\( \text{SUBCLASS\_INFO\_INCL}_{\text{r}} = '0', \text{ADD\_SUBCLASS\_INFO\_INCL}_{\text{r}} = '0' \) or \( \text{P\_REV\_IN\_USE}_{\text{s}} \) is less than 11), the mobile station shall add only those channels that it supports for the associated band class, in the order they appear in the Extended CDMA Channel List Message.

- If \( \text{P\_REV\_IN\_USE}_{\text{s}} \) is greater than or equal to 11, the mobile station shall sort the channels first by the ascending order of band class value as specified in [30], then by the ascending order of CDMA_FREQ within each band class.

- If TD_SEL_INCL\(_r\) is equal to ‘1’, the mobile station shall perform the following:
  - If the mobile station is capable of supporting the transmit diversity mode specified by TD_MODE\(_r\), the mobile station shall select those CDMA channels that have TD_HASH_IND\(_r\) set to ‘1’ from the CDMA channel list for the first CDMA Channel list while preserving the order subset.
  - If the mobile station is not capable of supporting the transmit diversity mode specified by TD_MODE\(_r\), the mobile station shall select those CDMA channels that have TD_HASH_IND\(_r\) set to ‘0’ from the CDMA channel list for the first

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\(^{10}\) 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.
CDMA Channel list while preserving the order subset. If this selected subset is empty, the mobile station shall not perform the remaining procedures in this section.

- If TD_SEL_INCL\(_r\) is equal to ‘0’, the mobile station shall select the entire list for the first CDMA Channel list subset.

From this first CDMA Channel list subset, the mobile station shall select the second CDMA Channel list final subset as follows:

- If RC_QPCH_SEL_INCL\(_r\) is equal to ‘1’ and the mobile station is capable of RC greater than 2 or capable of supporting QPCH, the mobile station shall select those CDMA channels with RC_QPCH_HASH_IND\(_r\) set to ‘1’ for the second CDMA Channel list final subset for CDMA channel hashing while preserving the order. If this list is empty, the mobile station shall use the first CDMA Channel list subset as the second CDMA Channel list final subset for CDMA channel hashing.

- Otherwise, the mobile station shall use the first CDMA Channel list subset as the second CDMA Channel list final subset for CDMA channel hashing.

From this second CDMA Channel list, the mobile station shall select the third CDMA Channel list subset as follows:

- If CDMA_FREQ_WEIGHT_INCL\(_r\) is equal to ‘0’, the mobile station shall set the third CDMA Channel list to be equal to the second CDMA Channel list.

- If CDMA_FREQ_WEIGHT_INCL\(_r\) is equal to ‘1’, starting with an empty third CDMA Channel list, for each entry “E” in the second CDMA Channel list in the order they appear, the mobile station shall append N consecutive entries “E” at the end of the third CDMA Channel, where N is the weight of “E” and equals either CDMA_FREQ_WEIGHT\(_r\)+1 or ADD_CDMA_FREQ_WEIGHT\(_r\)+1 appropriately.

The mobile station shall determine the band class for its Primary Broadcast Control Channel as follows:

- The mobile station shall generate a CDMA band list as follows. Starting with an empty CDMA band list, for each channel in the third CDMA Channel list in the order they appear, the mobile station shall append an entry equal to the band class of that channel, at the end of the CDMA band list.

- The mobile station shall use the hash algorithm specified in 2.6.7.1 and the size of the CDMA band list to compute the band class for its Primary Broadcast Control Channel.

After the final subset band class has been selected, the mobile station shall determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast Control Channel as follows:

- The mobile station shall eliminate those channels which are not in the computed band class from the third CDMA Channel list to generate the final CDMA Channel list.
If the final CDMA Channel list is empty, the mobile station shall enter the **System Determination Substate** with an acquisition failure indication.

The mobile station shall then use the hash algorithm specified in 2.6.7.1 with the number of channels in the final **CDMA Channel list subset of the CDMA channel list** to determine the CDMA Channel (Frequency Assignment) for its Primary Broadcast Control Channel.

If the CDMA Frequency Assignment has changed but the band class is the same (the computed CDMA Channel is different from CDMACH\textsubscript{s} but the computed CDMA band class is CDMABAND\textsubscript{s}), the mobile station shall perform the following:

1. Set CDMACH\textsubscript{s} to the new CDMA Channel.
2. Set CONFIG\_MSG\_SEQ\textsubscript{s}, A41\_SYS\_PAR\_MSG\_SEQ\textsubscript{s}, MC\_RR\_PAR\_MSG\_SEQ\textsubscript{s}, UNI\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s}, EXT\_CHAN\_LST\_MSG\_SEQ\textsubscript{s}, USER\_ZONE\_ID\_MSG\_SEQ\textsubscript{s}, and PRI\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s} and ACC\_MSG\_SEQ\textsubscript{s} to NULL. The mobile station shall keep the parameters associated with the current overhead messages until they are updated on the new Primary Broadcast Control Channel\textsuperscript{11}.

3. If the mobile station is operating in the Spreading Rate 1:
   - If the assigned CDMA channel supports transmit diversity, the mobile station shall set the following fields corresponding to the assigned CDMA channel:
     + SR1\_TD\_POWER\_LEVEL\textsubscript{s} = TD\_POWER\_LEVEL\textsubscript{r}.
     + SR1\_TD\_MODE\textsubscript{s} = TD\_MODE\textsubscript{r}.
     + BRAT\textsubscript{s} = SR1\_BRAT\_TD\textsubscript{s}.
     + BCCH\_CODE\_RATE\textsubscript{s} = SR1\_CRAT\_TD\textsubscript{s}.
     + BCCH\textsubscript{s} = BCCH\_CODE\_CHAN\_TD\textsubscript{s}.
   - Otherwise, the mobile station shall set the following fields corresponding to the assigned CDMA channel:
     + BRAT\textsubscript{s} = SR1\_BRAT\_NON\_TD\textsubscript{s},
     + BCCH\_CODE\_RATE\textsubscript{s} = SR1\_CRAT\_NON\_TD\textsubscript{s},
     + BCCH\textsubscript{s} = BCCH\_CODE\_CHAN\_NON\_TD\textsubscript{s},
4. Tune to the new CDMA Channel.

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\textsuperscript{11} 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).
If the band class has changed (the computed CDMA band class is different than CDMABANDs), the mobile station shall perform the following actions:

• If BYPASS_SYS_DET_INDr is equal to '0' for this CDMA channel, the mobile station shall perform the following:
  – Set NEW_BAND_RECORD.NEW_BAND_CLASS to the computed band class.
  – Set NEW_BAND_RECORD.NEW_FREQ to the computed CDMA Channel.
  – The mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a new band indication.

• If BYPASS_SYS_DET_INDr is equal to '1' for this CDMA channel, the mobile station shall perform the following:
  – Set CDMACHs to the new CDMA Channel.
  – Set CDMABANDs to the new band class.
  – Set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, MC_RR_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs and ACC_MSG_SEQs to NULL. The mobile station shall keep the parameters associated with the current overhead messages until they are updated on the new Primary Broadcast Control Channel.  

o If the mobile station is operating in the Spreading Rate 1:
  + If the assigned CDMA channel supports transmit diversity, the mobile station shall set the following fields corresponding to the assigned CDMA channel:
    o SR1_TD_POWER_LEVELs = TD_POWER_LEVELr.
    o SR1_TD_MODEs = TD_MODEr.
    o BRATs = SR1_BRAT_TDs.
    o BCCH_CODE_RATEs = SR1_CRAT_TDs.
    o BCCHs = BCCH_CODE_CHAN_TDs.
  – Otherwise, the mobile station shall set the following fields corresponding to the assigned CDMA channel:
    + BRATs = SR1_BRAT_NON_TDs.
    + BCCH_CODE_RATEs = SR1_CRAT_NON_TDs.

12 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).
When an ANSI-41 System Parameters Message is received, the configuration message sequence number, CONFIG_MSG_SEQr, shall be compared to that stored in A41_SYS_PAR_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as described in 2.6.2.2.13.1, 2.6.2.2.13.2, 2.6.2.2.13.3, and 2.6.2.2.13.4.

If REG_PRD is not within the valid range specified in 3.7.3.2.3.1, then the mobile station shall ignore the ANSI-41 System Parameters Message that contains it.

The mobile station shall store the following parameters:

- Configuration message sequence number
  \( \text{CONFIG_MSG_SEQs} = \text{CONFIG_MSG_SEQr} \), \( \text{A41_SYS_PAR_MSG_SEQs} = \text{CONFIG_MSG_SEQr} \)
- Home registration indicator \( \text{HOME_REGs} = \text{HOME_REGr} \)
- SID roamer registration indicator \( \text{FOR_SID_REGs} = \text{FOR_SID_REGr} \)
- NID roamer registration indicator \( \text{FOR_NID_REGs} = \text{FOR_NID_REGr} \)
- Power-up registration indicator \( \text{POWER_UP_REGs} = \text{POWER_UP_REGr} \)
- Power-down registration indicator \( \text{POWER_DOWN_REGs} = \text{POWER_DOWN_REGr} \)
- Parameter-change registration indicator \( \text{PARAMETER_REGs} = \text{PARAMETER_REGr} \)
- Preferred Enhanced Access Channel MSID type
  \( \text{PREF_MSID_TYPEs} = \text{PREF_MSID_TYPEr} \)
- Extended Preferred Enhanced Access Channel MSID type
  \( \text{EXT_PREF_MSID_TYPEs} = \text{EXT_PREF_MSID_TYPEr} \), if included; otherwise, set \( \text{EXT_PREF_MSID_TYPEs} \) to NULL.
- MEID Required indicator is included \( \text{MEID_REQD}s = \text{MEID_REQDr} \), if included; otherwise, set \( \text{MEID_REQD}s \) to ‘0’
- The mobile station shall set its operational IMSI, IMSI_O, as follows:
  - If IMSI_T_SUPPORTEDr is equal to ‘0’, the mobile station shall set IMSI_O to IMSI_Mp.
  - If IMSI_T_SUPPORTEDr is equal to ‘1’ and the mobile station’s IMSI_Tp has been programmed, the mobile station shall set IMSI_O to IMSI_Tp.
  - If IMSI_T_SUPPORTEDr is equal to ‘1’ and the mobile station’s IMSI_Tp has not been programmed, the mobile station shall set IMSI_O to IMSI_Mp.
– If IMSI_O has been changed, the mobile station shall set MC_RR_PAR_MSG_SEQs and EXT_CHAN_LST_MSG_SEQs to NULL and set NUM_FCCCHs to ‘1’ and FCCCH_IDs to ‘1’.

• If OTHER_INFO_INCLr is set to ‘1’, the mobile station shall store:
  – Base station identification (BASE_IDs = BASE_IDr)
  – If MCCr = ‘1111111111’ and IMSI_11_12r = ‘1111111’, the mobile station shall set the IMSI_O to IMSI_Mp and store:
    + Mobile Country Code (MCCs = MCC_Mp) and
    + IMSI 11th and 12th digits (IMSI_11_12s = IMSI_M_11_12p);
  – Otherwise, the mobile station shall store:
    + Mobile Country Code (MCCs = MCCr) and
    + IMSI 11th and 12th digits (IMSI_11_12s = IMSI_11_12r).
  – Broadcast GPS assist indicator (BROADCAST_GPS_ASSTs = BROADCAST_GPS_ASSTr)
  – Signaling encryption supported indicator (SIG_ENCRYPT_SUPs = SIG_ENCRYPT_SUPr)

• Least significant digit of MNC (IMSI_10s = IMSI_10r), if included.

• If IMSI_O is set to the IMSI_M, the mobile station shall set:
  – IMSI_O_Ss to IMSI_M_Sp (i.e., IMSI_O_S1s to IMSI_M_S1p and IMSI_O_S2s to IMSI_M_S2p)
  – IMSI_O_11_12s to IMSI_M_11_12p
  – MCC_Os to MCC_Mp
  – IMSI_O_ADDR_NUMs to IMSI_M_ADDR_NUMp

• If IMSI_O is set to the IMSI_T, the mobile station shall set:
  – IMSI_O_Ss to IMSI_T_Sp (i.e., IMSI_O_S1s to IMSI_T_S1p and IMSI_O_S2s to IMSI_T_S2p).
  – IMSI_O_11_12s to IMSI_T_11_12p
  – MCC_Os to MCC_Tp
  – IMSI_O_ADDR_NUMs to IMSI_T_ADDR_NUMp

• Delete foreign TMSI (DELETE_FOR_TMSIs = DELETE_FOR_TMSIr)

• Use TMSI (USE_TMSIs = USE_TMSIr)

• TMSI zone length (TMSI_ZONE_LENs = TMSI_ZONE_LENr)

• TMSI zone number (TMSI_ZONEs = TMSI_ZONEr)

• Maximum number of alternative service options (MAX_NUM_ALT.SO s = MAX_NUM_ALT_SO r).
• The mobile station shall set all bits of TMSI_CODE_s–p to ‘1’ if all of the following conditions are met:
  – The bits of TMSI_CODE_s–p are not all equal to ‘1’,
  – DELETE_FOR_TMSI_s is equal to ‘1’, and
  – ASSIGNING_TMSI_ZONE_LEN_s–p is not equal to TMSI_ZONE_LEN_s, or the least significant ASSIGNING_TMSI_ZONE_LEN_s–p octets of ASSIGNING_TMSI_ZONE_s–p are not equal to TMSI_ZONE_s.

• Message integrity supported indicator (MSG_INTEGRITY_SUP_s = MSG_INTEGRITY_SUP_r), if P_REV_IN_USE_s is greater than or equal to 10; otherwise, MSG_INTEGRITY_SUP_s = 0.

• If MSG_INTEGRITY_SUP_r is equal to ‘1’ and SIG_INTEGRITY_SUP_INCL_r is equal to ‘1’, the mobile station shall store the message integrity algorithms that the base station supports (SIG_INTEGRITY_SUP_s = SIG_INTEGRITY_SUP_r); otherwise, the mobile station shall set SIG_INTEGRITY_SUP_s to ‘00000000’.

If the mobile station supports packet data service options, the mobile station shall store the packet data services zone identifier (PACKET_ZONE_ID_s = PACKET_ZONE_ID_r); otherwise, the mobile station shall set PACKET_ZONE_ID_s to ‘00000000’.

If the mobile station supports packet data service options and the PZ_HYST_ENABLED field is included, the mobile station shall store the packet zone hysteresis enabled indicator (PZ_HYST_ENABLED_s = PZ_HYST_ENABLED_r); otherwise, the mobile station shall set PZ_HYST_ENABLED_s to ‘10’.

If the mobile station supports packet data service options and the PZ_HYST_LIST_LEN field is included, the mobile station shall store the packet zone hysteresis list length (PZ_HYST_LIST_LEN_s = PZ_HYST_LIST_LEN_r); otherwise, the mobile station shall set PZ_HYST_LIST_LEN_s to 4.

If the mobile station supports packet data service options and the PZ_HYST_ACT_TIMER field is included, the mobile station shall store the packet zone hysteresis activation timer (PZ_HYST_ACT_TIMER_s = PZ_HYST_ACT_TIMER_r); otherwise, the mobile station shall set PZ_HYST_ACT_TIMER_s to 30 seconds_NULL.

If the mobile station supports packet data service options and the PZ_HYST_TIMER_MUL field and the PZ_HYST_TIMER_EXP field are included, the mobile station shall store the packet zone hysteresis timer (PZ_HYST_TIMER_s = PZ_HYST_TIMER_MUL_r × 8 ^ PZ_HYST_TIMER_EXP_r); otherwise, the mobile station shall set PZ_HYST_TIMER_s to 60 seconds_NULL.

If the mobile station supports the Device Information Message on the r-csch, the mobile station shall store:
  • Autonomous message supported indicator
    (AUTO_MSG_SUPPORTED_s = AUTO_MSG_SUPPORTED_r)

If AUTO_MSG_SUPPORTED_r is equal to ‘1’ and the mobile station supports the Device Information Message on the r-csch, the mobile station shall store:
• Autonomous message interval
  (AUTO_MSG_INTERVAL_S = AUTO_MSG_INTERVAL_R)

The mobile station shall store concurrent service supported indicator (CS_SUPPORTED_S =
CS_SUPPORTED_R).

Maximum number of additional service reference identifiers allowed in origination
(MAX_ADD_SERV_INSTANCE_S = MAX_ADD_SERV_INSTANCE_R), if included; otherwise, the
mobile station shall set MAX_ADD_SERV_INSTANCE_S to 0.

The mobile station shall store mobile station initiated position location determination
supported indicator (MS_INIT_POS_LOC_SUP_IND_S = MS_INIT_POS_LOC_SUP_IND_R).

The mobile station shall also store the following parameters:

• If the mobile station is not in the Origination Attempt Substate, or Page Response
  Substate, or Registration Access Substate, the mobile station shall store the following
  prior to storing the remaining parameters:
    – Registered system identification (REG_SID_S = SID_S).
    – Registered network identification (REG_NID_S = NID_S).
    – Registered registration zone (REG_REG_ZONE_S = REG_ZONE_S).
    – Registered zone timer length (REG_ZONE_TIMER_S = ZONE_TIMER_R).

• System identification (SID_S = SID_R)
• Network identification (NID_S = NID_R)
• Registration zone (REG_ZONE_S = REG_ZONE_R)
• Number of registration zones to be retained (TOTAL_ZONES_S = TOTAL_ZONES_R)
• Zone timer length (ZONE_TIMER_S = ZONE_TIMER_R)
• Multiple SID storage indicator (MULT_SIDS_S = MULT_SIDS_R)
• Multiple NID storage indicator (MULT_NIDS_S = MULT_NIDS_R)
• Registration period (REG_PRD_S = REG_PRD_R)

• If DIST_REG_INCL is equal to ‘1’, the mobile station shall store:
  – Registration distance (REG_DIST_S = REG_DIST_R)

• If DIST_REG_INCL is equal to ‘0’, then the mobile station shall set REG_DIST_S equal
to ‘00000000000’.

• If TKZ_MODE_SUPPORTED_R is not included, the mobile station shall set
  TKZ_MODE_SUPPORTED_S to ‘0’; otherwise, the mobile station shall set
  TKZ_MODE_SUPPORTED_S to TKZ_MODE_SUPPORTED_R. If
  TKZ_MODE_SUPPORTED_S is equal to ‘1’, the mobile station shall store the tracking
  zone identifier (TKZ_ID_S = TKZ_ID_R).

The mobile station shall ignore any fields at the end of the ANSI-41 System Parameters
Message that are not defined according to the protocol revision level (MOB_P_REV_P of the
current band class) being used by the mobile station.

2.6.2.13.2 Roaming Status

The mobile station shall determine the roaming status for the mobile station (see 2.6.5.3). The mobile station should indicate to the user whether the mobile station is roaming.

2.6.2.13.3 Registration

The mobile station shall update stored variables and perform other registration procedures as specified in 2.6.5.2.2.

2.6.2.13.4 PACA Disable for SID Change

If PACA is equal to enabled, and SID is not equal to PACA_SID, the mobile station shall set PACA to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

2.6.2.14 MC-RR Parameters Message

Whenever an MC-RR Parameters Message is received, the configuration message sequence number, CONFIG_MSG_SEQ, shall be compared to that stored in MC_RR_PAR_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as described in 2.6.2.14.1, 2.6.2.14.2, and 2.6.2.14.3.

If the protocol revision level supported by the mobile station (MOB_P_REV) is less than the minimum protocol revision level supported by the base station (MIN_P_REV), the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a protocol mismatch indication (see 2.6.1.1).

If BASE_LAT, BASE_LONG, or PWR_REP_THRESH is not within the valid ranges specified in 3.7.2.3.2.31, then the mobile station shall ignore the MC-RR Parameters Message that contains them.

If the mobile station supports Spreading Rate 3 on the common channel and SR3_INCL is equal to ‘1’, the mobile station shall set:

- \( BRAT_s = SR3_BRAT_r \)
- \( BCCH_s = SR3_BCCH_CODE_CHAN_r \)
- \( BCCH_CODE_RATE_s = 1/3 \)
- \( SR3_PRIMARY_PILOT_s = SR3_PRIMARY_PILOT_r \)
- \( SR3_PILOT_POWER1_s = SR3_PILOT_POWER1_r \)
- \( SR3_PILOT_POWER2_s = SR3_PILOT_POWER2_r \)
- If SR3_CENTER_FREQ_INCL is equal to ‘1’, \( POTENTIAL_CDMACH_s = SR3_CENTER_FREQ_r \).

If POTENTIAL_CDMACH is different from CDMACH, the mobile station shall set

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CDMACH$_s$ = POTENTIAL_CDMACH$_s$ and then tune to the CDMA Channel (CDMACH$_s$).

2.6.2.2.14.1 Stored Parameters

The mobile station shall store the following parameters:

- Configuration message sequence number
  
  (CONFIG_MSG_SEQ$_s$ = CONFIG_MSG_SEQ$_r$
  
  MC_RR_PAR_MSG_SEQ$_s$ = CONFIG_MSG_SEQ$_r$
  
  - Base station identification (BASE_ID$_s$ = BASE_ID$_r$)
  
  - Protocol revision level (P_REV$_s$ = P_REV$_r$)
  
  - Protocol revision level currently in use (P_REV_IN_USE$_s$ = the lesser value of P_REV$_s$ and MOB_P_REV$_p$ of the current band class)
  
  - Minimum protocol revision level (MIN_P_REV$_s$ = MIN_P_REV$_r$).
  
  - Search window size for the Active Set and Candidate Set
    
    (SRCH_WIN_A$_s$ = SRCH_WIN_A$_r$
    
    - Search window size for the Remaining Set (SRCH_WIN_R$_s$ = SRCH_WIN_R$_r$
    
    - Pilot detection threshold (T_ADD$_s$ = T_ADD$_r$
    
    - Pilot drop threshold (T_DROP$_s$ = T_DROP$_r$
    
    - Active Set versus Candidate Set comparison threshold (T_COMP$_s$ = T_COMP$_r$
    
    - Drop timer value (T_TDROP$_s$ = T_TDROP$_r$
    
    - Drop timer range value (T_TDROP_RANGE$_s$ = T_TDROP_RANGE$_r$ if T_TDROP_RANGE_INCL$_r$ is equal to ‘1’; otherwise, T_TDROP_RANGE$_s$ = ‘0000’
    
    - Maximum age for retention of Neighbor Set members
      
      (NGHBR_MAX_AGE$_s$ = NGHBR_MAX_AGE$_r$
      
    - Slope of the handoff add/drop criterion (SOFT_SLOPE$_s$ = SOFT_SLOPE$_r$
    
    - Intercept of the handoff add criterion (ADD_INTERCEPT$_s$ = ADD_INTERCEPT$_r$
    
    - Intercept of the handoff drop criterion (DROP_INTERCEPT$_s$ = DROP_INTERCEPT$_r$
    
    - If ENC_SUPPORTED$_r$ is equal to ‘1’, the mobile station shall store:
      
      - Signaling encryption supported indicator (SIG_ENCRYPT_SUP$_s$ = SIG_ENCRYPT_SUP$_r$
      
      - User information encryption supported indicator (UI_ENCRYPT_SUP$_s$ = UI_ENCRYPT_SUP$_r$)
If \( P_{REV\_IN\_USE_s} \) has been changed, the mobile station shall set \( ACC\_MSG\_SEQ_s \), \( CURR\_ACC\_MSG\_SEQ, A41\_SYS\_PAR\_MSG\_SEQ_s \), \( UNI\_NGHBR\_LST\_MSG\_SEQ_s \), and \( EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_s \) to NULL.

If \( CCH\_INFO\_INCL_r \) is equal to ‘1’, the mobile station shall store:

- If \( MCC_r = '1111111111' \) and \( IMSI\_11\_12_r = '1111111' \), the mobile station shall set
  the IMSI_O to IMSI_M_p and store:
  - Mobile Country Code \( MCC_s = MCC_M_p \) and
  - IMSI 11th and 12th digits \( IMSI\_11\_12_s = IMSI\_M\_11\_12_p \);

- Otherwise, the mobile station shall store:
  - Mobile Country Code \( MCC_s = MCC_r \) and
  - IMSI 11th and 12th digits \( IMSI\_11\_12_s = IMSI\_11\_12_r \).

- Least significant digit of MNC \( IMSI\_10_s = IMSI\_10_r \), if included.

- If IMSI_O has been changed, the mobile station shall set
  \( EXT\_CHAN\_LST\_MSG\_SEQ_s \) to NULL, and set \( NUM\_FCCCH_s \) to ‘1’ and \( FCCCH\_ID_s \)
to ‘1’.

- Extended Global Service Redirection Message sent
  \( EXT\_GLOBAL\_REDIRECT_s = EXT\_GLOBAL\_REDIRECT_r \) if included; otherwise,
  \( EXT\_GLOBAL\_REDIRECT_s = '0' \)

- User Zone Identification Message sent
  \( USER\_ZONE\_ID_s = USER\_ZONE\_ID_r \) if included; otherwise, \( USER\_ZONE\_ID_s = '0' \)

- Private Neighbor List Message sent
  \( PRI\_NGHBR\_LST_s = PRI\_NGHBR\_LST_r \) if included; otherwise,
  \( PRI\_NGHBR\_LST_s = '0' \)

- ANSI-41 RAND Message sent
  \( SENDING\_RAND_s = SENDING\_RAND_r \) if included; otherwise,
  \( SENDING\_RAND_s = '0' \)

- Maximum slot cycle index
  \( MAX\_SLOT\_CYCLE\_INDEX_s = MAX\_SLOT\_CYCLE\_INDEX_r \)

- BCSC Service Parameters Message sent
  \( SENDING\_BSPM_s = SENDING\_BSPM_r \) if included; otherwise, set
  \( SENDING\_BSPM_s \) to ‘0’.

- BCSC Service Parameters Message transmission periodicity index
  \( BSPM\_PERIOD\_INDEX_s = BSPM\_PERIOD\_INDEX_r \) if \( SENDING\_BSPM_r \) equals ‘1’;
  otherwise, \( BSPM\_PERIOD\_INDEX_s = NULL \).

- \( BSPM\_PERIOD\_INDEX_s \) is not equal to NULL, the mobile station shall set
  \( BSPM\_WAIT\_TIME \) to \((B \times 160\text{ms}) \) where

\[
B = 2^i \times 16, \quad 0 \leq i \leq 2^{15}
\]
and \( i = \text{BSPM\_PERIOD\_INDEX}_s \).

- Power control reporting threshold \((\text{PWR\_REP\_THRESH}_s = \text{PWR\_REP\_THRESH}_r)\)
- Power control reporting frame count \((\text{PWR\_REP\_FRAMES}_s = \text{PWR\_REP\_FRAMES}_r)\)
- Threshold report mode indicator \((\text{PWR\_THRESH\_ENABLE}_s = \text{PWR\_THRESH\_ENABLE}_r)\)
- Periodic report mode indicator \((\text{PWR\_PERIOD\_ENABLE}_s = \text{PWR\_PERIOD\_ENABLE}_r)\)
- Power report delay \((\text{PWR\_REP\_DELAY}_s = \text{PWR\_REP\_DELAY}_r)\)
- System reselection indicator \((\text{RESELECT\_INCLUDED}_s = \text{RESELECT\_INCLUDED}_r)\)
- Pilot reporting indicator \((\text{PILOT\_REPORT}_s = \text{PILOT\_REPORT}_r)\)
- Short Data Burst supported indicator \((\text{SDB\_SUPPORTED}_s = \text{SDB\_SUPPORTED}_r)\)
- Broadcast GPS Assist Indicator \((\text{BROADCAST\_GPS\_ASST}_s = \text{BROADCAST\_GPS\_ASST}_r)\)
- Nominal reverse traffic channel output power offset relative to Reverse Pilot Channel power \((\text{RLGAIN\_TRAFFIC\_PILOT}_s = \text{RLGAIN\_TRAFFIC\_PILOT}_r)\)
- If \( \text{NUM\_FCCCH}_r \) is not equal to ‘0’:
  - Number of the Forward Common Control Channels \((\text{NUM\_FCCCH}_s = \text{NUM\_FCCCH}_r)\)
  - Data rate for the Forward Common Control Channels \((\text{FCCCH\_RATE}_s = \text{FCCCH\_RATE}_r)\)
  - Code rate for the Forward Common Control Channels \((\text{FCCCH\_CODE\_RATE}_s = \text{FCCCH\_CODE\_RATE}_r)\)
  - For \( i = 0 \) to \( \text{NUM\_FCCCH}_r - 1 \), store the channel code index for each Forward Common Control Channel \((\text{FCCCH\_CODE\_CHAN}_s[i] = \text{FCCCH\_CODE\_CHAN}_r)\)
- Broadcast index \((\text{BCAST\_INDEX}_s = \text{BCAST\_INDEX}_r)\)
- The number of Broadcast Control Channels \((\text{NUM\_BCCH\_BCAST}_s = \text{NUM\_BCCH\_BCAST}_r)\)
- If \( \text{NUM\_BCCH\_BCAST}_r \) is greater than ‘000’, \( i \) occurrences of the following fields, where \( i \) ranges from 1 to \( \text{NUM\_BCCH\_BCAST}_r \):
  - Set the Broadcast Control Channel Number (BCN) to \( i+1 \)
  - BCCH Walsh code index \((\text{BCCH\_CODE\_CHAN}[\text{BCN}]_s = \text{BCCH\_CODE\_CHAN}[\text{BCN}]_r)\)
  - BCCH data rate \((\text{BRAT}[\text{BCN}]_s = \text{BRAT}[i]_r)\)
  - BCCH code rate \((\text{BCCH\_CODE\_RATE}[\text{BCN}]_s = \text{BCCH\_CODE\_RATE}[i]_r)\)
- Sync ID supported indicator \((\text{USE\_SYNC\_ID}_s = \text{USE\_SYNC\_ID}_r)\)
- Pilot information request supported indicator \((\text{PILOT\_INFO\_REQ\_SUPPORTED}_s = \text{PILOT\_INFO\_REQ\_SUPPORTED}_r)\).
• Band class information request indicator (BAND_CLASS_INFO_REQ_s = BAND_CLASS_INFO_REQ_r)
• Alternate CDMA band class (ALT_BAND_CLASS_s = ALT_BAND_CLASS_r), if BAND_CLASS_INFO_REQ_r is equal to ‘1’.
• Access entry handoff in order and message processing operation indicator (ACC_ENT_HO_ORDER_s = ACC_ENT_HO_ORDER_r).
• If REV_PWR_CNTL_DELAY_INCL is equal to ‘1’, reverse power control delay (REV_PWR_CNTL_DELAY_s = REV_PWR_CNTL_DELAY_r)
• Permission indicator for the mobile station to request QoS settings in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message* (MOB_QOS_s = MOB_QOS_r)
• If RESELECT_INCLUDED_s is equal to ‘1’, the mobile station shall store:
  – Pilot power threshold (EC_THRESH_s = EC_THRESH_r)
  – Pilot Ec/Io threshold (EC_I0_THRESH_s = EC_I0_THRESH_r)
• Access handoff permitted indicator (ACCESS_HO_s = ACCESS_HO_r)
• Access probe handoff permitted indicator (ACCESS_PROBE_HO_s = ACCESS_PROBE_HO_r)
• If ACCESS_PROBE_HO_s is equal to ‘1’, access handoff list update permitted indicator (ACC_HO_LIST_UPD_s = ACC_HO_LIST_UPD_r)
• Maximum number of times that the mobile station is permitted to perform an access probe handoff (MAX_NUM_PROBE_HO_s = MAX_NUM_PROBE_HO_r)
• Access handoff permitted for message response indicator (ACCESS_HO_MSG_RSP_s = ACCESS_HO_MSG_RSP_r)
• Access probe handoff permitted for other messages indicator (ACC_PROBE_HO_OTHER_MSG_s = ACC_PROBE_HO_OTHER_MSG_r)
• If USER_ZONE_ID_s is equal to ‘0’, then the mobile station shall perform the following:
  – Set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
  – Set the UZID field of the UZ_REC to ‘0000000000000000’ for all entries.
  – Set the UZ_REV field of the UZ_REC to ‘0000’ for all entries.
  – Set the TEMP_SUB field of the UZ_REC to ‘0’ for all entries.
• If USER_ZONE_ID_s is equal to ‘1’ and the mobile station does not support Tiered Services, then the mobile station shall set USER_ZONE_ID_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
• If PRI_NGHBR_LST_s is equal to ‘0’, then the mobile station shall set PRI_NGHBR_LST_MSG_SEQ_s to CONFIG_MSG_SEQ_s.
• If PRI_NGHBR_LST is equal to ‘1’ and the mobile station does not support Tiered Services, then the mobile station shall set PRI_NGHBR_LST_MSG_SEQ to CONFIG_MSG_SEQ.

• If EXT_GLOBAL_REDIRECT is equal to ‘0’, then the mobile station shall set EXT_GLOB_SERV_REDIR_MSG_SEQ to CONFIG_MSG_SEQ.

• The mobile station shall perform the following:
  – If SENDING_RAND is equal to ‘1’, the mobile station shall set AUTH to ‘01’; otherwise, the mobile station shall set AUTH to ‘00’.

• The mobile station shall store the following:
  – Base station latitude (BASE_LAT = BASE_LATR)
  – Base station longitude (BASE_LONG = BASE_LONGR)

• If CAND_BAND_INFO_REQ is included, the mobile station shall set CAND_BAND_INFO_REQ to CAND_BAND_INFO_REQ. Otherwise, the mobile station shall set CAND_BAND_INFO_REQ to ‘0’.

• If CAND_BAND_INFO_REQ is set to ‘1’, the mobile station shall store the number of candidate band classes minus one (NUM_CAND_BAND_CLASS = NUM_CAND_BAND_CLASSR).

• If CAND_BAND_INFO_REQ is set to ‘1’, the mobile station shall perform the following for each occurrence of the CAND_BAND_CLASS record:
  – Set the CAND_BAND_CLASS field of CAND_BAND_CLASS_REC[i] to the ith occurrence of CAND_BAND_CLASSR.
  – Set the SUBCLASS_REC_LEN field of CAND_BAND_CLASS_REC[i] to the ith occurrence of SUBCLASS_REC_LENR.
  – If the ith occurrence of SUBCLASS_REC_LENR field is non-zero, the mobile station shall perform the following for each band subclass indicator received:
    – Set the BAND_SUBCLASS_IND_REC[j] field of CAND_BAND_CLASS_REC[i] to the jth occurrence of BAND_SUBCLASS_INDJR.

If TX_PWR_LIMIT_INCL is set to ‘1’ and the mobile station is operating in the 1915MHz – 1920MHz block of the PCS band, the mobile station shall store the transmit power limit TX_PWR_LIMIT = (TX_PWR_LIMITR - 30dB); otherwise, the mobile station shall set TX_PWR_LIMIT to the limit defined in [11].

If CCH_INFO_INCL is equal to ‘1’ and the mobile station supports the Quick Paging Channel operation:

• The mobile station shall set QPCH_SUPPORTED to QPCH_SUPPORTEDR.

• If QPCH_SUPPORTEDR = ‘1’:
  – The mobile station shall set QPCH_RATE to QPCH_RATER.
  – If the mobile station is monitoring the Primary Broadcast Control Channel in...
Spreading Rate 1 and the number of Quick Paging Channels specified in the received message (NUM_QPCHr) is different from NUM_QPCHs, the mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Quick Paging Channel number in the range 1 to NUM_QPCHr. The mobile station shall store the new Quick Paging Channel number as QPAGECHs and as ASSIGNED_QPAGECHs. The mobile station shall then set NUM_QPCHs to NUM_QPCHr.

- If the mobile station is monitoring the Primary Broadcast Control Channel in Spreading Rate 3 and the number of Quick Paging Channels specified in the received message (NUM_QPCHr) is different from NUM_QPCHs, the mobile station shall perform the following:
  + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Quick Paging Channel number in the range 1 to NUM_QPCHr.
  + The mobile station shall store the new Quick Paging Channel number as QPAGECHs and as ASSIGNED_QPAGECHs.
  + For i = 0 to NUM_QPCHs - 1, store the channel code index for each Quick Paging Channel (QPCH_CODE_CHANs[i] = QPCH_CODE_CHANr).

- The mobile station shall set QPCH_POWER_LEVEL_PAGEs to QPCH_POWER_LEVEL_PAGEr.
- The mobile station shall set QPCH_CCI_SUPPORTEDs to QPCH_CCI_SUPPORTEDr.
- If QPCH_CCI_SUPPORTEDr = ‘1’, the mobile station shall set QPCH_POWER_LEVEL_CONFIGs to QPCH_POWER_LEVEL_CONFIGr.
- The mobile station shall set QPCH_BL_SUPPORTEDs to QPCH_BL_SUPPORTEDr.
- If QPCH_BL_SUPPORTEDr = ‘1’, the mobile station shall set QPCH_POWER_LEVEL_BCASTs to QPCH_POWER_LEVEL_BCASTr.

The mobile station shall store the following:
- CDMA off time report supported indicator (CDMA_OFF_TIME_REP_SUP_INDs = CDMA_OFF_TIME_REP_SUP_INDr)
- If CDMA_OFF_TIME_REP_SUP_INDr is equal to ‘1’, the mobile station shall store:
  - CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLDs = CDMA_OFF_TIME_REP_THRESHOLDr in units specified by CDMA_OFF_TIME_REP_UNITr)
- Control Hold Mode supported indicator (CHM_SUPPORTEDs = CHM_SUPPORTEDr) if included; otherwise, set CHM_SUPPORTEDs to ‘1’.
- Release to Idle State allowed indicator (RELEASE_TO_IDLE_INDs = RELEASE_TO_IDLE_INDr).
- Reconnect Message supported indicator (RECONNECT_MSG_INDs = RECONNECT_MSG_INDr).
• Short Data Burst allowed in Reconnect Message allowed indicator
  (SDB_IN_RCNM_IND_S = SDB_IN_RCNM_IND_T), if included; otherwise, set
  SDB_IN_RCNM_IND_S to ‘0’.
• Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTED_S =
  FOR_PDCH_SUPPORTED_T).
• PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED_S =
  PDCH_CHM_SUPPORTED_T), if included; otherwise, set PDCH_CHM_SUPPORTED_S to
  ‘0’.

The mobile station shall set FOR_PDCH_COMMON_PARMS_S = ‘0’.

If both FOR_PDCH_SUPPORTED_T and PDCH_PARMS_INCL_T are included and equal to ‘1’,
the mobile station shall perform the following:
• If FOR_PDCH_RLGAIN_INCL_T is included and equal to ‘1’, the mobile station shall
  set:
    – (RLGAIN_ACKCH_PILOT_S = RLGAIN_ACKCH_PILOT_T).
    – (RLGAIN_CQICH_PILOT_S = RLGAIN_CQICH_PILOT_T).
• The mobile station shall set
  NUM_SOFT_SWITCHING_FRAMES_S = NUM_SOFT_SWITCHING_FRAMES_T + 1, and
  NUM_SOFTER_SWITCHING_FRAMES_S = NUM_SOFTER_SWITCHING_FRAMES_T + 1.

The mobile station shall set
  NUM_SOFT_SWITCHING_FRAMES_CHM_S = NUM_SOFT_SWITCHING_FRAMES_T + 1,
  and NUM_SOFTER_SWITCHING_FRAMES_CHM_S =
  NUM_SOFTER_SWITCHING_FRAMES_T + 1.
• The mobile station shall set NUM_SOFT_SWITCHING_SLOTS_S according to Table
  3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS_T.
• The mobile station shall set NUM_SOFTER_SWITCHING_SLOTS_S according to Table
  3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTS_T.
• The mobile station shall set PDCH_SOFT_SWITCHING_DELAY_S to
  PDCH_SOFT_SWITCHING_DELAY_T + 1, and PDCH_SOFTER_SWITCHING_DELAY_S
  to PDCH_SOFTER_SWITCHING_DELAY_T + 1.

The mobile station shall set FOR_PDCH_COMMON_PARMS_S = ‘1’.
• The mobile station shall set WALSH_TABLE_ID_S = WALSH_TABLE_ID_T.
• The mobile station shall set NUM_PDCCH_S = NUM_PDCCH_T.
• The mobile station shall store FOR_PDCCH_WALSH_S[i] to the i\textsuperscript{th}
  occurrence of
  FOR_PDCCH_WALSH_T[i].

The mobile station shall store the following:
• If NEG_SLOT_CYCLE_INDEX_SUP_T is included and equal to ‘1’, the mobile station
  shall set MIN_SLOT_CYCLE_INDEX to -4; otherwise, the mobile station shall set
  MIN_SLOT_CYCLE_INDEX to 0.
• If RER_MODE_SUPPORTED_r is not included, the mobile station shall set RER_MODE_SUPPORTED_s to ‘0’; otherwise, the mobile station shall set RER_MODE_SUPPORTED_s to RER_MODE_SUPPORTED_r.

• If AUTO_FCSO_ALLOWED_r is not included, the mobile station shall set AUTO_FCSO_ALLOWED_s to ‘0’; otherwise, the mobile station shall set AUTO_FCSO_ALLOWED_s to AUTO_FCSO_ALLOWED_r.

If FOR_PDCH_SUPPORTED_r is equal to ‘1’, then the mobile station shall set Reverse Packet Data Channel supported indicator (REV_PDCH_SUPPORTED_s = REV_PDCH_SUPPORTED_r).

If REV_PDCH_PARMS_INCL_r is not included, or if it is included and equal to ‘0’, the mobile station shall set REV_PDCH_PARMS_INCL_s to ‘0’; otherwise, the mobile station shall set REV_PDCH_PARMS_INCL_s to ‘1’ and perform the following:

• If REV_PDCH_RLGAIN_INCL_r is equal to ‘1’, the mobile station shall set:
  – (RLGAIN_SPICH_PILOT_s = RLGAIN_SPICH_PILOT_r).
  – (RLGAIN_REQCH_PILOT_s = RLGAIN_REQCH_PILOT_r).
  – (RLGAIN_PDCCH_PILOT_s = RLGAIN_PDCCH_PILOT_r).

• If REV_PDCH_PARMS_1_INCL_r is equal to ‘1’, the mobile station shall set:
  – (REV_PDCH_TABLE_SEL_s = REV_PDCH_TABLE_SEL_r).
  – (REV_PDCH_MAX_AUTO_TPR_s to REV_PDCH_MAX_AUTO_TPR_r).
  – (REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s = REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_r+1).

• If REV_PDCH_OPER_PARMS_INCL_r is equal to ‘1’, the mobile station shall set:
  – (REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s = to
    REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_r+1).
  – (REV_PDCH_DEFAULT_PERSISTENCE_s = REV_PDCH_DEFAULT_PERSISTENCE_r).
  – (REV_PDCH_RESET_PERSISTENCE_s = REV_PDCH_RESET_PERSISTENCE_r).
  – (REV_PDCH_GRANT_PRECEDENCE_s = REV_PDCH_GRANT_PRECEDENCE_r).
  – (REV_PDCH_MSIB_SUPPORTED_s = to REV_PDCH_MSIB_SUPPORTED_r).
  – (REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND_s = to
    REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND_r).

• The mobile station shall set

The mobile station shall store the following:

• If BYPASS_REG_IND_r is included, the mobile station shall set BYPASS_REG_IND_s to BYPASS_REG_IND_r; otherwise, the mobile station shall set BYPASS_REG_IND_s to ‘00’.
The mobile station shall ignore any fields at the end of the *MC-RR Parameters Message* that are not defined according to the protocol revision level (MOB_P_REV_p of the current band class) being used by the mobile station.

### 2.6.2.2.14.2 Slot Cycle Index

The mobile station shall set SLOT_CYCLE_INDEX to:

\[
\max\left(\min\left(SLOT_CYCLE_INDEX_{\text{REG}}, \text{MAX SLOT CYCLE INDEX}\right)\right).
\]

Where, SLOT_CYCLE_INDEX_REG is computed based on the slot cycle index value included in the last registration attempt (see 2.6.5.3.1 and 2.6.5.3.2).

If the mobile station is operating in the slotted mode, it shall set its slot cycle length as described in 2.6.2.1.1.3.

### 2.6.2.2.14.3 Forward Common Control Channel Assignment Change

If the number of Forward Common Control Channels specified in the *MC-RR Parameters Message* (NUM_FCCCHr) is not equal to ‘0’ and is different from NUM_FCCCHs, the mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common Control Channel number in the range 1 to NUM_FCCCHr and shall store this value as FCCCH_IDs. If NUM_FCCCHr is not equal to ‘0’, the mobile station shall store the FCCCH rate (FCCCH_RATEs = FCCCH_RATEr), the FCCCH code rate (FCCCH_CODE_RATEs = FCCCH_CODE_RATEr), and store FCCCH_CODE_CHANr of the corresponding Forward Common Control Channel as FCCCH_CODE_CHANs. The mobile station shall then set NUM_FCCCHs to NUM_FCCCHr.

The mobile station shall set ACC_MSG_SEQs to NULL.

### 2.6.2.2.14.4 RESCAN Parameter

If the RESCANr field in the *MC-RR Parameters Message* equals ‘1’, the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a rescan indication (see 2.6.1.1).

### 2.6.2.2.15 Enhanced Access Parameters Message

Whenever an *Enhanced Access Parameters Message* is received on the f-csch, the sequence number, ACC_MSG_SEQr, shall be compared to ACC_MSG_SEQs. If the comparison results in a match, the mobile station may ignore the message. If the comparison results in a mismatch, then the mobile station shall process the remaining fields in the message as follows:

If MAX_REQ_SEQ or MAX_RSP_SEQ are not within the valid ranges specified in 3.7.2.3.2.2, then the mobile station shall ignore the *Enhanced Access Parameters Message* that contains them.

The mobile station shall store the following parameters:
• Enhanced Access Parameters Message sequence number 
  (ACC_MSG_SEQs = ACC_MSG_SEQr)

• Persistence related parameters:
  – If PSIST_PARMS_INCL is equal to ‘1’, store the following:
    + Persistence parameter number according to the following rule: If the mobile 
      station’s access overload class is in the range 0-9 inclusive, set PSISTs equal 
      to PSIST(0-9)_EACHr; otherwise set PSISTs equal to PSIST(n)_EACHr, where 
      n is equal to the mobile station access overload class.
    + Persistence modifier for Enhanced Access Channel attempts for registrations 
      which are not responses to the Registration Request Order 
      (REG_PSISTs = REG_PSIST_EACHr).
    + Persistence modifier for Enhanced Access Channel attempts for message 
      transmissions (MSG_PSISTs = MSG_PSIST_EACHr).
    + Persistence modifier for emergency calls by the mobile stations in access 
      overload classes 0 to 9(PSIST_EMGs = PSIST_EMGr).
  – If PSIST_PARMS_INCLr is equal to ‘0’, store the following:
    + Set PSISTs to 0.
    + Persistence modifier for emergency calls by a mobile station in access 
      overload classes 0 to 9 (PSIST_EMGs = ‘000’).
    + Persistence modifier for Enhanced Access Channel attempts for message 
      transmissions (MSG_PSISTs = ‘000’).
    + Persistence modifier for Enhanced Access Channel attempts for registrations 
      which are not responses to the Registration Request Order 
      (REG_PSISTs = ‘000’).

• The mobile station shall store the Access Control based on Call Type (ACCT) 
  information as follows:
  – Set ACCT_SO_LIST to NULL.
  – Set ACCT_SO_GRP_LIST to NULL.
  – If ACCT_INCLr is equal to ‘1’ and ACCOLCp is in the range 0 to 9, then the 
    mobile station shall perform the following:
    + Set ACCT_INCL_EMGs to ACCT_INCL_EMGr.
    + If ACCT_SO_INCLr is equal to ‘1’, then for each ACCT_SOr included in this 
      message:
      o If ACCT_AOC_BITMAP_INCLr is equal to ‘0’, or if 
        ACCT_AOC_BITMAP_INCLr is equal to ‘1’ and the bit in the associated 
        ACCT_AOC_BITMAP1r corresponding to the mobile station’s ACCOLCp 
        (see Table 3.7.2.3.2.2-1) is equal to ‘1’, then add ACCT_SOr to 
        ACCT_SO_LIST.
+ If ACCT_SO_GRP_INCL is equal to ‘1’, then for each ACCT_SO_GRP included in this message:
  o If ACCT_AOC_BITMAP_INCL is equal to ‘0’, or if
  ACCT_AOC_BITMAP_INCL is equal to ‘1’ and the bit in the associated
  ACCT_AOC_BITMAP2 corresponding to the mobile station’s ACCOLC (see Table 3.7.2.3.2.2-1) is equal to ‘1’, then add ACCT_SO_GRP to
  ACCT_SO_GRP_LIST.

• Link Access Control related parameters:
  – Acknowledgment timeout (EACH_ACC_TMO = ACC_TMO)
  – Maximum number of probe sequences for an Enhanced Access Channel request
    (MAX_REQ_SEQ = MAX_REQ_SEQ)
  – Maximum number of probe sequences for an Enhanced Access Channel
    response (MAX_RSP_SEQ = MAX_RSP_SEQ)

• Mode Selection Table:
  NUM_MODE_SELECTION_ENTRIES = (NUM_MODE_SELECTION_ENTRIES + 1)
  For i = 1 to NUM_MODE_SELECTION_ENTRIES:
    – MODE_SELECTION[i].ACCESS_MODE = ACCESS_MODE field of the ith
      occurrence of the record
    – MODE_SELECTION[i].MIN_DURATION = ACCESS_MODE_MIN_DURATION field
      of the ith occurrence of the record
    – MODE_SELECTION[i].MAX_DURATION = ACCESS_MODE_MAX_DURATION
      field of the ith occurrence of the record

• Reverse gain adjustment of the Enhanced Access Channel or Reverse Common
  Control Channel relative to the Reverse Pilot Channel (RLGAIN_COMMON_PILOT =
  RLGAIN_COMMON_PILOT)

• The threshold level at which the interference correction begins to be applied
  (IC_THRESH = - IC_THRESH)

• The maximum interference correction that can be applied (IC_MAX = IC_MAX)

• Mode-specific parameters for the Enhanced Access Channel:
  For i = 1 to NUM_MODE_PARM_REC + 1:
    For j = 0 to 7:
      If the (j+1)th subfield of APPLICABLE_MODES is equal to ‘1’, store the
      following parameters:
        – Nominal transmit power offset on the Enhanced Access Channel
          (MODE_PARMS[j].EACH_NOM_PWR = EACH_NOM_PWR field of the ith
          occurrence of the record)
        – Initial power offset for access on the Enhanced Access Channel
(MODE_PARMS_s[j].EACH_INIT_PWR = EACH_INIT_PWR field of the i\textsuperscript{th} occurrence of the record)

- Power increment on the Enhanced Access Channel
  (MODE_PARMS_s[j].EACH_PWR_STEP = EACH_PWR_STEP field of the i\textsuperscript{th} occurrence of the record)

- Number of access probes on the Enhanced Access Channel
  (MODE_PARMS_s[j].EACH_NUM_STEP = EACH_NUM_STEP field of the i\textsuperscript{th} occurrence of the record)

- Preamble enabled indicator on the Enhanced Access Channel
  (MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED = EACH_PREAMBLE_ENABLED field of the i\textsuperscript{th} occurrence of the record)

- Number of preamble fractions sent on the Enhanced Access Channel if
  MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to ‘1’
  (MODE_PARMS_s[j].EACH_PREAMBLE_NUM_FRAC = EACH_PREAMBLE_NUM_FRAC field of the i\textsuperscript{th} occurrence of the record)

- Fractional preamble duration on the Enhanced Access Channel if
  MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to ‘1’
  (MODE_PARMS_s[j].EACH_PREAMBLE_FRAC_DURATION = EACH_PREAMBLE_FRAC_DURATION field of the i\textsuperscript{th} occurrence of the record)

- Preamble gated-off duration on the Enhanced Access Channel if
  MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to ‘1’
  (MODE_PARMS_s[j].EACH_PREAMBLE_OFF_DURATION = EACH_PREAMBLE_OFF_DURATION field of the i\textsuperscript{th} occurrence of the record)

- Additional preamble duration on the Enhanced Access Channel if
  MODE_PARMS_s[j].EACH_PREAMBLE_ENABLED is equal to ‘1’
  (MODE_PARMS_s[j].EACH_PREAMBLE_ADD_DURATION = EACH_PREAMBLE_ADD_DURATION field of the i\textsuperscript{th} occurrence of the record)

- Enhanced Access Channel probe backoff range
  (MODE_PARMS_s[j].EACH_PROBE_BKOFF = EACH_PROBE_BKOFF field of the i\textsuperscript{th} occurrence of the record)

- Enhanced Access Channel probe sequence backoff range
  (MODE_PARMS_s[j].EACH_BKOFF = EACH_BKOFF field of the i\textsuperscript{th} occurrence of the record)

- Enhanced Access Channel slot (MODE_PARMS_s[j].EACH_SLOT = 1 + EACH_SLOT field of the i\textsuperscript{th} occurrence of the record)

- Enhanced Access Channel first slot offset
  (MODE_PARMS_s[j].EACH_SLOT_OFFSET1 = EACH_SLOT_OFFSET1 field of the i\textsuperscript{th} occurrence of the record)

- Enhanced Access Channel second slot offset
  (MODE_PARMS_s[j].EACH_SLOT_OFFSET2 = EACH_SLOT_OFFSET2 field
of the \(i\)th occurrence of the record) 

- Additional parameters for the Basic Access Mode:
  
  If \(\text{BA\_PARMS\_LEN}_r\) is equal to ‘000’, set the Basic Access Mode supported indicator, \(\text{BA\_SUPPORTED}_s\), to ‘0’; otherwise store the following parameters:
  
  - Basic Access Mode supported indicator (\(\text{BA\_SUPPORTED}_s = ‘1’\))
  
  - Number of Enhanced Access Channels (\(\text{NUM\_EACH\_BA}_s = (\text{NUM\_EACH\_BA}_r + 1)\))
  
  - Rate words supported on the Enhanced Access Channels 
    (\(\text{EACH\_BA\_RATES\_SUPPORTED}_s = \text{EACH\_BA\_RATES\_SUPPORTED}_r\))

- Additional parameters for the Reservation Access Mode:
  
  If \(\text{RA\_PARMS\_LEN}_r\) is equal to ‘00000’, set the Reservation Access Mode supported indicator, \(\text{RA\_SUPPORTED}_s\), to ‘0’; otherwise store the following parameters, if included in the message:
  
  - Reservation Access Mode supported indicator (\(\text{RA\_SUPPORTED}_s = ‘1’\))
  
  - Number of Enhanced Access Channels (\(\text{NUM\_EACH\_RA}_s = (\text{NUM\_EACH\_RA}_r + 1)\))
  
  - Number of Common Assignment Channels (\(\text{NUM\_CACH}_s = (\text{NUM\_CACH}_r + 1)\))
  
  - Code rate of Common Assignment Channels (\(\text{CACH\_CODE\_RATE}_s = \text{CACH\_CODE\_RATE}_r\))
  
  - For \(i = 0\) to \(\text{NUM\_CACH}_s - 1\), store the channel code index for each Common Assignment Channel (\(\text{CACH\_CODE\_CHAN}_s[i] = \text{CACH\_CODE\_CHAN}_r\)).
  
  - Number of Reverse Common Control Channels (\(\text{NUM\_RCCCH}_s = (\text{NUM\_RCCCH}_r + 1)\))
  
  - Rate words supported on the Reverse Common Control Channels 
    (\(\text{RCCCH\_RATES\_SUPPORTED}_s = \text{RCCCH\_RATES\_SUPPORTED}_r\))
  
  - Preamble enabled indicator on the Reverse Common Control Channels 
    (\(\text{RCCCH\_PREAMBLE\_ENABLED}_s = \text{RCCCH\_PREAMBLE\_ENABLED}_r\))
  
  - Number of preamble fractions sent on the Reverse Common Control Channel if 
    \(\text{RCCCH\_PREAMBLE\_ENABLED}_r\) is equal to ‘1’ 
    (\(\text{RCCCH\_PREAMBLE\_NUM\_FRAC}_s = \text{RCCCH\_PREAMBLE\_NUM\_FRAC}_r\))
  
  - Fractional preamble duration on the Reverse Common Control Channel if 
    \(\text{RCCCH\_PREAMBLE\_ENABLED}_r\) is equal to ‘1’ 
    (\(\text{RCCCH\_PREAMBLE\_FRAC\_DURATION}_s = \text{RCCCH\_PREAMBLE\_FRAC\_DURATION}_r\))
  
  - Preamble gated-off duration on the Reverse Common Control Channel if 
    \(\text{RCCCH\_PREAMBLE\_ENABLED}_r\) is equal to ‘1’ 
    (\(\text{RCCCH\_PREAMBLE\_OFF\_DURATION}_s = \text{RCCCH\_PREAMBLE\_OFF\_DURATION}_r\))
– Additional preamble duration on the Reverse Common Control Channel if
  RCCCH_PREAMBLE_ENABLED is equal to ‘1’
  (RCCCH_PREAMBLE_ADD_DURATION_s = RCCCH_PREAMBLE_ADD_DURATION_r)

– Slot duration on the Reverse Common Control Channel (RCCCH_SLOT_s = 1 + RCCCH_SLOT_r)

– First slot offset of the Reverse Common Control Channel
  (RCCCH_SLOT_OFFSET1_s = RCCCH_SLOT_OFFSET1_r)

– Second slot offset of the Reverse Common Control Channel
  (RCCCH_SLOT_OFFSET2_s = RCCCH_SLOT_OFFSET2_r)

– Nominal transmit power offset on the Reverse Common Control Channel
  (RCCCH_NOM_PWR_s = RCCCH_NOM_PWR_r)

– Initial power offset for access on the Reverse Common Control Channel
  (RCCCH_INIT_PWR_s = RCCCH_INIT_PWR_r)

– Power Control delay for the Reservation Access Mode
  (RA_PC_DELAY_s = RA_PC_DELAY_r)

– Maximum delay to receive the Early Acknowledgment Channel Assignment Message on the Common Assignment Channel
  (EACAM_CACH_DELAY_s = EACAM_CACH_DELAY_r)

– Indicator for handoff supported on the Reverse Common Control Channels
  (RCCCH_HO_SUPPORTED_s = RCCCH_HO_SUPPORTED_r)

– Threshold for handoff on the Reverse Common Control Channels if
  RCCCH_HO_SUPPORTED_r is equal to ‘1’
  (RCCCH_HO_THRESH_s = RCCCH_HO_THRESH_r)

– Maximum delay to receive the Early Acknowledgment Channel Assignment Message and the Power Control Channel Assignment Message if
  RCCCH_HO_SUPPORTED_r is equal to ‘1’
  (EACAM_PCCAM_DELAY_s = EACAM_PCCAM_DELAY_r)

– Number of Common Power Control Channels (NUM_CPCCH_s = (NUM_CPCCH_r + 1))

– Power control rate for the Common Power Control Channels
  (CPCCH_RATE_s = CPCCH_RATE_r)

– For i = 0 to NUM_CPCCH_s - 1, store the channel code index for each Common
  Power Control Channel (CPCCH_CODE_CHAN_s[i] = CPCCH_CODE_CHAN_r).

– Number of Power Control Subchannels for the Reservation Access Mode
  (NUM_PCSCH_RAs = (NUM_PCSCH_RAr + 1))

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_r)
- Current Enhanced Access Parameters Message Sequence Number (CURR_ACC_MSG_SEQ = ACC_MSG_SEQ_r).
- Pilot PN sequence offset increment (PILOT_PN_s = PILOT_PN_r)

The mobile station shall also compare the Enhanced Access Parameters Message sequence number, ACC_MSG_SEQ_r, 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_r, 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_r, UNIV_NGHBR_LST_MSG_SEQ_s = CONFIG_MSG_SEQ_r).

If RADIO_INTERFACE_TYPE_r 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_r 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_r).

The mobile station shall set NGHBR_SET_SIZE_s to NUM_NGHBR_r.

For each of the neighboring base stations contained in the Universal Neighbor List Message, if FREQ_INCL_r is equal to ‘0’, or if FREQ_INCL_r is equal to ‘1’ and NGHBR_BAND_r is supported, the mobile station shall perform the following:

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• If the i\textsuperscript{th} occurrence of NGHBR\_CONFIG\textsubscript{r} is equal to ‘000’, ‘001’, ‘010’, or ‘100’, set
the NGHBR\_CONFIG field of NGHBR\_REC\[i\] to the i\textsuperscript{th} occurrence of
NGHBR\_CONFIG\textsubscript{r}; otherwise, set the NGHBR\_CONFIG field of NGHBR\_REC\[i\] to
‘011’.

• Set the NGHBR\_PN field of NGHBR\_REC\[i\] to the i\textsuperscript{th} occurrence of NGHBR\_PN\textsubscript{r}.

• If NGHBR\_CONFIG\textsubscript{r} is equal to ‘011’, set the BCCH\_SUPPORT field of
NGHBR\_REC\[i\] to BCCH\_SUPPORT\textsubscript{r} of the corresponding record.

• Set the ADD\_PILOT\_REC\_INCL field of NGHBR\_REC\[i\] to the i\textsuperscript{th} occurrence of
ADD\_PILOT\_REC\_INCL\textsubscript{r}. If ADD\_PILOT\_REC\_INCL\textsubscript{r} equals ‘1’, for each pilot
included in the message, the mobile station shall also perform the following:

  - Set the NGHBR\_PILOT\_REC\_TYPE field of NGHBR\_PILOT\_REC to
    NGHBR\_PILOT\_REC\_TYPE\textsubscript{r}.

  - If NGHBR\_PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘000’, The mobile station shall:
    + Set the TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to
      TD\_POWER\_LEVEL\textsubscript{r}.
    + Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE\textsubscript{r}.

  - If NGHBR\_PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘001’, the mobile station shall:
    + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF\textsubscript{r}.
    + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to
      AUX\_WALSH\textsubscript{r} with the Walsh Code length specified by
      WALSH\_LENGTH\textsubscript{r}.

  - If NGHBR\_PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘010’, the mobile station shall:
    + Set the AUX\_PILOT\_QOF field of NGHBR\_PILOT\_REC to QOF\textsubscript{r}.
    + Set the AUX\_PILOT\_WALSH\_CODE field of NGHBR\_PILOT\_REC to
      AUX\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.
    + Set the AUX\_TD\_POWER\_LEVEL field of NGHBR\_PILOT\_REC to
      AUX\_TD\_POWER\_LEVEL\textsubscript{r}.
    + Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE\textsubscript{r}.

  - If NGHBR\_PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘011’, the mobile station shall:
    + Set the SR3\_PRIMARY\_PILOT field of NGHBR\_PILOT\_REC to
      SR3\_PRIMARY\_PILOT\textsubscript{r}.
    + Set the SR3\_PILOT\_POWER1 field of NGHBR\_PILOT\_REC to
      SR3\_PILOT\_POWER1\textsubscript{r}.
    + Set the SR3\_PILOT\_POWER2 field of NGHBR\_PILOT\_REC to
      SR3\_PILOT\_POWER2\textsubscript{r}.

  - If NGHBR\_PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘100’, the mobile station shall:
+ Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to SR3_PRIMARY_PILOTr.

+ Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to SR3_PILOT_POWER1r.

+ Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to SR3_PILOT_POWER2r.

+ Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOFr.

+ Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

+ If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

+ If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

• If NGHBR_SRCH_MODEr = ‘00’ or ‘10’, set the SEARCH_PRIORITY field of each NGHBR_REC to ‘10’ (high) for all NGHBR_SET_SIZEs entries.

• If NGHBR_SRCH_MODEr = ‘01’ or ‘11’, set the SEARCH_PRIORITY field of NGHBR_REC[i] to the ith occurrence of SEARCH_PRIORITYr.

• If NGHBR_SRCH_MODEr = ‘00’ or ‘01’, set the SRCH_WIN_NGHBR field of each NGHBR_REC to SRCH_WIN_Nr for all NGHBR_SET_SIZEs entries.

• If NGHBR_SRCH_MODEr = ‘00’ or ‘01’, set the SRCH_OFFSET_NGHBR field of each NGHBR_REC to ‘000’.

• If NGHBR_SRCH_MODEr = ‘10’ or ‘11’:
  - set the SRCH_WIN_NGHBR field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of SRCH_WIN_NGHBRr,
  - if SRCH_OFFSET_INCLr equals ‘1’, set the SRCH_OFFSET_NGHBR field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of SRCH_OFFSET_NGHBRr, and
  - if SRCH_OFFSET_INCLr equals ‘0’, set the SRCH_OFFSET_NGHBR field of each NGHBR_REC to ‘000’.
• If USE_TIMING\_r is equal to ‘1’, set the TIMING\_INCL field of NGHBR\_REC[i] to the
  i\textsuperscript{th} occurrence of TIMING\_INCL\_r; otherwise, set the TIMING\_INCL field of
  NGHBR\_REC to ‘0’ for all entries.

• Set the NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC[i] to the i\textsuperscript{th} occurrence of
  NGHBR\_PDCH\_SUPPORTED\_r if included; otherwise, set the
  NGHBR\_PDCH\_SUPPORTED field of NGHBR\_REC to ‘0’ for all entries.

• The mobile station shall set RESQ\_ENABLED\_s = RESQ\_ENABLED\_r. If
  RESQ\_ENABLED\_s is equal to ‘1’, then the mobile station shall store:

  – Call rescue delay timer value (RESQ\_DELAY\_TIME\_s = RESQ\_DELAY\_TIME\_r)
  – Call rescue allowed timer value (RESQ\_ALLOWED\_TIME\_s =
    RESQ\_ALLOWED\_TIME\_r)
  – Call rescue attempt timer value (RESQ\_ATTEMPT\_TIME\_s =
    RESQ\_ATTEMPT\_TIME\_r)
  – Code channel index for call rescue (RESQ\_CODE\_CHAN\_s =
    RESQ\_CODE\_CHAN\_r)
  – Quasi-Orthogonal Function mask identifier for call rescue (RESQ\_QOF\_s =
    RESQ\_QOF\_r)

  – Minimum time between consecutive rescues (RESQ\_MIN\_PERIOD\_s =
    RESQ\_MIN\_PERIOD\_r + 1) if RESQ\_MIN\_PERIOD\_INCL\_r is equal to ‘1’; otherwise,
    RESQ\_MIN\_PERIOD\_s = ‘00000’.

  – The required number of transmissions of a regular PDU before declaring L2
    Acknowledgment Failure when Call Rescue is enabled
    (RESQ\_NUM\_TOT\_TRANS\_20MS\_s = RESQ\_NUM\_TOT\_TRANS\_20MS\_r) if
    included; otherwise, set RESQ\_NUM\_TOT\_TRANS\_20MS\_s to N1m.

  – The required number of transmissions of a mini PDU before declaring L2
    Acknowledgment Failure when Call Rescue is enabled
    (RESQ\_NUM\_TOT\_TRANS\_5MS\_s = RESQ\_NUM\_TOT\_TRANS\_5MS\_r) if included;
    otherwise, set RESQ\_NUM\_TOT\_TRANS\_5MS\_s to N15m.

  – The Traffic Channel preamble length for Call Rescue Soft Handoff when
    operating in Radio Configuration 1 or 2 (RESQ\_NUM\_PREAMBLE\_RC1\_RC2\_s =
    RESQ\_NUM\_PREAMBLE\_RC1\_RC2\_r).

  – The Traffic Channel preamble length for Call Rescue Soft Handoff when
    operating in Radio Configuration greater than 2 (RESQ\_NUM\_PREAMBLE\_s =
    RESQ\_NUM\_PREAMBLE\_r).

  – The power level adjustment to be applied to the last closed-loop power level
    when re-enabling the transmitter for call rescue soft handoff
    (RESQ\_POWER\_DELTA\_s = RESQ\_POWER\_DELTA\_r).

  – Set the NGHBR\_RESQ\_CONFIGURED field of NGHBR\_REC[i] to the i\textsuperscript{th}
    occurrence of NGHBR\_RESQ\_CONFIGURED\_r.
For each of the neighboring base stations contained in the *Universal Neighbor List Message*, if `FREQ_FIELDS_INCL_r` equals ‘1’, `FREQ_INCL_r` equals ‘1’, and `NGHBR_BAND_r` is supported, the mobile station shall also perform the following:

- Set the `NGHBR_BAND` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `NGHBR_BAND_r`.
- Set the `NGHBR_FREQ` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `NGHBR_FREQ_r`.

For each of the neighboring base stations contained in the *Universal Neighbor List Message*, if `USE_TIMING_r` is equal to ‘1’ and `TIMING_INCL_r` equals ‘1’, the mobile station shall also perform the following:

- Set the `NGHBR_TX_OFFSET` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `NGHBR_TX_OFFSET_r`.
- If `GLOBAL_TIMING_INCL_r` is equal to ‘1’, then the mobile station shall:
  - Set the `NGHBR_TX DURATION` field of `NGHBR_REC` to `GLOBAL_TX DURATION_r` for all entries.
  - Set the `NGHBR_TX_PERIOD` field of `NGHBR_REC` to `GLOBAL_TX_PERIOD_r` for all entries.
- If `GLOBAL_TIMING_INCL_r` is equal to ‘0’, then the mobile station shall:
  - Set the `NGHBR_TX DURATION` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `NGHBR_TX DURATION_r`.
  - Set the `NGHBR_TX_PERIOD` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `NGHBR_TX_PERIOD_r`.

For each of the neighboring base stations contained in the *Universal Neighbor List Message*, if `FREQ_FIELDS_INCL_r` equals ‘1’ and `FREQ_INCL_r` equals ‘0’, the mobile station shall also perform the following:

- Set the `NGHBR_BAND` field of `NGHBR_REC[i]` to `CDMABAND_s`.

  - If `NGHBR_CONFIG_r` equals ‘010’, set the `NGHBR_FREQ` field of `NGHBR_REC[i]` to the first CDMA Channel listed in the *CDMA Channel List Message or Extended CDMA Channel List Message* transmitted by the current base station; otherwise, set the `NGHBR_FREQ` field of `NGHBR_REC[i]` to `CDMACH_s`.

If `NGHBR_SET_ENTRY_INFO_r` is equal to ‘0’, then for all `NGHBR_SET_SIZE_s` occurrences of `ACCESS ENTRY HO`, the mobile station shall set the `ACCESS_ENTRY_HO` field of `NGHBR_REC[i]` to ‘0’.

If `NGHBR_SET_ENTRY_INFO_r` is equal to ‘1’, then for all `NGHBR_SET_SIZE_s` occurrences of `ACCESS ENTRY HO`, the mobile station shall set the `ACCESS_ENTRY_HO` field of `NGHBR_REC[i]` to the \( i^{th} \) occurrence of `ACCESS_ENTRY_HO_r`.

If `NGHBR_SET_ACCESS_INFO_r` is equal to ‘0’, then for all `NGHBR_SET_SIZE_s` occurrences of `ACCESS HO ALLOWED`, the mobile station shall set the `ACCESS HO ALLOWED` field of `NGHBR_REC[i]` to ‘0’.
If NGHBR_SET_ACCESS_INFO\(_r\) is equal to ‘1’, then for all NGHBR_SET_SIZE\(_s\) occurrences of ACCESS_HO_ALLOWED, the mobile station shall set the ACCESS_HO_ALLOWED field of NGHBR_REC[i] to the \(i^{th}\) occurrence of ACCESS_HO_ALLOWED\(_r\).

The mobile station shall update the idle handoff Neighbor Set (see 2.6.2.1.4) so that it consists only of pilot offsets listed in the Universal Neighbor List Message. If the Universal Neighbor List Message contains more pilot offsets than the mobile station can store, the mobile station shall store the pilot offsets beginning at the start of the Universal Neighbor List Message, up to the limits of the mobile station’s Neighbor Set storage capacity.

If RADIO_INTERFACE_TYPE\(_r\) is equal to ‘0001’, the mobile station shall process the fields contained in the record as follows:

The mobile station shall set NUM_ANALOG_NGHBR\(_s\) to NUM_ANALOG_NGHBR\(_r\), the number of neighboring analog systems contained in the Universal Neighbor List Message. For each of the neighboring analog systems contained in the Universal Neighbor List Message, the mobile station shall perform the following:

- Set the BAND_CLASS field of ANALOG_NGHBR_LIST[i] to the \(i^{th}\) occurrence of BAND_CLASS\(_r\).
- Set the SYS_A_B field of ANALOG_NGHBR_LIST[i] to the \(i^{th}\) occurrence of SYS_A_B\(_r\).

If RADIO_INTERFACE_TYPE\(_r\) is equal to ‘0010’, the mobile station shall process the fields contained in the record as follows:

The mobile station shall set NUM_HRPD_NGHBR\(_s\) to NUM_HRPD_NGHBR\(_r\), the number of neighboring HRPD systems contained in the Universal Neighbor List Message. For each of the neighboring HRPD systems contained in the Universal Neighbor List Message, the mobile station shall perform the following:

- Set the PN field of HRPD_NGHBR_LIST[i] to the \(i^{th}\) occurrence of NGHBR_PN\(_r\).
- Set the BAND_CLASS field of HRPD_NGHBR_LIST[i] to the \(i^{th}\) occurrence of NGHBR_BAND\(_r\) if NGHBR_FREQ_INCL\(_r\) equals ‘1’; otherwise, set the BAND_CLASS field of HRPD_NGHBR_LIST[i] to CDMABAND\(_s\).
- Set the CDMA_FREQ field of HRPD_NGHBR_LIST[i] to the \(i^{th}\) occurrence of NGHBR_FREQ\(_r\) if NGHBR_FREQ_INCL\(_r\) equals ‘1’; otherwise, set the BAND_CLASS field of HRPD_NGHBR_LIST[i] to CDMACH\(_s\).
- Set the PN_ASSOCIATION field of HRPD_NGHBR_LIST[i] to the \(i^{th}\) occurrence of PN_ASSOCIATION_IND\(_r\).
- Set the DATA_ASSOCIATION field of HRPD_NGHBR_LIST[i] to the \(i^{th}\) occurrence of DATA_ASSOCIATION_IND\(_r\).

2.6.2.2.18 BCMC Service Parameters Message

The mobile station may receive the BCMC Service Parameters Message on the Paging Channel or on the Primary Broadcast Control Channel.

When the mobile station desires to receive the BCMC Service Parameters Message on the
Paging Channel, the mobile station shall monitor the F-PCH for the duration of four F-PCH slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.1) for the start of the **BCMC Service Parameters Message** transmission or until the **BCMC Service Parameters Message** with DIFF_BSPMr equal to ‘0’ is received; if the mobile station detects the start of the **BCMC Service Parameters Message**, the mobile station shall monitor the F-PCH until the entire **BCMC Service Parameters Message** is received.

When the mobile station desires to receive the **BCMC Service Parameters Message** on the Primary Broadcast Control Channel, the mobile station shall monitor the F-BCCH for the duration of four F-BCCH slots from the first slot of a BSPM slot cycle (see 2.6.2.1.1.3.8.2) for the start of the **BCMC Service Parameters Message** transmission or until the **BCMC Service Parameters Message** with DIFF_BSPMr equal to ‘0’ is received; if the mobile station detects the start of the **BCMC Service Parameters Message**, the mobile station shall monitor the F-BCCH until the entire **BCMC Service Parameters Message** is received.

Whenever the **BCMC Service Parameters Message** is received, the mobile station shall compare the BSPM sequence number, BSPM_MSG_SEQr, to that stored in BSPM_MSG_SEQs. If the comparison results in a match and FULL_BSPM_IND = ‘1’, the mobile station may ignore the message. If the comparison results in a mismatch, the mobile station shall process the remaining fields in the message as follows:

The mobile station shall perform the following:

- If DIFF_BSPMr equals ‘0’, the mobile station shall perform the following:
  - The mobile station shall delete the currently stored **BCMC Service Parameters Message** parameters and shall store the parameters received in this **BCMC Service Parameters Message** as described below.
  - The mobile station shall set FULL_BSPM_IND to ‘1’.

- If DIFF_BSPMr equals ‘1’,
  - If (BSPM_MSG_SEQr - BSPM_MSG_SEQs) modulo 64 is greater than one, the mobile station shall perform the following:
    - The mobile station shall delete the currently stored **BCMC Service Parameters Message** parameters and shall store the parameters received in this **BCMC Service Parameters Message** as described below.
    - The mobile station shall set FULL_BSPM_IND to ‘0’.
  - Otherwise, the mobile station shall perform the following:
    - The mobile station shall update the currently stored **BCMC Service Parameters Message** parameters with the parameters received in this **BCMC Service Parameters Message** as described below.
The mobile station shall delete BCMC_RETRY_DELAY_LIST[i] from BCMC Retry Delay List if BCMC_RETRY_DELAY_LIST[i].BCMC_FLOW_ID is included in the BCMC Service Parameters Message.

The mobile station shall store the following parameters:

- BSPM sequence number (BSPM_MSG_SEQ = BSPM_MSG_SEQr).
- Frequency change registration required indication (FREQ_CHG_REG_REQUIRED = FREQ_CHG_REG_REQUIREDr).
- Frequency change registration timer (FREQ_CHG_REG_TIMER = FREQ_CHG_REG_TIMERr) if FREQ_CHG_REG_TIMER_IND equals ‘1’; otherwise, set FREQ_CHG_REG_TIMER to NULL.
- Autonomous BCMC request allowed indicator (AUTO_REQ_ALLOWED_IND = AUTO_REQ_ALLOWED_INDr).
- If USE_TIMEr is set to ‘1’ set the BSPM_ACTION_TIME = ACTION_TIMEr; otherwise, set the BSPM_ACTION_TIME = NULL. A BSPM with an explicit action time shall take effect when System Time (in 80 ms units) modulo 64 becomes equal to BSPM_ACTION_TIMEs.
- BCMC on traffic channel supported indicator (BCMC_ON_TRAFFIC_SUP = BCMC_ON_TRAFFIC_SUPr).
- Length of time stamp for use on r-csch (ACH_TIME_STAMP_SHORT_LENGTH = ACH_TIME_STAMP_SHORT_LENGTHr) if NON_DEFAULT_VALUEINCLUDEDr equals ‘1’; otherwise, ACH_TIME_STAMP_SHORT_LENGTHs shall be set to 10.
- Length of time stamp (TIME_STAMP_LONG_LENGTH = TIME_STAMP_LONG_LENGTHr) if NON_DEFAULT_VALUEINCLUDEDr equals ‘1’; otherwise, TIME_STAMP_LONG_LENGTHs shall be set to 52.
- Unit for time stamp length (TIME_STAMP_UNIT = TIME_STAMP_UNITr) if NON_DEFAULT_VALUEINCLUDEDr equals ‘1’; otherwise, TIME_STAMP_UNITs shall be set to 6.
- If REGISTRATION_REQ_FLAG_INCLUDr equals ‘1’, the mobile station shall compute and store a BCMC registration required timer (RegistrationRequiredTimer) expiration value:

\[
\text{REGISTRATION_REQ_TIMER_MAX} = (2^{\text{REGISTRATION_REQ_TIMER_PERIODr}} \times 80 \text{ ms}).
\]
- For i=1 to NUM_FSCHr, store the following:
- FBSCH_LIST_{i}.FSCH_ID = the position where this Forward Supplemental Channel is listed in this message (i.e. First Forward Supplemental Channel listed is given FSCH_ID of ‘001’, second one is given FSCH_ID of ‘010’, and so on).

- FBSCH_LIST_{i}.FSCH_BAND_CLASS = ith occurrence of FSCH_BAND_CLASS (Band class of the Forward Supplemental Channel) if FSCH_BAND_CLASS_INCL equals ‘1’; otherwise, FBSCH_LIST_{i}.FSCH_BAND_CLASS = CDMABANDs.

- FBSCH_LIST_{i}.FSCH_FREQ = ith occurrence of FSCH_FREQ (Frequency assignment of the forward broadcast supplemental channel) if FSCH_FREQ_INCL equals ‘1’; otherwise, FBSCH_LIST_{i}.FSCH_FREQ = CDMACHs.

- FBSCH_LIST_{i}.FSCH_CODE_CHAN = ith occurrence of FSCH_CODE_CHAN (Code channel index of the forward broadcast supplemental channel)

- FBSCH_LIST_{i}.FSCH_PLCM (Public Long code mask of the Forward Broadcast Supplemental Channel) shall be set as follows:
  - If FSCH_PLCM_SCHEME_INDr equals ‘00’, FBSCH_LIST_{i}.FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.1.
  - If FSCH_PLCM_SCHEME_INDr equals ‘01’, FBSCH_LIST_{i}.FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.2.
  - If FSCH_PLCM_SCHEME_INDr equals ‘10’, the mobile station shall perform the following:
    - If FSCH_PLCM_INDr equals ‘0’, FBSCH_LIST_{i}.FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.1.
    - If FSCH_PLCM_INDr equals ‘1’, FBSCH_LIST_{i}.FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.2.

- FBSCH_LIST_{i}.FSCH_MUX_OPTION = ith occurrence of FSCH_MUX_OPTION (Multiplex Option of the Forward Broadcast Supplemental Channel).

- FBSCH_LIST_{i}.FSCH_RC = ith occurrence of FSCH_RC (Radio configuration of the forward broadcast supplemental channel).

- FBSCH_LIST_{i}.FSCH_CODING = ith occurrence of FSCH_CODING (Coding type of the Forward Broadcast Supplemental Channel).
- \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_OUTERCODE\_RATE} = \text{ith occurrence of } \text{FSCH\_OUTERCODE\_RATE}_r \) (Outer Code Rate of the Forward Broadcast Supplemental Channel) if \( \text{FSCH\_OUTERCODE\_INCL}_r \) equals ‘1’; otherwise, \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_OUTERCODE\_RATE} = \text{NULL}.

- \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_OUTERCODE\_OFFSET} = \text{ith occurrence of } \text{FSCH\_OUTERCODE\_OFFSET}_r \) (Outer Coding Buffer Offset of the Forward Broadcast Supplemental Channel) if \( \text{FSCH\_OUTERCODE\_INCL}_r \) equals ‘1’; otherwise, \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_OUTERCODE\_OFFSET} = \text{NULL}.

- \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_NUM\_BITS\_IDX} = \text{ith occurrence of } \text{FSCH\_NUM\_BITS\_IDX}_r \) (Number of information bits index of the forward broadcast supplemental channel).

- \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_FRAME\_40\_USED} \text{FSCH\_FRAME\_SIZE} = \text{ith occurrence of } \text{FSCH\_FRAME\_40\_USED\_FRAME\_SIZE}_r \) (40ms frame used indicator Frame size of the forward broadcast supplemental channel).

- \( \text{FBSCH\_LIST}_s[i]\).\text{FSCH\_FRAME\_80\_USED} = \text{ith occurrence of } \text{FSCH\_FRAME\_80\_USED}_r \) (80ms frame used indicator of the forward broadcast supplemental channel).

- \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_STRUCTURE\_IND} = \text{ith occurrence of } \text{TDM\_STRUCTURE\_IND}_r \) (TDM structure used indicator).

- \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_SLOT\_LENGTH} = \text{ith occurrence of } \text{TDM\_SLOT\_LENGTH}_r \) (TDM slot length).

+ \( \text{If TDM\_SUPER\_PERIOD\_MASK\_LEN}_r \) is included, \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_SUPER\_PERIOD\_MASK\_LEN} = \text{ith occurrence of } \text{TDM\_SUPER\_PERIOD\_MASK\_LEN}_r \) (TDM super period mask length indicator). Otherwise, set \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_SUPER\_PERIOD\_MASK\_LEN} \) as specified in Table 3.7.2.3.2.38-3, based on \( \text{FSCH\_OUTERCODE\_RATE} \) field corresponding to \( \text{FSCH\_ID} \) field included in this record.

+ \( \text{If TDM\_MEGA\_PERIOD\_MASK\_LEN}_r \) is included, \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_MEGA\_PERIOD\_MASK\_LEN} = \text{ith occurrence of } \text{TDM\_MEGA\_PERIOD\_MASK\_LEN}_r \) (TDM mega period mask length indicator). Otherwise, set \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_MEGA\_PERIOD\_MASK\_LEN} \) as specified in Table 3.7.2.3.2.38-6.

+ \( \text{FBSCH\_LIST}_s[i]\).\text{TDM\_PERIOD} = \text{ith occurrence of } \text{TDM\_PERIOD}_r \) (TDM period).

• For \( i=1 \) to the number of flows included in this message, store the following:

- \( \text{BCMC\_FLOW\_LIST}_s[i]\).\text{BCMC\_FLOW\_ID} = \text{ith occurrence of } \text{BCMC\_FLOW\_ID} \) (BCMC flow identifier). See section 2.6.13.11.
- If REGISTRATION_REQ_FLAG_INCL equals ‘1’, and ith occurrence of FLOW_INFO_ON_OTHER_FREQ equals ‘0’,
  BCMC_FLOW_LISTs[i].REGISTRATION_REQ_FLAG = ith occurrence of REGISTRATION_REQ_FLAG (Registration required flag).

- If AUTH_SIGNATURE_REQUIRED equals ‘1’,
  BCMC_FLOW_LISTs[i].AUTH_SIGNATURE_REQ_IND = ith occurrence of AUTH_SIGNATURE_REQ_IND (Authorization signature required indication).

- If BCMC_ON_TRAFFIC_SUP is set to ‘1’,
  BCMC_FLOW_LISTs[i].BCMC_FLOW_ON_TRAFFIC_IND = ith occurrence of BCMC_FLOW_ON_TRAFFIC_IND (BCMC flow on traffic channel supported identifier); otherwise, BCMC_FLOW_LISTs[i].BCMC_FLOW_ON_TRAFFIC_IND = ‘0’.

- If the ith occurrence of NUM_LPM_ENTRIES equals ‘000’, then
  BCMC_FLOW_LISTs[i].BCMC_FLOW_ON_IND = 0; otherwise,
  BCMC_FLOW_LISTs[i].BCMC_FLOW_ON_IND = 1 (BCMC flow On or Off Indicator).

- For j=1 to NUM_LPM_ENTRIES, store the following:
  + BCMC_FLOW_LISTs[i].LPM_INFO[j].FSCH_ID = jth occurrence of FSCH_ID (Forward broadcast supplemental channel identifier).
  + If jth occurrence of TDM_USED_IND is set to 1, the mobile station shall store the following:
    o BCMC_FLOW_LISTs[i].LPM_INFO[j].TDM_MASK = jth occurrence of TDM_MASK (TDM mask).
    o If TDM_SUPER_PERIOD_MASK_INCL is set to ‘1’,
      BCMC_FLOW_LISTs[i].LPM_INFO[j].TDM_SUPER_PERIOD_MASK = jth occurrence of TDM_SUPER_PERIOD_MASK (TDM super period mask).
      Otherwise, set all bits of BCMC_FLOW_LISTs[i].LPM_INFO[j].TDM_SUPER_PERIOD_MASK to ‘1’.
    o If TDM_MEGA_PERIOD_MASK_INCL is set to ‘1’,
      BCMC_FLOW_LISTs[i].LPM_INFO[j].TDM_MEGA_PERIOD_MASK = jth occurrence of TDM_MEGA_PERIOD_MASK (TDM mega period mask).
      Otherwise, set all bits of BCMC_FLOW_LISTs[i].LPM_INFO[j].TDM_MEGA_PERIOD_MASK to ‘1’. 
TDM period for BCMC flow identified by BCMC_FLOW_LIST[i].BCMC_FLOW_ID on Forward Supplemental Channel identified by BCMC_FLOW_LIST[i].LPM_INFO[j].FSCH_ID is aligned at system time (t) as specified in section 2.6.13.12.

For k=0 to NUM_NGHBRY, store the following:


- BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_PN = kth occurrence of NGHBR_PNR (Neighbor pilot PN sequence offset index).

- BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_BCMC_CONFIG = kth occurrence of NGHBR_BCMC_CONFIG (Neighbor BCMC flow configuration).

- If NGHBR_BCMC_CONFIG equals '000', BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_BAND_CLASS = NULL; otherwise, the mobile station shall store the following:

  - If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_BAND_CLASS_INCL equals '0', BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_BAND_CLASS = FBSCH_LIST[i].NGHBR_FSCH_BAND_CLASS where i corresponds to the entry of FBSCH_LIST where FBSCH_LIST[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.

  - Otherwise, BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_BAND_CLASS = kth occurrence of NGHBR_FSCH_BAND_CLASS (Band class of the Forward Supplemental Channel in the neighbor base station).

- If NGHBR_BCMC_CONFIG equals '000', BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_CDMA_FREQ = NULL; otherwise, the mobile station shall store the following:

  - If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_FREQ_INCL equals '0', BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_CDMA_FREQ = FBSCH_LIST[i].FSCH_CDMA_FREQ where i corresponds to the entry of FBSCH_LIST where FBSCH_LIST[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.
Otherwise, BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_CODE_CHAN = kth occurrence of
NGHBR_FSCH_CODE_CHAN (Neighbor Frequency assignment of the
forward broadcast supplemental channel).

If NGHBR_BCMC_CONFIGr equals '000',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_CODE_CHAN = NULL; otherwise, the mobile station shall store the following:

If NGHBR_BCMC_CONFIGr equals '001' or '010' and
NGHBR_FSCH_CODE_CHAN_INCLr equals '0',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_CODE_CHAN = FBSCH_LISTs[i].FSCH_CODE_CHAN where i corresponds to the entry
of FBSCH_LISTs where FBSCH_LISTs[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.

Otherwise, BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_CODE_CHAN = kth occurrence of
NGHBR_FSCH_CODE_CHAN (Neighbor pilot forward broadcast supplemental channel code channel index).

If NGHBR_BCMC_CONFIGr equals '000',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_PLCM = NULL; otherwise, the mobile station shall store the following:

If NGHBR_BCMC_CONFIGr equals '010' or NGHBR_BCMC_CONFIGr equals '001' and
NGHBR_FSCH_PARMS_INCLr equals '0',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_PLCM = FBSCH_LISTs[i].FSCH_PLCM where i corresponds to the entry of FBSCH_LISTs where
FBSCH_LISTs[i].FSCH_ID equals FSCH_ID of this FORWARD SUPPLEMENTAL CHANNEL.

Otherwise, the mobile station shall perform the following:

If NGHBR_FSCH_PLCM_INDr equals '0'
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.1.

If NGHBR_FSCH_PLCM_INDr equals '1'
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].
NGHBR_FSCH_PLCM shall be set to PLCM_42 as specified in 2.6.13.10.2.
If NGHBR_BCMC_CONFIG equals '000',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_MUX_OPTION = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_PARMS_INCL equals '0',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_MUX_OPTION = FBSCH_LISTs[i].FSCH_MUX_OPTION where i corresponds to the entry of FBSCH_LIST where FBSCH_LISTs[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.

◊ Otherwise, BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_MUX_OPTION = kth occurrence of NGHBR_FSCH_MUXOPTION (Multiplex Option of the Forward Broadcast Supplemental Channel in the neighbor base station).

◊ If NGHBR_BCMC_CONFIG equals '000',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_RC = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_PARMS_INCL equals '0',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_RC = FBSCH_LISTs[i].FSCH_RC where i corresponds to the entry of FBSCH_LIST where FBSCH_LISTs[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.

◊ Otherwise, BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_RC = kth occurrence of NGHBR_FSCH_RC (Neighbor Radio configuration of the forward broadcast supplemental channel).

◊ If NGHBR_BCMC_CONFIG equals '000',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_CODING = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_PARMS_INCL equals '0',
BCMC_FLOW_LISTs[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_CODING = FBSCH_LISTs[i].NGHBR_FSCH_CODING where i corresponds to the entry of FBSCH_LIST where FBSCH_LISTs[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.
Otherwise, 
\[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_CODING} = \text{kth occurrence of NGHBR\_FSCH\_CODING}_r \text{ (Coding type of the Forward Broadcast Supplemental Channel in this neighbor base station).} \]

- If \( \text{NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘000’}, \)
  \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_RATE} = \text{NULL}; \text{otherwise, the mobile station shall store the following:} \]

  - If \( \text{NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘010’ or NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘001’ and NGHBR\_FSCH\_PARMS\_INCL}_r \text{ equals ‘0’}, \)
    \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_RATE} = \text{FBSCH\_LIST}_s[i].NGHBR\_FSCH\_OUTERCODE\_RATE}_r \text{ where i corresponds to the entry of FBSCH\_LIST}_s \text{ where FBSCH\_LIST}_s[i].FSCH\_ID equals FSCH\_ID of this Forward Supplemental Channel.} \]

  - Otherwise, \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_RATE} = \text{kth occurrence of NGHBR\_FSCH\_OUTERCODE\_RATE}_r \text{ (Outer Code Rate of the Forward Broadcast Supplemental Channel in this neighbor base station) if NGHBR\_FSCH\_OUTERCODE\_INCL}_r \text{ equals ‘1’}; \text{otherwise,} \]
    \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_RATE} = \text{NULL}. \]

- If \( \text{NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘000’}, \)
  \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_OFFSET} = \text{NULL}; \text{otherwise, the mobile station shall store the following:} \]

  - If \( \text{NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘010’ or NGHBR\_BCMC\_CONFIG}_r \text{ equals ‘001’ and NGHBR\_FSCH\_PARMS\_INCL}_r \text{ equals ‘0’}, \)
    \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_OFFSET} = \text{FBSCH\_LIST}_s[i].NGHBR\_FSCH\_OUTERCODE\_OFFSET}_r \text{ where i corresponds to the entry of FBSCH\_LIST}_s \text{ where FBSCH\_LIST}_s[i].FSCH\_ID equals FSCH\_ID of this Forward Supplemental Channel.} \]

  - Otherwise, \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_OFFSET} = \text{kth occurrence of NGHBR\_FSCH\_OUTERCODE\_OFFSET}_r \text{ (Outer Code Offset of the Forward Broadcast Supplemental Channel in this neighbor base station) if NGHBR\_FSCH\_OUTERCODE\_INCL}_r \text{ equals ‘1’}; \text{otherwise,} \]
    \[ \text{BCMC\_FLOW\_LIST}_s[i].LPM\_INFO[j].NGHBR\_INFO[k].NGHBR\_FSCH\_OUTERCODE\_OFFSET} = \text{NULL}. \]
Otherwise, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_OUTERCODE_OFFSET = kth occurrence of 
NGHBR_FSCH_OUTERCODE_OFFSET_f (Outer Coding Buffer Offset of the Forward Broadcast Supplemental Channel in this neighbor base station) if NGHBR_FSCH_OUTERCODE_INCL_f equals ‘1’; otherwise, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_OUTERCODE_OFFSET = NULL.

If NGHBR_BCMC_CONFIG_f equals ‘000’, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_NUM_BITS_IDX = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG_f equals ‘010’ or NGHBR_BCMC_CONFIG_f equals ‘001’ and NGHBR_FSCH_PARMS_INCL_f equals ‘0’, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_NUM_BITS_IDX = FBSCH_LIST_s[i].FSCH_NUM_BITS_IDX where i corresponds to the entry of FBSCH_LIST_s where FBSCH_LIST_s[i].FSCH_ID equals FSCH_ID of this Forward Supplemental Channel.
◊ Otherwise, BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_NUM_BITS_IDX = kth occurrence of NGHBR_FSCH_NUM_BITS_IDX_f (Neighbor Number of information bits index of the forward broadcast supplemental channel).

If NGHBR_BCMC_CONFIG_f equals ‘000’, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_FRAME_40_USED = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG_f equals ‘010’ or NGHBR_BCMC_CONFIG_f equals ‘001’ and NGHBR_FSCH_PARMS_INCL_f equals ‘0’, 
BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_FRAME_40_USED = FBSCH_LIST_s[i].FSCH_FRAME_40_USED where i corresponds to the entry of FBSCH_LIST_s where FBSCH_LIST_s[i].FSCH_ID equals FSCH_ID of this FORWARD SUPPLEMENTAL CHANNEL.
◊ Otherwise, BCMC_FLOW_LIST_s[i].LPM_INFO[j].NGHBR_INFO[k].NGHBR_FSCH_FRAME_40_USED = kth occurrence of NGHBR_FSCH_FRAME_40_USEDr (Neighbor 40ms frame used indicator of the forward broadcast supplemental channel).
If NGHBR_BCMC_CONFIG equals '000',

BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].

NGHBR_FSCH_FRAME_80_USED = NULL; otherwise, the mobile station shall store the following:

◊ If NGHBR_BCMC_CONFIG equals '010' or NGHBR_BCMC_CONFIG equals '001' and NGHBR_FSCH_PARMS_INCL equals '0',

BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].

NGHBR_FSCH_FRAME_80_USED =

FBSCH_LIST[i].FSCH_FRAME_80_USED where i corresponds to the entry of FBSCH_LIST where FBSCH_LIST[i].FSCH_ID equals

FSCH_ID of this FORWARD SUPPLEMENTAL CHANNEL.

◊ Otherwise, BCMC_FLOW_LIST[i].LPM_INFO[j].NGHBR_INFO[k].

NGHBR_FSCH_FRAME_80_USED = kth occurrence of

NGHBR_FSCH_FRAME_80_USEDr (Neighbor 80ms frame used indicator of the forward broadcast supplemental channel).

For each of the neighboring base stations contained in the BCMC Service Parameters Message and supports the broadcast control channel, the mobile station shall store the following informations from the message:

• SR1 Non-TD BCCH support indicator (BCMC_SR1_BCCH_NON_TD_INCLr = BCMC_SR1_BCCH_NON_TD_INCLr)

• SR1 TD BCCH support indicator (BCMC_SR1_TD_INCLr = BCMC_SR1_TD_INCLr)

• If BCMC_SR1_BCCH_NON_TD_INCLr is equal to '1':
  – BCMC_SR1_BRAT_NON_TDs = BCMC_SR1_BRAT_NON_TDr;
  – BCMC_SR1_CRAT_NON_TDs = BCMC_SR1_CRAT_NON_TDr;
  – BCMC_BCCH_CODE_CHAN_NON_TDs =

    BCMC_SR1_BCCH_CODE_CHAN_NON_TDr.

• If BCMC_SR1_TD_INCLr is included and is equal to '1', and the mobile station supports the Transmit Diversity indicated by BCMC_SR1_TD_MODEr:
  – BCMC_SR1_BRAT_TDs = BCMC_SR1_BRAT_TD;
  – BCMC_SR1_CRAT_TDs = BCMC_SR1_CRAT_TD;
  – BCMC_BCCH_CODE_CHAN_TDs = BCMC_SR1_BCCH_CODE_CHAN_TD.

• If the mobile station supports the Transmit Diversity, BCMC_SR1_BCCH_NON_TD_INCLr is equal to '1', and SR1_TD_INCLr is equal to '0':
  – BCMC_SR1_BRAT_TDs = BCMC_SR1_BRAT_NON_TD;
  – BCMC_SR1_CRAT_TDs = BCMC_SR1_CRAT_NON_TD;
  – BCMC_BCCH_CODE_CHAN_TDs = BCMC_SR1_BCCH_CODE_CHAN_NON_TD.
2.6.2.3 Mobile Station Page Match Operation

The Mobile Station Page Match Operation is performed whenever the mobile station receives a mobile-station-addressed page or a broadcast page. If the mobile station receives a mobile-station-addressed page that contains the IMSI or TMSI assigned to the mobile station (see [4]) on the Paging Channel, the mobile station transmits a Page Response Message on the Access Channel. If the mobile station receives a mobile-station-addressed page that contains the IMSI or TMSI assigned to the mobile station (see [4]) on the Forward Common Control Channel, the mobile station transmits a Page Response Message on the r-csch. If the mobile station is configured to receive broadcast messages and it receives a General Page Message that contains a burst type and broadcast address that the mobile station has been configured to receive (see [4]) on the Paging Channel, the mobile station performs the broadcast page procedures as described in 2.6.2.1.1.3.4. If the mobile station is configured to receive broadcast messages and it receives a General Page Message or a Universal Page Message that contains a burst type and broadcast address that the mobile station has been configured to receive (see [4]) on the Forward Common Control Channel, the mobile station performs the enhanced broadcast page procedures as described in 2.6.2.1.1.3.6.

When the mobile station receives a page message, it shall compare the configuration message sequence number, CONFIG_MSG_SEQr, to CONFIG_MSG_SEQs. If the comparison results in a mismatch, then the mobile station shall set CONFIG_MSG_SEQs to CONFIG_MSG_SEQr. The mobile station shall also compare the Access Parameters Message or the Enhanced Access Parameters Message sequence number, ACC_MSG_SEQr, with that stored in ACC_MSG_SEQs. If the comparison results in a mismatch, then the mobile station shall set ACC_MSG_SEQs to NULL (see 2.6.2.2). The mobile station shall set CURR_ACC_MSG_SEQ to ACC_MSG_SEQs.

The mobile station shall process each record for which it declares a page match (see [4]). If the mobile station receives a broadcast page that contains a burst type and broadcast address that the mobile station has been configured to receive on the Paging Channel, the mobile station should perform the broadcast page procedures described in 2.6.2.1.1.3.4. If the mobile station receives a broadcast page that contains a burst type and broadcast address that the mobile station has been configured to receive on the Forward Common Control Channel, the mobile station should perform the enhanced broadcast page procedures as described in 2.6.2.1.1.3.6.

If a page match is declared, the mobile station shall perform the following:

- The mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3.2) with a page response indication within T33m seconds after the page message is received.

If a page match is declared 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’.

• If the mobile station performs an access entry handoff on the Access Channel, none of CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs are equal to NULL.

• If the mobile station performs an access entry handoff on the Enhanced Access Channel, none of CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, MC_RR_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs are equal to NULL.

Otherwise, the mobile station shall not perform an access entry handoff to the neighboring base station.

The mobile station need not perform an access entry handoff to a base station operating on another frequency.

If the mobile station performs an access entry handoff, it shall follow the procedures specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the Update Overhead Information Substate of the System Access State (see 2.6.3.2).

If PACA is enabled, and if the mobile station performs an access entry handoff, the mobile station shall respond to the mobile-station-addressed page first and shall then re-originate 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_ORDERs is equal to ‘1’.
- If the mobile station performs an access entry handoff on the Access Channel, none
  of CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs,
  EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs,
  CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs,
  PRI_NGHBR_LST_MSG_SEQs, and EXT_SYS_PAR_MSG_SEQs are equal to NULL.
- If the mobile station performs an access entry handoff on the Enhanced Access
  Channel, none of CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs,
  MC_RR_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs,
  EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and
  PRI_NGHBR_LST_MSG_SEQs are equal to NULL.

Otherwise, the mobile station shall not perform an access entry handoff to the neighboring
base station.

The mobile station need not perform an access entry handoff to a base station operating on
another frequency.

If the mobile station performs an access entry handoff, it shall follow the procedures
specified in 2.6.2.1.4.2 and shall perform the access entry handoff before entering the
Update Overhead Information Substate of the System Access State (see 2.6.3.2). If PACA is
enabled and the mobile station performs an access entry handoff, the mobile station shall
respond to the order/message first and then re-originate the PACA call in the new base
station.

The following directed messages and orders can be received. If any field value of the
message or order is outside its permissible range, the mobile station shall send a Mobile
Station Reject Order with ORDQ equal to ‘00000100’ (message field not in valid range).

1. **Abbreviated Alert Order:** The mobile station may alert the user.

2. **Audit Order**

3. **Authentication Challenge Message:** The mobile station shall process the message
   and shall respond with an Authentication Challenge Response Message as specified
   in 2.3.12.1.4, regardless of the value of AUTHs. The mobile station shall enter the
   Update Overhead Information Substate of the System Access State with an
   order/message response indication within T32m seconds.

4. **Authentication Request Message:** The mobile station shall process the message and
   shall respond as specified in 2.3.12.5.2. The mobile station shall enter the Update
   Overhead Information Substate of the System Access State with an order/message
   response indication within T32m seconds.
5. **Base Station Challenge Confirmation Order**: The mobile station shall process the message and shall respond with an **SSD Update Confirmation Order** or **SSD Update Rejection Order** as specified in 2.3.12.1.5. 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.

6. **Base Station Reject Order**: The mobile station shall perform the procedures as specified in 2.6.11.5.

7. **Channel Assignment Message**: The mobile station shall process the message as follows:

   - If $\text{ASSIGN\_MODE}_r$ equals ‘001’, the mobile station shall perform the following actions:
   
   - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgement to the message has been sent and acknowledged.
   
   - If a CDMA channel (CDMA_FREQ) is specified in the assignment, the mobile station shall set $\text{CDMACH}_s = \text{CDMA\_FREQ}_r$, tune to the new Frequency Assignment, and measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2.
   
   - The mobile station shall set $\text{CONFIG\_MSG\_SEQ}_s$ and $\text{ACC\_MSG\_SEQ}_s$ to NULL (see 2.6.2.2) and shall set $\text{PILOT\_PN}_s$ to the pilot PN sequence offset of the strongest pilot in the list ($\text{PILOT\_PN}_r$).
   
   - If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set $\text{SYS\_PAR\_MSG\_SEQ}_s$, $\text{NGHBR\_LST\_MSG\_SEQ}_s$, $\text{EXT\_NGHBR\_LST\_MSG\_SEQ}_s$, $\text{GEN\_NGHBR\_LST\_MSG\_SEQ}_s$, $\text{CHAN\_LST\_MSG\_SEQ}_s$, $\text{EXT\_CHAN\_LST\_MSG\_SEQ}_s$, $\text{EXT\_SYS\_PAR\_MSG\_SEQ}_s$, $\text{USER\_ZONE\_ID\_MSG\_SEQ}_s$, $\text{PRI\_NGHBR\_LST\_MSG\_SEQ}_s$, $\text{GLOB\_SERV\_REDIR\_MSG\_SEQ}_s$, and $\text{EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ}_s$ to NULL. The mobile station shall set $\text{PAGE\_CHAN}_s$ to ‘1’ and $\text{PAGECH}_s$ to the Primary Paging Channel. **If the mobile station was monitoring Forward Common Control Channel**, the mobile station shall set the $\text{PRAT}_s$ to ‘00’. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
   
   - If $\text{ASSIGN\_MODE}_r$ equals ‘101’ and $\text{FREQ\_INCL}_r$ equals ‘0’, the mobile station shall perform the following actions:
   
   - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgement to the message has been sent and acknowledged.
- The mobile station shall measure the strength of each pilot listed in the
  assignment using the Neighbor Set search procedures specified in 2.6.6.2.1
  and 2.6.6.2.2, set PILOT_PNs to the pilot PN sequence offset of the strongest
  pilot in the list (PILOT_PNr), and set CONFIG_MSG_SEQs and
  ACC_MSG_SEQs to NULL (see 2.6.2.2).

- If the mobile station has not stored configuration parameters for the Primary
  Paging Channel of the new base station, or if the stored information is not
  current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs,
  NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs,
  GEN_NGHBR_LST_MSG_SEQs, CHANNEL_LST_MSG_SEQs,
  EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs,
  USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs,
  GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs
  to NULL. The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to
  the Primary Paging Channel. The mobile station shall then begin monitoring
  the Primary Paging Channel of the selected base station.

• If ASSIGN_MODEr equals ‘101’, FREQ_INCLr equals ‘1’, and the band class is
  not supported by the mobile station, the mobile station shall enter the
  Update
  Overhead Information Substate of the System Access State with an
  order/message response indication within T33m seconds and send a Mobile
  Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported
  by the mobile station).

• If ASSIGN_MODEr equals ‘101’, FREQ_INCLr equals ‘1’, and the band class is
  supported by the mobile station, the mobile station shall perform the following
  actions:

  - If the message requires acknowledgment, the mobile station shall wait until
    Layer 3 receives an indication from Layer 2 that the acknowledgment to the
    message has been sent and acknowledged.

  - The mobile station shall set CDMACHs = CDMA_FREQr and CDMABANDs =
    BAND_CLASSr. Then the mobile station shall tune to the new Frequency
    Assignment, measure the strength of each pilot listed in the assignment
    using the Neighbor Set search procedures specified in 2.6.6.2.1 and
    2.6.6.2.2, set PILOT_PNs to the pilot PN sequence offset of the strongest pilot
    in the list (PILOT_PNr), and set CONFIG_MSG_SEQs and ACC_MSG_SEQs to
    NULL (see 2.6.2.2).
- If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs to NULL. The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

- If ASSIGN_MODE_r is not equal to ‘001’ or ‘101’, the mobile station shall enter the Update Overhead Information Substate of the System Access State with an order/message response indication within T33m seconds and send a Mobile Station Reject Order with ORDQ field set to ‘00000010’ (message not accepted in this state).

8. Data Burst Message

9. Extended Channel Assignment Message: The mobile station shall process the message as follows:

- If ASSIGN_MODE_r equals ‘001’, FREQ_INCL_r equals ‘0’, the mobile station shall perform the following actions:
  - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
  - The mobile station shall measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2 set PILOT_PNs to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PNr), and set CONFIG_MSG_SEQs and ACC_MSG_SEQs to NULL (see 2.6.2.2).

- If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs to NULL. The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRATs to ‘00’. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
• If $ASSIGN\_MODE_r$ equals ‘001’, $FREQ\_INCL_r$ equals ‘1’, and the band class is not supported by the mobile station, 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 and send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station).

• If $ASSIGN\_MODE_r$ equals ‘001’, $FREQ\_INCL_r$ equals ‘1’, and the band class is supported by the mobile station, the mobile station shall perform the following actions:
  - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
  - The mobile station shall set $CDMACH_s = CDMA\_FREQ_r$ and $CDMABAND_s = BAND\_CLASS_r$. The mobile station shall set $CONFIG\_MSG\_SEQ_s$ and $ACC\_MSG\_SEQ_s$ to NULL (see 2.6.2.2). Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, and set $PILOT\_PN_s$ to the pilot PN sequence offset of the strongest pilot in the list ($PILOT\_PN_r$).
  - If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set $SYS\_PAR\_MSG\_SEQ_s$, $NGHBR\_LST\_MSG\_SEQ_s$, $EXT\_NGHBR\_LST\_MSG\_SEQ_s$, $GEN\_NGHBR\_LST\_MSG\_SEQ_s$, $CHAN\_LST\_MSG\_SEQ_s$, $EXT\_CHAN\_LST\_MSG\_SEQ_s$, $EXT\_SYS\_PAR\_MSG\_SEQ_s$, $USER\_ZONE\_ID\_MSG\_SEQ_s$, $PRI\_NGHBR\_LST\_MSG\_SEQ_s$, $GLOB\_SERV\_REDIR\_MSG\_SEQ_s$, and $EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ_s$ to NULL. The mobile station shall set $PAGE\_CHAN_s$ to ‘1’ and $PAGECH_s$ to the Primary Paging Channel. **If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT_s to ‘00’**.
  The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

• If $ASSIGN\_MODE_r$ equals ‘100’ or ‘101’, the mobile station shall perform the following actions:
  - If $DIRECT\_CH\_ASSIGN\_IND_r$ is included and is set to ‘1’, the mobile station shall process the message as defined below in the order specified follows:
    + The mobile station shall set $CONFIG\_MSG\_SEQ_s$ to $CONFIG\_MSG\_SEQ_r$. 

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If RESPOND_IND is equal to ‘1’, the stored configuration parameters are current (see 2.6.2.2), the mobile station shall process the message as specified in section 2.6.3.3; otherwise, the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment update overhead indication within T₃₃ₘ seconds. Process the message as specified in section 2.6.3.3 once stored configuration parameters are current.

- Otherwise, the mobile station shall enter the Update Overhead Information Substate of the System Access State with an order/message response indication within T₃₃ₘ seconds and send a Mobile Station Reject Order with ORDQ field set to ‘00000010’ (message not accepted in this state).

- If ASSIGN_MODEᵣ is not equal to ‘001’, ‘100’ or ‘101’, the mobile station shall enter the Update Overhead Information Substate of the System Access State with an order/message response indication within T₃₃ₘ seconds and send a Mobile Station Reject Order with ORDQ field set to ‘00000010’ (message not accepted in this state).

10. Feature Notification Message

11. Local Control Order

12. Lock Until Power-Cycled Order: The mobile station shall record the reason for the Lock Until Power-Cycled Order in the mobile station’s semi-permanent memory (LCKRSNₘ₋ₚ equals the least significant four bits of ORDQᵣ). After a mobile station receives this order, it shall not enter the System Access State (see 2.6.3) until it has received an Unlock Order or until after power-cycling the mobile station (i.e., after the next mobile station power-up). This requirement shall take precedence over any other mobile station requirement specifying entry to the System Access State. The mobile station should notify the user of the locked condition. The mobile station shall exit the Mobile Station Idle State and enter the System Determination Substate of the Mobile Station Initialization State with a lock indication (see 2.6.1.1). This allows the mobile station to operate in an alternate operating mode while locked.

13. Maintenance Required Order: The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSNₘ₋ₚ equals the least significant four bits of ORDQᵣ). If the mobile station has previously received a Lock Until Power-Cycled Order, it shall remain in the locked condition; otherwise, the mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

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¹³ 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.
14. **PACA Message:** If \( P_{REV\ IN\ USEs} \) is less than or equal to four, and if the mobile station does not support PACA capability, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

- If \( PACAs \) is equal to disabled, 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 and shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000010’ (message not accepted in this state).

- If \( PACAs \) is equal to enabled, the mobile station shall perform the following:
  - If the purpose of the message is to respond to an *Origination Message* (\( PURPOSEr \) is equal to ‘0000’), 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 and send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000010’ (message not accepted in this state).
  - If the purpose of the message is to provide the queue position of the PACA call (\( PURPOSEr \) is equal to ‘0001’), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2, corresponding to the value of \( PACA\_TIMEOUTs \), should indicate to the user that the PACA call is still queued, and should indicate the current queue position (\( Q\_POSr \)) of the call.
  - If the purpose of the message is to instruct the mobile station to re-originate the PACA call (\( PURPOSEr \) is equal to ‘0010’), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of \( PACA\_TIMEOUTs \), and the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3) with a PACA response indication within \( T_{33m} \) seconds to re-originate the PACA call.
  - If the purpose of the message is to cancel the PACA call (\( PURPOSEr \) is equal to ‘0011’), the mobile station shall set \( PACAs \) to disabled and \( PACA\_CANCEL \) to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

15. **Registration Accepted Order:** The mobile station shall perform the procedures as specified in 2.6.11.1.

16. **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_CODEs-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).

17. **Registration Request Order:** The mobile station shall process the message and
1. perform registration procedures as specified in 2.6.5.2.3.

18. Security Mode Command Message: The mobile station shall perform the procedures as specified in 2.6.11.4.

19. Service Redirection Message: The mobile station shall process the message as follows:

- If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a Mobile Station Reject Order with ORDQ equal to ’00000110’ (message requires a capability that is not supported by the mobile station).
- If DELETE_TMSI_r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’. The mobile station shall disable the full-TMSI timer.
- The mobile station shall set RETURN_IF_FAILs = RETURN_IF_FAILr.
- If RECORD_TYPE_r is equal to ’00000000’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT_REC_s and shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).

20. 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] to 0.
  - If RETRY_DELAY_r is not equal to ’00000000’, the mobile station shall set RETRY_DELAY_s[RETRY_TYPE] as follows:
    + If the most significant bit of the RETRY_DELAY_r is ’0’, set RETRY_DELAY_UNIT_s to 1000ms. If the most significant bit of the RETRY_DELAY_r is ’1’, set RETRY_DELAY_UNIT_s to 60000ms.
    + The mobile station shall set RETRY_DELAY_VALUE_s to the seven least significant bits of RETRY_DELAY_r.
    + The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUE_s × RETRY_DELAY_UNIT_s ms as RETRY_DELAY_s[RETRY_TYPE].

21. Slotted Mode Order: After receiving this order, the mobile station shall set SLOTTED_s to YES. The mobile station shall disable the TMS_Slotted timer.

22. SSD Update Message: The mobile station shall process the message and shall
respond with a Base Station Challenge Order as specified in 2.3.12.1.5. 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.

23. **Status Request Message:** The mobile station shall process the message. If $P_{\text{REV\_IN\_USE}}$ is less than or equal to three, the mobile station shall respond with a Status Response Message. If $P_{\text{REV\_IN\_USE}}$ is greater than three, the mobile station shall respond with an Extended Status Response Message. 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. If the message does not specify any qualification information ($\text{QUAL\_INFO\_TYPE}_r$ is equal to ‘00000000’), the mobile station shall include the requested information records in the response. If the message specifies a band class ($\text{QUAL\_INFO\_TYPE}_r$ is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class ($\text{BAND\_CLASS}_r$) in the response. If the message specifies a band class and an operating mode ($\text{QUAL\_INFO\_TYPE}_r$ is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class ($\text{BAND\_CLASS}_r$) and operating mode ($\text{OP\_MODE}_r$) 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 $\text{ASSIGNING\_TMSI\_ZONE\_LEN}_s$-$p$ to $\text{TMSI\_ZONE\_LEN}_r$.
- The mobile station shall store the assigning TMSI zone number by setting the $\text{ASSIGNING\_TMSI\_ZONE\_LEN}_s$-$p$ least significant octets of $\text{ASSIGNING\_TMSI\_ZONE}_s$-$p$ to $\text{TMSI\_ZONE}_r$, and
- The mobile station shall store the TMSI code by setting $\text{TMSI\_CODE}_s$-$p$ to $\text{TMSI\_CODE}_r$.

The mobile station shall set the TMSI expiration time by setting $\text{TMSI\_EXP\_TIME}_s$-$p$ to $\text{TMSI\_EXP\_TIME}_r$. 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 T32m seconds.

- If ORDQ_r is equal to ‘00000001’, the mobile station shall process the message as specified in 2.6.12.1.

The mobile station shall ignore all other messages and orders.

2.6.2.5 Mobile Station Origination Operation

The Mobile Station Origination Operation is performed when the mobile station is directed by the user to initiate a call, or if the Mobile Station Idle State is entered with NDSS_ORIG_s enabled.

If the mobile station is directed by the user to initiate a call, the mobile station shall perform the following:

- If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

- The mobile station shall set CURR_ACC_MSGSEQ to NULL.

The mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds.

2.6.2.6 Mobile Station Message Transmission Operation

Support of this operation is optional. If the mobile station supports the Mobile Station Message Transmission Operation, the operation is performed when the user directs the mobile station to transmit a Data Burst Message, or when the mobile station detects a change in hook status since the last time when the mobile station sent hook status information and the mobile station supports the Device Information Message on the r-csch, or when the mobile station determines that a Radio Environment Message is to be transmitted on the r-csch, or when the mobile station requests to operate in reduced slot cycle mode.

If the mobile station supports this operation, the mobile station shall set CURR_ACC_MSGSEQ to NULL.

If the mobile station supports this operation and the operation is performed when the user directs the mobile station to transmit a Data Burst Message, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3.2) with a message transmission indication within T33m seconds.
If the mobile station supports this operation and the operation is performed when the mobile station detects a change in hook status since the last time when the mobile station sent hook status information, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a hook status indication within T₃₃m seconds.

If the mobile station supports this operation and the operation is performed when the mobile station determines that a *Radio Environment Message* is to be transmitted on the r-csch, the mobile station shall perform the following:

- If RER_MODE_ENABLED is set to YES, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a radio environment report indication within T₃₃m seconds.

- Otherwise, if TKZ_MODE_ENABLED is set to YES, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a tracking zone indication within T₃₃m seconds.

If the mobile station supports this operation and the operation is performed when the mobile station requests to operate in reduced slot cycle mode, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3.2) with a fast call setup indication within T₃₃m seconds.

2.6.2.7 Mobile Station Power-Down Operation

The *Mobile Station Power-Down Operation* is performed when the user directs the mobile station to power down.

The mobile station shall update stored parameters and perform other registration procedures as specified in 2.6.5.5.2.4.

If no power-down registration is performed (see 2.6.5.5.2.4), the mobile station may power down.

2.6.2.8 Mobile Station PACA Cancel Operation

The *Mobile Station PACA Cancel Operation* is performed when the user directs the mobile station to cancel a PACA call.

If PACAₙ is equal to enabled, the mobile station shall perform the following:

- The mobile station shall set PACAₙ to disabled.

- The mobile station shall set PACA_CANCEL to ‘0’, if PACA_CANCEL is equal to ‘1’.

- The mobile station shall disable the PACA state timer.

- The mobile station should indicate to the user that the PACA call has been canceled.

- The mobile station shall set CURR_ACC_MSG_SEQ to NULL.

- The mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3) with a PACA cancel indication within T₃₃m seconds.
2.6.3 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.

As illustrated in Figure 2.6.3-1, the System Access State consists of the following substates:

- **Update Overhead Information Substate** - In this substate, if the base station supports the Primary Broadcast Control Channel for Spreading Rate 1 or if both the base station and mobile station supports the Primary Broadcast Control Channel for Spreading Rate 3 and if the protocol revision level in use is greater than six, the mobile station will monitor the Primary Broadcast Control Channel until it has received a current set of overhead messages; otherwise, the mobile station will monitor the Paging Channel until it has a current set of overhead messages.

- **Mobile Station Origination Attempt Substate** - In this substate, the mobile station sends an *Origination Message* or a *Reconnect Message* (with ORIG_IND set to ‘1’) to the base station.

- **Page Response Substate** - In this substate, the mobile station sends a *Page Response Message* or a *Reconnect Message* (with ORIG_IND set to ‘0’) to the base station.

- **Mobile Station Order/Message Response Substate** - In this substate, the mobile station sends a response to a message received from the base station.

- **Registration Access Substate** - In this substate, the mobile station sends a *Registration Message* to the base station.

- **Mobile Station Message Transmission Substate** - In this substate, the mobile station sends a *Data Burst Message* or a *Device Information Message* to the base station.

- **PACA Cancel Substate** - In this substate, the mobile station sends a *PACA Cancel Message* to the base station.
2.6.3.1 Access Procedures

2.6.3.1.1 Access Attempts

If the mobile station monitors the Paging Channel, the mobile station transmits on the Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the Access Parameters Message. The random access procedure is described in [4] and [3].

If the mobile station monitors the Forward Common Control Channel/Primary Broadcast Control Channel, the mobile station transmits on the Enhanced Access Channel using a random access procedure. Many parameters of the random access procedure are supplied by the base station in the Enhanced Access Parameters Message.

If Layer 3 receives an indication from Layer 2 that the system access is denied, the mobile station shall update its registration variables using SID_s, NID_s, REG_ZONE_s, and ZONE_TIMER_s that were stored from the first base station to which the mobile station sent an Access Probe, as specified in 2.6.5.3.2, and enter the System Determination Substate of the Mobile Station Initialization State with an access denied indication (see 2.6.1.1).
If Layer 3 receives an indication from Layer 2 that the system is lost, the mobile station shall update its registration variables using SID$_s$, NID$_s$, REG_ZONE$_s$, and ZONE_TIMER$_s$ that were stored from the first base station to which the mobile station transmitted an Access Probe, as specified in 2.6.5.5.3.2 and enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

2.6.3.1.2 Reserved

2.6.3.1.3 Handoffs

While in the System Access State, the mobile station shall continue its pilot search (see 2.6.3.1.3.1), and may perform access handoffs (see 2.6.3.1.3.2) and/or access probe handoffs (see 2.6.3.1.3.3).

If the mobile station performs access handoffs and/or access probe handoffs, the mobile station shall maintain the following variables:

- CURRENT_ACTIVE_PILOT$_s$
- PREVIOUS_ACTIVE_PILOT$_s$
- FIRST_ACTIVE_PILOT$_s$

Upon entering the System Access State the mobile station shall set CURRENT_ACTIVE_PILOT$_s$, PREVIOUS_ACTIVE_PILOT$_s$ and FIRST_ACTIVE_PILOT$_s$ to NULL. Prior to starting an access attempt, the mobile station shall set CURRENT_ACTIVE_PILOT$_s$ and PREVIOUS_ACTIVE_PILOT$_s$ to NULL. When the mobile station selects a base station for transmission of an access probe, the mobile station shall proceed as follows:

- If CURRENT_ACTIVE_PILOT$_s$ is not the same as the pilot of the selected base station, the mobile station shall set PREVIOUS_ACTIVE_PILOT$_s$ to the value of CURRENT_ACTIVE_PILOT$_s$.
- The mobile station shall set CURRENT_ACTIVE_PILOT$_s$ to the identity of the pilot corresponding to the selected base station.
- If FIRST_ACTIVE_PILOT$_s$ is NULL, the mobile station shall set FIRST_ACTIVE_PILOT$_s$ to the value of CURRENT_ACTIVE_PILOT$_s$.

Before the mobile station transmits an access probe to a new base station on the Access Channel, the mobile station shall update parameters based on the System Parameters Message, the Access Parameters Message and the Extended System Parameters Message on the associated new Paging Channel and process parameters from the messages (see 2.6.2.2.1, 2.6.2.2.2, and 2.6.2.2.5).

Before the mobile station transmits an access probe to a new base station on the Enhanced Access Channel, the mobile station shall update parameters based on the ANSI-41 System Parameters Message, the Enhanced Access Parameters Message, and the MC-RR Parameters Message on the associated new Primary Broadcast Control Channel and process parameters from the messages (see 2.6.2.2.13, 2.6.2.2.14, and 2.6.2.2.15).
If the mobile station monitors the Paging Channel, the mobile station shall update parameters based on the Neighbor List Message, the Extended Neighbor List Message, or the General Neighbor List Message on the associated new Paging Channel and process parameters from the message (see 2.6.2.2.3, 2.6.2.2.7, and 2.6.2.2.8).

If the mobile station monitors the Forward Common Control Channel/Primary Broadcast Control Channel, the mobile station shall update parameters based on the Universal Neighbor List Message on the associated new Primary Broadcast Control Channel and process parameters from the message (see 2.6.2.2.17).

If the mobile station receives the User Zone Identification Message or the Private Neighbor List Message, the mobile station shall update parameters based on these messages on the associated new Paging Channel or Primary Broadcast Control Channel and process parameters from the messages (see 2.6.2.2.9 and 2.6.2.2.10). If the mobile station receives a Global Service Redirection Message (see 2.6.2.2.6) which directs the mobile station away from the new base station, the mobile station shall not access the new base station. If the mobile station receives an Extended Global Service Redirection Message (see 2.6.2.2.11) which directs the mobile station away from the new base station, the mobile station shall not access the new base station. The mobile station shall process these messages only once after each access handoff.

2.6.3.1.3.1 Pilot Search

The following sets of pilot offsets are defined for a mobile station in the System Access State. Each pilot offset is a member of only one set.

- **Active Set:** The pilot offset of the Forward CDMA Channel whose Paging Channel or Forward Common Control Channel/Primary Broadcast Control Channel is being monitored.

- **Neighbor Set:** The pilots that are not currently in the Active Set and are likely candidates for access handoff or access probe handoff. The members of the Neighbor Set are specified in the Neighbor List Message, the Extended Neighbor List Message, and the General Neighbor List Message on the Paging Channel. The members of the Neighbor Set are specified in the Universal Neighbor List Message on the Primary Broadcast Control Channel.

- **Remaining Set:** The set of all possible pilot offsets in the current system (integer multiples of PILOT_INCs) on the current CDMA Frequency Assignment, excluding the pilots in the Neighbor Set and the Active Set.

2.6.3.1.3.2 Access Handoff

The mobile station is permitted to perform an access handoff to use the Paging Channel with the best pilot strength and an associated Access Channel. The mobile station is permitted to perform an access handoff to use the Forward Common Control Channel with the best pilot strength and an associated Enhanced Access Channel. The mobile station is permitted to perform an access handoff when waiting for a response from the base station or before sending a response to the base station. An access handoff is permitted after an
access attempt while the mobile station is in the Page Response Substate or the Mobile Station Origination Attempt Substate.

When the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel while waiting for a response from the base station in the Page Response Substate or in the Mobile Station Origination Attempt Substate, the mobile station shall perform an access handoff, if all of the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- ACCESS_HO is equal to ‘1’, and
- The mobile station is not already in the process of performing an access attempt.

When the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel, after receiving a message but before responding to that message while in the Page Response Substate or in the Mobile Station Origination Attempt Substate, the mobile station shall perform an access handoff if the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- ACCESS_HO is equal to ‘1’,
- ACCESS_HO_MSG_RSP is equal to ‘1’, and
- The mobile station is not already in the process of performing an access attempt.

When the mobile station declares an insufficiency of the Paging Channel or the Forward Common Control Channel, while waiting for a response from the base station in the Page Response Substate or in the Mobile Station Origination Attempt Substate, the mobile station may perform an access handoff if all of the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- ACCESS_HO is equal to ‘1’,
- The mobile station is not already in the process of performing an access attempt.

When the mobile station declares an insufficiency of the Paging Channel or the Forward Common Control Channel, after receiving a message but before responding to that message while in the Page Response Substate or in the Mobile Station Origination Attempt Substate, the mobile station may perform an access handoff if all of the following conditions hold:

- The pilot corresponding to the new base station is in the list ACCESS_HO_LIST,
- ACCESS_HO is equal to ‘1’,
- ACCESS_HO_MSG_RSP is equal to ‘1’, and

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14 Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.
15 Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.
• The mobile station is not already in the process of performing an access attempt.

If ACCESS_PROBE_HOs is equal to ‘0’ and ACCESS_HOs is equal to ‘1’, and the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel during an access attempt, after sending at least one complete access probe, the mobile station may monitor other Paging Channels or the Forward Common Control Channels which are in ACCESS_HO_LIST for \( T_{42m} \) seconds after the loss of the Paging Channel or the Forward Common Control Channel on which the access attempt was made.\(^{16}\)

### 2.6.3.1.3.3 Access Probe Handoff

The mobile station is permitted to perform an access probe handoff when the mobile station is in the **Page Response Substate** or the **Mobile Station Origination Attempt Substate**.

The mobile station may perform an access probe handoff during an access attempt to a pilot in ACCESS_HO_LIST when the message being sent is the **Origination Message**, **Reconnect Message**, or the **Page Response Message**, if all of the following conditions hold:

- ACCESS_PROBE_HOs is equal to ‘1’,
- The mobile station is in the **Page Response Substate** or the **Mobile Station Origination Attempt Substate**, and
- The mobile station has performed fewer than (MAX_NUM_PROBE_HOs +1) access probe handoffs during the current access attempt.

The mobile station may also perform an access probe handoff during an access attempt to a pilot in ACCESS_HO_LIST when the message being sent is a message other than the **Origination Message**, **Reconnect Message**, or the **Page Response Message**, if all of the preceding conditions hold and ACC_PROBE_HO_OTHER_MSGs is equal to ‘1’.

The mobile station may also perform an access probe handoff during an access attempt to a pilot not in ACCESS_HO_LIST when the message being sent is the **Origination Message**, **Reconnect Message**, or the **Page Response Message**, if all of the following conditions hold:

- ACC_HO_LIST_UPD is equal to ‘1’,
- ACCESS_PROBE_HOs is equal to ‘1’,
- The new pilot is stronger than any pilot in ACCESS_HO_LIST,
- The new pilot has the corresponding ACCESS_HO_ALLOWED field in the NGHBR_REC equal to ‘1’,
- Inclusion of the new pilot in ACCESS_HO_LIST does not cause the Access Channel or Enhanced Access Channel message to exceed the maximum capsule size,
- Inclusion of the new pilot in ACCESS_HO_LIST does not cause the number of members to exceed \( N_{13m} \).

\(^{16}\) The mobile station would be waiting for a response to the message transmitted in the access probe.
The mobile station is in the *Page Response Substate* or the *Mobile Station Origination Attempt Substate*, and

- The mobile station has performed fewer than \((\text{MAX\_NUM\_PROBE\_HOS} + 1)\) access probe handoffs during the current access attempt.

The mobile station may also perform an access probe handoff during an access attempt to a pilot not in ACCESS\_HO\_LIST when the message being sent is a message other than the *Origination Message*, *Reconnect Message*, or the *Page Response Message*, if all of the preceding conditions hold and ACC\_PROBE\_HO\_OTHER\_MSGs is equal to ‘1’.

If the above conditions are met, the mobile station may perform an access probe handoff when the mobile station declares a loss of the Paging Channel or Forward Common Control Channel (see 2.6.3.1.8); the mobile station may also perform an access probe handoff after getting an indication that the TA timer expired (see [4]) and the mobile station declares an insufficiency of the Paging Channel or the Forward Common Control Channel.

If the mobile station performs an access probe handoff, the mobile station shall suspend the access attempt on the old pilot and shall restart the access attempt on the new pilot (i.e. starting with the first probe of the first probe sequence of the access sub-attempt), as specified in [4]. The mobile station shall record the identity of the pilots to which access probes have been transmitted within the current access attempt.

The mobile station shall not reset its access probe handoff count until the access attempt ends.

Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to cancel the access attempt if the length of the message to be sent exceeds MAX\_CAP\_SIZE of the new base station. The mobile station may monitor other Paging Channels or Forward Common Control Channels which are in ACCESS\_HO\_LIST for \(T_{42m}\) seconds after aborting the access attempt.

**2.6.3.1.4 System Access State Exit Procedures**

Upon exiting the *System Access State*, the mobile station shall direct Layer 2 to cancel (see [4]) any access attempt in progress and discard the associated message. The mobile station shall then disable the *System Access State* timer.

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17 Insufficiency of the Paging Channel and the Forward Common Control Channel is implementor-defined.

18 The mobile station would be waiting for a response to the message transmitted in the access probe.
2.6.3.1.5 Reserved

2.6.3.1.6 Full-TMSI Timer

Whenever the mobile station sends its full TMSI, the mobile station enables a timer, called the full-TMSI timer. If the full-TMSI timer expires, the mobile station deletes the TMSI by setting all of the bits in the TMSI_CODEs-p field to ‘1’.

The mobile station shall maintain the full-TMSI timer. The mobile station shall provide a means for enabling or disabling the full-TMSI timer.

If the mobile station sends a message with an address including the ASSIGNING_TMSI_ZONEs-p and the full-TMSI timer is disabled, the mobile station shall enable the full-TMSI timer with a duration equal to $T_{69m} + 2.56 \times 2^i$ seconds where $i$ is equal to SLOT_CYCLE_INDEXs.

2.6.3.1.7 Monitoring Pilots

The mobile station assists the base station in the Traffic Channel assignment process by monitoring and reporting (see [4]) the pilot strength of the pilot in the mobile station’s Paging Channel or Forward Common Control Channel Active Set (see 2.6.3.1.3.1). The mobile station can also monitor and report (see [4]) other pilots on the same frequency; in such cases, the mobile station shall create ACCESS_HO_LIST and OTHER_REPORTED_LIST and shall monitor the pilots on those lists, if any.

For each monitored pilot, the mobile station shall record the pilot PN phase and the pilot strength PS, using the most recent measurements from the searcher element (see [2]), as they become available. The mobile station shall identify each pilot through its pilot PN phase (the phase of the pilot PN sequence, in units of one chip, relative to the zero offset pilot PN sequence of the pilot (see 2.6.6.2.4)). The mobile station shall determine the pilot strength, PS, as specified in 2.6.6.2.2.

2.6.3.1.7.1 Generation of the Initial Access Handoff List

ACCESS_HO_LIST is created immediately before transmitting the first access probe after entering the System Access State. When it is created, ACCESS_HO_LIST is defined as a set of at most $N_{13m}$ pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member exceeds $T_{ADDs}$.
- Each member, other than the Active Set pilot, has the corresponding ACCESS_HO_ALLOWED field in the NGHBR_REC equal to ‘1’.
- The Active Set pilot that the mobile station monitors when the mobile station enters the System Access State is a member.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.
2.6.3.1.7.2 Update of the Access Handoff List

When the mobile station performs an access probe handoff to a pilot which was not previously included in ACCESS_HO_LIST (see 2.6.3.1.3.3), it adds the pilot to ACCESS_HO_LIST.

If ACC_HO_LIST_UPD is equal to ‘1’, the mobile station can update ACCESS_HO_LIST, as follows:

- The mobile station can add one or more new pilots other than the Active Set pilot to ACCESS_HO_LIST before transmitting an access probe.
- The mobile station can also drop from ACCESS_HO_LIST pilots to which access probes have not been transmitted since entering the System Access State and whose strength have fallen below T_ADDs.

When it is updated before transmitting a subsequent access probe, ACCESS_HO_LIST is defined as a set of at most N13m pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member to which access probes have not been transmitted exceeds T_ADDs.
- Each member other than the pilot to which the first access probe in the System Access State was transmitted has the corresponding ACCESS_HO_ALLOWED field in the NGHBR_REC equal to ‘1’.
- The Active Set pilot to which the next access probe is to be transmitted is a member.
- All pilots to which access probes have been transmitted since entering the System Access State are members.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.

2.6.3.1.7.3 Generation of the Other Reported List

OTHER_REPORTED_LIST (specified by NUM_ADD_PILOTS and NUM_AUX_PILOTS, see [4]) is defined as a set of no more than N13m minus the number of pilots in ACCESS_HO_LIST pilots, having the greatest pilot strength in comparison with other qualifying pilots and for which all of the following apply:

- The strength of each member exceeds T_ADDs.
- No member is included in ACCESS_HO_LIST.
- All members can be contained in the Access Channel or Enhanced Access Channel message without exceeding the maximum capsule size.

2.6.3.1.7.4 Update of OTHER_REPORTED_LIST

Before transmitting each access probe, the mobile station shall generate OTHER_REPORTED_LIST according to section 2.6.3.1.7.3, using the most recent pilot strength information available from its searcher element (see [2]). If the mobile station
updates ACCESS_HO_LIST before transmitting an access probe, it shall update OTHER_REPORTED_LIST after updating ACCESS_HO_LIST.

2.6.3.1.8 Paging Channel and Forward Common Control Channel/ Primary Broadcast Control Channel Monitoring

When in the System Access State, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel at all times. The mobile station shall set a timer for T72m seconds, when it begins to monitor the Paging Channel or the Forward Common Control Channel and whenever it gets an indication that a valid message was received on the Paging Channel or the Forward Common Control Channel, whether addressed to the mobile station or not (see [4]).

If the T72m timer expires:

- The mobile station shall first finish transmitting the access probe in progress, if any.
- If by declaring a loss of the Paging Channel or the Forward Common Control Channel, the eligibility requirements for performing access handoff are met (see 2.6.3.1.3.2), then the mobile station shall declare a loss of the Paging Channel or the Forward Common Control Channel, and perform an access handoff. If by declaring a loss of the Paging Channel or the Forward Common Control Channel, the eligibility requirements for performing access probe handoff are met (see 2.6.3.1.3.3), then the mobile station may declare a loss of the Paging Channel or the Forward Common Control Channel, and perform an access probe handoff. If the mobile station performs an access handoff or an access probe handoff, the mobile station restarts the Paging Channel or the Forward Common Control Channel/ Primary Broadcast Control Channel monitoring procedure for the new base station.
- If an access attempt was in progress when the timer expired and that access attempt had already been suspended and resumed previously (see below), the mobile station shall declare a loss of the Paging Channel or the Forward Common Control Channel and shall disable its transmitter.
- If an access attempt was in progress when the timer expired and that access attempt had not been suspended and resumed before and the mobile station does not perform access probe handoff, the mobile station shall declare a temporary loss of the Paging Channel or the Forward Common Control Channel, shall direct Layer 2 to suspend the access attempt (see [4]), and shall perform the following:
  - The mobile station shall set the timer to (T40m-T72m) seconds.

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.
– If the mobile station receives an indication that a valid message on the Paging Channel or the Forward Common Control Channel, whether addressed to the mobile station or not, was received (see [4]) prior to the expiration of the (T40m-T72m) timer, the mobile station shall re-enable the transmitter, shall direct Layer 2 to resume operation from the beginning of the interrupted access probe sequence of the access sub-attempt (see [4]), and shall transmit the first probe of the new access probe sequence immediately after re-enabling the transmitter.

– If the (T40m-T72m) timer expires, the mobile station shall direct Layer 2 to cancel any access attempt (see [4]) and shall declare a loss of the Paging Channel or the Forward Common Control Channel.

• If an access attempt was not in progress when the timer expired and the mobile station does not perform access handoff, the mobile station shall perform the following:
  – The mobile station shall set the timer to (T40m-T72m) seconds.
  – If the (T40m-T72m) timer expires, the mobile station shall declare a loss of the Paging Channel or the Forward Common Control Channel.

2.6.3.2 Update Overhead Information Substate

In this substate, if the base station supports the Primary Broadcast Control Channel for Spreading Rate 1, or if both the mobile station and base station support Spreading Rate 3 on the common channels, then the mobile station shall monitor the Primary Broadcast Control Channel until it has received the current configuration messages; otherwise, the mobile station shall monitor the Paging Channel until it has received the current configuration messages. The mobile station compares sequence numbers to determine whether all of the configuration messages are up-to-date. To make sure it has the latest access parameters, the mobile station receives at least one message containing the ACC_MSG_SEQ field (except in case where the mobile station enters this substate with a page response indication, since the initiating page contains ACC_MSG_SEQ), and waits, if necessary, for an Access Parameters Message or an Enhanced Access Parameters Message.

In addition, if the mobile station is monitoring the Primary Broadcast Control Channel and SENDING_RANDs is equal to ‘1’, then it shall also wait for an ANSI-41 RAND Message.

Upon entering the Update Overhead Information Substate, the mobile station shall set the System Access State timer to a value of T41m seconds. The mobile station shall set PAGED to NO.

If the System Access State timer expires while in this substate, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

If the mobile station declares a loss of the Paging Channel or the Primary Broadcast Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:
• If PACA\textsubscript{s} is equal to enabled, the mobile station shall set PACA\textsubscript{s} to disabled and PACA\_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

• The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2.

• The mobile station shall enter the Mobile Station Idle State.

If PACA\textsubscript{s} is equal to enabled, the mobile station shall set PACA\_CANCEL to ‘1’ when the user directs the mobile station to cancel a PACA call.

If the mobile station receives any of the following messages, it shall process the message as follows:

1. **System Parameters Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.1).

2. **Access Parameters Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.2).

3. **Neighbor List Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.3).

4. **CDMA Channel List Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.4).

5. **Extended System Parameters Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.5).

6. **Global Service Redirection Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.6).

7. **Extended Neighbor List Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.7).

8. **General Neighbor List Message**: The mobile station shall process the parameters from the message (see 2.6.2.2.8).

9. **Lock Until Power-Cycled Order**: The mobile station shall record the reason for the Lock Until Power-Cycled Order in the mobile station’s semi-permanent memory (LCKRSN\_P\textsubscript{s-p} equals the least-significant four bits of ORD\textsubscript{qr}). The mobile station should notify the user of the locked condition. The mobile station shall then 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. **General Page Message** or **Universal Page Message**: If CURR\_ACC\_MSG\_SEQ is equal to NULL, the mobile station shall set CURR\_ACC\_MSG\_SEQ to ACC\_MSG\_SEQ\textsubscript{r}. The mobile station shall compare CONFIG\_MSG\_SEQ\textsubscript{s} to CONFIG\_MSG\_SEQ\textsubscript{r}. If the comparison results in a mismatch, the mobile station shall set CONFIG\_MSG\_SEQ\textsubscript{s} to CONFIG\_MSG\_SEQ\textsubscript{r}. The mobile station may
ignore the rest of the message. If this substate was not entered with an origination indication, page response indication, direct channel assignment update overhead indication, direct channel assignment respond indication, or direct channel assignment failure indication, the mobile station may also determine whether there is a page match. If the mobile station attempts to determine whether there is a page match, it shall use the procedure as defined in 2.6.2.3. If a match is declared, the mobile station shall set PAGED to YES.

11. **User Zone Identification Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.9).

12. **Private Neighbor List Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.10).

13. **Extended Global Service Redirection Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.11).

14. **Extended CDMA Channel List Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.12).

15. **ANSI-41 System Parameters Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.13).

16. **MC-RR Parameters Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.14).

17. **Enhanced Access Parameters Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.15).

18. **ANSI-41 RAND Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.16).

19. **Universal Neighbor List Message:** The mobile station shall process the parameters from the message (see 2.6.2.2.17).

20. **Extended Channel Assignment Message:** If this substate was not entered with an origination indication, and or a direct channel assignment update overhead indication, or a direct channel assignment respond indication, or a direct channel assignment failure indication, or if the DIRECT_CH_ASSIGN_IND_r is not included, or the DIRECT_CH_ASSIGN_IND_r is included and is set to ‘04’, the mobile station shall ignore this message. Otherwise, the mobile station shall process the message as follows:

   • If RESPOND_IND_r is equal to ‘0’, the mobile station shall perform the following in the order specified:

      — The mobile station shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r.

      — The mobile station shall wait till if the stored configuration parameters are current (see 2.6.2.2).

      — Once the stored configuration parameters are current, the mobile station shall disable the System Access State timer and, the mobile station shall process the message as specified in section 2.6.3.3; otherwise, the mobile
station shall process the message as specified in section 2.6.3.3 once stored
configuration parameters are current.

• If RESPOND_IND is equal to ‘1’, the mobile station shall perform the following
in the order specified:
  – The mobile station shall set CONFIG_MSG_SEQ to CONFIG_MSG_SEQr.
  – When all of the following conditions are met:
    + the stored configuration parameters are current (see 2.6.2.2)
    + CURR_ACC_MSG_SEQ and ACC_MSG_SEQ are equal and are not
      NULL, and
    + if the mobile station is monitoring the Primary Broadcast Control
      Channel and SENDING_RAND is equal to ‘1’, the ANSI-41 RAND
      Message has been received,
      the mobile station shall disable the System Access State timer and process
      the message as specified in section 2.6.3.3.

Otherwise, the mobile station shall ignore this message.

If the mobile station receives a message which is not included in the above list, the mobile
station shall ignore the message.

If this substate was entered with a direct channel assignment update overhead indication,
the mobile station shall perform the following in the order specified:

• The mobile station shall wait till the stored configuration parameters are current
  (see 2.6.2.2).

• Once the stored configuration parameters are current, the mobile station shall
  perform the following:

  – The mobile station shall disable the System Access State timer.

  – The mobile station shall process the Extended Channel Assignment Message
    received in Mobile Station Idle State as specified in section 2.6.3.3.

When all of the following conditions are met:

• The stored configuration parameters are current (see 2.6.2.2)
• CURR_ACC_MSG_SEQ and ACC_MSG_SEQ are equal and are not NULL, and
• If the mobile station is monitoring the Primary Broadcast Control Channel and
  SENDING_RAND is equal to ‘1’, the ANSI-41 RAND Message has been received,
then the mobile station shall disable the System Access State timer and shall perform one
of the following:
• If PAGED is equal to YES, the mobile station shall determine whether the message resulting in the page match was received on the current Paging Channel or Forward Common Control Channel. If the message was received on the current Paging Channel or Forward Common Control Channel, the mobile station shall enter the *Page Response Substate*; otherwise, the mobile station shall enter the *Mobile Station Idle State*.

• If this substate was entered with a page response indication, direct channel assignment *respond* indication, or direct channel assignment failure indication, and the mobile station has not performed an access entry handoff, the mobile station shall determine whether the message resulting in the page response was received on the current Paging Channel or Forward Common Control Channel. If the message was received on the current Paging Channel or Forward Common Control Channel, the mobile station shall enter the *Page Response Substate*; otherwise, the mobile station shall enter the *Mobile Station Idle State* with the corresponding indication.

• If this substate was entered with a page response indication, direct channel assignment *respond* indication, or direct channel assignment failure indication, and the mobile station has performed an access entry handoff, the mobile station shall enter the *Page Response Substate* with the corresponding indication.

• If this substate was entered with a page response retransmission indication, the mobile station shall enter the *Page Response Substate*.

• If this substate was entered with an origination indication, the mobile station shall enter the *Mobile Station Origination Attempt Substate*.

• If this substate was entered with a PACA response indication, the mobile station shall enter the *Mobile Station Origination Attempt Substate* with a PACA response indication.

• If this substate was entered with an order/message response indication and the mobile station has not performed an access entry handoff, the mobile station shall determine whether the message resulting in the response was received on the current Paging Channel or Forward Common Control Channel. If the message was received on the current Paging Channel or Forward Common Control Channel, the mobile station shall enter the *Mobile Station Order/Message Response Substate*; otherwise, the mobile station shall discard the response and enter the *Mobile Station Idle State*.

• If this substate was entered with an order/message response indication and the mobile station has performed an access entry handoff, the mobile station shall enter the *Mobile Station Order/Message Response Substate*.

• If this substate was entered with a registration indication, the mobile station shall enter the *Registration Access Substate*.

• If this substate was entered with a message transmission indication, the mobile station shall enter the *Mobile Station Message Transmission Substate* with a message transmission indication.
• If this substate was entered with a hook status indication, the mobile station shall enter the **Mobile Station Message Transmission Substate** with a hook status indication.

• If this substate was entered with a PACA cancel indication, the mobile station shall enter the **PACA Cancel Substate**.

• If this substate was entered with a radio environment report indication, the mobile station shall enter the **Mobile Station Message Transmission Substate** with a radio environment report indication.

• If this substate was entered with a tracking zone indication, the mobile station shall enter the **Mobile Station Message Transmission Substate** with a tracking zone indication.

• If this substate was entered with a fast call setup indication, the mobile station shall enter the **Mobile Station Message Transmission Substate** with a fast call setup indication.

2.6.3.3 Page Response Substate

In this substate, the mobile station sends a **Page Response Message** or a **Reconnect Message** in response to a mobile-station-addressed page or direct channel assignment from a base station. If the mobile station sends a **Reconnect Message**, it shall set the ORIG_IND field of the message to ‘0’.

If directed by the user to transmit a message, the mobile station may perform either of the following:

• The mobile station may transmit a **Data Burst Message** to the base station in this substate if all of the following conditions are true:
  – The mobile station has received confirmation of delivery of the **Page Response Message** or a **Reconnect Message**, and
  – ACCT is not enabled for the service option number associated with the **Data Burst Message** as follows:
    + The service option number associated with the **Data Burst Message** is not equal to any ACCT_SO entry in ACCT_SO_LIST, and
    + The service option group number of the service option associated with the **Data Burst Message** is not equal to any ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

• If the mobile station sends a **Reconnect Message** in assured mode in this substate, the mobile station may include a Short Data Burst (see [30]) in the **Reconnect Message** by setting the SDB_INCL field to ‘1’, if all of the following conditions are true:
  – SDB_SUPPORTEDs and SDB_IN_RCNM_INDs are equal to ‘1’, and
  – ACCT is not enabled for the service option number associated with the Short Data Burst as follows:
+ The service option number associated with the Short Data Burst is not equal to any ACCT_SO entry in ACCT_SO_LIST, and
+ The service option group number of the service option associated with the Short Data Burst is not equal to any ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

The mobile station shall not send the Reconnect Message if RECONNECT_MSG_INDs equals ‘0’ or if this message is not being sent to reconnect a dormant packet data service instance.

If a base station responds to the Page Response Message or the Reconnect Message with an authentication request, the mobile station responds in this substate.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station) other than the Data Burst Message, Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see [4]).

When transmitting an autonomous Data Burst Message, Layer 3 shall indicate to Layer 2 that the type of the message is a message transmission request (see [4]).

If the mobile station has a stored service configuration (that is, parameters conveyed by both the Service Configuration information record and the Non-negotiable Service Configuration information record) and corresponding SYNC_ID with associated SID and NID that are equal to the SIDs and NIDs respectively, and USE_SYNC_IDs is equal to ‘1’, the mobile station may include the SYNC_ID field in the Page Response Message or the Reconnect Message and, if included, shall set it to the SYNC_ID corresponding to the stored service configuration. If the mobile station includes SYNC_ID field in the Page Response Message or the Reconnect Message, the mobile station shall store the value of the SYNC_ID field in SYNC_IDs.

If the mobile station enters the Page Response Substate with a direct channel assignment indication, the mobile station shall perform the following:

- The mobile station shall send a Page Response Message or a Reconnect Message in unassured mode, and shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State,
- While in the Page Response Substate, the mobile station shall ignore all received messages, and
- The mobile station shall not perform any other procedures in this section.

Upon entering the Page Response Substate for any reason other than with a direct channel...
assignment_respond_indication in response to a direct channel assignment, the mobile station shall perform the following:

- Set RLGAIN_ADJs to ‘0000’.
- If P_REV_IN_USE is less than 11, set PLCM_TYPEs to ‘0000’; otherwise set PLCM_TYPEs to ‘0100’, and
- Send a Page Response Message or a Reconnect Message.

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. The mobile station may perform an access probe handoff or access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during an access attempt, the mobile station may perform an access probe handoff; otherwise, it shall declare an access attempt failure and shall perform the following actions:

- The mobile station shall update its registration variables as specified in 2.6.5.5.3.2,
- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL,
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC_RR_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If PACA is equal to enabled, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- The mobile station shall disable its transmitter, and
- The mobile station shall enter the Mobile Station Idle State.

If the mobile station receives confirmation of delivery of any message sent by the mobile station in this substate, the mobile station shall perform an access handoff if all of the following conditions hold:

- The mobile station declares a loss of the Paging Channel or the Forward Common Control Channel, and
- The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2), and there are pilots other than the active pilot in the access handoff list (see 2.6.3.1.3.2).

If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel and does not perform an access handoff, the mobile station shall perform the following:

- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC_RR_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
If PACA\_s is equal to enabled, the mobile station shall set PACA\_s to disabled and PACA\_CANCEL to 0, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled,

- The mobile station shall disable its transmitter, and
- The mobile station shall enter the \textit{Mobile Station Idle State}.

If PACA\_s is equal to enabled, the mobile station shall set PACA\_CANCEL to ‘1’ when the user directs the mobile station to cancel a PACA call.

If the mobile station receives confirmation of delivery of the \textit{Page Response Message} or the \textit{Reconnect Message} sent in this substate, the mobile station shall update its registration variables with respect to the base station to which the first access probe was transmitted after entering the \textit{System Access State}, as specified in 2.6.5.5.3.1.

If the \textit{System Access State} timer expires while in this substate, the mobile station shall perform the following:

- If PACA\_s is equal to enabled, the mobile station shall set PACA\_s to disabled and PACA\_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS\_PAR\_MSG\_SEQ\_s and ACC\_MSG\_SEQ\_s to NULL, and shall enter the \textit{Mobile Station Idle State}.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC\_RR\_PAR\_MSG\_SEQ\_s and ACC\_MSG\_SEQ\_s to NULL and enter the \textit{Mobile Station Idle State}.

The mobile station shall set and disable the \textit{System Access State} timer as follows:

- The mobile station shall disable the timer whenever it begins an access attempt.
- The mobile station shall set the timer to T\_42m seconds whenever it ends an access attempt.
- The mobile station shall disable the timer whenever it exits the \textit{System Access State}.

If the mobile station receives a \textit{Channel Assignment Message} or the \textit{Extended Channel Assignment Message}, Layer 3 shall send a dedicated channel assignment indication to Layer 2 (see [4]). If the mobile station has not received confirmation of delivery of the \textit{Page Response Message} or the \textit{Reconnect Message}, before receiving the \textit{Channel Assignment Message} or the \textit{Extended Channel Assignment Message}, the mobile station shall update its registration variables with respect to the base station to which the first access probe was transmitted after entering the \textit{System Access State}, as specified in 2.6.5.5.3.1. If the mobile station has not received confirmation of delivery of a \textit{Data Burst Message} before receiving the \textit{Channel Assignment Message} or the \textit{Extended Channel Assignment Message}, Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress and the mobile station may store the \textit{Data Burst Message} for later transmission on the r-dsch.

If the mobile station is to exit the \textit{System Access State} as a result of processing Layer 3
fields of a message requiring an acknowledgment, the mobile station shall exit the System Access State after Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

If Layer 3 receives a message other than a Channel Assignment Message or an Extended Channel Assignment Message with an indication from Layer 2 that an access attempt for a message being transmitted was not terminated as a result of processing the Layer 2 fields of the received message, the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station may send a Mobile Station Reject Order with ORDQ equal to ‘00000100’ (message field not in valid range).

1. Authentication Challenge Message: The mobile station shall respond to the message as specified in 2.3.12.1.4, regardless of the value of AUTHs.

2. Authentication Request Message: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.

3. Base Station Challenge Confirmation Order: The mobile station shall respond to the message as specified in 2.3.12.1.5.

4. Base Station Reject Order: The mobile station shall perform the procedures as specified in 2.6.11.5.

5. Channel Assignment Message: The mobile station shall process the message as follows:
   - If ASSIGN_MODEr equals ‘000’, the mobile station shall perform the following actions:
     − The mobile station shall set CH_INDs to ‘01’.
     − The mobile station shall store the frame offset (FRAME_OFFSETs = FRAME_OFFSETr), the message encryption mode indicator (ENCRYPT_MODEs = ENCRYPT_MODEr), and, if FREQ_INCLr equals ‘1’, the Frequency Assignment (CDMACHs = CDMA_FREQr).
     − The mobile station shall set SERV_NEGs to disabled.
     − If PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
     − The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8.
     − If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_CDMA_CHAN to CDMACHs, IDLE_CDMABAND to CDMABANDs, IDLE_SID to SIDs, IDLE_NID to NIDs, and IDLE_P_REV to P_REVs.
     − The mobile station shall enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.
• If ASSIGN_MODE<sub>r</sub> equals ‘001’, the mobile station shall perform the following actions:
  – If FREQ_INCL<sub>r</sub> equals ‘1’, the mobile station shall perform the following:
    + If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    + The mobile station shall set CDMA<sub>s</sub> to CDMA_FREQ<sub>r</sub>, tune to the new Frequency Assignment, and measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2.
  – The mobile station shall set CONFIG_MSG_SEQ<sub>s</sub> and ACC_MSG_SEQ<sub>s</sub> to NULL (see 2.6.2.2) and shall set PILOT_PN<sub>s</sub> to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN<sub>r</sub>).
  – If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ<sub>s</sub>, NGHBR_LST_MSG_SEQ<sub>s</sub>, EXT_NGHBR_LST_MSG_SEQ<sub>s</sub>, GEN_NGHBR_LST_MSG_SEQ<sub>s</sub>, USER_ZONE_ID_MSG_SEQ<sub>s</sub>, PRI_NGHBR_LST_MSG_SEQ<sub>s</sub>, CHAN_LST_MSG_SEQ<sub>s</sub>, EXT_CHAN_LST_MSG_SEQ<sub>s</sub>, EXT_SYS_PAR_MSG_SEQ<sub>s</sub>, GLOB_SERV_REDIR_MSG_SEQ<sub>s</sub>, and EXT_GLOB_SERV_REDIR_MSG_SEQ<sub>s</sub> to NULL.
  – The mobile station shall set PAGE_CHAN<sub>s</sub> to ‘1’ and PAGECH<sub>s</sub> to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT<sub>s</sub> to ‘00’.
    The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
  – If RESPOND<sub>r</sub> is equal to ‘1’, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T<sub>34m</sub> seconds after receiving the Channel Assignment Message.
  – If RESPOND<sub>r</sub> is equal to ‘0’, the mobile station shall enter the Mobile Station Idle State within T<sub>34m</sub> seconds after receiving the Channel Assignment Message.
• If ASSIGN_MODE<sub>r</sub> equals ‘010’, the mobile station shall perform the following actions:
  – If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the Page Response Substate.
− If the mobile station supports analog operation in the requested band class, the mobile station shall perform the following actions:
  + If USE_ANALOG_SYSr equals ‘1’, the mobile station shall set SERVSYSs to SYS_A if ANALOG_SYSr is equal to ‘0’, or shall set SERVSYSs to SYS_B if ANALOG_SYSr is equal to ‘1’.
  + If PACA_s is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  + If RESPOND r equals ‘0’, the mobile station shall enter the analog Initialization Task with a wait-for-page indication (see 2.6.1). If RESPOND r equals ‘1’, the mobile station shall enter the analog Initialization Task with a page response indication (see 2.6.1).

− If ASSIGN_MODE r equals ‘011’, the mobile station shall perform the following actions:
  − If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Page Response Substate.
  − If the mobile station supports analog operation in the requested band class:
    + If PACA_s is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
    + If the analog channel type is ‘00’, the mobile station shall store the system identification (SIDs = SID_r), voice mobile station attenuation code (VMAC_s = VMAC_r), voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r), SAT color code (SCCs = SCC_r), and message encryption mode indicator (MEMs = MEM_r), shall set DTXs to ‘00’ and shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with a page response indication.
    + If the analog channel type is not ‘00’:
      o If the mobile station supports narrow analog mode, the mobile station shall store the system identification (SIDs = SID_r), voice mobile station attenuation code (VMAC_s = VMAC_r), voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r), message encryption mode indicator (MEM_s = MEM_r), analog channel type (AN_CHAN_TYPE_s = AN_CHAN_TYPE_r) and the digital SAT code (DSCCs = DSCC_MSB_r × 4 + SCC_r), shall set DTXs to ‘00’, and shall enter the Confirm Initial Narrow Analog Voice Channel Task (see [22]) with a page response indication.
If the mobile station does not support narrow analog mode, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the *Page Response Substate* of the *System Access State.*

If ASSIGN_MODE<sub>r</sub> equals ‘100’, the mobile station shall perform the following actions:

- The mobile station shall set CH_IND<sub>s</sub> to ‘01’.
- If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If GRANTED_MODE<sub>r</sub> equals ‘00’, and the multiplex option and radio configuration combination specified in the DEFAULT_CONFIG field is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the *Page Response Substate*.
- If FREQ_INCL<sub>r</sub> equals ‘0’, the mobile station shall perform the following actions:
  - The mobile station shall store the frame offset (FRAME_OFFSET<sub>s</sub> = FRAME_OFFSET<sub>r</sub>), the message encryption mode indicator (ENCRYPT_MODE<sub>s</sub> = ENCRYPT_MODE<sub>r</sub>), the granted mode (GRANTED_MODE<sub>s</sub> = GRANTED_MODE<sub>r</sub>), and default configuration (DEFAULT_CONFIG<sub>s</sub> = DEFAULT_CONFIG<sub>r</sub>).
  - The mobile station shall set SERV_NEG<sub>s</sub> to enabled.
  - If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_CDMA_CHAN to CDMA<sub>s</sub>, IDLE_CDMABAND to CDMA_BAND<sub>s</sub>, IDLE_SID to SID<sub>s</sub>, IDLE_NID to NID<sub>s</sub>, and IDLE_P_REV to P_REVS<sub>s</sub>.
  - The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8 and shall then enter the *Traffic Channel Initialization Substate* of the *Mobile Station Control on the Traffic Channel State.*
- If FREQ_INCL<sub>r</sub> equals ‘1’, the mobile station shall perform the following actions:
  - If the band class is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the *Page Response Substate*.
  - If the band class is supported by the mobile station, the mobile station shall perform the following actions:
The mobile station shall store the frame offset (FRAME_OFFSET\_s = FRAME OFFSET\_r), the message encryption mode indicator (ENCRYPT MODE\_s = ENCRYPT MODE\_r), the bypass indicator (BYPASS ALERT ANSWER\_s = BYPASS ALERT ANSWER\_r), the granted mode (GRANTED MODE\_s = GRANTED MODE\_r), the default configuration (DEFAULT CONFIG\_s = DEFAULT CONFIG\_r), the idle Frequency Assignment (IDLE CDMA_CHAN = CDMA\_CH\_s), the idle band class (IDLE CDMA BAND = CDMA BAND\_s), the band class (CDMA BAND\_s = BAND CLASS\_r), and the Frequency Assignment (CDMA\_CH\_s = CDMA FREQ\_r).

The mobile station shall initialize CODE_CHAN LIST as described in 2.6.8, and shall set SERV NEG\_s to enabled.

If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE BCCH_CHAN to '0'; otherwise, the mobile station shall set IDLE BCCH_CHAN to '1'. The mobile station shall set IDLE SID to SID\_s, IDLE NID to NID\_s, and IDLE P REV to P REV\_s.

The mobile station shall then tune to the new Frequency Assignment and shall enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

• If ASSIGN MODE\_r equals '101', the mobile station shall perform the following actions:
  – If FREQ INCL\_r equals '0', the mobile station shall perform the following actions:
    + If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    + The mobile station shall set CONFIG MSG SEQ\_s and ACC MSG SEQ\_s to NULL (see 2.6.2.2) and shall set PILOT PN\_s to the pilot PN sequence offset of the strongest pilot in the list (PILOT PN\_r).
    + If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS PAR MSG SEQ\_s, NGHBR LST MSG SEQ\_s, EXT NGHBR LST MSG SEQ\_s, GEN NGHBR LST MSG SEQ\_s, USER ZONE ID MSG SEQ\_s, PRI NGHBR LST MSG SEQ\_s, CHAN LST MSG SEQ\_s, EXT CHAN LST MSG SEQ\_s, EXT SYS PAR MSG SEQ\_s, GLOB SERV REDIR MSG SEQ\_s, and EXT GLOB SERV REDIR MSG SEQ\_s to NULL.
    + The mobile station shall set PAGE CHAN\_s to '1' and PAGECH\_s to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
+ If RESPOND<sub>r</sub> is equal to '1', the mobile station shall perform the following:

  o If the *Channel Assignment Message* does not require an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with a page response retransmission indication within T<sub>34m</sub> seconds after receiving the *Channel Assignment Message*.

  o If the *Channel Assignment Message* requires an acknowledgment, the mobile station shall enter the *Update Overhead Information Substate* with a page response retransmission indication within T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the *Channel Assignment Message* has been sent and acknowledged.

+ If RESPOND<sub>r</sub> is equal to '0', the mobile station shall perform the following:

  o If the *Channel Assignment Message* does not require an acknowledgment, the mobile station shall enter the *Mobile Station Idle State* within T<sub>34m</sub> seconds after receiving the *Channel Assignment Message*.

  o If the *Channel Assignment Message* requires an acknowledgment, the mobile station shall enter the *Mobile Station Idle State* within T<sub>34m</sub> seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the *Channel Assignment Message* has been sent and acknowledged.

− If FREQ_INCL<sub>r</sub> equals '1', the mobile station shall perform the following actions:

  + If the band class is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the *Page Response Substate*.

  + If the band class is supported by the mobile station, the mobile station shall perform the following actions:

    o If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

    o The mobile station shall set CDMACH<sub>s</sub> to CDMA_FREQ<sub>r</sub> and CDMABAND<sub>s</sub> to BAND_CLASS<sub>r</sub>. Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT_PN<sub>s</sub> to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN<sub>r</sub>), and set CONFIG_MSG_SEQ<sub>s</sub> and ACC_MSG_SEQ<sub>s</sub> to NULL (see 2.6.2.2).
If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs to NULL. The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station. If RESPONDr is equal to ‘1’, the mobile station shall perform the following:

◊ If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T34m seconds after receiving the Channel Assignment Message.

◊ If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

If RESPONDr is equal to ‘0’, the mobile station perform the following:

◊ If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after receiving the Channel Assignment Message.

◊ If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

6. Data Burst Message

7. Extended Channel Assignment Message: The mobile station shall process the message as follows:

• If the Extended Channel Assignment Message requires an acknowledgement and the mobile station is to enter the Mobile Station Control on the Traffic Channel State as a result of processing Layer 3 fields of this message, the mobile station shall enter the Mobile Station Control on the Traffic Channel State only after Layer
3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

- The mobile station shall set RTC_NOM_PWR_USE_IND to ‘0’.
- The mobile station shall set DIRECT_CH_ASSIGN_RECOVER_INDs to ‘0’.

- **If the mobile station is in Page Response Substate and has sent** a Page Response Message or a Reconnect Message **the mobile station shall set** RESPOND_INDs to ‘0’; otherwise the mobile station shall set RESPOND_INDs to RESPOND_INDr.

- If ASSIGN_MODEr equals ‘000’, the mobile station shall perform the following actions:
  - The mobile station shall set CH_INDs to ‘01’.
  - If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  - If GRANTED_MODEr equals ‘00’, and the multiplex option and radio configuration specified in the DEFAULT_CONFIG field are not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the current state.
  - If GRANTED_MODEr is equal to ‘00’ and DEFAULT_CONFIGr is not equal to ‘100’, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00001110’ (RC does not match with DEFAULT_CONFIGr) and shall remain in the current state if any of the following conditions is true:
    - FOR_FCH_RCr is not equal to the RC associated with DEFAULT_CONFIGr (see Table 3.7.2.3.2.21-2).
    - REV_FCH_RCr is not equal to the RC associated with DEFAULT_CONFIGr (see Table 3.7.2.3.2.21-2).
  - If the mobile station does not support either of the Fundamental Channel Radio Configurations (FOR_FCH_RC or REV_FCH_RC), the mobile shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.

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20 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.

21 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.
− 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, the mobile
station shall send a \textit{Mobile Station Reject Order} with the ORDQ field
set to ‘00011100’ (PLCM_TYPE mismatch) and remain in the current state.

− If \textit{P_REV_IN_USE}s is equal to or greater than 6, the mobile station shall
store the Forward Fundamental Channel Radio Configuration
(FOR_FCH_RC_s = FOR_FCH_RC_r) and the Reverse Fundamental Channel
Radio Configuration (REV_FCH_RC_s = REV_FCH_RC_r).

− If FREQ_INCL_r equals ‘0’, and the band class is supported by the mobile
station, the mobile station shall perform the following actions:
  + The mobile station shall store the frame offset (FRAME_OFFSET_s =
FRAME_OFFSET_r); the message encryption mode indicator
(ENCRYPT_MODE_s = ENCRYPT_MODE_r); the bypass indicator
(BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r); the granted
mode (GRANTED_MODE_s = GRANTED_MODE_r); the default
configuration (DEFAULT_CONFIG_s = DEFAULT_CONFIG_r); and the
occurrences of PILOT_PN and PWR_COMB for each included member of
the Active Set.

  + The mobile station shall perform the procedures in 2.6.11.2.

  + If \textit{C_SIG_ENCRYPT_MODE} is included, the mobile station shall set
\textit{C_SIG_ENCRYPT_MODE}s to \textit{C_SIG_ENCRYPT_MODE}r.

  + The mobile station shall initialize CODE_CHAN_LIST as described in
2.6.8, and shall set SERV_NEG_s to enabled.

  + The mobile station shall set FPC_FCH_INIT_SETPT_s to
FPC_FCH_INIT_SETPT_r, FPC_FCH_CURR_SETPT_s to
FPC_FCH_INIT_SETPT_r, FPC_FCH_INIT_SETPT_s to FPC_FCH_INIT_SETPT_r,
FPC_FCH_MIN_SETPT_s to FPC_FCH_MIN_SETPT_r,
FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r, and FPC_PRI_CHAN_s
to ‘0’ if the mobile station supports any Radio Configuration greater than
2.

  + The mobile station shall set FPC_SUBCHAN_GAIN_s to
FPC_SUBCHAN_GAIN_r.

  + The mobile station shall set RLGAIN_ADJ_s to RLGAIN_ADJ_r.

  + The mobile station shall set REV_FCH_GATING_MODE_s to
REV_FCH_GATING_MODE_r.

  + The mobile station shall set REV_PWR_CNTL_DELAY_s to
REV_PWR_CNTL_DELAY_r if REV_PWR_CNTL_DELAY_INCL_r is equal to
‘1’.

  + The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r if
PLCM_TYPE_INCL_r is equal to ‘1’; otherwise, the mobile station shall set
PLCM_TYPE_s to ‘0000’ as follows:
If P_REV_IN_USE is less than 11, set PLCM_TYPE to ‘0000’; otherwise set PLCM_TYPE to ‘0100’.

The mobile station shall set PLCM to PLCM if PLCM is equal to ‘0001’.

If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCC_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCC_CHAN to ‘1’. The mobile station shall set IDLE_CDMA_CHAN to CDMA, IDLE_CDMABAND to CDMA, IDLE_SID to SID, IDLE_NID to NID, and IDLE_P_REV to P_REV.

The mobile station shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

If FREQ_INCL equals ‘1’, and the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.

If FREQ_INCL equals ‘1’, and the band class is supported by the mobile station, the mobile station shall perform the following actions:

- The mobile station shall store the frame offset (FRAME_OFFSET = FRAME_OFFSET); the message encryption mode indicator (ENCRYPT_MODE = ENCRYPT_MODE); the bypass indicator (BYPASS_ALERT_ANSWER = BYPASS_ALERT_ANSWER); the granted mode (GRANTED_MODE = GRANTED_MODE); the default configuration (DEFAULT_CONFIG = DEFAULT_CONFIG); the idle Frequency Assignment (IDLE_CDMA_CHAN = CDMA_CHAN); the idle band class (IDLE_CDMABAND = CDMA_BAND); the band class (CDMA_BAND = BAND_CLASS); the Frequency Assignment (CDMA_FREQ = CDMA_FREQ); and the occurrences of PILOT_PN and PWR COMB_IND for each included member of the Active Set.

- The mobile station shall perform the procedures in 2.6.11.2.

- The mobile station shall set FPC_FCH_INIT_SETPT to FPC_FCH_INIT_SETPT, FPC_FCH_CURR_SETPT to FPC_FCH_CURR_SETPT, FPC_FCH_MIN_SETPT to FPC_FCH_MIN_SETPT, FPC_FCH_MAX_SETPT to FPC_FCH_MAX_SETPT, and FPC_PRI_CHAN to ‘0’ if the mobile station supports any Radio Configuration greater than 2.

- The mobile station shall set FPC_SUBCHAN_GAIN to FPC_SUBCHAN_GAIN.

- The mobile station shall set RLGAIN_ADJ to RLGAIN_ADJ.

- The mobile station shall set REV_FCH_GATING_MODE to REV_FCH_GATING_MODE.
The mobile station shall set \( REV_PWR_CNTL_DELAY_s \) to \( REV_PWR_CNTL_DELAY_r \) if \( REV_PWR_CNTL_DELAY_INCL_r \) is equal to 1.

The mobile station shall set \( PLCM_TYPE_s \) to \( PLCM_TYPE_r \) if \( PLCM_TYPE_INCL_r \) is equal to 1; otherwise, the mobile station shall set \( PLCM_TYPE_s \) to '0000' as follows:

- If \( P_REV_IN_USE_s \) is less than 11, set \( PLCM_TYPE_s \) to '0000'; otherwise set \( PLCM_TYPE_s \) to '0100'.

The mobile station shall set \( PLCM_39_s \) to \( PLCM_39_r \) if \( PLCM_TYPE_r \) is equal to 0001.

The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8, and shall set SERV_NEG_s to enabled.

If the mobile station is currently monitoring the Paging Channel, the mobile station shall set \( IDLE_BCCH_CHAN \) to '0'; otherwise, the mobile station shall set \( IDLE_BCCH_CHAN \) to '1'. The mobile station shall set \( IDLE_SID \) to \( SID_s \), \( IDLE_NID \) to \( NID_s \), and \( IDLE_P_REV \) to \( P_REV_s \).

The mobile station shall then tune to the new Frequency Assignment and shall enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

- If \( ASSIGN_MODE_r \) equals 001, the mobile station shall perform the following actions:
  - If \( FREQ_INCL_r \) equals 0, the mobile station shall perform the following actions:
    - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    - The mobile station shall set \( CONFIG_MSG_SEQ_s \) and \( ACC_MSG_SEQ_s \) to NULL (see 2.6.2.2) and shall set \( PILOT_PN_s \) to the pilot PN sequence offset of the strongest pilot in the list (\( PILOT_PN_t \)).
    - If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set \( SYS_PAR_MSG_SEQ_s \), \( NGHBR_LST_MSG_SEQ_s \), \( EXT_NGHBR_LST_MSG_SEQ_s \), \( GEN_NGHBR_LST_MSG_SEQ_s \), \( USER_ZONE_ID_MSG_SEQ_s \), \( PRI_NGHBR_LST_MSG_SEQ_s \), \( CHAN_LST_MSG_SEQ_s \), \( EXT_CHAN_LST_MSG_SEQ_s \), \( EXT_SYS_PAR_MSG_SEQ_s \), \( GLOB_SERV_REDIR_MSG_SEQ_s \), and \( EXT_GLOB_SERV_REDIR_MSG_SEQ_s \) to NULL.
+ The mobile station shall set PAGE_CHAN s to ‘1’ and PAGECH s to the Primary Paging Channel. If the mobile station was monitoring the Forward Common Control Channel, the mobile station shall set the PRAT s to ‘00’. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

+ If RESPOND r is equal to ‘1’, the mobile station shall perform the following:
  o If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T34m seconds after receiving the Extended Channel Assignment Message.

  o If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

+ If RESPOND r is equal to ‘0’, the mobile station shall perform the following:
  o If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after receiving the Extended Channel Assignment Message.

  o If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

− If FREQ_INCL r equals ‘1’, and the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.

− If FREQ_INCL r equals ‘1’, and the band class is supported by the mobile station, the mobile station shall perform the following actions:
  + If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
The mobile station shall set CDMACH\textsubscript{s} to CDMA\_FREQ\textsubscript{r} and CDMABAND\textsubscript{s} to BAND\_CLASS\textsubscript{r}. Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT\_PN\textsubscript{s} to the pilot PN sequence offset of the strongest pilot in the list (PILOT\_PN\textsubscript{r}), and set CONFIG\_MSG\_SEQ\textsubscript{s} and ACC\_MSG\_SEQ\textsubscript{s} to NULL (see 2.6.2.2).

If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS\_PAR\_MSG\_SEQ\textsubscript{s}, NGHBR\_LST\_MSG\_SEQ\textsubscript{s}, EXT\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s}, GEN\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s}, USER\_ZONE\_ID\_MSG\_SEQ\textsubscript{s}, PRI\_NGHBR\_LST\_MSG\_SEQ\textsubscript{s}, CHAN\_LST\_MSG\_SEQ\textsubscript{s}, EXT\_CHAN\_LST\_MSG\_SEQ\textsubscript{s}, EXT\_SYS\_PAR\_MSG\_SEQ\textsubscript{s}, GLOB\_SERV\_REDIR\_MSG\_SEQ\textsubscript{s}, and EXT\_GLOB\_SERV\_REDIR\_MSG\_SEQ\textsubscript{s} to NULL.

The mobile station shall set PAGE\_CHAN\textsubscript{s} to ‘1’ and PAGECH\textsubscript{s} to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT\textsubscript{s} to ‘00’.

The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

If RESPOND\textsubscript{r} is equal to ‘1’, the mobile station shall perform the following:

- If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T\textsubscript{34m} seconds after receiving the Extended Channel Assignment Message.

- If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T\textsubscript{34m} seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

If RESPOND\textsubscript{r} is equal to ‘0’, the mobile station shall perform the following:

- If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T\textsubscript{34m} seconds after receiving the Extended Channel Assignment Message.
If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

- If ASSIGN_MODEr equals ‘010’, the mobile station shall perform the following actions:
  - If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.
  - If the mobile station supports analog operation in the requested band class, the mobile station shall perform the following actions:
    + If PACAₐ is equal to enabled, the mobile station shall set PACAₐ to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
    + If RESPONDₐ equals ‘0’, and USE_ANALOG_SYSr equals ‘1’, the mobile station shall set SERVSYSₐ to SYS_A if ANALOG_SYSr is equal to ‘0’, or set SERVSYSₐ to SYS_B if ANALOG_SYSr is equal to ‘1’. The mobile station shall then enter the analog Initialization Task with a wait-for-page indication (see [6]).
    + If RESPONDₐ equals ‘1’, and USE_ANALOG_SYSr equals ‘1’, the mobile station shall set SERVSYSₐ to SYS_A if ANALOG_SYSr is equal to ‘0’, or set SERVSYSₐ to SYS_B if ANALOG_SYSr is equal to ‘1’. The mobile station shall then enter the analog Initialization Task with a page response indication (see [6]).
    + If RESPONDₐ equals ‘0’, and USE_ANALOG_SYSr equals ‘0’, the mobile station shall enter the analog Initialization Task with a wait for page indication (see [6]).
    + If RESPONDₐ equals ‘1’, and USE_ANALOG_SYSr equals ‘0’, the mobile station shall enter the analog Initialization Task with a page response indication (see [6]).

- If ASSIGN_MODEr equals ‘011’, the mobile station shall perform the following actions:
  - If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.
If the mobile station supports analog operation in the requested band class, and the analog channel type is ‘00’, the mobile station shall store the system identification (SID_s = SID_r), voice mobile station attenuation code (VMAC_s = VMAC_r), voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r), SAT color code (SCC_s = SCC_r), and message encryption mode indicator (MEM_s = MEM_r), shall set DTX_s to ‘00’, and shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with a page response indication. If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

If the mobile station supports analog operation in the requested band class, the analog channel type is not ‘00’:

+ If the mobile supports narrow analog mode, the mobile station shall store the system identification (SID_s = SID_r), voice mobile station attenuation code (VMAC_s = VMAC_r), voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r), message encryption mode indicator (MEM_s = MEM_r), analog channel type (AN_CHAN_TYPE_s = AN_CHAN_TYPE_r) and the digital SAT code (DSCC_s = DSCC_MSB_r \times 4 + SCC_r), shall set DTX_s to ‘00’, and shall enter the Confirm Initial Narrow Analog Voice Channel Task (see [22]) with a page response indication. If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACACANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

+ If the mobile station does not support narrow analog mode, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the current state.

• If ASSIGN_MODE_r equals ‘100’, the mobile station shall perform the following actions:

  − If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

  − If GRANTED_MODE_r equals ‘00’ and the multiplex option and radio configuration specified in the DEFAULT_CONFIG_r field are not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the current state.

  − If GRANTED_MODE_r equals ‘11’, P_REV_IN_USE_s is less than 11, and the mobile station did not include a SYNC_ID field in the Page Response Message or Reconnect Message that was transmitted in this substate, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the current state.
− If SYNC_ID_INCLr is included and equals ‘1’, and the mobile station does not
have a stored service configuration corresponding to SYNC_IDr for the current
SIDₘ and NIDₘ pair, the mobile station shall send a Mobile Station Reject Order
with ORDQ field set to ‘00110111’ (Requested stored service configuration is not
available) and shall remain in the current state.

− If GRANTED_MODEr equals ‘11’, SR_ID_RESTOREr is not equal to ‘111’, and a
service option connection record corresponding to SR_ID_RESTOREr is not
contained in the stored service configuration, the mobile station shall send a
Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not
supported by the mobile station) and shall remain in the current state.

− If GRANTED_MODEr equals ‘00’ and DEFAULT_CONFIGr is not equal to ‘100’,
the mobile station shall send a Mobile Station Reject Order with ORDQ field set to
‘00000110’ (RC does not match with DEFAULT_CONFIG) and shall remain in
the current state if one of the following conditions is true:

  + FOR_RCr is not equal to the RC associated with DEFAULT_CONFIGr as
specified in Table 3.7.2.3.2.21-2.
  
  + REV_RCr is not equal to the RC associated with DEFAULT_CONFIGr as
specified in Table 3.7.2.3.2.21-2.

− If the mobile station does not support either of the Radio Configurations
(FOR_RC or REV_RC), the mobile station shall send a Mobile Station Reject Order
with the ORDQ field set to ‘00000110’ (capability not supported by the mobile
station) and remain in the current state.

− If CH_INDr = ‘01’ and the mobile station does not support Fundamental
Channel, the mobile station shall send a Mobile Station Reject Order with the
ORDQ field set to ‘00000110’ (capability not supported by the mobile station)
and remain in the current state.

− If CH_INDr = ‘10’ and the mobile station does not support the Dedicated Control
Channel, the mobile station shall send a Mobile Station Reject Order with the
ORDQ field set to ‘00000110’ (capability not supported by the mobile station)
and remain in the current state.

− If CH_INDr = ‘11’ and the mobile station does not support the Dedicated Control
Channel and Fundamental Channel concurrently, the mobile station shall send
a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability
not supported by the mobile station) and remain in the current state.

− If FREQ_INCLr equals ‘1’ and if the band class (BAND_CLASSr) is not supported
by the mobile station, the mobile station shall send a Mobile Station Reject Order
with ORDQ field set to ‘00000110’ (capability not supported by the mobile
station) and remain in the current state.
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, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00011100' (PLCM_TYPE mismatch) and remain in the current state.

If FUNDICATED_BCMC_IND_r equals '1', and the mobile station does not support BCMC reception on the Forward Fundicated Channels assigned in this message, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000110' (capability not supported by the mobile station) and remain in the current state.

If the mobile station does not send a Mobile Station Reject Order as specified above, it shall continue to perform the actions specified below.

The mobile station shall set

+ IDLE_CDMABAND = CDMABAND_s
+ IDLE_CDMACH = CDMACH_s

If FREQ_INCL_r equals '1', the mobile station shall set

+ CDMABAND_s = BAND_CLASS_r
+ CDMACH_s = CDMA_FREQ_r

The mobile station shall store the bypass indicator (BYPASS_ALERT_ANSWER_s = BYPASS_ALERT_ANSWER_r).

The mobile station shall store granted mode (GRANTED_MODE_s = GRANTED_MODE_r). If GRANTED_MODE_r equals '11', the mobile station shall perform the following:

+ The mobile station shall store the service reference to be restored (SR_ID_RESTORE_s = SR_ID_RESTORE_r).
+ If SR_ID_RESTORE_r equals '00', the mobile station shall store bitmap of service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_s = SR_ID_RESTORE_BITMAP_r).
+ If SYNC_ID_INCL_r is included and equals '1', the mobile station shall store the service configuration synchronization identifier (SYNC_ID_s = SYNC_ID_r).

The mobile station shall store the default configuration (DEFAULT_CONFIG_s = DEFAULT_CONFIG_r).

The mobile station shall store the Forward Traffic Channel Radio Configuration (FOR_RC_s = FOR_RC_r) and the Reverse Traffic Channel Radio Configuration (REV_RC_s = REV_RC_r).

The mobile station shall store the frame offset (FRAME_OFFSET_s = FRAME_OFFSET_r).

The mobile station shall store the message encryption mode indicator (ENCRYPT_MODE_s = ENCRYPT_MODE_r).
− The mobile station shall perform the procedures in 2.6.11.2.
− The mobile station shall store the Forward power control subchannel relative gain \([\text{FPC\_SUBCHAN\__GAIN}_s = \text{FPC\_SUBCHAN\__GAIN}_r]\).
− The mobile station shall set RLGAIN\_ADJ_s to RLGAIN\_ADJ_r.
− The mobile station shall set PLCM\_TYPE_s to PLCM\_TYPE_r if PLCM\_TYPE\_INCL_r is equal to ‘1’; otherwise, the mobile station shall set PLCM\_TYPE_s to ‘0000’ as follows:
  + If P\_REV\_IN\_USE_s is less than 11, set PLCM\_TYPE_s to ‘0000’; otherwise set PLCM\_TYPE_s to ‘0100’.
− The mobile station shall set PLCM\_39_s to PLCM\_39_r if PLCM\_TYPE_r is equal to ‘0001’.
− If FIXED\_PREAMBLE\_TRANSMIT\_IND_r is included, the mobile station shall set FIXED\_PREAMBLE\_TRANSMIT\_IND_s to FIXED\_PREAMBLE\_TRANSMIT\_IND_r; otherwise, the mobile station shall set FIXED\_PREAMBLE\_TRANSMIT\_IND_s to ‘0’. If FIXED\_PREAMBLE\_TRANSMIT\_IND_s equals ‘1’, the mobile station shall set FIXED\_NUM\_PREAMBLE_s to FIXED\_NUM\_PREAMBLE_r.
− The mobile station shall set REV\_FCH\_GATING\_MODE_s to REV\_FCH\_GATING\_MODE_r.
− The mobile station shall set REV\_PWR\_CNTL\_DELAY_s to REV\_PWR\_CNTL\_DELAY_r if REV\_PWR\_CNTL\_DELAY\_INCL_r is equal to ‘1’.
− If 3XFL\_1XRL\_INCL_r is equal to ‘1’, the mobile station shall set 1XRL\_FREQ\_OFFSET_s to 1XRL\_FREQ\_OFFSET_r.
− If DIRECT\_CH\_ASSIGN\_IND_r is equal to ‘1’, the mobile station shall perform the following:
  + The mobile station shall set RTC\_NOM\_PWR_s to RTC\_NOM\_PWR_r.
  + If the mobile station has not received confirmation of delivery of the Page Response Message or the Reconnect Message sent in this substate, the mobile station shall perform the following:
    o Set RTC\_NOM\_PWR\_USE\_IND to ‘1’.
    o Set DIRECT\_CH\_ASSIGN\_RECOVER\_IND_s to DIRECT\_CH\_ASSIGN\_RECOVER\_IND_r
  − If EARLY\_RL\_TRANSMIT\_IND_r is included, the mobile station shall set EARLY\_RL\_TRANSMIT\_IND_s to EARLY\_RL\_TRANSMIT\_IND_r; otherwise, the mobile station shall set EARLY\_RL\_TRANSMIT\_IND_s to ‘0’.
  − If TX\_PWR\_LIMIT\_INCL_r is set to ‘1’, the mobile station shall perform the following:
+ If the mobile station is being assigned to operate in the 1915MHz – 1920MHz block of the PCS band, the mobile station shall store the transmit power limit TX_PWR_LIMIT_S = (TX_PWR_LIMIT_T - 30dB);

+ Otherwise, the mobile station shall set TX_PWR_LIMIT_S to the limit defined in [11] for the target base station.

− The mobile station shall store the channel indicator (CH_IND_S = CH_IND_T) and the mobile station shall perform the following actions:

+ If CH_IND_T equals ‘01’, the mobile station shall set FPC_FCH_INIT_SETPT_S to FPC_FCH_INIT_SETPT_T, FPC_FCH_CURR_SETPT_S to FPC_FCH_CURR_SETPT_T, FPC_FCH_FER_S to FPC_FCH_FER_T, FPC_FCH_MIN_SETPT_S to FPC_FCH_MIN_SETPT_T, FPC_FCH_MIN_SETPT_T, FPC_FCH_MAX_SETPT_S to FPC_FCH_MAX_SETPT_T, and FPC_PRI_CHAN_S to ‘0’ if the mobile station supports any Radio Configuration greater than 2. Then for each included member of the Active Set, the mobile station shall store the following:

  o Set the PILOT_PN field to PILOT_PN_T.

  o Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL_T. If ADD_PILOT_REC_INCL_T equals ‘1’, the mobile station shall store the following:

    ◊ Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPE_T.

    ◊ If PILOT_REC_TYPE_T equals ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVEL_T and set the TD_MODE field of PILOT_REC to TD_MODE_T.

    ◊ If PILOT_REC_TYPE_T is equal to ‘001’, the mobile station shall:

      – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_T.

      – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSH_T with the Walsh Code length specified by WALSH_LENGTH_T.

    ◊ If PILOT_REC_TYPE_T is equal to ‘010’, the mobile station shall:

      – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_T.

      – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSH_T with the Walsh Code length specified by WALSH_LENGTH_T.

      – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVEL_T.

      – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE_T.

    ◊ If PILOT_REC_TYPE_T is equal to ‘011’, the mobile station shall:

      – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_T.
– Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1r.

– Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

◊ If PILOT_REC_TYPEr is equal to ‘100’, the mobile station shall:

– Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTr.

– Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1r.

– Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

– Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.

– Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

– If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r.

– Otherwise, set the AUX_PILOT_QOF field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

– If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r.

– Otherwise, set the AUX_PILOT_QOF field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

o Set the PWR_COMB_IND field to PWR_COMB_INDr.

o Set the CODE_CHAN_FCH field to CODE_CHAN_FCHr.

o Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCHr.

+ If CH_INDr equals ‘01’ and 3X_FCHINFO_INCLr equals ‘1’, for each included member of the Active Set, the mobile station store the following:
If $3X_{\text{FCH\_LOW\_INCL}}$ equals ‘1’, set the QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH\_LOW_{\text{r}}$ and the CODE\_CHAN\_FCH\_LOW field to CODE\_CHAN\_FCH\_LOW_{\text{r}}. Otherwise, set the QOF\_MASK\_ID\_FCH\_LOW field to QOF\_MASK\_ID\_FCH_{\text{r}} and the CODE\_CHAN\_FCH\_LOW to CODE\_CHAN\_FCH_{\text{r}}.

If $3X_{\text{FCH\_HIGH\_INCL}}$ equals ‘1’, set the QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH\_HIGH_{\text{r}} and the CODE\_CHAN\_FCH\_HIGH field to CODE\_CHAN\_FCH\_HIGH_{\text{r}}. Otherwise, set the QOF\_MASK\_ID\_FCH\_HIGH field to QOF\_MASK\_ID\_FCH_{\text{r}} and the CODE\_CHAN\_FCH\_HIGH to CODE\_CHAN\_FCH_{\text{r}}.

If CH\_IND_{\text{r}} equals ‘10’, the mobile station shall set FPC\_DCCH\_INIT\_SETPT_{s} to FPC\_DCCH\_INIT\_SETPT_{r}, FPC\_DCCH\_CURR\_SETPT_{s} to FPC\_DCCH\_CURR\_SETPT_{r}, FPC\_DCCH\_MIN\_SETPT_{s} to FPC\_DCCH\_MIN\_SETPT_{r}, FPC\_DCCH\_MAX\_SETPT_{s} to FPC\_DCCH\_MAX\_SETPT_{r}, FUND\_DCCH\_BCMC\_IND_{s} to FUND\_DCCH\_BCMC\_IND_{r}, and FPC\_PRI\_CHAN_{s} to ‘1’ if the mobile station supports any Radio Configuration greater than 2. Then for each included member of the Active Set, the mobile station shall store the following:

1. Set the PILOT\_PN to PILOT\_PN_{r}.
2. Set the ADD\_PILOT\_REC\_INCL field to ADD\_PILOT\_REC\_INCL_{r}. If ADD\_PILOT\_REC\_INCL is equal to ‘1’, the mobile station shall store the following:
   - Set the PILOT\_REC\_TYPE field of PILOT\_REC to PILOT\_REC\_TYPE_{r}.
   - If PILOT\_REC\_TYPE_{r} equals ‘000’, the mobile station shall set the TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL_{r} and set the TD\_MODE field of PILOT\_REC to TD\_MODE_{r}.
   - If PILOT\_REC\_TYPE_{r} is equal to ‘001’, the mobile station shall:
     - Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF_{r}.
     - Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_WALSH_{r} with the Walsh Code length specified by WALSH\_LENGTH_{r}.
   - If PILOT\_REC\_TYPE_{r} is equal to ‘010’, the mobile station shall:
     - Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF_{r}.
     - Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_WALSH_{r} with the Walsh Code length specified by WALSH\_LENGTH_{r}.
   - Set the TD\_MODE field of PILOT\_REC to TD\_MODE_{r}.
If PILOT_REC_TYPE is equal to '011', the mobile station shall:

- Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
- Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
- Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.

If PILOT_REC_TYPE is equal to '100', the mobile station shall:

- Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
- Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
- Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.
- Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.
- If ADD_INFO_INCL1_r is equal to '1', set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh Code length specified by WALSH_LENGTH1_r.
- Otherwise, set the AUX_PILOT_QOF field of PILOT_REC to QOF_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.
- If ADD_INFO_INCL2_r is equal to '1', set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2_r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2_r with the Walsh Code length specified by WALSH_LENGTH2_r.
- Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF_r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

- Set the PWR_COMB_IND field to PWR_COMB_INDr.
- Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
- Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH_r.
Set the DCCH_INCL field to DCCH_INCLr. If DCCH_INCLr equals ‘1’, the mobile station shall store the following:

- Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCHr.
- Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCHr.

+ If CH_INDr equals ‘0’ and 3X_DCCH_INFO_INCLr equals ‘1’, for each included member of the Active Set, the mobile station store the following:

- If 3X_DCCH_LOW_INCLr equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOWr and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOWr. Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCHr.

+ If 3X_DCCH_HIGH_INCLr equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGHr and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGHr. Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCHr.

+ If CH_INDr equals ‘10’, and FUNDICATED_BCMC_INDr equals ‘1’, for each included member of the Active Set, the mobile station shall store the following:

- Set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr.
- Set FOR_CPCSCHs to FOR_CPCSCHr.

+ If CH_INDr equals ‘11’, the mobile station shall set FPC_FCCH_INIT_SETPTs to FPC_FCCH_INIT_SETPTr, FPC_FCH_INIT_SETPTs to FPC_FCH_INIT_SETPTr, FPC_FCH_MIN_SETPTs to FPC_FCH_MIN_SETPTr, FPC_DCCH_INIT_SETPTs to FPC_DCCH_INIT_SETPTr, FPC_DCCH_MIN_SETPTs to FPC_DCCH_MIN_SETPTr, FPC_DCCH_MAX_SETPTs to FPC_DCCH_MAX_SETPTr, FPC_PRI_CHANs to FPC_PRI_CHANr, and FUNDICATED_BCMC_INDs to FUNDICATED_BCMC_INDr. Then for each included member of the Active Set, the mobile station shall store the following:

- Set the PILOT_PN to PILOT_PNr.

- Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC. If ADD_PILOT_REC_INCL is equal to ‘1’, the mobile station shall store the following:

- Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPEr.
If PILOT_REC_TYPEᵱ equals ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELᵱ and set the TD_MODE field of PILOT_REC to TD_MODEᵱ.

If PILOT_REC_TYPEᵱ is equal to ‘001’, the mobile station shall:

- Set the AUX_PILOT_QOF field of PILOT_REC to QOFᵱ.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHᵱ with the Walsh Code length specified by WALSH_LENGTHᵱ.

If PILOT_REC_TYPEᵱ is equal to ‘010’, the mobile station shall:

- Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOFᵱ.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHᵱ with the Walsh Code length specified by WALSH_LENGTHᵱ.
- Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVELᵱ.
- Set the TD_MODE field of PILOT_REC to TD_MODEᵱ.

If PILOT_REC_TYPEᵱ is equal to ‘011’, the mobile station shall:

- Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTᵱ.
- Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1ᵱ.
- Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2ᵱ.

If PILOT_REC_TYPEᵱ is equal to ‘100’, the mobile station shall:

- Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTᵱ.
- Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1ᵱ.
- Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2ᵱ.
- Set the AUX_PILOT_QOF field of PILOT_REC to QOFᵱ.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHᵱ with the Walsh Code length specified by WALSH_LENGTHᵱ.
– If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1r and set the
AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
AUX_PILOT_WALSH1r with the Walsh Code length specified by
WALSH_LENGTH1r.

– Otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOFr
and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to
AUX_PILOT_WALSHr with the Walsh Code length specified by
WALSH_LENGTHr.

– If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the
AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
AUX_PILOT_WALSH2r with the Walsh Code length specified by
WALSH_LENGTH2r.

– Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOFr
and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
AUX_PILOT_WALSHr with the Walsh Code length specified by
WALSH_LENGTHr.

  o Set the PWR_COMB_IND field to PWR_COMB_INDr.
  o Set the CODE_CHAN_FCH field to CODE_CHAN_FCHr.
  o Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCHr.
  o Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCHr.
  o Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCH.

+ If CH_INDr equals ‘11’ and 3X_FCH_INFO_INCLr equals ‘1’, for each included
member of the Active Set, the mobile station store the following:
  o If 3X_FCH_LOW_INCLr equals ‘1’, set the QOF_MASK_ID_FCH_LOW field
to QOF_MASK_ID_FCH_LOWr and the CODE_CHAN_FCH_LOW field to
CODE_CHAN_FCH_LOWr. Otherwise, set the QOF_MASK_ID_FCH_LOW
field to QOF_MASK_ID_FCHr and the CODE_CHAN_FCH_LOW to
CODE_CHAN_FCHr.
  o If 3X_FCH_HIGH_INCLr equals ‘1’, set the QOF_MASK_ID_FCH_HIGH
field to QOF_MASK_ID_FCH_HIGHr and the CODE_CHAN_FCH_HIGH
field to CODE_CHAN_FCH_HIGHr. Otherwise, set the
QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCHr and the
CODE_CHAN_FCH_HIGH to CODE_CHAN_FCHr.

+ If CH_INDr equals ‘11’ and 3X_DCCH_INFO_INCLr equals ‘1’, for each
included member of the Active Set, the mobile station store the following:
If 3X_DCCH_LOW_INCL equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOW. Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH.

If 3X_DCCH_HIGH_INCL equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGH and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGH. Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCH and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCH.

If CH_IND equals ‘11’ and FUNDICATED_BCMC_IND equals ‘1’, the mobile station shall store the following:

- Set REV_FCH_ASSIGNED to REV_FCH_ASSIGNED.
- Set FCH_BCMC_IND to ‘1’; otherwise, the mobile station shall set FCH_BCMC_IND to ‘0’.
- If CH_IND equals ‘11’ and FUNDICATED_BCMC_IND equals ‘1’ and FOR_CPCCH_INFO_INCL is included and is set to ‘1’, for each included member of the Active Set, the mobile station shall store the following:
  - Set FOR_CPCCH_WALSH to FOR_CPCCH_WALSH.
  - Set FOR_CPCSCH to FOR_CPCSCH.
- If CH_IND equals ‘11’ and FUNDICATED_BCMC_IND equals ‘1’ and ADD_PLCM_FOR_FCH_INCL is included and is set to ‘1’, the mobile station shall store the following:
  - Set ADD_PLCM_FOR_FCH_TYPE to ADD_PLCM_FOR_FCH_TYPE.
  - If ADD_PLCM_FOR_FCH_TYPE is equal to ‘1’, set ADD_PLCM_FOR_FCH_39 to ADD_PLCM_FOR_FCH_39.

The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8, and shall set SERV_NEG to enabled.

If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_SID to SID, IDLE_NID to NID, and IDLE_P_REV to P_REV.

If FREQ_INCL equals ‘1’, the mobile station shall then tune to the new frequency assignment.

If DIRECT_CH_ASSIGN_IND equals ‘1’ and RESPOND_IND equals ‘1’, the mobile station shall perform the following:

+ If the mobile station is in Mobile Station Idle State, then the mobile station
shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3.2) with a direct channel assignment respond indication within $T_{33m}$ seconds after the Extended Channel Assignment Message is received; otherwise, the mobile station shall enter the Page Response Substate with a direct channel assignment respond indication.

Otherwise, the mobile station shall enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

- If $\text{ASSIGN\_MODE}_r$ equals ‘101’, the mobile station shall perform the following actions:
  - If $\text{PACA}_s$ is equal to enabled, the mobile station shall set $\text{PACA}_s$ to disabled and $\text{PACA\_CANCEL}$ to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  - If $\text{GRANTED\_MODE}_r$ equals ‘11’, $\text{P\_REV\_IN\_USE}_s$ is less than 11, and the mobile station did not include a $\text{SYNC\_ID}$ field in the Page Response Message or Reconnect Message that was transmitted in this substate, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in this state.
  - If $\text{GRANTED\_MODE}_r$ equals ‘11’, $\text{SR\_ID\_RESTORE}_r$ is not equal to ‘111’, and a service option connection record corresponding to $\text{SR\_ID\_RESTORE}_r$ or $\text{SR\_ID\_RESTORE\_BITMAP}_r$ is not contained in the stored service configuration, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the current state.
  - If $\text{SYNC\_ID\_INCL}_r$ is included and equals ‘1’, and the mobile station does not have stored service configuration corresponding to $\text{SYNC\_ID}_r$ for the current SID$_s$ and NID$_s$ pair, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00110111’ (Requested stored service configuration is not available) and shall remain in the current state.
  - If the mobile station does not support any of the specified Radio Configurations (FOR_PDCH_RC, FOR_FCH_DCCH_RC or REV_FCH_DCCH_RC), the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.
  - If $\text{EXT\_CH\_IND}_r$ signals the allocation of a F-FCH or R-FCH and the mobile station does not support the Fundamental Channel, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.
  - If $\text{EXT\_CH\_IND}_r$ signals the allocation of a F-DCCH or R-DCCH and the mobile station does not support the Dedicated Control Channel, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.
If FREQ_INCL equals ‘1’ and if the band class (BAND_CLASS) is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.

If PLCM_TYPE equals ‘0010’ and IMSI_O is derived from IMSI_T, or if PLCM_TYPE equals ‘0011’ and IMSI_O is derived from IMSI_M, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00011100’ (PLCM_TYPE mismatch) and remain in the current state.

If FUNDICATED_BCMC_IND equals ‘1’, and the mobile station does not support BCMC reception on the Forward Fundicated Channels assigned in this message, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the current state.

If the mobile station does not send a Mobile Station Reject Order as specified above, it shall continue to perform the actions specified below.

Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC layer.

If FREQ_INCL equals ‘1’, the mobile station shall set

+ CDMABAND = BAND_CLASS
+ CDMACH = CDMA_FREQ

The mobile station shall store the bypass indicator (BYPASS_ALERT_ANSWER = BYPASS_ALERT_ANSWERr).

The mobile station shall store the granted mode indicator (GRANTED_MODE = GRANTED_MODEr). Furthermore, if GRANTED_MODEr equals ‘11’, the mobile station shall store service reference to be restored (SR_ID_RESTORE = SR_ID_RESTOREr).

If SR_ID_RESTOREr equals ‘000’, the mobile station shall store bitmap of service reference identifiers to be restored (SR_ID_RESTORE_BITMAP = SR_ID_RESTORE_BITMAPr).

If SYNC_ID_INCL is included and equals ‘1’, the mobile station shall store the service configuration synchronization identifier (SYNC_ID = SYNC_IDr).

The mobile station shall store the frame offset (FRAME_OFFSET = FRAME_OFFSETr).

The mobile station shall store the message encryption mode indicator (ENCRYPT_MODE = ENCRYPT_MODEr).

The mobile station shall perform the following procedures in the order listed below:

+ If D_SIG_ENCRYPT_MODEr is included, the mobile station shall perform the following:
If D_SIG_ENCRYPT_MODE\textsubscript{r} is equal to ‘000’, the mobile station shall set D_SIG_ENCRYPT_MODE\textsubscript{s} to C_SIG_ENCRYPT_MODE\textsubscript{s}; otherwise, the mobile station shall set D_SIG_ENCRYPT_MODE\textsubscript{s} to D_SIG_ENCRYPT_MODE\textsubscript{r}, ENC_KEY\textsubscript{s} to the most recently generated CMEAKEY in the mobile station associated with AUTHR of the \emph{Page Response Message}, and EXT_ENCRYPT_SEQ[0] and EXT_ENCRYPT_SEQ[1] to 256 \times ENC_SEQ_H (the ENC_SEQ_H field in the \emph{Page Response Message}).

If ENC_KEY\_SIZE\textsubscript{r} is included, the mobile station shall set ENC_KEY\_SIZE\textsubscript{s} to ENC_KEY\_SIZE\textsubscript{r}.

If C_SIG_ENCRYPT_MODE is included, the mobile station shall set C_SIG_ENCRYPT_MODE\textsubscript{s} to C_SIG_ENCRYPT_MODE\textsubscript{r}.

The mobile station shall set EXT_CH_IND\textsubscript{s} to EXT_CH_IND\textsubscript{r}.

The mobile station shall set CH_IND\textsubscript{s} to ‘00’.

If EXT_CH_IND\textsubscript{r} signals the allocation of a F-FCH or a F-DCCH, the mobile station shall store the Forward power control subchannel relative gain [FPC\_SUBCHAN\_GAIN\textsubscript{s} = FPC\_SUBCHAN\_GAIN\textsubscript{r}].

The mobile station shall set RLGAIN\_ADJS to RLGAIN\_ADJR.

The mobile station shall set PLCM\_TYPE\textsubscript{s} to PLCM\_TYPE\textsubscript{r} if PLCM\_TYPE\_INCL\textsubscript{r} is equal to ‘1’; otherwise, the mobile station shall set PLCM\_TYPE\textsubscript{s} to ‘0000’ as follows:

If P\_REV\_IN\_USE\textsubscript{s} is less than 11, set PLCM\_TYPE\textsubscript{s} to ‘0000’; otherwise set PLCM\_TYPE\textsubscript{s} to ‘0100’.

The mobile station shall set PLCM\_39\textsubscript{s} to PLCM\_39\textsubscript{r} if PLCM\_TYPE\textsubscript{r} is equal to ‘0001’.

The mobile station shall set FUNDICATED\_BCM\_IND\textsubscript{s} to FUNDICATED\_BCM\_IND\textsubscript{r}. If FUNDICATED\_BCM\_IND\textsubscript{r} equals ‘1’ and the EXT_CH_IND\textsubscript{r} signals the allocation of a F-FCH, the mobile station shall set FCH\_BCM\_IND to ‘1’; otherwise, the mobile station shall set FCH\_BCM\_IND to ‘0’.

If FUNDICATED\_BCM\_IND\textsubscript{r} equals ‘1’ and ADD\_PLCM\_FOR\_FCH\_INCL\textsubscript{r} is included and is set to ‘1’, the mobile station shall store the following:

Set ADD\_PLCM\_FOR\_FCH\_TYPE\textsubscript{s} to ADD\_PLCM\_FOR\_FCH\_TYPE\textsubscript{r}.

Set ADD\_PLCM\_FOR\_FCH\_39\textsubscript{s} to ADD\_PLCM\_FOR\_FCH\_39\textsubscript{r} if ADD\_PLCM\_FOR\_FCH\_TYPE\textsubscript{r} is equal to ‘1’.

If EXT_CH_IND\textsubscript{r} signals the allocation of R-FCH, the mobile station shall set REV\_FCH\_GATING\_MODE\textsubscript{s} to REV\_FCH\_GATING\_MODE\textsubscript{r}.

The mobile station shall set REV\_PWR\_CNTL\_DELAY\textsubscript{s} to REV\_PWR\_CNTL\_DELAY\textsubscript{r} if REV\_PWR\_CNTL\_DELAY\_INCL\textsubscript{r} is equal to ‘1’.
The mobile station shall set FULL_CI_FEEDBACK_IND s to FULL_CI_FEEDBACK_IND r.

If EXT_CH_IND r equals '01000', the mobile station shall set FOR_CPCCH_RATE s to FOR_CPCCH_RATE r, and FOR_CPCCH_UPDATE_RATE s to FOR_CPCCH_UPDATE_RATE r, otherwise, the mobile station shall set FOR_CPCCH_RATE s to '00', and FOR_CPCCH_UPDATE_RATE s to '00'.

The mobile station shall set REV_CQICH_FRAME_OFFSET s to REV_CQICH_FRAME_OFFSET r.

The mobile station shall set REV_CQICH_REPS s to REV_CQICH_REPS r.

The mobile station shall set REV_ACKCH_REPS s to REV_ACKCH_REPS r.

The mobile station shall set FOR_PDCH_RC s to FOR_PDCH_RC r.

If EXT_CH_IND r signals the allocation of a R-PDCH, the mobile station shall set REV_PDCH_RC s to REV_PDCH_RC r.

If EXT_CH_IND r signals the allocation of a F-FCH, the mobile station shall set FOR_FCH_RC s to FOR_FCH_DCCH_RC r.

If EXT_CH_IND r signals the allocation of a F-DCCH, the mobile station shall set FOR_FCH_RC s to FOR_FCH_DCCH_RC r.

If EXT_CH_IND r signals the allocation of a R-FCH, the mobile station shall set REV_FCH_RC s to REV_FCH_DCCH_RC r.

If EXT_CH_IND r signals the allocation of a R-DCCH, the mobile station shall set REV_DCCH_RC s to REV_FCH_DCCH_RC r.

If EXT_CH_IND r signals the allocation of a F-FCH and a F-DCCH, the mobile station shall set FPC_PRI_CHAN s to FPC_PRI_CHAN r.

If EXT_CH_IND r signals the allocation of a F-FCH, the mobile station shall set FPC_FCH_INIT_SETPT s to FPC_FCH_INIT_SETPT r, FPC_FCH_CURR_SETPT s to FPC_FCH_CURR_SETPT r, FPC_FCH_MIN_SETPT s to FPC_FCH_MIN_SETPT r, FPC_FCH_MAX_SETPT s to FPC_FCH_MAX_SETPT r.

If EXT_CH_IND r signals the allocation of a F-DCCH, the mobile station shall set FPC_DCCH_INIT_SETPT s to FPC_DCCH_INIT_SETPT r, FPC_DCCH_CURR_SETPT s to FPC_DCCH_INIT_SETPT r, FPC_DCCH_MIN_SETPT s to FPC_DCCH_MIN_SETPT r, FPC_DCCH_MAX_SETPT s to FPC_DCCH_MAX_SETPT r.

If EARLY_RL_TRANSMIT_IND r is included, the mobile station shall set EARLY_RL_TRANSMIT_IND s to EARLY_RL_TRANSMIT_IND r; otherwise, the mobile station shall set EARLY_RL_TRANSMIT_IND s to '0'.
If the `FIXED_PREAMBLE_TRANSMIT_IND` is included, the mobile station shall set `FIXED_PREAMBLE_TRANSMIT_IND` to `FIXED_PREAMBLE_TRANSMIT_IND`; otherwise, the mobile station shall set `FIXED_PREAMBLE_TRANSMIT_IND` to `0`. If `FIXED_PREAMBLE_TRANSMIT_IND` equals `1`, the mobile station shall store `FIXED_NUM_PREAMBLE` to `FIXED_NUM_PREAMBLE`.

If `TX_PWR_LIMIT_INCLUDED` is set to `1`, the mobile station shall perform the following:

+ If the mobile station is being assigned to operate in the 1915MHz – 1920MHz block of the PCS band, the mobile station shall store the transmit power limit `TX_PWR_LIMIT_S = (TX_PWR_LIMIT_TR - 30dB)`;

+ Otherwise, the mobile station shall set `TX_PWR_LIMIT_S` to the limit defined in [11] for the target base station.

If `FOR_PDCH_PARAMS_INCLUDED` is equal to `1`, the mobile station shall set `FOR_PDCH_COMMON_PARAMS_S = ‘0’`; otherwise, if `FOR_PDCH_COMMON_PARAMS_S` is equal to `0`, the mobile station shall send a `Mobile Station Reject Order` with `ORDQ` equal to `00000011` (message structure not acceptable) and remain in the current state.

If `FOR_PDCH_RLGAIN_INCLUDED` is included and equal to `1`, the mobile station shall set `RLGAIN_ACKCH_PILOT_S` to `RLGAIN_ACKCH_PILOT_TR`, and `RLGAIN_CQICH_PILOT_S` to `RLGAIN_CQICH_PILOT_TR`.

If `FOR_PDCH.Params_INCLUDED` is equal to `1`, the mobile station shall set `NUM_SOFT_SWITCHING_FRAMES_S` to `NUM_SOFT_SWITCHING_FRAMES_TR` + 1, and `NUM_SOFTER_SWITCHING_FRAMES_S` to `NUM_SOFTER_SWITCHING_FRAMES_TR` + 1.

If `CHM_SWITCHING_PARAMS_INCLUDED` is included and equal to `1`, the mobile station shall set `NUM_SOFT_SWITCHING_FRAMES_CHM_S` to `NUM_SOFT_SWITCHING_FRAMES_CHM_TR` + 1, and `NUM_SOFTER_SWITCHING_FRAMES_CHM_S` to `NUM_SOFTER_SWITCHING_FRAMES_CHM_TR` + 1.

If `CHM_SWITCHING_PARAMS_INCLUDED` is included and equal to `0`, the mobile station shall set `NUM_SOFT_SWITCHING_FRAMES_CHM_S` to `NUM_SOFT_SWITCHING_FRAMES_CHM_TR` + 1, and `NUM_SOFTER_SWITCHING_FRAMES_CHM_S` to `NUM_SOFTER_SWITCHING_FRAMES_CHM_TR` + 1.

If `FOR_PDCH_PARAMS_INCLUDED` is equal to `1`, the mobile station shall set `NUM_SOFT_SWITCHING_SLOTS_S` according to Table 3.7.2.3.2.21-9 based on the value of `NUM_SOFT_SWITCHING_SLOTS_TR`.

If `FOR_PDCH_PARAMS_INCLUDED` is equal to `1`, the mobile station shall set `NUM_SOFTER_SWITCHING_SLOTS_S` according to Table 3.7.2.3.2.21-9 based on the value of `NUM_SOFTER_SWITCHING_SLOTS_TR`.
− If CHM SWITCHING PARMS INCL is included and equal to ‘1’, the mobile station shall:
  + Set NUM SOFT SWITCHING SLOTS CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM SOFT SWITCHING SLOTS CHMr.
  + Set NUM SOFTER SWITCHING SLOTS CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM SOFTER SWITCHING SLOTS CHMr.

− If CHM SWITCHING PARMS INCL is included and equal to ‘0’, the mobile station shall:
  + Set NUM SOFT SWITCHING SLOTS CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM SOFT SWITCHING SLOTS CHMr.
  + Set NUM SOFTER SWITCHING SLOTS CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM SOFTER SWITCHING SLOTS CHMr.

− If FOR_PDCH PARMS INCL is equal to ‘1’, the mobile station shall set PDCH SOFT SWITCHING DELAYs to PDCH SOFT SWITCHING DELAYr + 1, and PDCH SOFTER SWITCHING DELAYs to PDCH SOFTER SWITCHING DELAYr + 1.

− If TX DISABLED TIMER INCL is equal to ‘1’, the mobile station shall set TX DISABLED TIMERs to TX DISABLED TIMERr; otherwise, the mobile station shall set TX DISABLED TIMERs to T81m.

− If EXT CH IND signals the allocation of a R-PDCH, the mobile station shall:
  + Set FOR GCH ASSIGNEDs to FOR GCH ASSIGNEDr.
  + Set FOR RCCH ASSIGNEDs to FOR RCCH ASSIGNEDr.
  + If FOR RCCH ASSIGNEDs is equal to ‘1’, the mobile station shall:
    o Set FOR RCCH DRC MODEs to FOR RCCH DRC MODEr.
    o Set FOR RCCH REPETITIONs to FOR RCCH REPETITIONr.
  + If FOR ACKCH ASSIGNEDr is equal to ‘1’, the mobile station shall set FOR ACKCH MODEs to FOR ACKCH MODEr.
  + If FOR ACKCH COMB SELr is included, the mobile station shall set FOR ACKCH COMB SELs to FOR ACKCH COMB SELr; otherwise, the mobile station shall set FOR ACKCH COMB SELs to ‘0’.
  + If REV_PDCH RLGAIN INCLr is included and equal to ‘1’, the mobile station shall perform the following:
    o The mobile station shall set RLGAIN_SPICH_PILOTs to RLGAIN_SPICH_PILOTr.
    o The mobile station shall set RLGAIN_REQCH_PILOTs to RLGAIN_REQCH_PILOTr.
The mobile station shall set RLGAIN_PDCCH_PILOT\_S to RLGAIN_PDCCH_PILOT\_R.

+ If REV_PDCH_PARMS\_1\_INCL\_R is included and equal to ‘1’, the mobile station shall perform the following:
  o The mobile station shall set REV_PDCH_TABLE_SEL\_S to REV_PDCH_TABLE_SEL\_R.
  o The mobile station shall set REV_PDCH_MAX\_AUTO\_TPR\_S to REV_PDCH_MAX\_AUTO\_TPR\_R.

- Otherwise, the mobile station shall:
  + Set FOR\_GCH\_ASSIGNED\_S to NULL.
  + Set FOR\_RCCH\_ASSIGNED\_S to NULL.

- For each included member of the Active Set, the mobile station shall store the following:
  + Set the PILOT\_PN field to PILOT\_PN\_R.
  + Set the ADD_PILOT\_REC\_INCL field to ADD_PILOT\_REC\_INCL\_R. If ADD_PILOT\_REC\_INCL\_R equals ‘1’, the mobile station shall store the following:
    o Set the PILOT\_REC\_TYPE field of PILOT\_REC to PILOT\_REC\_TYPE\_R.
    o If PILOT\_REC\_TYPE\_R equals ‘000’, the mobile station shall set the TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL\_R and set the TD\_MODE field of PILOT\_REC to TD\_MODE\_R.
    o If PILOT\_REC\_TYPE\_R is equal to ‘001’, the mobile station shall:
      ◊ Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF\_R.
      ◊ Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_PILOT\_WALSH\_R with the Walsh Code length specified by WALSH\_LENGTH\_R.
    o If PILOT\_REC\_TYPE\_R is equal to ‘010’, the mobile station shall:
      ◊ Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF\_R.
      ◊ Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_WALSH\_R with the Walsh Code length specified by WALSH\_LENGTH\_R.
      ◊ Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to AUX\_TD\_POWER\_LEVEL\_R.
      ◊ Set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE\_R.
  ◊ Set FOR\_PDCH\_INCL\_S to FOR\_PDCH\_INCL\_R.
  ◊ If FOR\_PDCH\_INCL\_R is equal to ‘1’, the mobile station shall perform the following:
If FOR_PDCH_PARMS_INCL_r is equal to ‘1’, the mobile station shall store the following parameters:
- The mobile station shall set WALSH_TABLE_ID_s to WALSH_TABLE_ID_r.
- The mobile station shall set NUM_PDCCH_s to NUM_PDCCH_r.
- The mobile station shall store FOR_PDCCH_WALSH_s[i] to the i^{th} occurrence of FOR_PDCCH_WALSH_r.

If EXT_CH_IND_r signals the allocation of a F-CPCCH, the mobile station shall set FOR_CPCCH_WALSH_s to FOR_CPCCH_WALSH_r, and, FOR_CPCSCH_s to FOR_CPCSCH_r.

If EXT_CH_IND_r equals ‘01000’, the mobile station shall set FOR_CPCCH_RATE_s to FOR_CPCCH_RATE_r.

The mobile station shall store FOR_PDCCH_WALSH_s[i] to the i^{th} occurrence of FOR_PDCCH_WALSH_r.

The mobile station shall set PWR_COMB_IND_s to PWR_COMB_IND_r.

If PDCH_GROUP_IND_INCL_r is equal to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIER_s as follows:
- If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
  - The mobile station shall set PDCH_GROUP_IDENTIFIER_s to ‘000’;
- Otherwise, the mobile station shall perform the following:
  - If PDCH_GROUP_IND_r is set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIER_s to the same value as that of the previous pilot in the list that has a F-PDCH assigned; otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIER_s to the value one greater than that of the previous pilot in the list that has a F-PDCH assigned.
- Otherwise, the mobile station shall perform the following:
  - If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
    - The mobile station shall set PDCH_GROUP_IDENTIFIER_s to ‘000’;
  - Otherwise, the mobile station shall perform the following:
    - If F-PDCH is assigned for this pilot, the mobile station shall perform the following:
+ If PWR_COMB_IND is set to ‘1’, and there are no pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.

+ If PWR_COMB_IND is set to ‘1’, and all pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned have PWR_COMB_IND set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.

+ Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the value one greater than that of the previous pilot in the list.

– Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to NULL.

ο If EXT_CH_IND signals the allocation of a F-FCH, the mobile station shall set CODE_CHAN_FCHs = CODE_CHAN_FCHr, and QOF_MASK_ID_FCHs = QOF_MASK_ID_FCHr.

ο If EXT_CH_IND signals the allocation of a F-DCCH, the mobile station shall set CODE_CHAN_DCCHs = CODE_CHAN_DCCHr, and QOF_MASK_ID_DCCHs = QOF_MASK_ID_DCCHr.

ο If FOR_PDCH_INCL is equal to ‘1’, EXT_CH_IND signals the allocation of a R-PDCH, and FOR_ACKCH_ASSIGNED is equal to ‘1’, the mobile station shall set FOR_ACKCH_WALSH_INDEXs to FOR_ACKCH_WALSH_INDEXr, and FOR_ACKSCH_INDEXs to FOR_ACKSCH_INDEXr.

ο If FOR_PDCH_INCL is equal to ‘1’, and if FOR_RCCH_ASSIGNED is included and set to ‘1’, the mobile station shall set FOR_RCCH_WALSH_INDEXs to FOR_RCCH_WALSH_INDEXr, FOR_RCCH_SCH_INDEXs to FOR_RCCH_SCH_INDEXr, and FOR_RCCH_OFFSETs to FOR_RCCH_OFFSETr.

ο If FOR_RCCH_INCL is included and set to ‘1’, the mobile station shall do the following:

◊ Set FOR_RCCH_WALSH_INDEXs to FOR_RCCH_WALSH_INDEXr.

◊ Set FOR_RCSCH_INDEXs to FOR_RCSCH_INDEXr.

ο If FOR_PDCH_INCL is equal to ‘1’, and if FOR_GCH_ASSIGNED is included and set to ‘1’, the mobile station shall perform the following:

◊ Set NUM_FOR_GCHs to NUM_FOR_GCHr, and
For each of the NUM_FOR_GCHs occurrences of FOR_GCH_WALSH_INDEXr, the mobile station shall set FOR_GCH_WALSH_INDEXs[j] to FOR_GCH_WALSH_INDEXr[j].

Otherwise, the mobile station shall perform the following:

- Set NUM_FOR_GCHs to 0, and
- Set FOR_GCH_WALSH_INDEXs to NULL.

The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8, and shall set SERV_NEGs to enabled.

- If DIRECT_CH_ASSIGN_INDr is equal to ‘1’, the mobile station shall perform the following:
  - The mobile station shall set RTC_NOM_PWRs to RTC_NOM_PWRr.
  - If the mobile station has not received confirmation of delivery of the Page Response Message or the Reconnect Message sent in this substate, the mobile station shall perform the following:
    - Set RTC_NOM_PWR_USE_IND to ‘1’.
    - Set DIRECT_CH_ASSIGN_RECOVERs to DIRECT_CH_ASSIGN_RECOVERr.

If DIRECT_CH_ASSIGN_INDr is equal to ‘1’, the mobile station shall set DIRECT_CH_ASSIGN_RECOVERs to DIRECT_CH_ASSIGN_RECOVERr.

- If FREQ_INCLr equals ‘1’, the mobile station shall then tune to the new frequency assignment.

- If DIRECT_CH_ASSIGN_INDr is equal to ‘1’ and RESPOND_INDr is equal to ‘1’, the mobile station shall perform the following:
  - If the mobile station is in Mobile Station Idle State, then the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3.2) with a direct channel assignment respond indication within T33m seconds after the Extended Channel Assignment Message is received; otherwise, the mobile station shall enter the Page Response Substate with a direct channel assignment respond indication.

Otherwise, the mobile station shall enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

8. Fast Call Setup Order:

- If ORDQr is equal to ‘00000000’, the mobile station shall process the message and respond with a Fast Call Setup Order as specified in 2.6.12.1.
- If ORDQr is equal to ‘00000001’, the mobile station shall process the message as specified in 2.6.12.1.

9. Feature Notification Message
10. **Local Control Order**

11. **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_Ps-p equals the least significant four bits of ORDQr). 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.

11. **Maintenance Required Order:** The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSNs-p equals the least significant four bits of ORDQr). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

12. **Registration Accepted Order:** The mobile station shall perform the procedures as specified in 2.6.11.1.

13. **RegistrationRejected 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 = ‘0000100’), the mobile station shall set all the bits of the TMSI_CODEs-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).

14. **Release Order:** If NDSS_ORIGs is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled, and should indicate to the user that the call origination has been canceled. The mobile station shall enter the Mobile Station Idle State or the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1). If the mobile station enters the Mobile Station Idle State, and if PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

15. **Retry Order:** The mobile station shall process the message as follows:

- If RETRY_TYPEr is equal to ‘000’, the mobile station shall set RETRY_DELAYs[RETRY_TYPE] to 0, where RETRY_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.

- If RETRY_TYPEr is equal to ‘001’, ‘100’, or ‘101’, the mobile station shall perform the following:
  - If RETRY_DELAYr is equal to ‘00000000’, then the mobile station shall set RETRY_DELAYs[RETRY_TYPEr] to 0.
  - If RETRY_DELAYr is not equal to ‘00000000’, the mobile station shall set RETRY_DELAYs[RETRY_TYPEr] as follows:
If the most significant bit of the RETRY_DELAY is ‘0’, set RETRY_DELAY_UNITs to 1000ms. If the most significant bit of the RETRY_DELAY is ‘1’, set RETRY_DELAY_UNITs to 60000ms.

The mobile station shall set RETRY_DELAY_VALUEs to the seven least significant bits of RETRY_DELAY.

The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUEs × RETRY_DELAY_UNITs ms as RETRY_DELAYs[RETRY_TYPEr].

17. **Security Mode Command Message**: The mobile station shall perform the procedures as specified in 2.6.11.4.

18. **Service Redirection Message**: The mobile station shall process the message as follows:

   - If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to ‘00000110’ (message requires a capability that is not supported by the mobile station).
   - If DELETE_TMSI is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’. The mobile station shall disable the full-TMSI timer.
   - The mobile station shall set RETURN_IF_FAILs = RETURN_IF_FAILr.
   - If RECORD_TYPE is equal to ‘00000000’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT_REC and shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).

19. **SSD Update Message**: The mobile station shall respond to the message as specified in 2.3.12.1.5.

20. **Status Request Message**: The mobile station shall disable the System Access State timer and respond to the message. If P_REV_IN_USEs is less than or equal to three, the mobile station shall respond with a *Status Response Message*. If P_REV_IN_USEs is greater than three, the mobile station shall respond with an Extended Status Response Message. If the message does not specify any qualification information (QUAL_INFO_TYPEr is equal to ‘00000000’), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL_INFO_TYPEr is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASSr) in the response. If the message specifies a band class and an operating mode (QUAL_INFO_TYPEr is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASSr) and operating mode (OP_MODEr) 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).

21. 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_LENs-p to TMSI_ZONE_LENr;
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING_TMSI_ZONE_LENs-p least significant octets of ASSIGNING_TMSI_ZONEs-p to TMSI_ZONEr, and
- The mobile station shall store the TMSI code by setting TMSI_CODEs-p to TMSI_CODEr.

The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIMEs-p to TMSI_EXP_TIMEr. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a TMSI Assignment Completion Message within T56m seconds.

22. User Zone Reject Message

23. Any other message: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

If the mobile station performs an access probe handoff or access handoff and receives any of the following messages, it shall process the message as specified in 2.6.3.1.3:

- If the mobile station is currently monitoring the Paging Channel:
  1. System Parameters Message
  2. Access Parameters Message
  3. Neighbor List Message
  4. Extended System Parameters Message
  5. Extended Neighbor List Message
  6. General Neighbor List Message
  7. Global Service Redirection Message
  8. Extended Global Service Redirection Message
• If the mobile station is currently monitoring the Primary Broadcast Control Channel:
  1. ANSI-41 System Parameters Message
  2. Enhanced Access Parameters Message
  3. Universal Neighbor List Message
  4. MC-RR Parameters Message
  5. Extended Global Service Redirection Message

2.6.3.4 Mobile Station Order/Message Response Substate

In this substate, the mobile station sends a message that is a response to a message received from the base station. If the base station responds to the mobile station’s message with an authentication request, the mobile station responds in this substate.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see [4]).

Upon entering the Mobile Station Order/Message Response Substate, the mobile station shall send the response message.

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

• If PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

• The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.3.2.

• The mobile station shall disable its transmitter.

• The mobile station shall enter the Mobile Station Idle State.

If the mobile station receives confirmation of delivery of any message sent by the mobile station in this substate, it shall send a response in this substate if required, and shall then enter the Mobile Station Idle State.
If PACA is equal to enabled, the mobile station shall set PACA_CANCEL to ‘1’ when the
user directs the mobile station to cancel a PACA call.

If the mobile station is to exit the *System Access State* as a result of processing Layer 3
fields of a message requiring an acknowledgment, the mobile station shall exit the *System
Access State* after Layer 3 receives an indication from Layer 2 that the acknowledgment to
the message has been sent and acknowledged.

If Layer 3 receives a message with an indication from Layer 2 that an access attempt for a
message being transmitted was not terminated as a result of processing the Layer 2 fields
of the received message, the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the
message or order is outside its permissible range, the mobile station may send a *Mobile
Station Reject Order* with ORDQ equal to ‘00000100’ (message field not in valid range).

1. **Authentication Challenge Message**: The mobile station shall respond to the message
   as specified in 2.3.12.1.4, regardless of the value of AUTHS.

2. **Authentication Request Message**: The mobile station shall process the message and
   shall respond as specified in 2.3.12.5.2.

3. **Base Station Challenge Confirmation Order**: The mobile station shall respond to the
   message as specified in 2.3.12.1.5.

4. **Base Station Reject Order**: The mobile station shall perform the procedures as
   specified in 2.6.11.5.

11. **Data Burst Message**

12. **Fast Call Setup Order**:
    - If ORDQf is equal to ‘00000000’, the mobile station shall process the message
      and respond with a *Fast Call Setup Order* as specified in 2.6.12.1.
    - If ORDQf is equal to ‘00000001’, the mobile station shall process the message
      as specified in 2.6.12.1.

13. **Feature Notification Message**

14. **Local Control Order**

15. **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_Ps-P equals the least significant four bits of
    ORDQf). 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*.

16. **Maintenance Required Order**: The mobile station shall record the reason for the
    *Maintenance Required Order* in the mobile station’s semi-permanent memory
(MAINTRSN\textsubscript{s-p} equals the least significant four bits of \textit{ORDQ}r). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

17. Registration Accepted Order: The mobile station shall perform the procedures as specified in 2.6.11.1.

18. 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 (\textit{ORDQ} = ‘00000100’), the mobile station shall set all the bits of the TMSI\textit{CODES}_{s-p} to ‘1’. The mobile station shall enter the \textit{System Determination Substate} of the \textit{Mobile Station Initialization State} with a registration rejected indication (see 2.6.1.1).

19. Retry Order: The mobile station shall process the message as follows:

- If RETRY\_TYPE\textsubscript{r} is equal to ‘000’, the mobile station shall set RETRY\_DELAY\textsubscript{s[RETRY\_TYPE]} to 0, where RETRY\_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.
- If RETRY\_TYPE\textsubscript{r} is equal to ‘001’, ‘100’, or ‘101’, the mobile station shall perform the following:
  - If RETRY\_DELAY\textsubscript{r} is equal to ‘00000000’, then the mobile station shall set RETRY\_DELAY\textsubscript{s[RETRY\_TYPE]} to 0.
  - If RETRY\_DELAY\textsubscript{r} is not equal to ‘00000000’, the mobile station shall set RETRY\_DELAY\textsubscript{s[RETRY\_TYPE]} as follows:
    + If the most significant bit of the RETRY\_DELAY\textsubscript{r} is ‘0’, set RETRY\_DELAY\_UNIT\textsubscript{s} to 1000ms. If the most significant bit of the RETRY\_DELAY\textsubscript{r} is ‘1’, set RETRY\_DELAY\_UNIT\textsubscript{s} to 60000ms.
    + The mobile station shall set RETRY\_DELAY\_VALUE\textsubscript{s} to the seven least significant bits of RETRY\_DELAY\textsubscript{r}.
    + The mobile station shall store the next system time 80 ms boundary + RETRY\_DELAY\_VALUE\textsubscript{s} × RETRY\_DELAY\_UNIT\textsubscript{s} ms as RETRY\_DELAY\textsubscript{s[RETRY\_TYPE]}.

20. Security Mode Command Message: The mobile station shall perform the procedures as specified in 2.6.11.4.

21. Service Redirection Message: The mobile station shall process the message as follows:

- If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a Mobile Station Reject Order with \textit{ORDQ} equal to ‘00000110’ (message requires a capability that is not supported by the mobile station).
- If DELETE\_TMSI\textsubscript{r} is equal to ‘1’, the mobile station shall set all the bits of TMSI\textit{CODES}_{s-p} to ‘1’. The mobile station shall disable the full-TMSI timer.
• The mobile station shall set RETURN_IF_FAIL\textsubscript{s} = RETURN_IF_FAIL\textsubscript{r}.

• If RECORD\_TYPE\textsubscript{r} is equal to ‘00000000’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT\_REC\textsubscript{s} and shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).

22. **SSD Update Message**: The mobile station shall respond to the message as specified in 2.3.12.1.5.

23. **Status Request Message**: The mobile station shall disable the System Access State timer and respond to the message. If P\_REV\_IN\_USE\textsubscript{s} is less than or equal to three, the mobile station shall respond with a Status Response Message. If P\_REV\_IN\_USE\textsubscript{s} is greater than three, the mobile station shall respond with an Extended Status Response Message. If the message does not specify any qualification information (QUAL\_INFO\_TYPE\textsubscript{r} is equal to ‘00000000’), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL\_INFO\_TYPE\textsubscript{r} is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND\_CLASS\textsubscript{r}) in the response. If the message specifies a band class and an operating mode (QUAL\_INFO\_TYPE\textsubscript{r} is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND\_CLASS\textsubscript{r}) and operating mode (OP\_MODE\textsubscript{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\textsubscript{s-p} to TMSI\_ZONE\_LEN\textsubscript{r},

• The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING\_TMSI\_ZONE\_LEN\textsubscript{s-p} least significant octets of ASSIGNING\_TMSI\_ZONE\textsubscript{s-p} to TMSI\_ZONE\textsubscript{r}, and

• The mobile station shall store the TMSI code by setting TMSI\_CODE\textsubscript{s-p} to TMSI\_CODE\textsubscript{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 T56m seconds.

25. User Zone Reject Message

26. Any other message: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

2.6.3.5 Mobile Station Origination Attempt Substate

In this substate, the mobile station sends an Origination Message or a Reconnect Message. If the mobile station sends a Reconnect Message, it shall set the ORIG_IND field of the message to ‘1’.

If directed by the user to transmit a Short Data Burst (see [30]) and the mobile station sends a Reconnect Message in assured mode in this substate, the mobile station may include a Short Data Burst in the Reconnect Message by setting the SDB_INCL field to ‘1’, if all of the following conditions are true:

- SDB_SUPPORTED_s and SDB_IN_RCNM_IND_s are equal to ‘1’, and
- ACCT is not enabled for the service option number associated with the Short Data Burst as follows:
  - The service option number associated with the Short Data Burst is not equal to any ACCT.SO entry in ACCT.SO_LIST, and
  - The service option group number of the service option associated with the Short Data Burst is not equal to any ACCT.SO_GRP entry in ACCT.SO_GRP_LIST.

The mobile station shall not send the Reconnect Message if RECONNECT_MSG_IND_s equals ‘0’, or if this message is not being sent to reconnect a dormant packet data service instance, or the information that needs to be conveyed to the base station for the dormant packet data reconnection (PREV_SID, PREV_NID, PREV_PZID. See [42] for details) can not be carried in a Reconnect Message.

If P_REV_IN_USE_s is greater than or equal to 11 and the Origination Message is being sent to perform packet data dormant handoff, the mobile station shall include all dormant packet data service instances (see [42]) up to the limit specified by MAX_ADD_SERV_INSTANCE_s.

If the base station responds to the Origination Message or the Reconnect Message with an authentication request, the mobile station responds in this substate.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).
When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see [4]).

Upon entering the Mobile Station Origination Attempt Substate, the mobile station shall set RLGAIN_ADJ₈ to ‘0000’, set PLCM_TYPE₈ to ‘0000’, and perform the following:

- If P_REV_IN_USE₈ is less than 11, set PLCM_TYPE₈ to ‘0000’; otherwise set PLCM_TYPE₈ to ‘0100’.

The mobile station shall exit the Mobile Station Origination Attempt Substate, shall enter either the Mobile Station Idle State or the System Determination Substate with an ACCT blocked indication, and should indicate to the user that the call has terminated if all of the following conditions are true:

- P_REV_IN_USE₈ is greater than six,
- ACCT_INCL_EMG₈ is equal to ‘1’ or the mobile station determines that the call is not an emergency call,
- ACCT is enabled for the requested service option number, due to either of the following two conditions:
  - the requested service option number is equal to an ACCT_SO entry in ACCT_SO_LIST, or
  - the service option group number of the requested service option is equal to an ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

- If the substate was entered with an origination indication, the mobile station shall send the Origination Message or the Reconnect Message as an r-csch request.

- If the substate was entered with a PACA response indication, the mobile station shall send the Origination Message as an r-csch response using the access procedures specified in 2.6.3.1. The mobile station shall include the dialed digits (if any) from the previous origination attempt in the Origination Message.

- If the origination is a result of NDSS_ORIG₈ being equal to enabled, the mobile station shall include in the Origination Message the dialed digits (if any) recorded from the previous origination attempt.

- If the mobile station has a stored service configuration (that is, parameters conveyed by both the Service Configuration information record and the Non-negotiable Service Configuration information record) and corresponding SYNC_ID with associated SID and NID that are equal to the SIDs and NIDs respectively, and USE_SYNC_ID₈ is equal to ‘1’, the mobile station may include the SYNC_ID field in the Origination Message or the Reconnect Message and, if included, shall perform the following:
  - The mobile station shall set it to the SYNC_ID corresponding to the stored
service configuration. The mobile station shall store the value of the SYNC_ID field in SYNC_IDs.

- The mobile station shall set the SR_ID field of the *Origination Message* or the *Reconnect Message* as follows:
  + If the mobile station requests the restoration of a single service option connection from the stored service configuration, the mobile station shall set this field to the corresponding service reference identifier.
  + Otherwise (that is, the mobile station requests the restoration of all the service option connections from the stored service configuration), the mobile station shall set this field to '111'.

- The mobile station shall include in the *Origination Message* as many of the dialed digits as possible without exceeding the message capsule size. When calculating the number of dialed digits to be included in the *Origination Message*, the mobile station shall assume the following if P_REV_IN_USEs is greater than three:
  - The number of additional reported pilots (NUM_ADD_PILOTS) is equal to five (see 2.6.3.1.7 and 2.7.1.3.1.3) so that up to five additional pilots may be reported in any access probe, and
  - The number of alternative service option numbers (NUM_ALT_SO) is less than or equal to the maximum alternative service option numbers (MAX_NUM_ALT_SOs).

- If PACAs is equal to enabled, the mobile station shall set the PACA_REORIG field of the *Origination Message* to '1'; otherwise, the mobile station shall set the field to '0'.

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. The mobile station may perform an access probe handoff or an access handoff as described in 2.6.3.1.3.2 and 2.6.3.1.3.3. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8) during an access attempt, the mobile station may perform an access probe handoff; otherwise, it shall declare an access attempt failure and shall perform the following:

- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC_RR_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If NDSS_ORIGs is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled, and should indicate to the user that the call origination is canceled.
- The mobile station shall update its registration variables as specified in 2.6.5.5.3.2.
- The mobile station shall disable its transmitter and enter the *Mobile Station Idle State*. 

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If the mobile station receives confirmation of delivery of any message sent by the mobile station in this substate, the mobile station shall perform an access handoff if all of the following conditions hold:

- The mobile station declares a loss of the Paging Channel or the Forward Common Control Channel,
- The mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2) and there are pilots other than the active pilot in the access handoff list (see 2.6.3.1.3.2).

If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel and does not perform an access handoff, the mobile station shall perform the following:

- If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC_RR_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL.
- If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If NDSS_ORIG_s is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the call origination is canceled.
- The mobile station shall disable its transmitter and enter the Mobile Station Idle State.

If the mobile station receives confirmation of delivery of the Origination Message or the Reconnect Message, the mobile station shall update its registration variables with respect to the base station to which the first access probe was transmitted after entering the System Access State as specified in 2.6.5.5.3.1.

The mobile station shall set and disable the System Access State timer as follows:

- The mobile station shall disable the timer whenever it begins an access attempt.
- The mobile station shall set the timer to T_{42m} seconds whenever it ends an access attempt.
- The mobile station shall disable the timer whenever it exits the System Access State.

If the System Access State timer expires while in this substate, the mobile station shall perform the following:

- If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- If NDSS_ORIG_s is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled, and should indicate to the user that the call origination is canceled.
• If the mobile station is monitoring the Paging Channel, the mobile station shall set SYS_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL and enter the Mobile Station Idle State.

• If the mobile station is monitoring the Forward Common Control Channel, the mobile station shall set MC_RR_PAR_MSG_SEQs and ACC_MSG_SEQs to NULL and enter the Mobile Station Idle State.

If the mobile station is directed by the user to disconnect the call, the mobile station shall perform the following actions:

• Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.

• The mobile station shall send the Release Order (normal release) in assured mode requiring confirmation of delivery.

• After receiving confirmation of delivery of the Release Order, the mobile station shall enter the Mobile Station Idle State (see 2.6.2.2) or the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1).

If the mobile station is directed by the user to power off, the mobile station shall perform the following actions:

• Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.

• The mobile station shall send the Release Order (with power-down indication) in assured mode requiring confirmation of delivery.

• After receiving confirmation of delivery of the Release Order, the mobile station shall perform power-down registration procedures (see 2.6.5.1.2).

• The mobile station may power off.

If the mobile station receives a Channel Assignment Message or the Extended Channel Assignment Message, Layer 3 shall send a dedicated channel assignment indication to Layer 2 (see [4]). If the mobile station has not received confirmation of delivery of the Origination Message or the Reconnect Message before receiving the Channel Assignment Message or the Extended Channel Assignment Message, the mobile station shall update its registration variables with respect to the base station to which the first access probe was transmitted after entering the System Access State, as specified in 2.6.5.5.3.1.

If the mobile station is to exit the System Access State as a result of processing Layer 3 fields of a message requiring an acknowledgment, the mobile station shall exit the System Access State after Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

If Layer 3 receives a message other than messages listed below:

• a Channel Assignment Message, or

• an Extended Channel Assignment Message with either DIRECT_CH_ASSIGN_IND field not included, or DIRECT_CH_ASSIGN_IND field included and set to ‘0’
with an indication from Layer 2 that an access attempt for a message being transmitted
was not terminated as a result of processing the Layer 2 fields of the received message,
the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the
message or order is outside its permissible range, the mobile station may send a Mobile
Station Reject Order with ORDQ equal to ‘00000100’ (message field not in valid range).

1. **Authentication Challenge Message:** The mobile station shall respond to the message
   as specified in 2.3.12.1.4, regardless of the value of AUTHs.

2. **Authentication Request Message:** The mobile station shall process the message and
   shall respond as specified in 2.3.12.5.2.

3. **Base Station Challenge Confirmation Order:** The mobile station shall respond to the
   message as specified in 2.3.12.1.5.

4. **Base Station Reject Order:** The mobile station shall perform the procedures as
   specified in 2.6.11.5.

5. **Channel Assignment Message:** The mobile station shall process the message as
   follows:

   - If ASSIGN_MODEr equals '000', the mobile station shall perform the following
     actions:
       - The mobile station shall set CH_INDs to '01'.
       - The mobile station shall store the frame offset (FRAME_OFFSETs =
         FRAME_OFFSETr), the message encryption mode indicator
         (ENCRYPT_MODEs = ENCRYPT_MODEr), and, if FREQ_INCLr equals ‘1’, the
         Frequency Assignment (CDMACHs = CDMA_FREQr).
       - If PACAs is equal to enabled, the mobile station shall set PACAs to disabled
         and PACA_CANCEL to '0', shall disable the PACA state timer, and should
         indicate to the user that the PACA call is proceeding.
       - If the mobile station is currently monitoring the Paging Channel, the mobile
         station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall
         set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set
         IDLE_CDMA_CHAN to CDMACHs, IDLE_CDMABAND to CDMABANDs,
         IDLE_SID to SIDs, IDLE_NID to NIDs, and IDLE_P_REV to P_REVs.
       - The mobile station shall initialize the CODE_CHAN_LIST as described in
         2.6.8, shall set SERV_NEGs to disabled, and shall enter the Traffic Channel
         Initialization Substate of the Mobile Station Control on the Traffic Channel
         State.

   - If ASSIGN_MODEr equals '001', the mobile station shall perform the following
     actions:
       - If the message requires acknowledgment, the mobile station shall wait until
         Layer 3 receives an indication from Layer 2 that the acknowledgment to the
         message has been sent and acknowledged.
− If a CDMA channel (CDMA_FREQ) is specified in the assignment, the mobile station shall set CDMACHs = CDMA_FREQr, tune to the new Frequency Assignment, and measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.

− The mobile station shall set CONFIG_MSG_SEQs and ACC_MSG_SEQs to NULL (see 2.6.2.2) and shall set PILOT_PNs to the pilot PN sequence offset of the strongest pilot in the list.

− If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs to NULL.

− The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRATs to ‘00’.

The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

− If RESPOND is equal to ‘1’, the mobile station shall enter the Update Overhead Information Substate with an origination indication.

• If ASSIGN_MODE equals ‘010’, the mobile station shall perform the following actions:

− If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the Mobile Station Origination Attempt Substate.

− If the mobile station supports analog operation in the requested band class and RESPOND equals ‘1’, the mobile station shall perform the following actions:

  + If USE_ANALOG_SYS equals ‘0’, the mobile station shall perform the following actions:

    o If PACA is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

    o The mobile station shall enter the analog Initialization Task with an origination indication (see 2.6.1).
+ If USE_ANALOG_SYS_r equals ‘1’, the mobile station shall perform the following actions:
  o The mobile station shall set SERVSYS_s to SYS_A if ANALOG_SYS_r is equal to ‘0’, or shall set SERVSYS_s to SYS_B if ANALOG_SYS_r is equal to ‘1’.
  o If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  o The mobile station shall then enter the analog Initialization Task with an origination indication (see 2.6.1).

• If ASSIGN_MODE_r equals ‘011’, the mobile station shall perform the following actions:
  − If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the Mobile Station Origination Attempt Substate.
  − If the mobile station supports analog operation in the requested band class:
    + If the analog channel type is ‘00’, the mobile station shall perform the following actions:
      o The mobile station shall store the system identification (SID_s = SID_r), the voice mobile station attenuation code (VMAC_s = VMAC_r), the voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r), the SAT color code (SCC_s = SCC_r), and the message encryption mode indicator (MEM_s = MEM_r).
      o The mobile station shall set DTX_s to ‘00’.
      o If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.
      o The mobile station shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with an origination indication.
    + If the analog channel type is not ‘00’, the mobile station shall perform the following actions:
      o If the mobile supports narrow analog mode, the mobile station shall perform the following actions:
The mobile station shall store the system identification (SID$_S =$ SID$_r$), the voice mobile station attenuation code (VMAC$_S =$ VMAC$_r$), the voice channel number (ANALOG_CHAN$_S =$ ANALOG_CHAN$_r$), the message encryption mode indicator (MEM$_S =$ MEM$_r$), the analog channel type (AN_CHAN_TYPE$_S =$ AN_CHAN_TYPE$_r$) and the digital SAT code (DSCC$_S =$ DSCC_MSBr $\times 4 +$ SCC$_r$).

The mobile station shall set DTX$_S$ to '00'.

If PACA$_S$ is equal to enabled, the mobile station shall set PACA$_S$ to disabled, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.

The mobile station shall enter the Confirm Initial Narrow Analog Voice Channel Task (see [22]) with an origination indication.

If the mobile station does not support narrow analog mode, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000110' (capability not supported by the mobile station) and the mobile station shall remain in the Mobile Station Origination Attempt Substate of the System Access State.

If ASSIGN_MODE$_r$ equals '100', the mobile station shall perform the following actions:

- The mobile station shall set CH_IND$_S$ to '01'.
- If GRANTED_MODE$_r$ equals '00', and the multiplex option or radio configuration specified in the DEFAULT_CONFIG field is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to '00000110' (capability not supported by the mobile station) and remain in Mobile Station Origination Attempt Substate.
- If FREQ_INCL$_r$ equals '0', the mobile station shall perform the following actions:
  + The mobile station shall store the frame offset (FRAME_OFFSET$_S =$ FRAME_OFFSET$_r$), the message encryption mode indicator (ENCRYPT_MODE$_S =$ ENCRYPT_MODE$_r$), the granted mode (GRANTED_MODE$_S =$ GRANTED_MODE$_r$), and the default configuration (DEFAULT_CONFIG$_S =$ DEFAULT_CONFIG$_r$).
  + The mobile station shall set SERV_NEG$_S$ to enabled.
  + If PACA$_S$ is equal to enabled, the mobile station shall set PACA$_S$ equal to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.
  + The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8.
+ If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_CDMA_CHAN to CDMACHs, IDLE_CDMABAND to CDMABANDs, IDLE_SID to SIDs, IDLE_NID to NIDs, and IDLE_P_REV to P_REVs.

+ The mobile station shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

− If FREQ_INCLr equals ‘1’, the mobile station shall perform the following actions:

+ If the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

+ If the band class is supported by the mobile station, the mobile station shall perform the following actions:

  o The mobile station shall store the frame offset (FRAME_OFFSETs = FRAME_OFFSETr), the message encryption mode indicator (ENCRYPT_MODEs = ENCRYPT_MODEr), the granted mode (GRANTED_MODEs = GRANTED_MODEr), the default configuration (DEFAULT_CONFIGs = DEFAULT_CONFIGr), the idle Frequency Assignment (IDLE_CDMA_CHAN = CDMACHs), the idle band class (IDLE_CDMABAND = CDMABANDs), the band class (CDMABANDs = BAND_CLASSr), and the Frequency Assignment (CDMACHs = CDMA_FREQr).

  o The mobile station shall set SERV_NEGs to enabled.

  o If PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACACANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.

  o The mobile station shall initialize the CODE_CHAN_LIST as described in 2.6.8.

  o If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_SID to SIDs, IDLE_NID to NIDs, and IDLE_P_REV to P_REVs.

  o The mobile station shall then tune to the new Frequency Assignment and enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

• If ASSIGN_MODEr equals ‘101’, the mobile station shall perform the following actions:
If FREQ_INCL equals ‘0’, the mobile station shall perform the following actions:

+ If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

+ The mobile station shall set CONFIG_MSG_SEQs and ACC_MSG_SEQs to NULL (see 2.6.2.2) and shall set PILOT_PNs to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN).

+ If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, GLOB_SERV_REDIR_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs to NULL.

+ The mobile station shall set PAGE_CHANs to ‘1’ and PAGECHs to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.

+ If RESPOND equals ‘0’, the mobile station shall perform the following:

  o If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with an origination indication within T34m seconds after receiving the Channel Assignment Message.

  o If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within T34m seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

+ If RESPOND equals ‘0’, the mobile station shall perform the following:

  o If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Mobile Station Idle State within T34m seconds after receiving the Channel Assignment Message.
If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Mobile Station Idle State within $T_{34m}$ seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

- If FREQ_INCL$_r$ equals ‘1’, the mobile station shall perform the following actions:
  
  + If the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘0000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.
  
  + If the band class is supported by the mobile station, the mobile station shall perform the following actions:
    
    o If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    
    o The mobile station shall set CDMACH$_s$ to CDMA_FREQ$_r$ and CDMABAND$_s$ to BAND_CLASS$_r$. Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT_PN$_s$ to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN$_r$), and set CONFIG_MSG_SEQ$_s$ and ACC_MSG_SEQ$_s$ to NULL (see 2.6.2.2).
    
    o If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS_PAR_MSG_SEQ$_s$, NGHBR_LST_MSG_SEQ$_s$, EXT_NGHBR_LST_MSG_SEQ$_s$, GEN_NGHBR_LST_MSG_SEQ$_s$, CHAN_LST_MSG_SEQ$_s$, EXT_CHAN_LST_MSG_SEQ$_s$, EXT_SYS_PAR_MSG_SEQ$_s$, USER_ZONE_ID_MSG_SEQ$_s$, PRI_NGHBR_LST_MSG_SEQ$_s$, GLOB_SERV_REDIR_MSG_SEQ$_s$, and EXT_GLOB_SERV_REDIR_MSG_SEQ$_s$ to NULL.
    
    o The mobile station shall set PAGE_CHAN$_s$ to ‘1’ and PAGECH$_s$ to the Primary Paging Channel. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
    
    o If RESPOND$_r$ is equal to ‘1’, the mobile station shall perform the following:
      
      ◊ If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within $T_{34m}$ seconds after receiving the Channel Assignment Message.
If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with a page response retransmission indication within $T_{34m}$ seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

- If RESPOND$_r$ is equal to ‘0’, the mobile station shall perform the following:
  - If the Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Mobile Station Idle State within $T_{34m}$ seconds after receiving the Channel Assignment Message.
  - If the Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Mobile Station Idle State within $T_{34m}$ seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Channel Assignment Message has been sent and acknowledged.

6. Data Burst Message

7. Extended Channel Assignment Message: If $P_{REV\_IN\_USEs}$ is greater than or equal to 11, and DIRECT_CH_ASSIGN_INDr equals ‘1’, the mobile station shall ignore the message. Otherwise, the mobile station shall process the message as follows:

- The mobile station shall set RTC_NOM_PWR_USE_IND to ‘0’.
- The mobile station shall set DIRECT_CH_ASSIGN_RECOVER_INDs to ‘0’.
- If ASSIGN_MODE$_r$ equals ‘000’, the mobile station shall perform the following actions:
  - If PACAs is equal to enabled, the mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  - If GRANTED_MODE$_r$ equals ‘00’, and the multiplex option and radio configuration specified in the DEFAULT_CONFIG field are not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the Mobile Station Origination Attempt Substate.
  - If GRANTED_MODE$_r$ is equal to ‘00’ and DEFAULT_CONFIG$_r$ is not equal to ‘100’, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00001110’ (RC does not match with DEFAULT_CONFIG$_r$ and shall remain in the Mobile Station Origination Attempt Substate if any of the following conditions is true:
    + FOR_FCH_RC$_r$ is not equal to the RC associated with DEFAULT_CONFIG$_r$ (see Table 3.7.2.3.21-2).
+ REV_FCH_RC<sub>r</sub> is not equal to the RC associated with DEFAULT_CONFIG<sub>r</sub> (see Table 3.7.2.3.21-2).

- If the mobile station does not support either of the Fundamental Channel Radio Configurations (FOR_FCH_RC or REV_FCH_RC), the mobile shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

- If PLCM_TYPE<sub>r</sub> equals ‘0010’ and IMSI_O is derived from IMSI_T, or if PLCM_TYPE<sub>r</sub> equals ‘0011’ and IMSI_O is derived from IMSI_M, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00011100’ (PLCM_TYPE mismatch) and remain in the Mobile Station Origination Attempt Substate.

- The mobile station shall set CH_IND<sub>s</sub> to ‘01’.

- If P_REV_IN_USE<sub>s</sub> is equal to or greater than six, the mobile station shall store the Forward Fundamental Channel Radio Configuration (FOR_FCH_RC<sub>s</sub> = FOR_FCH_RC<sub>r</sub>) and the Reverse Fundamental Channel Radio Configuration (REV_FCH_RC<sub>s</sub> = REV_FCH_RC<sub>r</sub>)

- If FREQ_INCL<sub>r</sub> equals ‘0’, the mobile station shall perform the following actions:
  + The mobile station shall store the frame offset (FRAME_OFFSET<sub>s</sub> = FRAME_OFFSET<sub>r</sub>), the message encryption mode indicator (ENCRYPT_MODE<sub>s</sub> = ENCRYPT_MODE<sub>r</sub>), the bypass indicator (BYPASS_ALERT_ANSWER<sub>s</sub> = BYPASS_ALERT_ANSWER<sub>r</sub>), the granted mode (GRANTED_MODE<sub>s</sub> = GRANTED_MODE<sub>r</sub>), the default configuration (DEFAULT_CONFIG<sub>s</sub> = DEFAULT_CONFIG<sub>r</sub>), and the occurrences of PILOT_PN and PWR_COMB for each included member of the Active Set.
  + If C_SIG_ENCRYPT_MODE is included, the mobile station shall set C_SIG_ENCRYPT_MODE<sub>s</sub> to C_SIG_ENCRYPT_MODE<sub>r</sub>.
  + The mobile station shall perform the procedures in 2.6.11.2.
  + The mobile station shall set SERV_NEG<sub>s</sub> to enabled.

- If PACA<sub>s</sub> is equal to enabled, the mobile station shall set PACA<sub>s</sub> equal to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.

- The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8.
The mobile station shall set FPC_FCH_INIT_SETPTs to FPC_FCH_INIT_SETPTr, FPC_FCH_CURR_SETPTs to FPC_FCH_CURR_SETPTr, FPC_FCH_INIT_SETPTs, FPC_FCH_INIT_SETPTs, FPC_FCH_FERs to FPC_FCH_FERr, FPC_FCH_MIN_SETPTs to FPC_FCH_MIN_SETPTr, FPC_FCH_MAX_SETPTs to FPC_FCH_MAX_SETPTr, and FPC_PRI_CHANs to '0' if the mobile station supports any Radio Configuration greater than 2.

The mobile station shall set FPC_SUBCHAN_GAINs to FPC_SUBCHAN_GAINr.

The mobile station shall set REV_FCH_GATING_MODEs to REV_FCH_GATING_MODEr.

The mobile station shall set REV_PWR_CNTL_DELAYs to REV_PWR_CNTL_DELAYr if REV_PWR_CNTL_DELAY_INCLr is equal to '1'.

The mobile station shall set RLGAIN_ADJs to RLGAIN_ADJr.

The mobile station shall set PLCM_TYPEs to PLCM_TYPEr if PLCM_TYPE_INCLr is equal to '1'; otherwise, the mobile station shall set PLCM_TYPEs to '0000' as follows:

- If P_REV_IN_USEs is less than 11, set PLCM_TYPEs to '0000'; otherwise set PLCM_TYPEs to '0100'.

The mobile station shall set PLCM_39s to PLCM_39r if PLCM_TYPEr is equal to '0001'.

If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to '0'; otherwise, the mobile station shall set IDLE_BCCH_CHAN to '1'. The mobile station shall set IDLE_CDMA_CHAN to CDMACHs, IDLE_CDMABAND to CDMABANDs, IDLE_SID to SIDs, IDLE_NID to NIDs, and IDLE_P_REV to P_REVs.

The mobile station shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

If FREQ_INCLr equals '1', the mobile station shall perform the following actions:

- If the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to '00000110' (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

- If the band class is supported by the mobile station, the mobile station shall perform the following actions:
The mobile station shall store the frame offset (FRAME_OFFSET = FRAME_OFFSET);
the message encryption mode indicator (ENCRYPT_MODE = ENCRYPT_MODE);
the bypass indicator (BYPASS_ALERT_ANSWER = BYPASS_ALERT_ANSWER);
the granted mode (GRANTED_MODE = GRANTED_MODE);
the default configuration (DEFAULT_CONFIG = DEFAULT_CONFIG);
the idle Frequency Assignment (IDLE_CDMA_CHAN = CDMACHannel);
the idle band class (IDLE_CDMABAND = CDMABAND);
the band class (CDMABAND = BAND_CLASS);
the Frequency Assignment (CDMACHannel = CDMA_FREQ);
and the occurrences of PILOT_PN and PWR_COMB_IND for each included member of the Active Set.

The mobile station shall perform the procedures in 2.6.11.2.

The mobile station shall set SERV_NEG to enabled.

The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8.

The mobile station shall set FPC_FCH_INIT_SETPT to
FPC_FCH_INIT_SETPT, FPC_FCH_CURR_SETPT to
FPC_FCH_INIT_SETPT, FPC_FCH_FER to FPC_FCH_FER,
FPC_FCH_MIN_SETPT to FPC_FCH_MIN_SETPT,
FPC_FCH_MAX_SETPT to FPC_FCH_MAX_SETPT, and
FPC_PRI_CHAN to '0' if the mobile station supports any Radio Configuration greater than 2.

The mobile station shall set FPC_SUBCHAN_GAIN to
FPC_SUBCHAN_GAIN.

The mobile station shall set RLGAIN_ADJ to RLGAIN_ADJ.

The mobile station shall set REV_FCH_GATING_MODE to
REV_FCH_GATING_MODE.

The mobile station shall set REV_PWR_CNTL_DELAY to
REV_PWR_CNTL_DELAY if REV_PWR_CNTL_DELAY晡 is equal
to '1'.

The mobile station shall set PLCM_TYPE to PLCM_TYPE if
PLCM_TYPE晡 is equal to '1'; otherwise, the mobile station shall
set PLCM_TYPE to '0000' as follows:

\[ P \text{REV_IN_USE} \text{ less than 11, set PLCM_TYPE to '0000'}; \]
\[ \text{otherwise set PLCM_TYPE to '0100'}. \]

The mobile station shall set PLCM_39 to PLCM_39 if PLCM_TYPE is
equal to '0001'.
If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_SID to SIDs, IDLE_NID to NIDs, IDLE_P_REV to P_REVs.

The mobile station shall then tune to the new Frequency Assignment and enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

- If ASSIGN_MODE_r equals ‘001’, the mobile station shall perform the following actions:
  - If FREQ_INCL_r equals ‘0’, the mobile station shall perform the following actions:
    - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    - The mobile station shall set CONFIG_MSG_SEQ_s and ACC_MSG_SEQ_s to NULL (see 2.6.2.2) and shall set PILOT_PN_s to the pilot PN sequence offset of the strongest pilot in the list (PILOT_PN_r).
    - The mobile station shall set PAGE_CHAN_s to ‘1’ and PAGECH_s to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT_s to ‘00’.
    - The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
    - If RESPOND_r is equal to ‘1’, the mobile station shall perform the following:
      - If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with an origination indication within T34m seconds after receiving the Extended Channel Assignment Message.
If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with an origination indication within $T_{34m}$ seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

- If FREQ_INCL$_r$ equals ‘1’, the mobile station shall perform the following actions:
  + If the band class is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.
  + If the band class is supported by the mobile station, the mobile station shall perform the following actions:
    - If the message requires acknowledgment, the mobile station shall wait until Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.
    - The mobile station shall set CDMACH$_s$ to CDMA_FREQ$_r$ and CDMABAND$_s$ to BAND_CLASS$_r$. Then the mobile station shall tune to the new Frequency Assignment, measure the strength of each pilot listed in the assignment using the Neighbor Set search procedures specified in 2.6.6.2.1 and 2.6.6.2.2, set PILOT PN$_s$ to the pilot PN sequence offset of the strongest pilot in the list (PILOT PN$_r$), and set CONFIG MSG SEQ$_s$ and ACC MSG SEQ$_s$ to NULL (see 2.6.2.2).
    - If the mobile station has not stored configuration parameters for the Primary Paging Channel of the new base station, or if the stored information is not current (see 2.6.2.2), the mobile station shall set SYS PAR MSG SEQ$_s$, NGHBR LST MSG SEQ$_s$, EXT NGHBR LST MSG SEQ$_s$, GEN NGHBR LST MSG SEQ$_s$, CHAN LST MSG SEQ$_s$, EXT CHAN LST MSG SEQ$_s$, EXT SYS PAR MSG SEQ$_s$, USER ZONE ID MSG SEQ$_s$, PRI NGHBR LST MSG SEQ$_s$, GLOB SERV REDIR MSG SEQ$_s$, and EXT GLOB SERV REDIR MSG SEQ$_s$ to NULL.
    - The mobile station shall set PAGE_CHAN$_s$ to ‘1’ and PAGECH$_s$ to the Primary Paging Channel. If the mobile station was monitoring Forward Common Control Channel, the mobile station shall set the PRAT$_s$ to ‘00’. The mobile station shall then begin monitoring the Primary Paging Channel of the selected base station.
    - If RESPOND$_r$ is equal to ‘1’, the mobile station shall perform the following:
If the Extended Channel Assignment Message does not require an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with an origination indication within $T_{34m}$ seconds after receiving the Extended Channel Assignment Message.

If the Extended Channel Assignment Message requires an acknowledgment, the mobile station shall enter the Update Overhead Information Substate with an origination indication within $T_{34m}$ seconds after Layer 3 receives an indication from Layer 2 that the acknowledgment to the Extended Channel Assignment Message has been sent and acknowledged.

- If ASSIGN_MODE$_r$ equals ‘010’, the mobile station shall perform the following actions:
  - If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.
  - If the mobile station supports analog operation in the requested band class, the mobile station shall perform the following actions:
    + If RESPOND$_r$ equals ‘1’ and USE_ANALOG_SYS$_r$ equals ‘0’, the mobile station shall enter the analog Initialization Task with an origination indication (see 2.6.1).
    + If RESPOND$_r$ equals ‘1’ and USE_ANALOG_SYS$_r$ equals ‘1’, the mobile station shall perform the following actions:
      o The mobile station shall set SERVSYS$_s$ to SYS_A if ANALOG_SYS$_r$ is equal to ‘0’, or set SERVSYS$_s$ to SYS_B if ANALOG_SYS$_r$ is equal to ‘1’.
      o The mobile station shall then enter the analog Initialization Task with an origination indication (see 2.6.1).

- If ASSIGN_MODE$_r$ equals ‘011’, the mobile station shall perform the following actions:
  - If the mobile station does not support analog operation in the requested band class, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the Mobile Station Origination Attempt Substate.
  - If the mobile station supports analog operation in the requested band class, the mobile station shall perform the following actions:
    + If the analog channel type is ‘00’, the mobile station shall perform the following actions:
The mobile station shall store the system identification (SID = SID$\text{r}$), voice mobile station attenuation code (VMAC = VMAC$\text{r}$), voice channel number (ANALOG_CHAN = ANALOG_CHAN$\text{r}$), SAT color code (SCC = SCC$\text{r}$), and message encryption mode indicator (MEM = MEM$\text{r}$).

The mobile station shall set DTX to ‘00’.

If PACA is equal to enabled, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.

The mobile station shall enter the Confirm Initial Voice Channel Task (see 2.6.4.2) with an origination indication.

If the analog channel type is not ‘00’, the mobile station shall perform the following actions:

If the mobile supports narrow analog mode, the mobile station shall perform the following actions:

- The mobile station shall store the system identification (SID = SID$\text{r}$), voice mobile station attenuation code (VMAC = VMAC$\text{r}$), voice channel number (ANALOG_CHAN = ANALOG_CHAN$\text{r}$), message encryption mode indicator (MEM = MEM$\text{r}$), analog channel type (AN_CHAN_TYPE = AN_CHAN_TYPE$\text{r}$), and the digital SAT code (DSCC = DSCC MSB$\text{r}$ × 4 + SCC$\text{r}$).

- The mobile station shall set DTX to ‘00’.

- If PACA is equal to enabled, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call is proceeding.

- The mobile station shall enter the Confirm Initial Narrow Analog Voice Channel Task (see [22]) with an origination indication.

If the mobile station does not support narrow analog mode, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and the mobile station shall remain in the Mobile Station Origination Attempt Substate of the System Access State.

If ASSIGN_MODE$\text{r}$ equals ‘100’, the mobile station shall perform the following actions:

- If PACA is equal to enabled, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
− If GRANTED_MODE_r equals ‘00’ and the multiplex option and radio
configuration specified in the DEFAULT_CONFIG_r field are not supported by
the mobile station, the mobile station shall send a **Mobile Station Reject Order**
with ORDQ field set to ‘00000110’ (capability not supported by the mobile
station) and shall remain in the **Mobile Station Origination Attempt Substate**.

− If GRANTED_MODE_r equals ‘11’, P_REV_IN_USE_s is less than 11, and the
mobile station did not include a SYNC_ID field in the **Origination Message** or
the **Reconnect Message** that was transmitted in this substate, the mobile
station shall send a **Mobile Station Reject Order** with ORDQ field set to
‘00000110’ (capability not supported by the mobile station) and shall remain
in the **Mobile Station Origination Attempt Substate**.

− If SYNC_ID_INCL_r is included and equals ‘1’ and the mobile station does not
have stored service configuration corresponding to SYNC_ID_r for the current
SID_s and NID_s pair, the mobile station shall send a **Mobile Station Reject
Order** with ORDQ field set to ‘00000110’ (Requested stored service
configuration is not available) and shall remain in the **Mobile Station
Origination Attempt Substate**.

− If GRANTED_MODE_r equals ‘11’, SR_ID_RESTORE_r is not equal to ‘111’,
and a service option connection record corresponding to SR_ID_RESTORE_r
is not contained in the stored service configuration, the mobile station shall
send a **Mobile Station Reject Order** with ORDQ field set to ‘00000110’
(capability not supported by the mobile station) and shall remain in the **Mobile Station
Origination Attempt Substate**.

− If GRANTED_MODE_r equals ‘00’ and DEFAULT_CONFIG_r is not equal to
‘100’, the mobile station shall send a **Mobile Station Reject Order** with ORDQ
field set to ‘00001110’ (RC does not match with DEFAULT_CONFIG) and
shall remain in the **Mobile Station Origination Attempt Substate** if one of the
following conditions is true:
  + FOR_RC_r is not equal to the Radio Configuration associated with
    DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.
  + REV_RC_r is not equal to the Radio Configuration associated with
    DEFAULT_CONFIG_r as specified in Table 3.7.2.3.2.21-2.

− If the mobile station does not support either of the Radio Configurations
(FOR_RC or REV_RC), the mobile station shall send a **Mobile Station Reject
Order** with the ORDQ field set to ‘00000110’ (capability not supported by the
mobile station) and remain in the **Mobile Station Origination Attempt Substate**.

− If CH_IND_r = ‘01’ and the mobile station does not support the Fundamental
Channel, the mobile station shall send a **Mobile Station Reject Order** with the
ORDQ field set to ‘00000110’ (capability not supported by the mobile
station) and remain in the **Mobile Station Origination Attempt Substate**.
− If CH_IND \(_r\) = ‘10’ and the mobile station does not support the Dedicated Control Channel, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.

− If CH_IND \(_r\) = ‘11’ and the mobile station does not support the Dedicated Control Channel and Fundamental Channel concurrently, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.

− If FREQ_INCL \(_r\) equals ‘1’ and if the band class (BAND_CLASS\(_r\)) is not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.

− If 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\(_M\), the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00011100’ (PLCM_TYPE mismatch) and remain in the *Mobile Station Origination Attempt Substate*.

− If FUNDICATED_BCMC_IND \(_r\) is included and set to 1, and the mobile station does not support the BCMC reception on the Forward Fundicated Channels assigned in this message, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the *Mobile Station Origination Attempt Substate*.

− If the mobile station does not send a Mobile Station Reject Order as specified above, it shall continue to perform the actions specified below.

− The mobile station shall set
  
  + IDLE_CDMABAND = CDMABAND\(_s\)
  + IDLE_CDMACH = CDMACH\(_s\)

− If FREQ_INCL \(_r\) equals ‘1’, the mobile station shall set
  
  + CDMABAND\(_s\) = BAND_CLASS\(_r\)
  + CDMACH\(_s\) = CDMA_FREQ\(_r\)

− The mobile station shall store the bypass indicator (BYPASS_ALERT_ANSWER\(_s\) = BYPASS_ALERT_ANSWER\(_r\)).

− The mobile station shall store granted mode (GRANTED_MODE\(_s\) = GRANTED_MODE\(_r\)). If GRANTED_MODE\(_r\) equals ‘11’, the mobile station shall perform the following:
  
  + The mobile station shall store service reference identifier to be restored (SR_ID_RESTORE\(_s\) = SR_ID_RESTORE\(_r\)).
+ If SR_ID_RESTORE_r equals ‘000’, the mobile station shall store bitmap of service reference identifiers to be restored (SR_ID_RESTORE_BITMAP_s = SR_ID_RESTORE_BITMAP_r).

− If SYNC_ID_INCL_r is included and equals ‘1’, the mobile station shall store the service configuration synchronization identifier (SYNC_ID_s = SYNC_ID_r).

− The mobile station shall store the default configuration (DEFAULT_CONFIG_s = DEFAULT_CONFIG_r).

− The mobile station shall store the Forward Traffic Channel Radio Configuration (FOR_RC_s = FOR_RC_r) and the Reverse Traffic Channel Radio Configuration (REV_RC_s = REV_RC_r).

− The mobile station shall store the frame offset (FRAME_OFFSET_s = FRAME_OFFSET_r).

− The mobile station shall store the message encryption mode indicator (ENCRYPT_MODE_s = ENCRYPT_MODE_r).

− The mobile station shall perform the procedures in 2.6.11.2.

− The mobile station shall store the Forward power control subchannel relative gain (FPC_SUBCHAN_GAIN_s = FPC_SUBCHAN_GAIN_r).

− The mobile station shall set RLGAIN_ADJ_s to RLGAIN_ADJ_r.

− The mobile station shall set REV_FCH_GATING_MODE_s to REV_FCH_GATING_MODE_r.

− The mobile station shall set REV_PWR_CNTL_DELAY_s to REV_PWR_CNTL_DELAY_r if REV_PWR_CNTL_DELAY_INCL_r is equal to ‘1’.

− If 3XFL_1XRL_INCL_r is equal to ‘1’, the mobile station shall set 1XRL_FREQ_OFFSET_s to 1XRL_FREQ_OFFSET_r.

− The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r if PLCM_TYPE_INCL_r is equal to ‘1’; otherwise, the mobile station shall set PLCM_TYPE_s to ‘0000’ as follows:

  + If P_REV_IN_USE_s is less than 11, set PLCM_TYPE_s to ‘0000’; otherwise set PLCM_TYPE_s to ‘0100’.

− The mobile station shall set PLCM_39_s to PLCM_39_r if PLCM_TYPE_r is equal to ‘0001’.

− If EARLY_RL_TRANSMIT_IND_r is included, the mobile station shall set EARLY_RL_TRANSMIT_IND_s to EARLY_RL_TRANSMIT_IND_r; otherwise, the mobile station shall set EARLY_RL_TRANSMIT_IND_s to ‘0’.
− If \( \text{FIXED\_PREAMBLE\_TRANSMIT\_IND} \) is included, the mobile station shall set \( \text{FIXED\_PREAMBLE\_TRANSMIT\_IND} \) to \( \text{FIXED\_PREAMBLE\_TRANSMIT\_IND} \); otherwise, the mobile station shall set \( \text{FIXED\_PREAMBLE\_TRANSMIT\_IND} \) to ‘0’. If \( \text{FIXED\_PREAMBLE\_TRANSMIT\_IND} \) equals ‘1’, the mobile station shall set \( \text{FIXED\_NUM\_PREAMBLE} \) to \( \text{FIXED\_NUM\_PREAMBLE} \).

− If \( \text{TX\_PWR\_LIMIT\_INCL} \) is set to ‘1’, the mobile station shall perform the following:
  + If the mobile station is being assigned to operate in the 1915MHz–1920MHz block of the PCS band, the mobile station shall store the transmit power limit \( \text{TX\_PWR\_LIMIT} = (\text{TX\_PWR\_LIMIT} - 30\text{dB}) \); 
  + Otherwise, the mobile station shall set \( \text{TX\_PWR\_LIMIT} \) to the limit defined in [11] for the target base station.

− The mobile station shall store the channel indicator (\( \text{CH\_IND} = \text{CH\_IND} \)) and the mobile station shall perform the following actions:
  + If \( \text{CH\_IND} \) equals ‘01’, the mobile station shall set \( \text{FPC\_FCH\_INIT\_SETPT} \) to \( \text{FPC\_FCH\_INIT\_SETPT} \), \( \text{FPC\_FCH\_CURR\_SETPT} \) to \( \text{FPC\_FCH\_INIT\_SETPT} \), \( \text{FPC\_FCH\_FER} \) to \( \text{FPC\_FCH\_FER} \), \( \text{FPC\_FCH\_MIN\_SETPT} \) to \( \text{FPC\_FCH\_MIN\_SETPT} \), \( \text{FPC\_FCH\_MAX\_SETPT} \) to \( \text{FPC\_FCH\_MAX\_SETPT} \), and \( \text{FPC\_PRI\_CHAN} \) to ‘0’ if the mobile station supports any Radio Configuration greater than 2. Then for each included member of the Active Set, the mobile station shall store the following:
    ◊ Set the \( \text{PILOT\_PN} \) field to \( \text{PILOT\_PN} \).
    ◊ Set the \( \text{ADD\_PILOT\_REC\_INCL} \) field to \( \text{ADD\_PILOT\_REC\_INCL} \). If \( \text{ADD\_PILOT\_REC\_INCL} \) equals ‘1’, the mobile station shall store the following:
      ◊ Set the \( \text{PILOT\_REC\_TYPE} \) field of \( \text{PILOT\_REC} \) to \( \text{PILOT\_REC\_TYPE} \).
      ◊ If \( \text{PILOT\_REC\_TYPE} \) equals ‘000’, the mobile station shall set the \( \text{TD\_POWER\_LEVEL} \) field of \( \text{PILOT\_REC} \) to \( \text{TD\_POWER\_LEVEL} \) and set the \( \text{TD\_MODE} \) field of \( \text{PILOT\_REC} \) to \( \text{TD\_MODE} \).
      ◊ If \( \text{PILOT\_REC\_TYPE} \) equals to ‘001’, the mobile station shall:
        – Set the \( \text{AUX\_PILOT\_QOF} \) field of \( \text{PILOT\_REC} \) to \( \text{QOF} \).
        – Set the \( \text{AUX\_PILOT\_WALSH\_CODE} \) field of \( \text{PILOT\_REC} \) to \( \text{AUX\_PILOT\_WALSH} \) with the Walsh Code length specified by \( \text{WALSH\_LENGTH} \).
      ◊ If \( \text{PILOT\_REC\_TYPE} \) is equal to ‘010’, the mobile station shall:
        – Set the \( \text{AUX\_PILOT\_TD\_QOF} \) field of \( \text{PILOT\_REC} \) to \( \text{QOF} \).
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH_LENGTH\textsubscript{r}.

- Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVEL\textsubscript{r}.

- Set the TD_MODE field of PILOT_REC to TD_MODE\textsubscript{r}.

◊ If PILOT_REC\_TYPE\textsubscript{r} is equal to ‘011’, the mobile station shall:

  - Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3\_PRIMARY_PILOT\textsubscript{r}.

  - Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3\_PILOT\_POWER1\textsubscript{r}.

  - Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3\_PILOT\_POWER2\textsubscript{r}.

◊ If PILOT_REC\_TYPE\textsubscript{r} is equal to ‘100’, the mobile station shall:

  - Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3\_PRIMARY_PILOT\textsubscript{r}.

  - Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3\_PILOT\_POWER1\textsubscript{r}.

  - Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3\_PILOT\_POWER2\textsubscript{r}.

  - Set the AUX_PILOT_QOF field of PILOT_REC to QOF\textsubscript{r}.

  - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH_LENGTH\textsubscript{r}.

  - If ADD_INFO\_INCL1\textsubscript{r} is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1\textsubscript{r} and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1\textsubscript{r} with the Walsh Code length specified by WALSH_LENGTH1\textsubscript{r}; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF\textsubscript{r} and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH_LENGTH\textsubscript{r}.
If ADD_INFO_INCL2r is equal to ‘1’, set the AUX PILOT_QOF2
field of PILOT_REC to QOF2r and set the
AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
AUX_PILOT_WALSH2r with the Walsh Code length specified
by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2
field of PILOT_REC to QOFr and set the
AUX_PILOT_WALSH_CODE2 field of PILOT_REC to
AUX_PILOT_WALSHr with the Walsh Code length specified by
WALSH_LENGTHr.

- Set the PWR_COMB_IND field to PWR_COMB_INDr.
- Set the CODE_CHAN_FCH field to CODE_CHAN_FCHr.
- Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCHr.

+ If CH_INDr equals ‘01’ and 3X_FCH_INFO_INCLr equals ‘1’, for each
  included member of the Active Set, the mobile station store the following:

  - If 3X_FCH_LOW_INCLr equals ‘1’, set the QOF_MASK_ID_FCH_LOW
    field to QOF_MASK_ID_FCH_LOWr and the CODE_CHAN_FCH_LOW
    field to CODE_CHAN_FCH_LOWr. Otherwise, set the
    QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCHr and the
    CODE_CHAN_FCH_LOW to CODE_CHAN_FCHr.

  - If 3X_FCH_HIGH_INCLr equals ‘1’, set the QOF_MASK_ID_FCH_HIGH
    field to QOF_MASK_ID_FCH_HIGHr and the
    CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGHr.
    Otherwise, set the QOF_MASK_ID_FCH_HIGH field to
    QOF_MASK_ID_FCHr and the CODE_CHAN_FCH_HIGH to
    CODE_CHAN_FCHr.

+ If CH_INDr equals ‘10’, the mobile station shall set
  FPC_DCCH_INIT_SETPTs to FPC_DCCH_INIT_SETPTs, FPC_DCCH_CURR_SETPTs to FPC_DCCH_INIT_SETPTs,
  FPC_DCCH_FERs to FPC_DCCH_FERs, FPC_DCCH_MIN_SETPTs to
  FPC_DCCH_MIN_SETPTs, FPC_DCCH_MAX_SETPTs to
  FPC_DCCH_MAX_SETPTs, FUNDICATED_BCMC_INDs to
  FUNDICATED_BCMC_INDs, and FPC_PRI_CHANs to ‘1’ if the mobile
  station supports any Radio Configuration greater than 2. Then for each
  included member of the Active Set, the mobile station shall store the
  following:

  - Set the PILOT_PN to PILOT_PNr.
  - Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL. If
    ADD_PILOT_REC_INCL is equal to ‘1’, the mobile station shall store
    the following:

      ◇ Set the PILOT_REC_TYPE field of PILOT_REC to
      PILOT_REC_TYPEr.
If PILOT_REC_TYPE\textsubscript{r} equals ‘000’, the mobile station shall set the TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL\textsubscript{r} and set the TD\_MODE field of PILOT\_REC to TD\_MODE\textsubscript{r}.

If PILOT_REC_TYPE\textsubscript{r} is equal to ‘001’, the mobile station shall:

- Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF\textsubscript{r}.
- Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_PILOT\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.

If PILOT_REC_TYPE\textsubscript{r} is equal to ‘010’, the mobile station shall:

- Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF\textsubscript{r}.
- Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.
- Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to AUX\_TD\_POWER\_LEVEL\textsubscript{r}.
- Set the TD\_MODE field of PILOT\_REC to TD\_MODE\textsubscript{r}.

If PILOT_REC_TYPE\textsubscript{r} is equal to ‘011’, the mobile station shall:

- Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to SR3\_PRIMARY\_PILOTr.
- Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to SR3\_PILOT\_POWER1\textsubscript{r}.
- Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to SR3\_PILOT\_POWER2\textsubscript{r}.

If PILOT_REC_TYPE\textsubscript{r} is equal to ‘100’, the mobile station shall:

- Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to SR3\_PRIMARY\_PILOTr.
- Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to SR3\_PILOT\_POWER1\textsubscript{r}.
- Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to SR3\_PILOT\_POWER2\textsubscript{r}.
- Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF\textsubscript{r}.
- Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_PILOT\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.
- If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

- If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

- Set the PWR_COMB_IND field to PWR_COMB_INDr.
- Set the CODE_CHAN_FCH field to CODE_CHAN_FCHr.
- Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCHr.
- Set the DCCH_INCL field to DCCH_INClr. If DCCH_INClr equals ‘1’, the mobile station shall store the following:
  - Set the CODE_CHAN_DCCH field to CODE_CHAN_DCCHr.
  - Set the QOF_MASK_ID_DCCH field to QOF_MASK_ID_DCCHr.

+ If CH_INDr equals ‘10’ and 3X_DCCH_INFO_INClr equals ‘1’, for each included member of the Active Set, the mobile station shall store the following:
  - If 3X_DCCH_LOW_INClr equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOWr and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOWr. Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCHr.
  - If 3X_DCCH_HIGH_INClr equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGHr and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGHr. Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCHr.
If CH_IND equals ‘10’, and FUNDICATED_BCMC_IND equals ‘1’, for each included member of the Active Set, the mobile station shall store the following:

- Set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr.
- Set FOR_CPCSCHs to FOR_CPCSCh.

If CH_IND equals ‘11’, the mobile station shall set FPC_FCCH_INIT_SETPTs to FPC_FCCH_INIT_SETPTr, FPC_FCCH_CURR_SETPTs to FPC_FCCH_INIT_SETPTs, FPC_FCCH_FERs to FPC_FCCH_FERr, FPC_FCCH_MIN_SETPTs to FPC_FCCH_MIN_SETPTr, FPC_DCCH_INIT_SETPTs to FPC_DCCH_INIT_SETPTr, FPC_DCCH_CURR_SETPTs to FPC_DCCH_INIT_SETPTs, FPC_DCCH_FERs to FPC_DCCH_FERr, FPC_DCCH_MIN_SETPTs to FPC_DCCH_MIN_SETPTr, FPC_DCCH_MAX_SETPTs to FPC_DCCH_MAX_SETPTr, FPC_PRI_CHANs to FPC_PRI_CHANr, and FUNDICATED_BCMC_INDs to FUNDICATED_BCMC_INDr. Then for each included member of the Active Set, the mobile station shall store the following:

- Set the PILOT_PN to PILOT_PNr.
- Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC. If ADD_PILOT_REC_INCL is equal to ‘1’, the mobile station shall store the following:
  - Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPEr.
  - If PILOT_REC_TYPEr equals ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELr and set the TD_MODE field of PILOT_REC to TD_MODEr.
  - If PILOT_REC_TYPEr is equal to ‘001’, the mobile station shall:
    - Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
    - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
  - If PILOT_REC_TYPEr is equal to ‘010’, the mobile station shall:
    - Set the AUX_TD_POWER_LEVEL field of PILOT_REC to QOFr.
    - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
    - Set the AUX_TDPOWER_LEVEL field of PILOT_REC to AUX_TDPOWER_LEVELr.
– Set the TD_MODE field of PILOT_REC to TD_MODE_r.

◊ If PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.

◊ If PILOT_REC_TYPE_r is equal to ‘100’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.
  – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

  – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh Code length specified by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

  – If ADD_INFO_INCL2_r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2_r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2_r with the Walsh Code length specified by WALSH_LENGTH2_r; otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF_r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

  o Set the PWR_COMB_IND field to PWR_COMB_INDr

  o Set the CODE_CHAN_FCH field to CODE_CHAN_FCH_r.
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- Set the QOF_MASK_ID_FCH field to QOF_MASK_ID_FCH<sub>r</sub>.
- Set the CODE_CHAN_DCCCH field to CODE_CHAN_DCCCH<sub>r</sub>.  
- Set the QOF_MASK_ID_DCCCH field to QOF_MASK_ID_DCCCH<sub>r</sub>.

+ If CH_IND<sub>r</sub> equals ‘11’ and 3X_FCH_INFO_INCL<sub>r</sub> equals ‘1’, for each included member of the Active Set, the mobile station store the following:

  - If 3X_FCH_LOW_INCL<sub>r</sub> equals ‘1’, set the QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_LOW<sub>r</sub> and the CODE_CHAN_FCH_LOW field to CODE_CHAN_FCH_LOW<sub>r</sub>. Otherwise, set the QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH<sub>r</sub> and the CODE_CHAN_FCH_LOW to CODE_CHAN_FCH<sub>r</sub>.

  - If 3X_FCH_HIGH_INCL<sub>r</sub> equals ‘1’, set the QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH_HIGH<sub>r</sub> and the CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH<sub>r</sub>. Otherwise, set the QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH<sub>r</sub> and the CODE_CHAN_FCH_HIGH to CODE_CHAN_FCH<sub>r</sub>.

+ If CH_IND<sub>r</sub> equals ‘11’ and FUNDICATED_BCMC_IND<sub>r</sub> equals ‘1’, the mobile station shall:

  - Set REV_FCH_ASSIGNED<sub>s</sub> to REV_FCH_ASSIGNED<sub>r</sub>.

+ If CH_IND<sub>r</sub> equals ‘11’ and FUNDICATED_BCMC_IND<sub>r</sub> equals ‘1’, the mobile station shall set FCH_BCMC_IND to ‘1’; otherwise, the mobile station shall set FCH_BCMC_IND to ‘0’.

+ If CH_IND<sub>r</sub> equals ‘11’, FUNDICATED_BCMC_IND<sub>r</sub> equals ‘1’, and FOR_CPCCH_INFO_INCL<sub>r</sub> is included and is set to ‘1’, for each included member of the Active Set, the mobile station shall store the following:

  - Set FOR_CPCCH_WALSH<sub>s</sub> to FOR_CPCCH_WALSH<sub>r</sub>.

  - Set FOR_CPCSCH<sub>s</sub> to FOR_CPCSCH<sub>r</sub>.

+ If CH_IND<sub>r</sub> equals ‘11’, FUNDICATED_BCMC_IND<sub>r</sub> equals ‘1’, and ADD_PLCM_FOR_FCH_INCL<sub>r</sub> is included and is set to ‘1’, the mobile station shall store the following:

  - Set ADD_PLCM_FOR_FCH_TYPE<sub>s</sub> to ADD_PLCM_FOR_FCH_TYPE<sub>r</sub>.

  - Set ADD_PLCM_FOR_FCH_39<sub>s</sub> to ADD_PLCM_FOR_FCH_39<sub>r</sub> if ADD_PLCM_FOR_FCH_TYPE<sub>r</sub> is equal to ‘1’.

+ If CH_IND<sub>r</sub> equals ‘11’ and 3X_DCCH_INFO_INCL<sub>r</sub> equals ‘1’, for each included member of the Active Set, the mobile station store the following:
If 3X_DCCH_LOW_INCL equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOWr and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOWr. Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCHr.

If 3X_DCCH_HIGH_INCL equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGHr and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGHr. Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCHr.

The mobile station shall initialize CODE_CHAN_LIST as described in 2.6.8, and shall set SERV_NEGs to enabled.

− If the mobile station is currently monitoring the Paging Channel, the mobile station shall set IDLE_BCCH_CHAN to ‘0’; otherwise, the mobile station shall set IDLE_BCCH_CHAN to ‘1’. The mobile station shall set IDLE_SID to SID_s, IDLE_NID to NID_s, and IDLE_P_REV to P_REV_s.

− If FREQ_INCL equals ‘1’, the mobile station shall then tune to the new frequency assignment.

− The mobile station shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

• If ASSIGN_MODE equals ‘101’, the mobile station shall perform the following actions:
  − If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
  − If GRANTED_MODE equals ‘11’, P_REV_IN_USEs is less than 11, and the mobile station did not include a SYNC_ID field in the Origination Message or the Reconnect Message that was transmitted in this substate, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the Mobile Station Origination Attempt Substate.
  − If SYNC_ID_INCL is included and equals ‘1’ and the mobile station does not have stored service configuration corresponding to SYNC_IDr for the current SID_s and NID_s pair, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00011011’ (Requested stored service configuration is not available) and shall remain in the Mobile Station Origination Attempt Substate.
− If GRANTED_MODE<sub>r</sub> equals ‘11’, SR_ID_RESTORE<sub>r</sub> is not equal to ‘111’, and a service option connection record corresponding to SR_ID_RESTORE<sub>r</sub> is not contained in the stored service configuration, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and shall remain in the Mobile Station Origination Attempt Substate.

− If the mobile station does not support any of the specified Radio Configurations (FOR_PDCH_RC, FOR_FCH_DCCH_RC or REV_FCH_DCCH_RC), the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

− If EXT_CH_IND<sub>r</sub> signals the allocation of a F-FCH or R-FCH and the mobile station does not support Fundamental Channel, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

− If EXT_CH_IND<sub>r</sub> signals the allocation of a F-DCCH or R-DCCH and the mobile station does not support the Dedicated Control Channel, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

− If FREQ_INCL<sub>r</sub> equals ‘1’ and if the band class (BAND_CLASS<sub>r</sub>) is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

− If PLCM_TYPE<sub>r</sub> equals ‘0010’ and IMSI_O is derived from IMSI_T, or if PLCM_TYPE<sub>r</sub> equals ‘0011’ and IMSI_O is derived from IMSI_M, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00011100’ (PLCM_TYPE mismatch) and remain in the Mobile Station Origination Attempt Substate.

− If FUNDICATED_BCMC_IND<sub>r</sub> is included and set to 1, and the mobile station does not support BCMC reception on the Forward Fundicated Channels assigned in this message, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported by the mobile station) and remain in the Mobile Station Origination Attempt Substate.

− If the mobile station does not send a Mobile Station Reject Order as specified above, it shall continue to perform the actions specified below.

− Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC layer.

− If FREQ_INCL<sub>r</sub> equals ‘1’, the mobile station shall set

\[ + \text{CDMABAND}_s = \text{BAND_CLASS}_r \]
The mobile station shall store the bypass indicator (BYPASS_ALERT_ANSWERs = BYPASS_ALERT_ANSWERr).

The mobile station shall store the granted mode indicator (GRANTED_MODEs = GRANTED_MODEr). If GRANTED_MODEr equals ‘11’, the mobile station shall perform the following:

The mobile station shall store the service reference identifier to be restored (SR_ID_RESTOREs = SR_ID_RESTOREr).

If SR_ID_RESTOREr equals ‘000’, the mobile station shall store bitmap of service reference identifiers to be restored (SR_ID_RESTORE_BITMAPs = SR_ID_RESTORE_BITMAPr).

If SYNC_ID_INCLr is included and equals ‘1’, the mobile station shall store the service configuration synchronization identifier (SYNC_IDs = SYNC_IDr).

The mobile station shall store the frame offset (FRAME_OFFSETs = FRAME_OFFSETr).

The mobile station shall store the message encryption mode indicator (ENCRYPT_MODEs = ENCRYPT_MODEr).

The mobile station shall perform the following procedures in the order listed below:

If D_SIG_ENCRYPT_MODEr is included, the mobile station shall perform the following:

- If D_SIG_ENCRYPT_MODEr is equal to ‘000’, the mobile station shall set D_SIG_ENCRYPT_MODEs to C_SIG_ENCRYPT_MODEs; otherwise, the mobile station shall set D_SIG_ENCRYPT_MODEs to D_SIG_ENCRYPT_MODEr, ENC_KEYs to the most recently generated CMEAKEY in the mobile station associated with AUTHR of the Origination Message, and EXT_ENCRYPT_SEQ[0] and EXT_ENCRYPT_SEQ[1] to $256 \times $ENC_SEQ_H (the ENC_SEQ_H field in the Origination Message).

If ENC_KEY_SIZEr is included, the mobile station shall set ENC_KEY_SIZEs to ENC_KEY_SIZEr.

If C_SIG_ENCRYPT_MODE is included, the mobile station shall set C_SIG_ENCRYPT_MODEs to C_SIG_ENCRYPT_MODEr.

The mobile station shall set EXT_CH_INDs to EXT_CH_INDr.

The mobile station shall set CH_INDs to ‘00’.

If EXT_CH_INDr signals the allocation of a F-FCH or a F-DCCH, the mobile station shall store the Forward power control subchannel relative gain [FPC_SUBCHAN_GAINs = FPC_SUBCHAN_GAINr].

The mobile station shall set RLGAIN_ADJs to RLGAIN_ADJr.
The mobile station shall set PLCM_TYPE_s to PLCM_TYPE_r if PLCM_TYPE_INCL_r is equal to ‘1’; otherwise, the mobile station shall set PLCM_TYPE_s to ‘0000’ as follows:

+ If P_REV_IN_USE_s is less than 11, set PLCM_TYPE_s to ‘0000’; otherwise set PLCM_TYPE_s to ‘0100’.

The mobile station shall set PLCM_39_s to PLCM_39_r if PLCM_TYPE_r is equal to ‘0001’.

The mobile station shall set FUNDICATED_BCMC_IND_s to FUNDICATED_BCMC_IND_r. If FUNDICATED_BCMC_IND_r equals ‘1’ and the EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall set FCH_BCMC_IND to ‘1’; otherwise, the mobile station shall set FCH_BCMC_IND to ‘0’.

If FUNDICATED_BCMC_IND_r equals ‘1’ and ADD_PLCM_FOR_FCH_INCL_r is included and is set to ‘1’, the mobile station shall store the following:

+ Set ADD_PLCM_FOR_FCH_TYPE_s to ADD_PLCM_FOR_FCH_TYPE_r.
+ Set ADD_PLCM_FOR_FCH_39_s to ADD_PLCM_FOR_FCH_39_r if ADD_PLCM_FOR_FCH_TYPE_r is equal to ‘1’.

The mobile station shall set REV_FCH_GATING_MODE_s to REV_FCH_GATING_MODE_r.

The mobile station shall set REV_PWR_CNTL_DELAY_s to REV_PWR_CNTL_DELAY_r if REV_PWR_CNTL_DELAY_INCL_r is equal to ‘1’.

The mobile station shall set FULL_CI_FEEDBACK_IND_s to FULL_CI_FEEDBACK_IND_r.

If EXT_CH_IND_r equals ‘01000’, the mobile station shall set FOR_CPCCH_RATE_s to FOR_CPCCH_RATE_r and FOR_CPCCH_UPDATE_RATE_s to FOR_CPCCH_UPDATE_RATE_r; otherwise, the mobile station shall set FOR_CPCCH_RATE_s to ‘00’, and FOR_CPCCH_UPDATE_RATE_s to ‘00’.

The mobile station shall set REV_CQICH_FRAME_OFFSET_s to REV_CQICH_FRAME_OFFSET_r.

The mobile station shall set REV_CQICH_REPS_s to REV_CQICH_REPS_r.

The mobile station shall set REV_ACKCH_REPS_s to REV_ACKCH_REPS_r.

The mobile station shall set FOR_PDCH_RC_s to FOR_PDCH_RC_r.

If EXT_CH_IND_r signals the allocation of a R-PDCH, the mobile station shall set REV_PDCH_RC_s to REV_PDCH_RC_r.

If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall set FOR_FCH_RC_s to FOR_FCH_DCCH_RC_r.

If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile station shall set FOR_DCCH_RC_s to FOR_FCH_DCCH_RC_r.
- If EXT_CH_INDₙ signals the allocation of a R-FCH, the mobile station shall set REV_FCH_RCₛ to REV_FCH_DCCH_RCₜ.
- If EXT_CH_INDₙ signals the allocation of a R-DCCH, the mobile station shall set REV_DCCH_RCₛ to REV_FCH_DCCH_RCₜ.
- If EXT_CH_INDₙ signals the allocation of a F-FCH and a F-DCCH, the mobile station shall set FPC_PRI_CHANₛ to FPC_PRI_CHANₜ.
- If EXT_CH_INDₙ signals the allocation of a F-FCH, the mobile station shall set FPC_FCH_INIT_SETPTₛ to FPC_FCH_INIT_SETPTₜ, FPC_FCH_CURR_SETPTₛ to FPC_FCH_CURR_SETPTₜ, FPC_FCH_FERₛ to FPC_FCH_FERₜ, FPC_FCH_MIN_SETPTₛ to FPC_FCH_MIN_SETPTₜ, FPC_FCH_MAX_SETPTₛ to FPC_FCH_MAX_SETPTₜ.
- If EXT_CH_INDₙ signals the allocation of a F-DCCH, the mobile station shall set FPC_DCCH_INIT_SETPTₛ to FPC_DCCH_INIT_SETPTₜ, FPC_DCCH_CURR_SETPTₛ to FPC_DCCH_INIT_SETPTₜ, FPC_DCCH_FERₛ to FPC_DCCH_FERₜ, FPC_DCCH_MIN_SETPTₛ to FPC_DCCH_MIN_SETPTₜ, FPC_DCCH_MAX_SETPTₛ to FPC_DCCH_MAX_SETPTₜ.
- If EARLY_RL_TRANSMIT_INDₙ is included, the mobile station shall set EARLY_RL_TRANSMIT_INDₛ to EARLY_RL_TRANSMIT_INDₜ; otherwise, the mobile station shall set EARLY_RL_TRANSMIT_INDₛ to ‘0’.
- If FIXED_PREAMBLE_TRANSMIT_INDₙ is included, the mobile station shall set FIXED_PREAMBLE_TRANSMIT_INDₛ to FIXED_PREAMBLE_TRANSMIT_INDₜ; otherwise, if FIXED_PREAMBLE_TRANSMIT_INDₛ is equal to ‘0’, the mobile station shall set FIXED_NUM_PREAMBLEₛ to FIXED_NUM_PREAMBLEₜ.
- If TX_PWR_LIMIT_INCLₙ is set to ‘1’, the mobile station shall perform the following:
  + If the mobile station is being assigned to operate in the 1915MHz – 1920MHz block of the PCS band, the mobile station shall store the transmit power limit TX_PWR_LIMITₛ = (TX_PWR_LIMITₜ - 30dB);
  + Otherwise, the mobile station shall set TX_PWR_LIMITₛ to the limit defined in [11] for the target base station.
- If FOR_PDCH_PARMS_INCLₙ is equal to ‘1’, the mobile station shall set FOR_PDCH_COMMON_PARMSₛ = ‘0’; otherwise, if FOR_PDCH_COMMON_PARMSₛ is equal to ‘0’, the mobile station shall send a Mobile Station Reject Order with ORDO equal to ‘00000011’ (message structure not acceptable) and remain in the current state.
- If FOR_PDCH_RLGAIN_INCLₙ is included and equal to ‘1’, the mobile station shall set RLGAIN_ACKCH_PILOTₛ to RLGAIN_ACKCH_PILOTₜ, and RLGAIN_CQICH_PILOTₛ to RLGAIN_CQICH_PILOTₜ.
− If FOR_PDCH_PARMS_INCL_r is equal to ‘1’, the mobile station shall set
  NUM_SOFT_SWITCHING_FRAMES_s to NUM_SOFT_SWITCHING_FRAMES_r + 1,
  and NUM_SOFTER_SWITCHING_FRAMES_s to
  NUM_SOFTER_SWITCHING_FRAMES_r + 1.
− If CHM_SWITCHING_PARMS_INCL_r is included and equal to ‘1’, the mobile
  station shall set NUM_SOFT_SWITCHING_FRAMES_CHMs to
  NUM_SOFT_SWITCHING_FRAMES_CHMr + 1, and
  NUM_SOFTER_SWITCHING_FRAMES_CHMs to
  NUM_SOFTER_SWITCHING_FRAMES_CHMr + 1.
− If CHM_SWITCHING_PARMS_INCL_r is included and equal to ‘0’, the mobile
  station shall set NUM_SOFT_SWITCHING_FRAMES_CHMs to
  NUM_SOFT_SWITCHING_FRAMES_r + 1, and
  NUM_SOFTER_SWITCHING_FRAMES_CHMs to
  NUM_SOFTER_SWITCHING_FRAMES_r + 1.
− If FOR_PDCH_PARMS_INCL_r is equal to ‘1’, the mobile station shall set
  NUM_SOFT_SWITCHING_SLOTS_s according to Table 3.7.2.3.2.21-9 based on
  the value of NUM_SOFT_SWITCHING_SLOTS_r.
− If FOR_PDCH_PARMS_INCL_r is equal to ‘1’, the mobile station shall set
  NUM_SOFTER_SWITCHING_SLOTS_s according to Table 3.7.2.3.2.21-9 based on
  the value of NUM_SOFTER_SWITCHING_SLOTS_r.
− If CHM_SWITCHING_PARMS_INCL_r is included and equal to ‘1’, the mobile
  station shall:
  + Set NUM_SOFT_SWITCHING_SLOTS_CHMs according to Table 3.7.2.3.2.21-9
    based on the value of NUM_SOFT_SWITCHING_SLOTS_CHMr.
  + Set NUM_SOFTER_SWITCHING_SLOTS_CHMs according to Table
    3.7.2.3.2.21-9 based on the value of
    NUM_SOFTER_SWITCHING_SLOTS_CHMr.
− If CHM_SWITCHING_PARMS_INCL_r is included and equal to ‘0’, the mobile
  station shall:
  + Set NUM_SOFT_SWITCHING_SLOTS_CHMs according to Table 3.7.2.3.2.21-9
    based on the value of NUM_SOFT_SWITCHING_SLOTS_r.
  + Set NUM_SOFTER_SWITCHING_SLOTS_CHMs according to Table
    3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTS_r.
− If FOR_PDCH_PARMS_INCL_r is equal to ‘1’, the mobile station shall set
  PDCH_SOFT_SWITCHING_DELAY_s to PDCH_SOFT_SWITCHING_DELAY_r + 1,
  and PDCH_SOFTER_SWITCHING_DELAY_s to
  PDCH_SOFTER_SWITCHING_DELAY_r + 1.
− If TX_DISABLED_TIMER_INCL_r is equal to ‘1’, the mobile station shall set
  TX_DISABLED_TIMER_s to TX_DISABLED_TIMER_r; otherwise, the mobile
  station shall set TX_DISABLED_TIMER_s to $T_{81m}$.
− If EXT_CH_IND_r signals the allocation of a R-PDCH, the mobile station shall:
+ Set FOR_GCH_ASSIGNED\textsubscript{s} to FOR_GCH_ASSIGNED\textsubscript{r}.
+ Set FOR_RCCH_ASSIGNED\textsubscript{s} to FOR_RCCH_ASSIGNED\textsubscript{r}.
+ If FOR_RCCH_ASSIGNED\textsubscript{s} is equal to ‘1’, the mobile station shall:
  o Set FOR_RCCH_DRC_MODE\textsubscript{s} to FOR_RCCH_DRC_MODE\textsubscript{r}.
  o Set FOR_RCCH_REPETITION\textsubscript{s} to FOR_RCCH_REPETITION\textsubscript{r}.
  o Set FOR_RCCH_UPDATE_RATE\textsubscript{s} to FOR_RCCH_UPDATE_RATE\textsubscript{r}.
+ If FOR_ACKCH_ASSIGNED\textsubscript{r} is equal to ‘1’, the mobile station shall set
  FOR_ACKCH_MODE\textsubscript{s} to FOR_ACKCH_MODE\textsubscript{r}.
+ If FOR_ACKCH_COMB_SEL\textsubscript{r} is included, the mobile station shall set
  FOR_ACKCH_COMB_SEL\textsubscript{s} to FOR_ACKCH_COMB_SEL\textsubscript{r}; otherwise, the
  mobile station shall set FOR_ACKCH_COMB_SEL\textsubscript{s} to ‘0’.
+ If REV_PDCH_RLGAIN_INCL\textsubscript{r} is included and equal to ‘1’, the mobile station
  shall perform the following:
  o The mobile station shall set RLGAIN_SPICH_PILOT\textsubscript{s} to
    RLGAIN_SPICH_PILOT\textsubscript{r}.
  o The mobile station shall set RLGAIN_REQCH_PILOT\textsubscript{s} to
    RLGAIN_REQCH_PILOT\textsubscript{r}.
  o The mobile station shall set RLGAIN_PDCCH_PILOT\textsubscript{s} to
    RLGAIN_PDCCH_PILOT\textsubscript{r}.
+ If REV_PDCH_PARMS_1_INCL\textsubscript{r} is included and equal to ‘1’, the mobile
  station shall perform the following:
  o The mobile station shall set REV_PDCH_TABLE_SEL\textsubscript{s} to
    REV_PDCH_TABLE_SEL\textsubscript{r}.
  o The mobile station shall set REV_PDCH_MAX_AUTO_TPR\textsubscript{s} to
    REV_PDCH_MAX_AUTO_TPR\textsubscript{r}.
  Otherwise, the mobile station shall:
  + Set FOR_GCH_ASSIGNED\textsubscript{s} to NULL.
  + Set FOR_RCCH_ASSIGNED\textsubscript{s} to NULL.
  For each included member of the Active Set, the mobile station shall store the
  following:
  + Set the PILOT_PN field to PILOT_PN\textsubscript{r}.
  + Set the ADD_PILOT_REC_INCL field to ADD_PILOT_REC_INCL\textsubscript{r}. If
    ADD_PILOT_REC_INCL\textsubscript{r} equals ‘1’, the mobile station shall store the
    following:
    o Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPE\textsubscript{r}.
If PILOT_REC_TYPE equals '000', the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELr and set the TD_MODE field of PILOT_REC to TD_MODEr.

If PILOT_REC_TYPE is equal to '001', the mobile station shall:

- Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

If PILOT_REC_TYPE is equal to '010', the mobile station shall:

- Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOFr.
- Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
- Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVELr.
- Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODEr.

Set FOR_PDCH_INCLs to FOR_PDCH_INCLr.

If FOR_PDCH_INCLr is equal to '1', the mobile station shall perform the following:

- If FOR_PDCH_PARMS_INCLr is equal to '1', the mobile station shall store the following parameters:
  - The mobile station shall set WALSH_TABLE_IDs to WALSH_TABLE_IDr.
  - The mobile station shall set NUM_PDCCHs to NUM_PDCCHr.
  - The mobile station shall set FOR_PDCCH_WALSHs[i] to the i\textsuperscript{th} occurrence of FOR_PDCCH_WALSHr.
- The mobile station shall set MAC_IDs to MAC_IDr.
- The mobile station shall set REV_CQICH_COVERS to REV_CQICH_COVERr.

- If EXT_CH_INDr signals the allocation of a F-CPCCH, the mobile station shall set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr, and FOR_CPCSCHs to FOR_CPCSCHr.

- If EXT_CH_INDr equals '01000', the mobile station shall set FOR_CPCCH_RATEs to FOR_CPCCH_RATEr.

- The mobile station shall store FOR_PDCCH_WALSHs[i] to the i\textsuperscript{th} occurrence of FOR_PDCCH_WALSHr.

The mobile station shall set PWR_COMB_INDs to PWR_COMB_INDr.
o If PDCH_GROUP_IND_INCL_r is equal to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs as follows:

◊ If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
  – The mobile station shall set PDCH_GROUP_IDENTIFIERs to ‘000’;

◊ Otherwise, the mobile station shall perform the following:
  – If PDCH_GROUP_IND_r is set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned; otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the value one greater than that of the previous pilot in the list that has a F-PDCH assigned.

o Otherwise, the mobile station shall perform the following:

◊ If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
  – The mobile station shall set PDCH_GROUP_IDENTIFIERs to ‘000’;

◊ Otherwise, the mobile station shall perform the following:
  – If F-PDCH is assigned for this pilot, the mobile station shall perform the following:
    + If PWR_COMB_IND_r is set to ‘1’, and there are no pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
    + If PWR_COMB_IND_r is set to ‘1’, and all pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned have PWR_COMB_IND set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
    + Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the value one greater than that of the previous pilot in the list.
  – Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to NULL.

o If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall set CODE_CHAN_FCHs to CODE_CHAN_FCH_r, and QOF_MASK_ID_FCHs to QOF_MASK_ID_FCH_r.
If EXT CH IND signals the allocation of a F-DCCH, the mobile station shall set CODE_CHAN_DCCH\_s to CODE_CHAN_DCCH\_r, and QOF_MASK_ID_DCCH\_s to QOF_MASK_ID_DCCH\_r.

- If FOR_PDCH\_INCL\_r is equal to ‘1’, EXT CH IND\_r signals the allocation of a R-PDCH, and FOR_ACKCH\_ASSIGNED\_r is equal to ‘1’, the mobile station shall set FOR_ACKCH\_WALSH\_INDEX\_s to FOR_ACKCH\_WALSH\_INDEX\_r, and FOR_ACKSCH\_INDEX\_s to FOR_ACKSCH\_INDEX\_r.

- If FOR_RCCH\_INCL\_r is included and set to ‘1’, the mobile station shall do the following:
  - Set FOR_RCCH\_WALSH\_INDEX\_s to FOR_RCCH\_WALSH\_INDEX\_r.
  - Set FOR_RCSCH\_INDEX\_s to FOR_RCSCH\_INDEX\_r.

- If FOR_PDCH\_INCL\_r is equal to ‘1’, and if FOR_GCH\_ASSIGNED\_r is included and set to ‘1’, the mobile station shall perform the following:
  - Set NUM\_FOR\_GCH\_s to NUM\_FOR\_GCH\_r, and
  - For each of the NUM\_FOR\_GCH\_s occurrences of FOR\_GCH\_WALSH\_INDEX\_r, the mobile station shall set FOR\_GCH\_WALSH\_INDEX\_s[j] to FOR\_GCH\_WALSH\_INDEX\_r[j].

- Otherwise, the mobile station shall perform the following:
  - Set NUM\_FOR\_GCH\_s to 0, and
  - Set FOR\_GCH\_WALSH\_INDEX\_s to NULL.

- The mobile station shall initialize CODE\_CHAN\_LIST as described in 2.6.8, and shall set SERV\_NEG\_s to enabled.
- If FREQ\_INCL\_r equals ‘1’, the mobile station shall then tune to the new frequency assignment.
- The mobile station shall then enter the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.

8. Feature Notification Message: If RELEASE\_r is equal to ‘1’, the mobile station shall enter the Mobile Station Idle State or the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1).

9. Intercept Order: The mobile station shall enter the Mobile Station Idle State.

10. Local Control Order

11. Lock Until Power-Cycled Order: The mobile station shall disable its transmitter and record the reason for the Lock Until Power-Cycled Order in the mobile station’s semi-permanent memory (LCKRSN\_P\_s-p equals the least significant 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.

12. **Maintenance Required Order**: The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSNs-p equals the least significant four bits of ORDQr). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

13. **PACA Message**: If P_REV_IN_USEs is less than or equal to four and the mobile station does not support PACA capability, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

- If PACAs is equal to disabled, the mobile station shall perform the following actions:
  - If the purpose of the message is to respond to an Origination Message (PURPOSEr is equal to ‘0000’), the mobile station shall perform the following actions:
    - The mobile station shall set PACAs to enabled and shall set PACA_SIDs to SIDs.
    - The mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUTs.
    - The mobile station should indicate to the user that the call has been queued as a PACA call, and should indicate the current queue position (Q_POSr) of the call.
    - The mobile station shall enter the Mobile Station Idle State.
  - If the purpose of the message is to cancel the PACA call (PURPOSEr is equal to ‘0011’), the mobile station shall perform the following actions:
    - The mobile station shall set PACAs to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
    - The mobile station shall enter the Mobile Station Idle State.
  - If the purpose of the message is anything else (PURPOSEr is not equal to ‘0000’ or ‘0011’), the mobile station shall ignore the message. The mobile station shall remain in the Mobile Station Origination Attempt Substate.

- If PACAs is equal to enabled, the mobile station shall perform the following actions:
  - If the purpose of the message is to respond to an Origination Message (PURPOSEr is equal to ‘0000’), the mobile station shall perform the following actions:
+ The mobile station should indicate to the user that the PACA call is still queued, and should indicate to the user the current queue position (Q_POSr) of the call.

+ The mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUTs.

+ The mobile station shall enter the Mobile Station Idle State.

− If the purpose of the message is to provide the queue position of the PACA call (PURPOSEr is equal to ‘0001’), the mobile station shall perform the following actions:

  + The mobile station should indicate to the user that the PACA call is still queued, and should indicate the current queue position (Q_POSr) of the call.

  + The mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA_TIMEOUTs.

  + The mobile station shall enter the Mobile Station Idle State.

− If the purpose of the message is to instruct the mobile station to re-originate the PACA call (PURPOSEr is equal to ‘0010’), the mobile station shall remain in the Mobile Station Origination Attempt Substate.

− If the purpose of the message is to cancel the PACA call (PURPOSEr is equal to ‘0011’), the mobile station shall perform the following actions:

  + The mobile station shall set PACA_status to disabled, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

  + The mobile station shall enter the Mobile Station Idle State.

14. **Registration Accepted Order**: The mobile station shall perform the procedures as specified in 2.6.11.1.

15. **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_CODEs 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).

16. **Release Order or Service Status Order**: If NDSS_ORIG_status is equal to enabled, the mobile station shall set NDSS_ORIG_status to disabled, and should indicate to the user that the call origination has been canceled. The mobile station shall enter the Mobile Station Idle State or the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1). If the mobile station enters the Mobile Station Idle State, and if PACA_status is equal to enabled, the mobile station shall set PACA_status to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
17. **Reorder Order:** If NDSS_ORIGs is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled, and should indicate to the user that the call origination has been canceled. If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled. The mobile station shall enter the *Mobile Station Idle State.*

18. **Retry Order:** The mobile station shall process the order as follows:

- If RETRY_TYPE_r is equal to '000', the mobile station shall set RETRY_DELAYs[RETRY_TYPE] to 0, where RETRY_TYPE is equal to '001', '010', '011', '100', or '101'.
- If RETRY_TYPE_r is equal to '001', '100', or '101', then the mobile station shall perform the following:
  - If RETRY_DELAY_r is equal to '00000000', then the mobile station shall set RETRY_DELAYs[RETRY_TYPE_r] to 0.
  - If RETRY_DELAY_r is not equal to '00000000', the mobile station shall set RETRY_DELAYs as follows:
    + If the most significant bit of the RETRY_DELAY_r is '0', set RETRY_DELAY_UNITs to 1000ms. If the most significant bit of the RETRY_DELAY_r is '1', set RETRY_DELAY_UNITs to 60000ms.
    + The mobile station shall set RETRY_DELAY_VALUEs to the seven least significant bits of RETRY_DELAY_r.
    + The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUEs × RETRY_DELAY_UNITs ms as RETRY_DELAYs[RETRY_TYPE_r].
    + If RETRY_TYPE_r is equal to '001' or '101', and NDSS_ORIGs is equal to enabled, the mobile station shall set NDSS_ORIGs to disabled and should indicate to the user that the call origination has been canceled. If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to '0', shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
    + If RETRY_TYPE_r is equal to '001' or '101', the mobile station shall enter the *Mobile Station Idle State.*

19. **Security Mode Command Message:** The mobile station shall perform the procedures as specified in 2.6.11.4.

20. **Service Redirection Message:** The mobile station shall process the message as follows:

- If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to '00000110' (message requires a capability that is not supported by the mobile station).
• If DELETE TMSI_r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE_{s-p} to ‘1’.

• The mobile station shall disable the full-TMSI timer.

• The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.

• If RECORD_TYPE_r is ‘00000000’, the mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r, and enter the System Determination Substate of the Mobile Station Initialization State with an NDSS off indication (see 2.6.1.1); otherwise:
  – if REDIRECT_TYPE_r is ‘0’, the mobile station shall store the redirection record received in the message as REDIRECT_REC_s and shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).
  – if REDIRECT_TYPE_r is ‘1’, the mobile station shall store the redirection record received in the message as REDIRECT_REC_s and shall enable NDSS_ORIG_s, and shall record the dialed digits (if any). The mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).

21. SSD Update Message: The mobile station shall respond to the message as specified in 2.3.12.1.5.

22. Status Request Message: The mobile station shall disable the System Access State timer and respond to the message. If P_REV_IN_USE_s is less than or equal to three, the mobile station shall respond with a Status Response Message. If P_REV_IN_USE_s is greater than three, the mobile station shall respond with an Extended Status Response Message. If the message does not specify any qualification information (QUAL_INFO_TYPE_r is equal to ‘00000000’), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL_INFO_TYPE_r is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_s) in the response. If the message specifies a band class and an operating mode (QUAL_INFO_TYPE_r is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_s) and operating mode (OP_MODE_s) in the response. If the message specifies a band class or a band class and an operating mode which are not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00000110’ (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00001000’ (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00001001’ (information record is not supported for the specified band class and operating mode).
23. **TMSI Assignment Message**: The mobile station shall store the TMSI zone and code as follows:

   - The mobile station shall store the length of the TMSI zone field by setting `ASSIGNING_TMSI_ZONE_LEN_{s-p}` to `TMSI_ZONE_LEN_r`,
   - The mobile station shall store the assigning TMSI zone number by setting the `ASSIGNING_TMSI_ZONE_LEN_{s-p}` least significant octets of `ASSIGNING_TMSI_ZONE_{s-p}` to `TMSI_ZONE_r`, and
   - The mobile station shall store the TMSI code by setting `TMSI_CODE_{s-p}` to `TMSI_CODE_r`.

   The mobile station shall set the TMSI expiration time by setting `TMSI_EXP_TIME_{s-p}` to `TMSI_EXP_TIME_r`. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a *TMSI Assignment Completion Message* within $T_{56m}$ seconds.

24. **User Zone Reject Message**

25. **BCMC Order**: The mobile station shall process this message as follows:

   - If `ORDQ_r` is set to ‘00000000’, the mobile station shall perform the following for each of the BCMC flows that the base station is responding to:
     - If `CLEAR_ALL_RETRY_DELAY_r` equals ‘1’, the mobile station shall delete the currently stored BCMC Retry Delay List.
     - If `CLEAR_RETRY_DELAY_r` equals ‘1’, the mobile station shall delete the entry in the `BCMC_RETRY_DELAY_LIST_{s}[i]` corresponding to `BCMC_FLOW_ID` (See section 2.6.13.11) in this message.
     - If `ALL_BCMC_REASON_r` or `BCMC_REASON_r` equals ‘0000’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_NOT_AVAILABLE, reason_ind=CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
     - If `ALL_BCMC_REASON_r` or `BCMC_REASON_r` equals ‘0001’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_NOT_TRANSMITTED, reason_ind=CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
     - If `BCMC_REASON_r` equals ‘0010’ for any of the flows or `ALL_BCMC_REASON_r` equals ‘0010’, the mobile station shall enable the BCMC wait timer with a value of `BSPM_WAIT_TIME` seconds, shall enter the *Mobile Station Idle State* and shall wait for an updated *BCMC Service Parameters Message* as specified in 2.6.13.1.
     - If `ALL_BCMC_REASON_r` or `BCMC_REASON_r` equals ‘0011’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=SUCCESS, cause=REGISTRATION_ACCEPTED, reason_ind=CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
– If `ALL_BCMC_REASON` or `BCMC_REASON` equals ‘0100’, Layer 3 shall send
  a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause=
  AUTHORIZATION_FAILURE, reason_ind = CURRENT_SYS)` for each of the
  corresponding `BCMC_FLOW_ID` to the BCMC Service Layer, and shall enter
  the Mobile Station Idle State.

– If `ALL_BCMC_REASON` or `BCMC_REASON` equals ‘0101’, the mobile station
  shall perform the following:

  + Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID,
    result=FAILURE, cause=RETRY_DELAY, reason_ind=CURRENT_SYS)` for
    each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.

  + For each of the corresponding `BCMC_FLOW_ID`, if there is a
    `BCMC_RETRY_DELAY_LIST[i].BCMC_FLOW_ID` which is same as
    `BCMC_FLOW_ID` (See section 2.6.13.11), the mobile station shall set
    `BCMC_RETRY_DELAY_LIST[i].RETRY_DELAY` to current system time plus
    `ALL_BCMC_RETRY_DELAY / BCMC_RETRY_DELAY`; otherwise, the
    mobile station shall add new `BCMC_RETRY_DELAY_LIST[i]` to the BCMC
    Retry Delay List and shall set
    `BCMC_RETRY_DELAY_LIST[i].BCMC_FLOW_ID` to the `BCMC_FLOW_ID`,
    `BCMC_RETRY_DELAY_LIST[i].RETRY_DELAY` to current system time plus
    `ALL_BCMC_RETRY_DELAY / BCMC_RETRY_DELAY`.

– If the base station indicates `BCMC_REASON` (indicated via
  `ALL_BCMC_REASON` or `BCMC_REASON`) of ‘0000’, ‘0001’, ‘0011’, ‘0100’, or
  ‘0101’ for all of the flows requested, the mobile station shall enter the Mobile
  Station Idle State.

26. Any other message: If the mobile station receives any other message specified in
    Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all
    other messages.

28. If the mobile station performs an access probe handoff or access handoff and receives any
    of the following messages, it shall process the message as specified in 2.6.3.1.3:

    • If the mobile station is currently monitoring the Paging Channel:

      1. System Parameters Message
      2. Access Parameters Message
      3. Neighbor List Message
      4. Extended System Parameters Message
      5. Extended Neighbor List Message
      6. General Neighbor List Message
      7. Global Service Redirection Message
      8. Extended Global Service Redirection Message
• If the mobile station is currently monitoring the Primary Broadcast Control Channel:
  1. ANSI-41 System Parameters Message
  2. Enhanced Access Parameters Message
  3. Universal Neighbor List Message
  4. MC-RR Parameters Message
  5. Extended Global Service Redirection Message

2.6.3.6 Registration Access Substate

In this substate, the mobile station sends a Registration Message. If the base station responds with an authentication request, the mobile station responds in this substate.

Upon entering the Registration Access Substate, the mobile station shall send the Registration Message.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station) other than the Registration Message, Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see [4]).

When transmitting an autonomous Registration Message (i.e., it is not sent as a response to a Registration Request Order received from the base station), Layer 3 shall indicate to Layer 2 that the type of the message is a request that is a registration (see [4]).

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

• If PACA<sub>S</sub> is equal to enabled, the mobile station shall set PACA<sub>S</sub> to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

• The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2.

• The mobile station shall disable its transmitter and enter the Mobile Station Idle State.
If the mobile station receives confirmation of delivery of any message sent by the mobile station in this substate, it shall then enter the Mobile Station Idle State unless:

- If the registration access was initiated due to a user direction to power down, the mobile station shall update registration variables as specified in 2.6.5.3.3 and may power down.
- If the mobile station has included the ENC_SEQ_H field in the Registration Message.
- If a message received from the base station requires a response, the mobile station shall send a response to the message in this substate.

If the mobile station receives confirmation of delivery of the Registration Message, the mobile station shall update its registration variables as specified in 2.6.5.3.1.

If the mobile station is directed by the user to originate a call, the mobile station may process the origination request as follows:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- If PACAaspberry is equal to enabled, the mobile station shall set PACA to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.
- The mobile station shall enter the Mobile Station Origination Attempt Substate with an origination indication.

If PACAaspberry is equal to enabled, the mobile station shall set PACA_CANCEL to ‘1’ when the user directs the mobile station to cancel a PACA call.

If the mobile station is to exit the System Access State as a result of processing Layer 3 fields of a message requiring an acknowledgment, the mobile station shall exit the System Access State after Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

If Layer 3 receives a message other than message listed below:

- _Extended Channel Assignment Message with DIRECT_CH_ASSIGN_IND field included and set to ‘1’_

with an indication from Layer 2 that an access attempt for a message being transmitted was not terminated as a result of processing the Layer 2 fields of the received message, the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station may send a Mobile Station Reject Order with ORDQ equal to ‘00000100’ (message field not in valid range).

1. **Authentication Challenge Message:** If the registration access was initiated due to a user direction to power down, the mobile station shall ignore the message; otherwise, the mobile station shall respond to the message as specified in 2.3.12.1.4, regardless of the value of AUTHS.
2. **Authentication Request Message**: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.

3. **Base Station Challenge Confirmation Order**: If the registration access was initiated due to a user direction to power down, the mobile station shall ignore the message; otherwise, the mobile station shall respond to the message as specified in 2.3.12.1.5.

4. **Base Station Reject Order**: The mobile station shall perform the procedures as specified in 2.6.11.5.

5. **Data Burst Message**

6. **Feature Notification Message**

7. **Local Control Order**

8. **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_Ps-p equals the least significant four bits of ORDQr). 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.

9. **Maintenance Required Order**: The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSNs-p equals the least significant four bits of ORDQr). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

10. **PACA Message**: If P_REV_IN_USEs is less than or equal to four and the mobile station does not support PACA capability, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000110' (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

    If PACAs is equal to disabled, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (message not accepted in this state).

    If PACAs is equal to enabled, the mobile station shall perform the following:

    - If the purpose of the message is to respond to an Origination Message (PURPOSEr is equal to ‘0000’), the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000010’ (message not accepted in this state).
• If the purpose of the message is to provide the queue position of the PACA call (PURPOSE\textsubscript{r} is equal to ‘0001’), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT\textsubscript{s}, should indicate to the user that the PACA call is still queued, and should indicate to the user the current queue position (Q\_POS\textsubscript{r}) of the call.

• If the purpose of the message is to instruct the mobile station to re-originate the PACA call (PURPOSE\textsubscript{r} is equal to ‘0010’), Layer 3 shall send an L2-Supervision\_Request primitive to Layer 2 to abort any access attempt in progress, shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of PACA\_TIMEOUT\textsubscript{s}, and shall enter the Mobile\_Station\_Origination\_Attempt\_Substate with a PACA response indication.

• If the purpose of the message is to cancel the PACA call (PURPOSE\textsubscript{r} is equal to ‘0011’), the mobile station shall set PACA\_s to disabled and PACA\_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

11. Registration Accepted Order: The mobile station shall perform the procedures 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\textsubscript{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. Release Order: If NDSS\_ORIG\_s is equal to enabled, the mobile station shall set NDSS\_ORIG\_s to disabled, and should indicate to the user that the call origination has been canceled. The mobile station shall enter the Mobile\_Station\_Idle\_State or the System Determination Substate of the Mobile\_Station\_Initialization\_State with a release indication (see 2.6.1.1). If the mobile station enters the Mobile\_Station\_Idle\_State, and if PACA\_s is equal to enabled, the mobile station shall set PACA\_s to disabled and PACA\_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

14. Retry Order: The mobile station shall process the message as follows:

• If RETRY\_TYPE\textsubscript{r} is equal to ‘000’, the mobile station shall set RETRY\_DELAY\textsubscript{s}[RETRY\_TYPE\textsubscript{r}] to 0, where RETRY\_TYPE\textsubscript{r} is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.

• If RETRY\_TYPE\textsubscript{r} is equal to ‘001’, ‘100’, or ‘101’, the mobile station shall perform the following:
  − If RETRY\_DELAY\textsubscript{r} is equal to ‘00000000’, then the mobile station shall set RETRY\_DELAY\textsubscript{s}[RETRY\_TYPE\textsubscript{r}] to 0.
  − If RETRY\_DELAY\textsubscript{r} is not equal to ‘00000000’, the mobile station shall set RETRY\_DELAY\textsubscript{s}[RETRY\_TYPE\textsubscript{r}] as follows:

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If the most significant bit of the RETRY_DELAY r is ‘0’, set RETRY_DELAY_UNITs to 1000ms. If the most significant bit of the RETRY_DELAY r is ‘1’, set RETRY_DELAY_UNITs to 60000ms. The mobile station shall set RETRY_DELAY_VALUEs to the seven least significant bits of RETRY_DELAY r. The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUEs × RETRY_DELAY_UNITs ms as RETRY_DELAY[RETRY_TYPE r].

15. **Security Mode Command Message**: The mobile station shall perform the procedures as specified in 2.6.11.4.

16. **Service Redirection Message**: The mobile station shall process the message as follows:
   - If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to ‘00000110’ (message requires a capability that is not supported by the mobile station).
   - If DELETE_TMSI r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’. The mobile station shall disable the full-TMSI timer.
   - The mobile station shall set RETURN_IF_FAILs = RETURN_IF_FAILr.
   - If RECORD_TYPE r is equal to ‘00000000’, the mobile station shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the redirection record received in the message as REDIRECT_RECs and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1).

17. **SSD Update Message**: If the registration access was initiated due to a user direction to power down, the mobile station shall ignore the message. Otherwise, the mobile station shall respond to the message as specified in 2.3.12.1.5.

18. **Status Request Message**: The mobile station shall disable the *System Access State* timer and respond to the message. If P_REV_IN_USEs is less than or equal to three, the mobile station shall respond with a *Status Response Message*. If P_REV_IN_USEs is greater than three, the mobile station shall respond with an *Extended Status Response Message*. If the message does not specify any qualification information (QUAL_INFO_TYPEr is equal to ‘00000000’), the mobile station shall include the requested information records in the response. If the message specifies a band class (QUAL_INFO_TYPEr is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASSr) in the response. If the message specifies a band class and an operating mode (QUAL_INFO_TYPEr is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASSr) and operating mode (OP_MODEr) in the response.
If the message specifies a band class or a band class and an operating mode which are not supported by the mobile station, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to ‘00000110’ (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to ‘00001000’ (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to ‘00001001’ (information record is not supported for the specified band class and operating mode).

19. **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_LENs-p to TMSI_ZONE_LENr;
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING_TMSI_ZONE_LENs-p least significant octets of ASSIGNING_TMSI_ZONEs-p to TMSI_ZONEr, and
- The mobile station shall store the TMSI code by setting TMSI_CODEs-p to TMSI_CODEr.

The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIMEs-p to TMSI_EXP_TIMEr. 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.

20. **User Zone Reject Message**

21. **General Page Message or Universal Page Message:** If the mobile station receives a mobile-station-addressed page, the mobile station may determine if there is a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall enter the *Page Response Substate*.

22. **Extended Channel Assignment Message:** If the DIRECT_CH_ASSIGN_INDr is included and is set to ‘1’, the mobile station shall perform the following:

- The mobile station shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r.
- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
• If the stored configuration parameters are current (see 2.6.2.2), the mobile station shall process the message as specified in section 2.6.3.3. Otherwise, the mobile station shall process the message as specified in section 2.6.3.3 once stored configuration parameters are current.

Otherwise, the mobile station shall ignore this message.

23. 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.

• If ORDQ_r is equal to ‘00000001’, the mobile station shall process the message as specified in 2.6.12.1.

24. Any other message: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

2.6.3.7 Mobile Station Message Transmission Substate

In this substate, the mobile station sends a Data Burst Message, a Device Information Message, a Radio Environment Message, or a Fast Call Setup Order. If the base station responds with an authentication request, the mobile station responds in this substate.

Support of this substate is optional.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station) other than the Data Burst Message, Layer 3 shall indicate to Layer 2 that the message is a request other than a registration request or a message transmission request (see [4]).

When transmitting an autonomous Data Burst Message, Layer 3 shall indicate to Layer 2 that the type of the message is a request that is a message transmission (see [4]).

The mobile station shall not send any Short Data Burst (see [30], [42]) until the maximum of the system time stored in RETRY_DELAY_s[100] and RETRY_DELAY_s[101].

Upon entering the Mobile Station Message Transmission Substate, the mobile station shall transmit the message as follows:

• The mobile station shall exit the Mobile Station Message Transmission Substate, shall enter either the Mobile Station Idle State or the System Determination Substate with an ACCT blocked indication, and should indicate to the user that the message transmission has terminated if all of the following conditions are true:
– P_REV_IN_USE_s is greater than six,
– ACCT is enabled for the service option number associated with the Data Burst Message, due to either of the following two conditions:
  + The service option number associated with the Data Burst Message is equal to an ACCT_SO entry in ACCT_SO_LIST, or
  + The service option group number of the service option associated with the Data Burst Message is equal to an ACCT_SO_GRP entry in ACCT_SO_GRP_LIST.

• If the mobile station entered this substate with a message transmission indication, the mobile station shall transmit the Data Burst Message to the base station.

• If the mobile station entered this substate with a hook status indication, the mobile station shall set the autonomous message timer equal to AUTO_MSG_INTERVALs and shall start the timer. The mobile station shall transmit the Device Information Message to the base station, with the RECORD_TYPE field of the message set to 00100000 and the Hook Indicator field set to the current hook status.

• If the mobile station entered this substate with a radio environment report indication, the mobile station shall transmit the Radio Environment Message to the base station in assured mode, and increment RER_COUNT upon receiving confirmation of delivery. If, after incrementing, RER_COUNT is equal to RER_MAX_NUM_MSGs, the mobile station shall set RER_MODE_ENABLED to NO. If RER_MODE_ENABLED is set to NO and TKZ_MODE_PENDING is equal to YES, the mobile station shall perform the following:
  – Set TKZ_MODE_ENABLED to YES and TKZ_MODE_PENDING to NO.
  – If TKZ_SID_s is equal to SID_s, TKZ_NID_s is equal to NID_s, and TKZ_MODE_SUPPORTEDs is equal to ‘1’, initialize the tracking zone list (TKZ_LIST) to contain TKZ_ID_s; otherwise, initialize the tracking zone list to NULL.
  – Enable the tracking zone update timer with an initial value of infinity if TKZ_UPDATE_PRD_s is equal to ‘1111’; otherwise, the mobile station shall enable the tracking zone update timer with an initial value of 2^TKZ_UPDATE_PRD_s + 6 seconds.

• If the mobile station entered this substate with a tracking zone indication, the mobile station shall perform the following:
  – The mobile station shall transmit the Radio Environment Message to the base station.
If the mobile station receives confirmation of delivery of Radio Environment Message, the mobile station shall add TKZ_IDs to TKZ_LIST. For all entries of TKZ_LIST whose TKZ timer is not active, other than TKZ_IDs, enable the TKZ timer with the duration specified by TKZ_TIMERs. If TKZ_LIST contains more than TKZ_LIST_LENs + 1 entries, the entry with active TKZ timer with smallest remaining TKZ timer value shall be removed from the list before adding the new entry.

The mobile station shall increment TKZ_COUNT upon receiving confirmation of delivery. If, after incrementing, TKZ_COUNT is equal to TKZ_MAX_NUM_MSGs, the mobile station shall disable the tracking zone update timer and set TKZ_MODE_ENABLED to NO.

- If the mobile station entered this substate with a fast call setup indication, the mobile station shall transmit the Fast Call Setup Order (ORDQ = '00000000') to the base station as follows:

  - If the mobile station requests operation in the reduced slot cycle mode, the mobile station shall set the RSC_MODE_IND field to ‘1’ and perform the following:
    + Set RSC_MODE_ENABLED to YES.
    + Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as specified in 2.7.3.6, and store the system time specified by these fields as RSC_END_TIME.
    + Set the RSCI field as specified in 2.7.3.6 and store it as RSCI_s; if RSCI_s is equal to ‘0111’, set SLOTTEDs to NO.

  - Otherwise, the mobile station shall set the RSC_MODE_IND field to ‘0’.

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8), the mobile station shall perform the following:

  - If PACA_s is equal to enabled, the mobile station shall set PACA_s to disabled and PACA_CANCEL to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

  - The mobile station shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2.

  - The mobile station shall disable its transmitter and enter the Mobile Station Idle State.

If the mobile station receives confirmation of any message sent by the mobile station in this substate, it shall send a response in this substate if required and shall then enter the Mobile Station Idle State.
If PACA\textsubscript{s} is equal to enabled, the mobile station shall set PACA\_CANCEL to ‘1’ when the user directs the mobile station to cancel a PACA call.

If the mobile station is to exit the System Access State as a result of processing Layer 3 fields of a message requiring an acknowledgment, the mobile station shall exit the System Access State after Layer 3 receives an indication from Layer 2 that the acknowledgment to the message has been sent and acknowledged.

If Layer 3 receives a message other than message listed below:

- **Extended Channel Assignment Message** with DIRECT\_CH\_ASSIGN\_IND field included and set to ‘1’

with an indication from Layer 2 that an access attempt for a message being transmitted was not terminated as a result of processing the Layer 2 fields of the received message, the mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the message or order is outside its permissible range, the mobile station may send a **Mobile Station Reject Order** with ORDQ equal to ‘00000100’ (message field not in valid range).

1. **Authentication Challenge Message**: The mobile station shall respond to the message as specified in 2.3.12.1.4, regardless of the value of AUTH\textsubscript{s}.

2. **Authentication Request Message**: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.

3. **Base Station Challenge Confirmation Order**: The mobile station shall respond to the message as specified in 2.3.12.1.5.

4. **Base Station Reject Order**: The mobile station shall perform the procedures as specified in 2.6.11.5.

5. **Data Burst Message**

6. **Local Control Order**

7. **Lock Until Power-Cycled Order**: The mobile station shall disable its transmitter and record the reason for the Lock Until Power-Cycled Order in the mobile station’s semi-permanent memory (LCKRSN\textsubscript{Ps-P} equals the least significant four bits of ORDQ\textsubscript{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.

8. **Maintenance Required Order**: The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSN\textsubscript{S-P} equals the least significant four bits of ORDQ\textsubscript{r}). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.
9. **PACA Message:** If \( P_{REV\_IN\_USE} \) is less than or equal to four and the mobile station does not support PACA capability, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000110’ (message requires a capability that is not supported by the mobile station); otherwise, the mobile station shall process the message as follows:

If \( PACA_s \) is equal to disabled, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000010’ (message not accepted in this state).

If \( PACA_s \) is equal to enabled, the mobile station shall perform the following:

- If the purpose of the message is to respond to an *Origination Message* \((PURPOSE_r = \text{‘0000’})\), the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000010’ (message not accepted in this state).
- If the purpose of the message is to provide the queue position of the PACA call \((PURPOSE_r = \text{‘0001’})\), the mobile station shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of \( PACA\_TIMEOUT_s \), should indicate to the user that the PACA call is still queued, and should indicate to the user the current queue position \((Q\_POS_r)\) of the call.
- If the purpose of the message is to instruct the mobile station to re-originate the PACA call \((PURPOSE_r = \text{‘0010’})\), Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress, shall set the PACA state timer to the duration shown in Table 3.7.2.3.2.20-2 corresponding to the value of \( PACA\_TIMEOUT_s \), and shall enter the *Mobile Station Origination Attempt Substate* with a PACA response indication.
- If the purpose of the message is to cancel the PACA call \((PURPOSE_r = \text{‘0011’})\), the mobile station shall set \( PACA_s \) to disabled and \( PACA\_CANCEL \) to ‘0’, shall disable the PACA state timer, and should indicate to the user that the PACA call has been canceled.

10. **Registration Accepted Order:** The mobile station shall perform the procedures as specified in 2.6.11.1.

11. **Registration Rejected Order:** This order indicates that normal service is not available on this system. The mobile station shall disable the full-TMSI timer. If the received order specifies to delete the TMSI \((ORDQ = ‘00000100’)\), the mobile station shall set all the bits of the TMSI_CODEs-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).

12. **Retry Order:** The mobile station shall process the message as follows:

- If \( RETRY\_TYPE_r \) is equal to ‘000’, the mobile station shall set \( RETRY\_DELAY_{[RETRY\_TYPE]} \) 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_DELAYᵣ is equal to ‘00000000’, then the mobile station shall set
RETRY_DELAYₛ[RETRY_TYPEᵣ] to 0.

If RETRY_DELAYᵣ is not equal to ‘00000000’, the mobile station shall set
RETRY_DELAYₛ[RETRY_TYPEᵣ] as follows:

+ If the most significant bit of the RETRY_DELAYᵣ is ‘0’, set
  RETRY_DELAY_UNITₛ to 1000ms. If the most significant bit of the
  RETRY_DELAYᵣ is ‘1’, set RETRY_DELAY_UNITₛ to 60000ms.

+ The mobile station shall set RETRY_DELAY_VALUEₛ to the seven least
  significant bits of RETRY_DELAYᵣ.

+ The mobile station shall store the next system time 80 ms boundary +
  RETRY_DELAY_VALUEₛ × RETRY_DELAY_UNITₛ ms as
  RETRY_DELAYₛ[RETRY_TYPEᵣ].

13. **Security Mode Command Message:** The mobile station shall perform the procedures
    as specified in 2.6.11.4.

14. **Service Redirection Message:** The mobile station shall process the message as
    follows:

    • If the mobile station is directed to an unsupported operation mode or band
      class, the mobile station shall respond with a **Mobile Station Reject Order** with
      ORDQ equal to ‘00000110’ (message requires a capability that is not supported
      by the mobile station).

    • If DELETE_TMSIᵣ is equal to ‘1’, the mobile station shall set all the bits of
      TMSI_CODEₛₚ to ‘1’. The mobile station shall disable the full-TMSI timer.

    • The mobile station shall set RETURN_IF_FAILₛ = RETURN_IF_FAILᵣ.

    • If RECORD_TYPEᵣ is equal to ‘00000000’, the mobile station shall enter the
      System Determination Substate of the Mobile Station Initialization State with an
      NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
      redirection record received in the message as REDIRECT_RECₛ and shall enter
      the System Determination Substate of the Mobile Station Initialization State with a
      redirection indication (see 2.6.1.1).

15. **SSD Update Message:** The mobile station shall respond to the message as specified
    in 2.3.12.1.5.

16. **Status Request Message:** The mobile station shall disable the System Access State
    timer and respond to the message. If P_REV_IN_USEₛ is less than or equal to three,
    the mobile station shall respond with a **Status Response Message**. If
    P_REV_IN_USEₛ is greater than three, the mobile station shall respond with an
    **Extended Status Response Message**. If the message does not specify any
    qualification information (QUAL_INFO_TYPEᵣ is equal to ‘00000000’), the mobile
    station shall include the requested information records in the response. If the
    message specifies a band class (QUAL_INFO_TYPEᵣ is equal to ‘00000001’), the
    mobile station shall only include the requested information records for the specified
    band class (BAND_CLASSᵣ) in the response. If the message specifies a band class
and an operating mode (QUAL_INFO>Type is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASSr) and operating mode (OP_MODEr) in the response.

If the message specifies a band class or a band class and an operating mode which is not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00000110’ (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00001000’ (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the specified band class and operating mode, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00001001’ (information record is not supported for the specified band class and operating mode).

17. **TMSI Assignment Message**: The mobile station shall store the TMSI zone and code as follows:
   - The mobile station shall store the length of the TMSI zone field by setting ASSIGNING_TMSI_ZONE_LENs-p to TMSI_ZONE_LENr,
   - The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING_TMSI_ZONE_LENs-p least significant octets of ASSIGNING_TMSI_ZONEs-p to TMSI_ZONEr, and
   - The mobile station shall store the TMSI code by setting TMSI_CODEs-p to TMSI_CODEr.

   The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIMEs-p to TMSI_EXP_TIMEr. The mobile station shall disable the full-TMSI timer. The mobile station shall then respond with a TMSI Assignment Completion Message within T56m seconds.

18. **General Page Message** or Universal Page Message: If the mobile station receives a mobile-station-addressed page, the mobile station may determine whether there is a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform the following:
   - Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
   - If the mobile station entered this substate with a message transmission indication, the mobile station may store the Data Burst Message for later transmission.
   - The mobile station shall enter the Page Response Substate.

19. **Extended Channel Assignment Message**: If the DIRECT_CH_ASSIGN_INDr is included and is set to ‘1’, the mobile station shall perform the following:
   - The mobile station shall set CONFIG_MSG_SEQs-p to CONFIG_MSG_SEQr.
If the mobile station entered this substate with a message transmission indication, the mobile station may store the Data Burst Message for later transmission.

Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.

If the stored configuration parameters are current (see 2.6.2.2), the mobile station shall process the message as specified in section 2.6.3.3; otherwise, the mobile station shall process the message as specified in section 2.6.3.3 once stored configuration parameters are current.

Otherwise, the mobile station shall ignore this message.

20. 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.

If ORDQ_r is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

21. Any other message: If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

2.6.3.8 PACA Cancel Substate

In this substate, the mobile station sends a PACA Cancel Message. If the base station responds with an authentication request, the mobile station responds in this substate.

Upon entering the PACA Cancel Substate, the mobile station shall transmit the PACA Cancel Message.

If a message received from the base station requires a Layer 2 acknowledgment and does not require a Layer 3 response, Layer 3 shall indicate to Layer 2 that no response is outstanding (see [4]).

If a message received from the base station requires a Layer 2 acknowledgment and also a Layer 3 response, Layer 3 shall indicate to Layer 2 that a response is outstanding (see [4]).

When transmitting a response to a message received from the base station, Layer 3 shall indicate to Layer 2 that the type of the message is a response (see [4]).

When transmitting an autonomous message (i.e., a message that is not sent as a response to a message received from the base station), Layer 3 shall indicate to Layer 2 that the type of the message is a request other than a registration request or a message transmission request (see [4]).

While in this substate, the mobile station shall monitor the Paging Channel or the Forward Common Control Channel. If the mobile station declares a loss of the Paging Channel or the Forward Common Control Channel (see 2.6.3.1.8), it shall declare an access attempt failure and update its registration variables as specified in 2.6.5.5.3.2, disable its transmitter and enter the Mobile Station Idle State. If the mobile station receives
confirmation of any message sent by the mobile station in this substate, it shall send a
response in this substate if required and shall then enter the Mobile Station Idle State.

If the mobile station is to exit the System Access State as a result of processing Layer 3
fields of a message requiring an acknowledgment, the mobile station shall exit the System
Access State after Layer 3 receives an indication from Layer 2 that the acknowledgment to
the message has been sent and acknowledged.

If Layer 3 receives a message other than message listed below:

- Extended Channel Assignment Message with DIRECT_CH_ASSIGN_IND field
  included and set to ‘1’

with an indication from Layer 2 that an access attempt for a message being transmitted
was not terminated as a result of processing the Layer 2 fields of the received message, the
mobile station shall ignore the received message.

The following directed messages and orders can be received. If any field value of the
message or order is outside its permissible range, the mobile station may send a Mobile
Station Reject Order with ORDQ equal to ‘00000100’ (message field not in valid range).

1. Authentication Challenge Message: The mobile station shall respond to the message
   as specified in 2.3.12.1.4, regardless of the value of AUTHs.

2. Authentication Request Message: The mobile station shall process the message and
   shall respond as specified in 2.3.12.5.2.

3. Base Station Challenge Confirmation Order: The mobile station shall respond to the
   message as specified in 2.3.12.1.5.

4. Base Station Reject Order: The mobile station shall perform the procedures as
   specified in 2.6.11.5.

5. Data Burst Message

6. Local Control Order

7. Lock Until Power-Cycled Order: The mobile station shall disable its transmitter and
   record the reason for the Lock Until Power-Cycled Order in the mobile station’s semi-
   permanent memory (LCKRSN_Ps-P equals the least significant four bits of ORDQr).
   The mobile station should notify the user of the locked condition. The mobile
   station shall enter the System Determination Substate of the Mobile Station
   Initialization State with a lock indication (see 2.6.1.1), and shall not enter the System
   Access State again until after the next mobile station power-up or until it has
   received an Unlock Order. This requirement shall take precedence over any other
   mobile station requirement specifying entry to the System Access State.

8. Maintenance Required Order: The mobile station shall record the reason for the
   Maintenance Required Order in the mobile station’s semi-permanent memory
   (MAINTRSN_s-P equals the least significant four bits of ORDQr). The mobile station
   shall remain in the unlocked condition. The mobile station should notify the user of
   the maintenance required condition.
9. **PACA Message:** The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000010' (message not accepted in this state).

10. **Registration Accepted Order:** The mobile station shall perform the procedures as specified in 2.6.11.1.

11. **Registration Rejected Order:** This order indicates that normal service is not available on this system. The mobile station shall disable the full-TMSI timer. If the received order specifies to delete the TMSI (ORDQ = '00000100'), the mobile station shall set all the bits of the TMSI_CODEs-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).

12. **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] to 0.
     - If RETRY_DELAY_r is not equal to '00000000', the mobile station shall set RETRY_DELAY_s[RETRY_TYPE] as follows:
       - If the most significant bit of the RETRY_DELAY_r is '0', set RETRY_DELAY_UNIT_s to 100ms. If the most significant bit of the RETRY_DELAY_r is '1', set RETRY_DELAY_UNIT_s to 60000ms.
       - The mobile station shall set RETRY_DELAY_VALUE_s to the seven least significant bits of RETRY_DELAY_r.
       - The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUE_s × RETRY_DELAY_UNIT_s ms as RETRY_DELAY_s[RETRY_TYPE].

13. **Security Mode Command Message:** The mobile station shall perform the procedures as specified in 2.6.11.4.

14. **Service Redirection Message:** The mobile station shall process the message as follows:

   - If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to '00000110' (message requires a capability that is not supported by the mobile station).
   - If DELETE_TMSI_r is equal to '1', the mobile station shall set all the bits of TMSI_CODEs-p to '1'. The mobile station shall disable the full-TMSI timer.
   - The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
• If \( \text{RECORD} \_\text{TYPE}_r \) is equal to ‘00000000’, the mobile station shall enter the
  System Determination Substate of the Mobile Station Initialization State with an
  NDSS off indication (see 2.6.1.1); otherwise, the mobile station shall store the
  redirection record received in the message as REDIRECT\_RECs and shall enter
  the System Determination Substate of the Mobile Station Initialization State with a
  redirection indication (see 2.6.1.1).

15. **SSD Update Message**: The mobile station shall respond to the message as specified
    in 2.3.12.1.5.

16. **Status Request Message**: The mobile station shall disable the System Access State
    timer and respond to the message. If \( \text{P} \_\text{REV} \_\text{IN} \_\text{USEs} \) is less than or equal to three,
    the mobile station shall respond with a Status Response Message. If \( \text{P} \_\text{REV} \_\text{IN} \_\text{USEs} \) is greater than three, the mobile station shall respond with an
    Extended Status Response Message. If the message does not specify any
    qualification information (QUAL\_INFO\_TYPEr is equal to ‘00000000’), the mobile
    station shall include the requested information records in the response. If the
    message specifies a band class (QUAL\_INFO\_TYPEr is equal to ‘00000001’), the
    mobile station shall only include the requested information records for the specified
    band class (BAND\_CLASSr) in the response. If the message specifies a band class
    and an operating mode (QUAL\_INFO\_TYPEr is equal to ‘00000010’), the mobile
    station shall only include the requested information records for the specified band
    class (BAND\_CLASSr) and operating mode (OP\_MODEr) in the Status Response
    Message.

    If the message specifies a band class or a band class and an operating mode which
    is not supported by the mobile station, the mobile station shall send a Mobile
    Station Reject Order with ORDQ set to ‘00000110’ (message requires a capability
    that is not supported by the mobile station). If the response to this message
    exceeds the allowable length, the mobile station shall send a Mobile Station Reject
    Order with ORDQ set to ‘00001000’ (response message would exceed the allowable
    length). If the message specifies an information record which is not supported by
    the mobile station for the specified band class and operating mode, the mobile
    station shall send a Mobile Station Reject Order with ORDQ set to ‘00001001’
    (information record is not supported for the specified band class and operating
    mode).

17. **TMSI Assignment Message**: The mobile station shall store the TMSI zone and code
    as follows:

    • The mobile station shall store the length of the TMSI zone field by setting
      ASSIGNING\_TMSI\_ZONE\_LENs\_p to TMSI\_ZONE\_LENr,

    • The mobile station shall store the assigning TMSI zone number by setting the
      ASSIGNING\_TMSI\_ZONE\_LENs\_p least significant octets of
      ASSIGNING\_TMSI\_ZONEs\_p to TMSI\_ZONEr, and

    • The mobile station shall store the TMSI code by setting TMSI\_CODEs\_p to
      TMSI\_CODEr.
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 T56m seconds.

18. **General Page Message or Universal Page Message:** If the mobile station receives a mobile-station-addressed page, the mobile station may determine whether there is a page match (see 2.6.2.3). If a match is declared, the mobile station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- The mobile station shall enter the Page Response Substate.

19. **Extended Channel Assignment Message:** If the DIRECT_CH_ASSIGN_IND_r is included and is set to '1', the mobile station shall perform the following:

- The mobile station shall set CONFIG_MSG_SEQ_s to CONFIG_MSG_SEQ_r.
- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to abort any access attempt in progress.
- If the stored configuration parameters are current (see 2.6.2.2), the mobile station shall process the message as specified in section 2.6.3.3; otherwise, the mobile station shall process the message as specified in section 2.6.3.3 once stored configuration parameters are current.

Otherwise, the mobile station shall ignore this message.

20. **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.
- If ORDQ_r is equal to '00000001', the mobile station shall process the message as specified in 2.6.12.1.

21. **Any other message:** If the mobile station receives any other message specified in Table 3.7.2.3-1, it shall ignore all Layer 3 fields. The mobile station shall ignore all other messages.

2.6.4 Mobile Station Control on the Traffic Channel State

In this state, the mobile station communicates with the base station using the Forward and Reverse Traffic Channels.

As illustrated in Figure 2.6.4-1, the Mobile Station Control on the Traffic Channel State consists of the following substates:

- **Traffic Channel Initialization Substate** - In this substate, the mobile station verifies that it can receive the Forward Traffic Channel and begins transmitting on the Reverse Traffic Channel.
• **Traffic Channel Substate** - In this substate, the mobile station exchanges Traffic Channel frames with the base station in accordance with the current service configuration. The mobile station may perform the gating operation of Reverse Pilot Channel. While in this substate, one or more Call Control instances can be activated (see 2.6.10).

• **Release Substate** - In this substate, the mobile station disconnects the calls and the physical channels.
Figure 2.6.4-1. Mobile Station Control on the Traffic Channel State
2.6.4.1 Special Functions and Actions

The mobile station performs special functions and actions in one or more of the substates of the *Mobile Station Control on the Traffic Channel State.*

2.6.4.1.1 Forward Traffic Channel Power Control

The mobile station uses FPC_MODE_NO_SCHs as FPC_MODEs except during the forward Supplemental Channel assignment interval. During the forward Supplemental Channel assignment interval, the mobile station uses FPC_MODE_SCHs as FPC_MODEs.

To support Forward Traffic Channel power control, the mobile station reports frame error rate statistics to the base station. If the base station enables periodic reporting, the mobile station reports frame error rate statistics at specified intervals. If the base station enables threshold reporting, the mobile station reports frame error rate statistics when the frame error rate reaches a specified threshold.\(^{22}\)

The mobile station shall maintain the following frame counters:

- A counter (TOT_FRAMES\(_S\)) for the total number of frames received on the Forward Fundamental Channel.
- A counter (BAD_FRAMES\(_S\)) for the number of bad frames detected on the Forward Fundamental Channel.
- A counter (DCCH_TOT_FRAMES\(_S\)) for the total number of frames received on the Forward Dedicated Control Channel, when the Dedicated Control Channel is assigned.
- A counter (DCCH_BAD_FRAMES\(_S\)) for the total number of bad frames received on the Forward Dedicated Control Channel, when the Dedicated Control Channel is assigned.

The mobile station shall maintain the following counters for each Supplemental Channel assigned, if FOR_SCH_FER_REPs is equal to ‘1’:

- A counter (SCH_TOT_FRAMES\(_S\)) for the number of frames received on the assigned Supplemental Channel.
- A counter (SCH_BAD_FRAMES\(_S\)) for the number of bad frames received on the assigned Supplemental Channel.

The mobile station shall increment the counter by 1 at every 20 ms interval if a 20ms frame or at least one 5ms frame is received from the Forward Fundamental Channel or Dedicated Control Channel:

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\(^{22}\) Periodic reporting and threshold reporting may be independently enabled or disabled by the base station.
• If the received frame is from the Fundamental Channel, the mobile station shall perform the following:
  – Increment TOT_FRAMES\textsubscript{s} by 1.
  – If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile station shall increment BAD_FRAMES\textsubscript{s} by 1.

• If the received frame is from the Forward Dedicated Control Channel, the mobile station shall perform the following:
  – Increment DCCH_TOT_FRAMES\textsubscript{s} by 1.
  – If the received 20ms frame is bad or one of the 5ms frames is bad, the mobile station shall increment DCCH_BAD_FRAMES\textsubscript{s} by 1.

• If either of the following conditions is true:
  – PWR_THRESH_ENABLE\textsubscript{s} is equal to ‘1’ and if one of the following conditions is true:
    + If the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel \([\text{FPC_PRI_CHAN}_s = '0']\), and BAD_FRAMES\textsubscript{s} is equal to PWR_REP_THRESH\textsubscript{s} or
    + If the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel \([\text{FPC_PRI_CHAN}_s = '1']\), and DCCH_BAD_FRAMES\textsubscript{s} is equal to PWR_REP_THRESH\textsubscript{s}.
  or
  – PWR_PERIOD_ENABLE\textsubscript{s} is equal to ‘1’ and if one of the following conditions is true:
    + If the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel \([\text{FPC_PRI_CHAN}_s = '0']\), and TOT_FRAMES\textsubscript{s} is equal to \(\lfloor(2(\text{PWR_REP_FRAMES}_s/2) \times 5)\rfloor\), or
    + If the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel \([\text{FPC_PRI_CHAN}_s = '1']\), and DCCH_TOT_FRAMES\textsubscript{s} is equal to \(\lfloor(2(\text{PWR_REP_FRAMES}_s/2) \times 5)\rfloor\),

then the mobile station shall send a \textit{Power Measurement Report Message} to the base station. The mobile station should send the \textit{Power Measurement Report Message} in unassured mode. After sending a \textit{Power Measurement Report Message}, the mobile station shall set TOT_FRAMES\textsubscript{s}, BAD_FRAMES\textsubscript{s} to zero, and if the Dedicated Control Channel is assigned, shall set DCCH_TOT_FRAMES\textsubscript{s} and DCCH_BAD_FRAMES\textsubscript{s} to zero. The mobile station shall not increment the counters for a period of PWR_REP_DELAY\textsubscript{s} \(\times 4\) frames following the first transmission of the message.

• If FPC_PRI_CHAN\textsubscript{s} is equal to ‘0’ and TOT_FRAMES\textsubscript{s} is equal to \(\lfloor(2(\text{PWR_REP_FRAMES}_s/2) \times 5)\rfloor\), the mobile station shall perform the following:
  – Set TOT_FRAMES\textsubscript{s} and BAD_FRAMES\textsubscript{s} to zero.
Set DCCH_TOT_FRAMES and DCCH_BAD_FRAMES to zero, if the Dedicated Control Channel is assigned.

- If FPC_PRI_CHAN is equal to '1' and DCCH_TOT_FRAMES is equal to \( \lfloor \frac{PWR_REP_FRAMES}{2} \times 5 \rfloor \), the mobile station shall set TOT_FRAMES, BAD_FRAMES, DCCH_TOT_FRAMES, and DCCH_BAD_FRAMES to zero.

For each received frame from an assigned Supplemental Channel, the mobile station shall perform the following, if FOR_SCH_FER_REPs is equal to '1':

- Increment SCH_TOT_FRAMES by 1.
- If the received frame is bad, increment SCH_BAD_FRAMES by 1.

At the end of a burst on each assigned Supplemental Channel, if FOR_SCH_FER_REPs is equal to '1', the mobile station shall report the total number of frames received on this Supplemental Channel (SCH_TOT_FRAMES) and the bad frames detected (SCH_BAD_FRAMES) with the fields SCH_PWR_MEAS_FRAMES and SCH_ERRORS_DETECTED in the Power Measurement Report Message respectively. After sending the Power Measurement Report Message for the Supplemental Channel, the mobile station shall set SCH_TOTAL_FRAMES and SCH_BAD_FRAMES of the reported SCH to zero.

If both Forward Fundamental Channel and the Forward Dedicated Control Channel are assigned to the mobile station, the mobile station shall perform the following:

- The mobile station shall set FPC_DELTA_SETPT to (FPC_FCH_CURR_SETPT - FPC_DCCH_CURR_SETPT).
- For each received frame, if \(|FPC_FCH_CURR_SETPT - FPC_DCCH_CURR_SETPT - FPC_DELTA_SETPT|\) is equal to or greater than its assigned threshold FPC_SETPT_THRESH, the mobile station shall send the Outer Loop Report Message requiring acknowledgment to the base station, and the mobile station shall then set FPC_DELTA_SETPT to (FPC_FCH_CURR_SETPT - FPC_DCCH_CURR_SETPT).

For each of the supplemental channels assigned to the mobile station and FPC_MODE is set to '000', the mobile station shall perform the following:

- The mobile station shall set FPC_DELTA_SCH_SETPT to (FPC_FCH_CURR_SETPT - FPC_SCH_CURR_SETPT) if FPC_PRI_CHAN is equal to '0'.
- The mobile station shall set FPC_DELTA_SCH_SETPT to (FPC_DCCH_CURR_SETPT - FPC_SCH_CURR_SETPT) if FPC_PRI_CHAN is equal to '1'.

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• For each received frame, if FPC_PRI_CHAN is equal to ‘0’ and
\[|FPC_FCH_CURR_SETPT - FPC_SCH_CURR_SETPT| - FPC_DELTA_SCH_SETPT\] is equal to or greater than its assigned threshold FPC_SETPT_THRESH, the mobile station shall send the Outer Loop Report Message in assured mode, and the mobile station shall then set FPC_DELTA_SCH_SETPT to (FPC_FCH_CURR_SETPT - FPC_SCH_CURR_SETPT).

• For each received frame, if FPC_PRI_CHAN is equal to ‘1’ and
\[|FPC_DCCH_CURR_SETPT - FPC_SCH_CURR_SETPT| - FPC_DELTA_SCH_SETPT\] is equal to or greater than its assigned threshold FPC_SETPT_THRESH, the mobile station shall send the Outer Loop Report Message in assured mode, and the mobile station shall then set FPC_DELTA_SCH_SETPT to (FPC_DCCH_CURR_SETPT - FPC_SCH_CURR_SETPT).

If the Supplemental channels are assigned to the mobile station and FPC_MODE is set to ‘001’, ‘010’, ‘101’, or ‘110’, for each additional Forward Supplemental Channel other than the Forward Supplemental Channel specified by FPC_SEC_CHAN, the mobile station shall perform the following:

• The mobile station shall set FPC_DELTA_SCH_SETPT to (FPC_SCH_CURR_SETPT[FPC_SEC_CHAN] - FPC_SCH_CURR_SETPT) for the Supplemental Channel.

• For each received frame, if \[|FPC_SCH_CURR_SETPT[FPC_SEC_CHAN] - FPC_DELTA_SCH_SETPT|\] is equal to or greater than its assigned threshold FPC_SETPT_THRESH, the mobile station shall send the Outer Loop Report Message in assured mode, and the mobile station shall then set FPC_DELTA_SCH_SETPT to (FPC_SCH_CURR_SETPT[FPC_SEC_CHAN] - FPC_SCH_CURR_SETPT).

2.6.4.1.1.1 Forward Traffic Channel Power Control Initialization

To initialize Forward Traffic Channel power control, the mobile station shall set TOT_FRAMES, BAD_FRAMES, DCCH_TOT_FRAMES, and DCCH_BAD_FRAMES to zero. The mobile station shall initialize the frame counters SCH_TOT_FRAMES and SCH_BAD_FRAMES for each assigned Supplemental Channel to zero. The mobile station shall initialize FOR_SCH_FER_REPs to zero.

2.6.4.1.1.2 Processing the Power Control Parameters Message

The mobile station shall store the following parameters from the Power Control Parameters Message:

• Power control reporting threshold (PWR_REP_THRESH = PWR_REP_THRESHr)

• Power control reporting frame count (PWR_REP_FRAMES = PWR_REP_FRAMESr)

• Threshold report mode indicator (PWR_THRESH_ENABLE = PWR_THRESH_ENABLEr)
- Periodic report mode indicator
  \( \text{PWR} \_\text{PERIOD} \_\text{ENABLE}_{s} = \text{PWR} \_\text{PERIOD} \_\text{ENABLE}_{r} \)  
- Power report delay \( \text{PWR} \_\text{REP} \_\text{DELAY}_{s} = \text{PWR} \_\text{REP} \_\text{DELAY}_{r} \)  

The mobile station shall set \( \text{TOT}\_\text{FRAMES}_{s} \) and \( \text{BAD}\_\text{FRAMES}_{s} \) to zero if FCH is assigned.  
The mobile station shall set \( \text{DCCH} \_\text{TOT}\_\text{FRAMES}_{s} \) and \( \text{DCCH} \_\text{BAD}\_\text{FRAMES}_{s} \) to zero if DCCH is assigned.

### 2.6.4.1.1.3 Processing the Power Control Message

The mobile station shall send a *Mobile Station Reject Order* with the \( \text{ORDQ} \) field set to ‘00000110’ (message requires a capability that is not supported by the mobile station) if any of the following conditions are detected:

- If the mobile station does not support any Radio Configuration greater than 2 and \( \text{FPC} \_\text{MODE}_{r} \) is not supported by the mobile station.
- If the mobile station does not support Supplemental Channel and \( \text{FPC} \_\text{MODE}_{r} \) is set to the ‘001’, ‘010’, ‘101’, or ‘110’.
- If \( \text{PWR} \_\text{CNTL} \_\text{STEP}_{r} \) corresponds to a power control step size (see [2]) is not supported by the mobile station.

The mobile station shall send a *Mobile Station Reject Order* with the \( \text{ORDQ} \) field set to ‘00000111’ (message cannot be handled by the current mobile station configuration) if any of the following conditions are detected:

- \( \text{FPC} \_\text{PRI} \_\text{CHAN}_{r} \) is set to ‘1’ and only the Fundamental Channel is assigned.
- \( \text{FPC} \_\text{PRI} \_\text{CHAN}_{r} \) is set to ‘0’ and only the Dedicated Control Channel is assigned.

If none of the above conditions are true, the mobile station shall process the message as follows at the action time (see 2.6.4.1.5) specified in the message:

- The mobile station shall store the power control step size \( \text{PWR} \_\text{CNTL} \_\text{STEP}_{s} = \text{PWR} \_\text{CNTL} \_\text{STEP}_{r} \).
- If \( \text{FPC} \_\text{INCL}_{r} \) is equal to ‘1’, the mobile station shall perform the following:
  - The mobile station shall set \( \text{FPC} \_\text{MODE} \_\text{NO}\_\text{SCH}_{s} = \text{FPC} \_\text{MODE}_{r} \).
  - The mobile station shall set \( \text{FPC} \_\text{MODE}_{s} = \text{FPC} \_\text{MODE} \_\text{NO}\_\text{SCH}_{s} \) if there is no forward Supplemental Channel burst in progress (see 2.6.6.2.5.1.1).
  - The mobile station shall set \( \text{FPC} \_\text{PRI}\_\text{CHAN}_{s} \) to \( \text{FPC} \_\text{PRI}\_\text{CHAN}_{r} \).
  - If \( \text{FPC} \_\text{OLPC} \_\text{FCH}\_\text{INCL} \) is equal to ‘1’, the mobile station shall:
    + Set \( \text{FPC} \_\text{FCH}\_\text{FER}_{s} \) to \( \text{FPC} \_\text{FCH}\_\text{FER}_{r} \).
    + If \( \text{FPC} \_\text{FCH}\_\text{MIN}\_\text{SETPT}_{r} \) is not equal to ‘11111111’, set \( \text{FPC} \_\text{FCH}\_\text{MIN}\_\text{SETPT}_{s} \) to \( \text{FPC} \_\text{FCH}\_\text{MIN}\_\text{SETPT}_{r} \); otherwise, set \( \text{FPC} \_\text{FCH}\_\text{MIN}\_\text{SETPT}_{s} \) to \( \text{FPC} \_\text{FCH}\_\text{CURR}\_\text{SETPT}_{s} \).
+ If FPC_FCH_MAX_SETPT_r is not equal to ‘11111111’, set FPC_FCH_MAX_SETPT_s to FPC_FCH_MAX_SETPT_r; otherwise, set FPC_FCH_MAX_SETPT_s to FPC_FCH_CURR_SETPT_s.

– If FPC_O LPC_DCCH_INCL is equal to ‘1’, the mobile station shall:
  + Set FPC_DCCH_FER_s to FPC_DCCH_FER_r.
  + If FPC_DCCH_MIN_SETPT_r is not equal to ‘11111111’, set FPC_DCCH_MIN_SETPT_s to FPC_DCCH_MIN_SETPT_r; otherwise, set FPC_DCCH_MIN_SETPT_s to FPC_DCCH_CURR_SETPT_s.
  + If FPC_DCCH_MAX_SETPT_r is not equal to ‘11111111’, set FPC_DCCH_MAX_SETPT_s to FPC_DCCH_MAX_SETPT_r; otherwise, set FPC_DCCH_MAX_SETPT_s to FPC_DCCH_CURR_SETPT_s.

– If FPC_INCL is equal to ‘1’ and FPC_MODE is equal to ‘001’, ‘010’, ‘101’, or ‘110’, the mobile station shall:
  + Set FPC_SEC_CHAN_s to FPC_SEC_CHAN_r.
  + Set FPC_BCMC_CHAN_s to FPC_BCMC_CHAN_r.

– If NUM_SUP_r is not equal to ‘00’, for each Supplemental Channel included in the message, the mobile station shall:
  + Set SCH_ID_s to SCH_ID_r.
  + Set FPC_SCH_FER_s[SCH_ID_s] to FPC_SCH_FER_r.
  + If FPC_SCH_MIN_SETPT_r is not equal to ‘11111111’, set FPC_SCH_MIN_SETPT_s[SCH_ID_s] to FPC_SCH_MIN_SETPT_r; otherwise, set FPC_SCH_MIN_SETPT_s[SCH_ID_s] to FPC_SCH_CURR_SETPT_s.
  + If FPC_SCH_MAX_SETPT_r is not equal to ‘11111111’, set FPC_SCH_MAX_SETPT_s[SCH_ID_s] to FPC_SCH_MAX_SETPT_r; otherwise, set FPC_SCH_MAX_SETPT_s[SCH_ID_s] to FPC_SCH_CURR_SETPT_s.

– If FPC_THRESH_INCL is equal to ‘1’, the mobile station shall set FPC_SETPT_THRESH_s to FPC_SETPT_THRESH_r.

– If FPC_THRESH_SCH_INCL is equal to ‘1’, the mobile station shall set FPC_SETPT_THRESH_SCH_s to FPC_SETPT_THRESH_SCH_r.

• If RPC_INCL_r is equal to ‘1’ and the mobile station supports any Radio Configuration greater than 2, the mobile station shall perform the following:
  – If RPC_ADJ_REC_TYPE is equal to ‘0000’, the mobile station shall update the Reverse Channel Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for each reverse link code channel received in this message.
  – If RPC_ADJ_REC_TYPE is equal to ‘0001’ or ‘0010’, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for each transmission rate, frame length, coding type received in this message.
- If RPC_ADJ_REC_TYPE is equal to ‘0011’, at the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for the R-CQICH.

- If RPC_ADJ_REC_TYPE is equal to ‘0100’, the mobile station shall perform the following:
  
  + At the first R-PDCH frame boundary at or after the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for any combination of the following channels:
    - R-REQCH,
    - R-SPICH,
    - R-PDCCH possibly for each encoder packet size, or for the boosted and non boosted modes
    - R-PDCH possibly for each encoder packet size, or for the boosted and non boosted modes, or for each encoder packet size and transmission round.
  
  + At the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for the R-ACKCH.

  + If REV_SPICH_ADJ_INCLr is equal to ‘1’, the mobile station shall set REV_SPICH_EP_SIZEs to REV_SPICH_EP_SIZEr+1.
  
  + If REV_PDCH_PARMS_INCLr is equal to ‘1’, the mobile station shall set REV_PDCH_NUM_ARQ_ROUNDS_NORMALs to REV_PDCH_NUM_ARQ_ROUNDS_NORMALr+1, and REV_PDCH_NUM_ARQ_ROUNDS_BOOSTs to REV_PDCH_NUM_ARQ_ROUNDS_BOOSTr+1.

2.6.4.1.1.4 Processing the Rate Change Message

The mobile station shall process this message as follows at the action time (see 2.6.4.1.5) specified in the message:

- The mobile station shall set FULL_CI_FEEDBACK_INDs to FULL_CI_FEEDBACK_INDr.

- If REV_CQICH_RATE_CHANGE_INCLr is equal to ‘1’, the mobile station shall set REV_CQICH_REPSs to REV_CQICH_REPSr. In addition, if RL_CQICH_ATT_ADJ_GAIN_INCLr is equal to ‘1’, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing the offsets relative to the Reverse Pilot Channel power for the corresponding transmission power level (HIGH or LOW).
• If SWITCHING_PARMS_INCL is included and equal to ‘1’, the mobile station shall set NUM_SOFT_SWITCHING_FRAMES_s to NUM_SOFT_SWITCHING_FRAMES_r + 1, and NUM_SOFTER_SWITCHING_FRAMES_s to NUM_SOFTER_SWITCHING_FRAMES_r + 1.

• If CHM_SWITCHING_PARMS_INCL is included and equal to ‘1’, the mobile station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to NUM_SOFT_SWITCHING_FRAMES_CHM_r + 1, and NUM_SOFTER_SWITCHING_FRAMES_CHM_s to NUM_SOFTER_SWITCHING_FRAMES_CHM_r + 1.

• If CHM_SWITCHING_PARMS_INCL is included and equal to ‘0’, the mobile station shall set NUM_SOFT_SWITCHING_FRAMES_CHM_s to NUM_SOFT_SWITCHING_FRAMES_r + 1, and NUM_SOFTER_SWITCHING_FRAMES_CHM_s to NUM_SOFTER_SWITCHING_FRAMES_r + 1.

• If REV_ACKCH_RATE_CHANGE_INCL is equal to ‘1’, the mobile station shall set REV_ACKCH_REPS_s to REV_ACKCH_REPS_r.

• If REV_PDCH_MAX_PARMS_INCL is equal to ‘1’, the base station shall set REV_PDCH_MAX_AUTO_TPR_s to REV_PDCH_MAX_AUTO_TPR_r, and REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_s to REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET_r+1.

• If REV_PDCH_PARMS_INCL is equal to ‘1’, the mobile station shall set REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_s to REV_PDCH_NUM_ARQ_ROUNDS_NORMAL_r+1, and REV_PDCH_NUM_ARQ_ROUNDS_BOOST_s to REV_PDCH_NUM_ARQ_ROUNDS_BOOST_r+1.
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*, and the *Reverse Supplemental Channel Assignment Mini Message*. The multiplex option used for the Forward Traffic Channel can be the same as that used for the Reverse Traffic Channel, or it can be different.

2. **Forward and Reverse Traffic Channel Configurations**: These include the Radio Configurations and other necessary attributes for the Forward and Reverse Traffic Channels. The Traffic Channel Configuration used can be different for the Forward and Reverse Traffic Channels or it can be the same.

3. **Forward and Reverse Traffic Channel Transmission Rates**: These are the transmission rates actually used for the Forward and Reverse Traffic Channels respectively. The transmission rates for the Forward Traffic Channel can include all of the transmission rates supported by the radio configuration associated with the Forward Traffic Channel multiplex option, or a subset of the supported rates. Similarly, the transmission rates used for the Reverse Traffic Channel can include all rates supported by the radio configuration associated with the Reverse Traffic Channel multiplex option, or a subset of the supported rates. The transmission rates used for the Forward Traffic Channel can be the same as those used for the Reverse Traffic Channel, or they can be different.

4. **Service Option Connections**: These are the services in use on the Traffic Channel.
There can be multiple service option connections. It is also possible that there is no service option connection, in which case the mobile station uses the Reverse Traffic Channel as follows:

- Sends null traffic on the Reverse Fundamental Channel, if the Fundamental Channel is present.
- Sends signaling traffic on the Reverse Traffic Channel where r-dsch is mapped to.

Associated with each service option connection are a service option, a Forward Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service option connection reference. The associated service option formally defines the way in which traffic bits are processed by the mobile station and base station. The associated Forward and Reverse Traffic Channel traffic types specify the types of traffic used to support the service option. A service option can require the use of a particular type of traffic, such as primary or secondary, or it can accept more than one traffic type. A service option can be one-way, in which case it can be supported on the Forward Traffic Channel only or the Reverse Traffic Channel only. Alternatively, a service option can be two-way, in which case it can be supported on the Forward and Reverse Traffic Channels simultaneously. Connected service options can also invoke operation on Supplemental Code Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Code Channels (see [3] for Multiplex Options applicable to Supplemental Code Channels), and by using the appropriate Supplemental Code Channel related messages (i.e., the Supplemental Channel Request Message, the Supplemental Channel Assignment Message, and the General Handoff Direction Message). After Supplemental Code Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Code Channels. Connected service options can also invoke operation on Supplemental Channels in either one or both of the Forward and Reverse Traffic Channels by negotiating a multiplex option that supports operation on Supplemental Channels (see [3] for Multiplex Options applicable to Supplemental Channel) and by using the appropriate Supplemental Channel related messages (i.e., the Supplemental Channel Request Mini Message, the Extended Supplemental Channel Assignment Message, the Forward Supplemental Channel Assignment Mini Message, the Reverse Supplemental Channel Assignment Mini Message, and the Universal Handoff Direction Message). After Supplemental Channels have been assigned by the base station, the connected service option can transmit primary and/or secondary traffic on Supplemental Channels. The associated service option connection reference provides a means for uniquely identifying the service option connection. The reference serves to resolve ambiguity when there are multiple service option connections in use.

The non-negotiable service configuration parameters are sent from the base station to the mobile stations only, and consists of the following:

1. *Reverse Pilot Gating Rate:* This controls the way in which the reverse pilot is gated on the Reverse Pilot Channel. The base station specifies the reverse pilot gating...
rate to be used in the Service Connect Message, the General Handoff Direction Message, and the Universal Handoff Direction Message.

2. **Forward and Reverse Power Control Parameters:** These consist of forward power control operation mode, outer loop power control parameters (e.g. target frame error rate, minimum Eb/Nt setpoint, and maximum Eb/Nt setpoint) for the Forward Fundamental Channel and Forward Dedicated Control Channel, and Power Control Subchannel indicator which indicates where the mobile station is to perform the primary inner loop estimation and the base station is to multiplex the Power Control Subchannel.

3. **Logical to Physical Mapping:** This is a table of logical to physical mapping entries, consisting of service reference identifier, logical resource, physical resource, forward flag, reverse flag, and priority.

The mobile station can request a default service configuration associated with a service option at call origination, and can request new service configurations during Traffic Channel operation. A requested service configuration can differ greatly from its predecessor or can be very similar. For example, the mobile station can request a service configuration in which all of the service option connections are different from those of the existing configuration; or the mobile station can request a service configuration in which the existing service option connections are maintained with only minor changes, such as a different set of transmission rates or a different mapping of service option connections to Forward and Reverse Traffic Channel traffic types.

If the mobile station requests a service configuration that is acceptable to the base station, they both begin using the new service configuration. If the mobile station requests a service configuration that is not acceptable to the base station, the base station can reject the requested service configuration or propose an alternative service configuration. If the base station proposes an alternative service configuration, the mobile station can accept or reject the base station’s proposed service configuration, or propose yet another service configuration. This process, called service negotiation, ends when the mobile station and the base station find a mutually acceptable service configuration, or when either the mobile station or the base station rejects a service configuration proposed by the other.

It is also possible for the base station to request a default service configuration associated with a service option when paging the mobile station and to request new service configurations during Traffic Channel operation. The service negotiation proceeds as described above, but with the roles of the mobile station and base station reversed.

For CDMA mode operation in Band Class 0, the mobile station and base station can also use an alternative method for negotiating a service configuration known as service option negotiation. Service option negotiation is similar to service negotiation, but offers less flexibility for specifying the attributes of the service configuration. During service option negotiation, the base station or the mobile station specifies only which service option is to be used. There is no facility for explicitly specifying the multiplex options, traffic types or transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction with the service option. Instead, implicit service configuration attributes are assumed. In particular, the Forward and Reverse multiplex options and transmission rates are assumed...
to be the default multiplex options and transmission rates associated with the requested service option, and the traffic type for both the Forward and Reverse Traffic Channels is assumed to be primary traffic; furthermore, a service configuration established using service option negotiation is restricted to having only a single service option connection.

At mobile station origination and termination, the type of negotiation to use, either service negotiation or service option negotiation, is indicated in the Channel Assignment Message. Service negotiation is always used after the mobile station receives an Extended Channel Assignment Message. If a CDMA-to-CDMA hard handoff occurs during the call, the type of negotiation to use following the handoff is indicated in the Extended Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff Direction Message.

For CDMA mode operation in band classes other than Band Class 0, only service negotiation is to be used.

The following messages are used to support service negotiation:

1. Service Request Message: The mobile station can use this message to propose a service configuration, or to accept or reject a service configuration proposed in a Service Response Message. The base station can use this message to propose a service configuration, or to reject a service configuration proposed in a Service Response Message.

2. Service Response Message: The mobile station can use this message to accept or reject a service configuration proposed in a Service Request Message, or to propose an alternative service configuration. The base station can use this message to reject a service configuration proposed in a Service Request Message, or to propose an alternative service configuration.

3. Service Connect Message: The base station can use this message to accept a service configuration proposed in a Service Request Message or Service Response Message, and to instruct the mobile station to begin using the service configuration.

4. Service Connect Completion Message: The mobile station can use this message to acknowledge the transition to a new service configuration.

5. Service Option Control Message: The mobile station and base station can use this message to invoke service-option-specific functions.

6. Extended Channel Assignment Message: The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an Origination Message or a Page Response Message.

The following messages are used to support service option negotiation:

1. Service Option Request Order: The mobile station and base station can use this message either to request a service option or to suggest an alternative service option.

2. Service Option Response Order: The mobile station and base station can use this message to accept or to reject a service option request.
3. **Service Option Control Order:** The mobile station and base station can use this message to invoke service option specific functions.

The following messages are used to support both service negotiation and service option negotiation:

1. **Origination Message:** The mobile station can use this message to propose an initial service configuration.

2. **Channel Assignment Message:** The base station can use this message to accept or to reject the initial service configuration proposed by the mobile station in an **Origination Message** or a **Page Response Message** and to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used during the call.

3. **Extended Handoff Direction Message:** The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff.

4. **General Handoff Direction Message:** The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a **Service Request Message** or **Service Response Message**. The base station can also use this message to instruct the mobile station to begin using the service configuration.

5. **General Page Message** or **Universal Page Message:** The base station can use a mobile-station-addressed page in a **General Page Message** or in a **Universal Page Message** to propose an initial service configuration.

6. **Page Response Message:** The mobile station can use this message to accept or to reject the initial service configuration proposed by the base station in a mobile-station-addressed page, or to propose an alternative initial service configuration.

7. **Status Request Message:** The base station can use this message to request service capability information from the mobile station.

8. **Status Response Message:** The mobile station can use this message to return the service capability information requested by the base station in a **Status Request Message**.

9. **Extended Status Response Message:** The mobile station can use this message to return the service capability information requested by the base station in a **Status Request Message**.

10. **Universal Handoff Direction Message:** The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a **Service Request Message** or **Service Response Message**. The base station can also use this message to instruct the mobile station to begin using the service configuration.
2.6.4.1.2.1 Use of Variables

2.6.4.1.2.1.1 Maintaining the Service Request Sequence Number
The mobile station shall maintain a service request sequence number variable, SERV_REQ_NUMs, for use with service negotiation. Upon entering the Mobile Station Control On the Traffic Channel State, the mobile station shall set SERV_REQ_NUMs to 0. Each time the mobile station sends a new Service Request Message, it shall set the SERV_REQ_SEQ field of the message to the current value of SERV_REQ_NUMs, and shall then set SERV_REQ_NUMs equal to (SERV_REQ_NUMs + 1) modulo 8.

2.6.4.1.2.1.2 Maintaining the Service Negotiation Indicator Variable
The mobile station shall maintain a service negotiation indicator variable, SERV_NEGs, to indicate which type of negotiation to use, either service negotiation or service option negotiation. The mobile station shall set SERV_NEGs to enabled whenever service negotiation is to be used, and shall set SERV_NEGs to disabled whenever service option negotiation is to be used. The precise rules for setting SERV_NEGs are specified in 2.6.4.2 and 2.6.6.2.5.1.

For CDMA operation in band classes other than Band Class 0, the mobile station shall set SERV_NEGs to enabled.

2.6.4.1.2.1.3 Maintaining the Service Option Request Number
The mobile station shall maintain a service option request number variable, SO_REQs, for use with service option negotiation. The mobile station shall set SO_REQs to a special value, NULL, if the mobile station does not have an outstanding service option request. If the mobile station has an outstanding service option request, the mobile station shall set SO_REQs to the number of the service option associated with the outstanding request.

2.6.4.1.2.1.4 Stored Service Configuration and Reconnection
This section provides an overview of how the mobile station and the base station may store the service configuration and how the stored service configuration may be restored upon re-establishing dedicated channels.

Upon establishing a call and entering the Mobile Station Control on the Traffic Channel State, service negotiation procedures are performed as specified in 2.6.4.1.2.2 to establish a mutually acceptable service configuration between the mobile station and the base station. The service configuration consists of parameters specified via the Service Configuration information record (see 3.7.5.7) and Non-Negotiable Service Configuration information record (see 3.7.5.20). The mobile station and the base station may store the established service configuration. This is done so that when the call is re-established, the stored service configuration may be restored and without performing the service negotiation procedures. In order to ensure that the service configuration restored at the mobile station and the base station are identical (that is, the values of the service configuration parameters are identical), a service configuration synchronization identifier (called SYNC_ID) is associated with each stored service configuration. SYNC_ID is a variable length identifier assigned by the base station corresponding to a particular Service Configuration information record and

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Non-negotiable Service Configuration information record. The SYNC_ID value is used by
the base station to determine whether these two information records may be omitted from
the Service Connect Message.

When P_REV_IN_USEs is less than or equal to six, there is no requirement on storing the
established service configuration for future use. In this case, when a call is re-established
and the mobile station enters the Mobile Station Control on the Traffic Channel State, service
configuration must be re-established by performing service negotiation procedures again.

When P_REV_IN_USEs is greater than six, based on the value of SYNC_ID included by the
mobile station in the Origination Message, Page Response Message, or Enhanced Origination
Message the base station may not send the Service Configuration information record and
the Non-negotiable Service Configuration information record over the air and instructs the
mobile station to start using the stored information records corresponding to the SYNC_ID
reported by the mobile station.

When P_REV_IN_USEs is equal to or greater than nine, the mobile station is required to
store minimum of four service configurations. Also, the stored service configuration can be
restored incrementally as well. That is, if N service option connections are contained in the
stored service configuration, then the mobile station can request to restore one of these
service option connections upon establishing dedicated channels. This is achieved via the
SR_ID field of the Origination Message or Reconnect Message. Once operating on the
dedicated channels, the mobile station can request to restore additional service option
connections via the Enhanced Origination Message. The base station in turn can grant the
mobile station request via Extended Channel Assignment Message, Service Connect
Message, or Call Assignment Message. If the base station uses Extended Channel
Assignment Message to grant the mobile station request, then the base station is not
required to send a Service Connect Message. During traffic channel operation, service
option connections are to be restored only from the SYNC_ID that is currently in use [if
any].

When P_REV_IN_USEs is equal to or greater than 11, the base station can autonomously
order the mobile station to restore a stored service configuration via the Extended Channel
Assignment Message or Service Connect Message even when the mobile station has not
requested to restore a service configuration, or when the mobile station has requested to
restore a different service configuration. Additionally, the base station can signal the
SYNC_ID value corresponding to the currently used service configuration using the
Universal Handoff Direction Message.

2.6.4.1.2.2 Service Subfunctions

As illustrated in Figure 2.6.4.1.2.2-1, the mobile station supports service configuration and
negotiation by performing the following set of service subfunctions:

- Normal Service Subfunction - While this subfunction is active, the mobile station
  processes service configuration requests from the user and from the base station.

- Waiting for Service Request Message Subfunction - While this subfunction is active,
  the mobile station waits to receive a Service Request Message.
Waiting for Service Response Message Subfunction - While this subfunction is active, the mobile station waits to receive a Service Response Message.

Waiting for Service Connect Message Subfunction - While this subfunction is active, the mobile station waits to receive a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record.

Waiting for Service Action Time Subfunction - While this subfunction is active, the mobile station waits for the action time associated with a new service configuration and then sends a Service Connect Completion Message, a Handoff Completion Message, or an Extended Handoff Completion Message.

SO Negotiation Subfunction - While this subfunction is active, the mobile station supports service option negotiation with the base station. This subfunction is only used while operating in Band Class 0.

The SO Negotiation Subfunction supports service option negotiation. All of the other service subfunctions support service negotiation.

At any given time during Traffic Channel operation, only one of the service subfunctions is active. For example, when the mobile station first enters the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State, the Normal Service Subfunction, the Waiting for Service Connect Message Subfunction or the SO Negotiation Subfunction is active. Each of the other service subfunctions may become active in response to various events which occur during the Traffic Channel substates. Typically, the mobile station processes events pertaining to service configuration and negotiation in accordance with the requirements for the active service subfunction, however, some Traffic Channel substates do not allow for the processing of certain events pertaining to service configuration and negotiation, or specify requirements for processing such events which supersede the requirements of the active service subfunction.
Normal Service Subfunction

For service negotiation

For service option negotiation

SO Negotiation Subfunction

Entered from any subfunction when SERV_NEG is disabled.

Waiting for Service Request Message proposing; sends Service Response Message rejecting.

Waiting for Service Request Message rejecting.

- or -

Receives Service Request Message proposing; sends Service Response Message rejecting.

For service negotiation

User requests new service configuration; sends Service Request Message proposing.

Action time passes; uses new service configuration; sends Service Connect Completion Message, Handoff Completion Message, or Extended Handoff Completion Message.

Receives SCM, GHDM, or UHDM

Receives Service Request Message proposing; sends Service Response Message accepting.

Receives Service Request Message proposing; sends Service Response Message proposing.

Receives Service Response Message proposing; sends Service Request Message accepting.

Receives Service Response Message accepting; sends Service Request Message rejecting.

Notes:
- SCM stands for Service Connect Message.
- GHDM stands for General Handoff Direction Message.
- UHDM stands for Universal Handoff Direction Message.
- Processing for special cases, such as timeouts and errors, is not shown in this diagram.

Figure 2.6.4.1.2.2-1. Mobile Station Service Subfunctions
2.6.4.1.2.2.1 Normal Service Subfunction

While this subfunction is active, the mobile station processes service configuration requests from the user and from the base station.

While the Normal Service Subfunction is active, the mobile station shall perform the following:

- The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

- To initiate service negotiation for a new service configuration, the mobile station shall send a Service Request Message to propose the new service configuration. The mobile station shall activate the Waiting for Service Response Message Subfunction.

- For any service option connection that is part of the current service configuration, the mobile station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.

- If SERV_NEG changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the SO Negotiation Subfunction.

- If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:

1. Service Connect Message: The mobile station shall perform the following:
   - If USE_OLD_SERV_CONFIG equals ‘01’ or ‘10’, and if the mobile station entered the Mobile Station Control on the Traffic Channel State due to receiving an Extended Channel Assignment Message with GRANTED_MODE set to ‘11’, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00010100’ (stored configuration already restored at channel assignment) within T56m seconds and shall not perform the rest of the procedures below.
   - If USE_OLD_SERV_CONFIG equals ‘00’, the mobile station shall perform the following: If the mobile station accepts the service configuration specified in the message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.
• If USE_OLD_SERV_CONFIG equals ‘01’, the mobile station shall perform the following: If the mobile station accepts the service configuration currently stored at the mobile station, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.

• If USE_OLD_SERV_CONFIG equals ‘10’, the mobile station shall perform the following: If the mobile station accepts the service configuration resulting from updating the stored service configuration with the service configuration received in this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.

• If USE_OLD_SERV_CONFIG equals ‘11’, the mobile station shall perform the following: if the mobile station accepts the service configuration resulting from restoring the indicated service option connection records from the stored service configuration and releasing the indicated service option connection records from the current service configuration, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.

2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the mobile station shall interpret the action time of the message as specified in 2.6.4.1.5, and shall process the message in accordance with the requirements for the service option; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.

3. Service Request Message: The mobile station shall process the message as follows:

  – If the purpose of the message is to reject a proposed service configuration, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds.

  – If the purpose of the message is to propose a service configuration, the mobile station shall process the message as follows:
    
    + If the mobile station accepts the proposed service configuration, the mobile station shall send a Service Response Message to accept the proposed service configuration within T59m seconds. The mobile station shall activate the Waiting for Service Connect Message Subfunction.
+ If the mobile station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the mobile station shall send a Service Response Message to reject the proposed service configuration within T59m seconds.

+ If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a Service Response Message to propose the alternative service configuration within T59m seconds. The mobile station shall activate the Waiting for Service Request Message Subfunction.

4. Service Response Message: The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds.

5. General Handoff Direction Message: If the SCRINCLUDED field is included in this message and is set to ‘1’:
   
   If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction.

6. Universal Handoff Direction Message: If the SCRINCLUDED field is included in this message and is set to ‘1’:
   
   If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction.

   • If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds:
     
     1. Service Option Request Order
     2. Service Option Response Order
     3. Service Option Control Order

2.6.4.1.2.2.2 Waiting for Service Request Message Subfunction

While this subfunction is active, the mobile station waits to receive a Service Request Message.

Upon activation of the Waiting for Service Request Message Subfunction, the mobile station shall set the subfunction timer for T68m seconds.

While the Waiting for Service Request Message Subfunction is active, the mobile station shall perform the following:

   • If the subfunction timer expires, the mobile station shall activate the Normal Service Subfunction.
• The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

• The mobile station shall not initiate service negotiation for a new service configuration.

• For any service option connection that is part of the current service configuration, the mobile station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.

• If SERV_NEG equals from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the SO Negotiation Subfunction.

• If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:

  1. Service Connect Message: The mobile station shall perform the following:

     • If USE_OLD_SERV_CONFIG equals ‘01’ or ‘10’, and if the mobile station entered the Mobile Station Control on the Traffic Channel State due to receiving an Extended Channel Assignment Message with GRANTED_MODE set to ‘11’, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00010100’ (stored configuration already restored at channel assignment) within T56m seconds, and shall activate the Normal Service Subfunction.

     • If USE_OLD_SERV_CONFIG equals ‘00’, the mobile station shall perform the following: If the mobile station accepts the service configuration specified in the message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds and shall activate the Normal Service Subfunction.

     • If USE_OLD_SERV_CONFIG equals ‘01’, the mobile station shall perform the following: If the mobile station accepts the service configuration currently stored at the mobile station, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds and shall activate the Normal Service Subfunction.

     • If USE_OLD_SERV_CONFIG equals ‘10’, the mobile station shall perform the following: If the mobile station accepts the service configuration resulting from updating the stored service configuration with the service configuration received in this message, the mobile station shall activate the Waiting for Service Action Time Subfunction;
otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T₅₆ₘ seconds and shall activate the Normal Service Subfunction.

- If USE_OLD_SERV_CONFIGᵣ equals ‘11’, the mobile station shall perform the following: if the mobile station accepts the service configuration resulting from restoring the indicated service option connection records from the stored service configuration and releasing the indicated service option connection records from the current service configuration, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T₅₆ₘ seconds and shall activate the Normal Service Subfunction.

2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the mobile station shall interpret the action time of the message as specified in 2.6.4.1.5, and shall process the message in accordance with the requirements for the service option; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T₅₆ₘ seconds.

3. Service Request Message: The mobile station shall process the message as follows:
   - If the purpose of the message is to reject a proposed service configuration, the mobile station shall activate the Normal Service Subfunction.
   - If the purpose of the message is to propose a service configuration, the mobile station shall process the message as follows:
     + If the mobile station accepts the proposed service configuration, the mobile station shall send a Service Response Message to accept the proposed service configuration within T₅₉ₘ seconds. The mobile station shall activate the Waiting for Service Connect Message Subfunction.
     + If the mobile station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the mobile station shall send a Service Response Message to reject the proposed service configuration within T₅₉ₘ seconds. The mobile station shall activate the Normal Service Subfunction.
     + If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a Service Response Message to propose the alternative service configuration within T₅₉ₘ seconds. The mobile station shall reset the subfunction timer for T₆₈ₘ seconds.

4. Service Response Message: The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T₅₆ₘ seconds.
5. **General Handoff Direction Message**: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

   If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

6. **Universal Handoff Direction Message**: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

   If the mobile station has not rejected this message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall activate the *Normal Service Subfunction*.

   - If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000010’) within T_{56m} seconds:
     1. *Service Option Request Order*
     2. *Service Option Response Order*
     3. *Service Option Control Order*

2.6.4.1.2.2.3 Waiting for Service Response Message Subfunction

While this subfunction is active, the mobile station waits to receive a *Service Response Message*.

Upon activation of the *Waiting for Service Response Message Subfunction*, the mobile station shall set the subfunction timer for T_{68m} seconds.

While the *Waiting for Service Response Message Subfunction* is active, the mobile station shall perform the following:

   - If the subfunction timer expires, the mobile station shall activate the *Normal Service Subfunction*.

   - The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

   - The mobile station shall not initiate service negotiation for a new service configuration.

   - For any service option connection that is part of the current service configuration, the mobile station may send a *Service Option Control Message* to invoke a service option specific function in accordance with the requirements for the associated service option.

   - If SERV_NEG_s changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the *SO Negotiation Subfunction*. 
If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:

1. **Service Connect Message**: The mobile station shall perform the following:
   - If USE_OLD_SERV_CONFIG<sub>r</sub> equals ‘01’ or ‘10’, and if the mobile station entered the *Mobile Station Control on the Traffic Channel State* due to receiving an *Extended Channel Assignment Message* with GRANTED_MODE set to ‘11’, the mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00010100’ (stored configuration already restored at channel assignment) within T<sub>56m</sub> seconds, and shall activate the *Normal Service Subfunction*.
   - If USE_OLD_SERV_CONFIG<sub>r</sub> equals ‘00’, the mobile station shall perform the following: If the mobile station accepts the service configuration specified in the message, the mobile station shall activate the *Waiting for Service Action Time Subfunction*; otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000111’) within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.
   - If USE_OLD_SERV_CONFIG<sub>r</sub> equals ‘01’, the mobile station shall perform the following: If the mobile station accepts the service configuration currently stored at the mobile station, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.
   - If USE_OLD_SERV_CONFIG<sub>r</sub> equals ‘10’, the mobile station shall perform the following: If the mobile station accepts the service configuration resulting from updating the stored service configuration with the service configuration received in this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*.
   - If USE_OLD_SERV_CONFIG<sub>r</sub> equals ‘11’, the mobile station shall perform the following: if the mobile station accepts the service configuration resulting from restoring the indicated service option connection records from the stored service configuration and releasing the indicated service option connection records from the current service configuration, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000111’) within T<sub>56m</sub> seconds and shall activate the *Normal Service Subfunction*. 
2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the mobile station shall interpret the action time of the message as specified in 2.6.4.1.5, and shall process the message in accordance with the requirements for the service option; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds.

3. Service Request Message: The mobile station shall process the message as follows:

   – If the purpose of the message is to reject a proposed service configuration, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds.

   – If the purpose of the message is to propose a service configuration, the mobile station shall discontinue processing the service configuration requested by the user and shall process the message as follows:
     + If the mobile station accepts the proposed service configuration, the mobile station shall send a Service Response Message to accept the proposed service configuration within T59m seconds. The mobile station shall activate the Waiting for Service Connect Message Subfunction.
     + If the mobile station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the mobile station shall send a Service Response Message to reject the proposed service configuration within T59m seconds. The mobile station shall activate the Normal Service Subfunction.
     + If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a Service Response Message to propose the alternative service configuration within T59m seconds. The mobile station shall activate the Waiting for Service Request Message Subfunction.

4. Service Response Message: The mobile station shall process the message as follows:

   – If the service request sequence number (SERV_REQ_SEQr) from the message does not match the sequence number of the Service Request Message for which the mobile station is expecting a response, the mobile station shall not process the other Layer 3 fields of the message.

   – If the purpose of the message is to reject the service configuration proposed in the corresponding Service Request Message, the mobile station shall activate the Normal Service Subfunction. The mobile station may indicate to the user that the requested service configuration has been rejected.

   – If the purpose of the message is to propose a service configuration, the mobile station shall process the message as follows:
If the mobile station accepts the proposed service configuration, the mobile station shall send a Service Request Message to accept the proposed service configuration within T59m seconds. The mobile station shall activate the Waiting for Service Connect Message Subfunction.

If the mobile station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the mobile station shall send a Service Request Message to reject the proposed service configuration within T59m seconds. The mobile station shall activate the Normal Service Subfunction.

If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a Service Request Message to propose the alternative service configuration within T59m seconds. The mobile station shall reset the subfunction timer for T68m seconds.

5. General Handoff Direction Message: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall activate the Normal Service Subfunction.

6. Universal Handoff Direction Message: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall activate the Normal Service Subfunction.

- If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds:

  1. Service Option Request Order
  2. Service Option Response Order
  3. Service Option Control Order

2.6.4.1.2.2.4 Waiting for Service Connect Message Subfunction

While this subfunction is active, the mobile station waits to receive a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record.

Upon activation of the Waiting for Service Connect Message Subfunction, the mobile station shall set the subfunction timer for T65m seconds.

While the Waiting for Service Connect Message Subfunction is active, the mobile station shall perform the following:
• If the subfunction timer expires, the mobile station shall activate the Normal Service Subfunction.

• The mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

• The mobile station shall not initiate service negotiation for a new service configuration.

• For any service option connection that is part of the current service configuration, the mobile station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.

• If SERV_NEGS changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the SO Negotiation Subfunction.

• If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:
  1. Service Connect Message: The mobile station shall perform the following:
     • If USE_OLD_SERV_CONFIGr equals ‘01’ or ‘10’, and if the mobile station entered the Mobile Station Control on the Traffic Channel State due to receiving an Extended Channel Assignment Message with GRANTED_MODE set to ‘11’, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘0010100’ (stored configuration already restored at channel assignment) within T56m seconds, and shall activate the Normal Service Subfunction.
     • If USE_OLD_SERV_CONFIGr equals ‘00’, the mobile station shall perform the following: If the mobile station accepts the service configuration specified in the message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds and shall activate the Normal Service Subfunction.
     • If USE_OLD_SERV_CONFIGr equals ‘01’, the mobile station shall perform the following: If the mobile station accepts the service configuration currently stored at the mobile station, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds, and shall activate the Normal Service Subfunction.
• If USE_OLD_SERV_CONFIG_r equals ‘10’, the mobile station shall perform
the following: If the mobile station accepts the service configuration resulting
from updating the stored service configuration with the service configuration
received in this message, the mobile station shall activate the Waiting for
Service Action Time Subfunction; otherwise, the mobile station shall send a
Mobile Station Reject Order (ORDQ = ‘00000111’) within T_{56m} seconds, and
shall activate the Normal Service Subfunction.

• If USE_OLD_SERV_CONFIG_r equals ‘11’, the mobile station shall perform
the following: if the mobile station accepts the service configuration resulting
from restoring the indicated service option connection records from the
stored service configuration and releasing the indicated service option
connection records from the current service configuration, the mobile station
shall activate the Waiting for Service Action Time Subfunction; otherwise,
the mobile station shall send a Mobile Station Reject Order (ORDQ =
‘00000111’) within T_{56m} seconds, and shall activate the Normal Service
Subfunction.

2. **Service Option Control Message:** If the service option connection specified by the
message is part of the current service configuration, and the service option
specified by the message is the same as the service option associated with the
service option connection, the mobile station shall interpret the action time of
the message as specified in 2.6.4.1.5, and shall process the message in
accordance with the requirements for the service option; otherwise, the mobile
station shall send a Mobile Station Reject Order (ORDQ =
‘00000111’) within T_{56m} seconds.

3. **Service Request Message:** The mobile station shall process the message as
follows:
   – If the purpose of the message is to reject a proposed service configuration,
     the mobile station shall send a Mobile Station Reject Order (ORDQ =
     ‘00000010’) within T_{56m} seconds.
   – If the purpose of the message is to propose a service configuration, the
     mobile station shall process the message as follows:
     + If the mobile station accepts the proposed service configuration, the
       mobile station shall send a Service Response Message to accept the
       proposed service configuration within T_{59m} seconds. The mobile station
       shall reset the subfunction timer for T_{65m} seconds.
     + If the mobile station does not accept the proposed service configuration
       and does not have an alternative service configuration to propose, the
       mobile station shall send a Service Response Message to reject the
       proposed service configuration within T_{59m} seconds. The mobile station
       shall activate the Normal Service Subfunction.
If the mobile station does not accept the proposed service configuration and has an alternative service configuration to propose, the mobile station shall send a Service Response Message to propose the alternative service configuration within $T_{59m}$ seconds. The mobile station shall activate the Waiting for Service Request Message Subfunction.

4. **Service Response Message**: The mobile station shall send a Mobile Station Reject Order ($ORDQ = '00000010$') within $T_{56m}$ seconds.

5. **General Handoff Direction Message**: If the SCR_INCLUDED field is included in this message and is set to ‘1’:
   - If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall activate the Normal Service Subfunction.

6. **Universal Handoff Direction Message**: If the SCR_INCLUDED field is included in this message and is set to ‘1’:
   - If the mobile station has not rejected this message, the mobile station shall activate the Waiting for Service Action Time Subfunction; otherwise, the mobile station shall activate the Normal Service Subfunction.

   • If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a Mobile Station Reject Order ($ORDQ = '00000010$') within $T_{56m}$ seconds:
     1. Service Option Request Order
     2. Service Option Response Order
     3. Service Option Control Order

2.6.4.1.2.2.5 Waiting for Service Action Time Subfunction

While this subfunction is active, the mobile station waits for the action time associated with a new service configuration. If the action time was specified by a Service Connect Message, the mobile station shall send the Service Connect Completion Message at the action time.

While the Waiting for Service Action Time Subfunction is active, the mobile station shall perform the following:

   • Prior to the action time associated with the Service Connect Message, General Handoff Direction Message (containing a service configuration record), or Universal Handoff Direction Message (containing a service configuration record), the mobile station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The mobile station shall discard any Forward Traffic Channel frame which has a format that is not supported by the mobile station. The mobile station may discard any type of Forward Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.
• At the action time associated with the Service Connect Message, General Handoff Direction Message (containing a service configuration record) or Universal Handoff Direction Message (containing a service configuration record), the mobile station shall perform the following:

  - If this is a Service Connect Message and USE_TYPE0_PLCM\_r equals ‘1’, the mobile station shall perform the following:
    + If P\_REV\_IN\_USE\_s is less than 11, set PLCM\_TYPE\_s to ‘0000’; otherwise set PLCM\_TYPE\_s to ‘0100’.
    + The mobile station shall use the Public Long Code Mask derived from PLCM\_TYPE\_s as specified in 2.3.6.

  - If this is a Service Connect Message with USE\_OLD\_SERV\_CONFIG\_r equals ‘01’, the mobile station shall perform the following:
    + If SYNC\_ID\_INCL\_r is included and set to ‘1’, the SYNC\_ID\_r indicates the stored service configuration to be restored; otherwise, the SYNC\_ID conveyed by the mobile station indicates the stored service configuration to be restored.
    + The Call Control instance identified by NULL shall also be identified by the connection reference assigned to the first service option connection in the stored Service Configuration information record.
    + For each service option connection (with corresponding connection reference CON\_REF\_i) in the stored service configuration record, if any, except for the first one, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with a ‘restore indication’. The mobile station shall identify each of these Call Control instances by the corresponding CON\_REF\_i.
    + The mobile station shall begin to use the stored service configuration corresponding to this SYNC\_ID which was stored by the mobile station when it left the Mobile Station Control on the Traffic Channel State as the current service configuration as specified in 2.6.4.1.2.5.2 and shall begin to process Forward and Reverse Traffic Channel frames accordingly. The mobile station shall send a Service Connect Completion Message within T56m seconds after the action time. The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

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23 Note that these procedures that take place at the action time may not occur for this message if a GHDM/UHDM with SC\_R\_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.
+ The mobile station shall store the synchronization identifier corresponding to the stored service configuration as SYNC_IDs.

+ The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

- If this is a Service Connect Message with USE_OLD_SERV_CONFIGr equals ‘10’, the mobile station shall perform the following:

  + If SYNC_ID_INCR is included and set to ‘1’ and SYNC_ID BS INITIATED INDr is set to ‘1’, the SYNC_IDr indicates the stored service configuration to be restored; otherwise, the SYNC_ID conveyed by the mobile station indicates the stored service configuration to be restored.

  + The mobile station shall update the stored service configuration with the received service configuration as follows:

    o The mobile station shall restore the stored service configuration as specified in 2.6.4.1.2.5.2.

    o The mobile station shall process the received Service Configuration Record as specified in 2.6.4.1.12.

    o The mobile station shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13.

  + For each service option connection (with corresponding connection reference CON_REFi) in the stored service configuration record, if any, except for the first one, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with a ‘restore indication’. The mobile station shall identify each of these Call Control instances by the corresponding CON_REFi.

  + The mobile station shall begin to use the updated service configuration as the current service configuration and shall begin to process Forward and Reverse Traffic Channel frames accordingly. The mobile station shall send a Service Connect Completion Message within T56m seconds after the action time. The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

  + If SYNC_ID_INCLr is set to ‘1’ and SYNC_ID BS INITIATED INDr is set to ‘0’, the mobile station shall perform the following:

    o The mobile station shall store the synchronization identifier received from the base station (SYNC_IDs = SYNC_IDr).

    o The mobile station shall store the new service configuration corresponding to SYNC_IDs as specified in 2.6.4.1.2.5.1.

    Otherwise, the mobile station shall set SYNC_IDs to NULL.

+ The mobile station shall exit this subfunction and activate the Normal
If this is a Service Connect Message with USE_OLD_SERV_CONFIG, the mobile station shall perform the following:

- If the SYNC_ID_INCL field is included in this message and set to ‘1’, the mobile station shall perform the following:
  
  + If the SYNC_ID included in this message indicates the stored service configuration to be restored; otherwise, the SYNC_ID conveyed by the mobile station indicates the stored service configuration to be restored.

  o Prior to this message, if an Extended Channel Assignment Message with GRANTED_MODE set to ‘11’ was not received and a Service Connect Message, General Handoff Direction Message (with service configuration), or Universal Handoff Direction Message (with service configuration) was not successfully received or accepted by the mobile station since entering the Traffic Channel Substate, the mobile station shall perform the following:

    ◊ The mobile station shall begin to use the service configuration which was stored by the mobile station when it left the Mobile Station Control on the Traffic Channel State as the current service configuration as specified in 2.6.4.1.2.2.5.2 where only the service option connection record corresponding to SR_IDr received in the Service Connect Message shall be restored.

    ◊ The Call Control instance identified by NULL shall also be identified by the connection reference assigned to the restored service option connection.

    ◊ The mobile station shall begin to process Forward and Reverse Traffic Channel frames accordingly with the restored service configuration. The mobile station shall send a Service Connect Completion Message within 56m seconds after the action time. The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

    ◊ The mobile station shall store the synchronization identifier corresponding to the stored service configuration as SYNC_IDs.

    ◊ The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

  o Otherwise, the mobile station shall perform the following at the action time of this message:

    ◊ At the action time of this message, the mobile station shall restore the indicated service option connection record(s) from the stored service configuration as specified in 2.6.4.1.2.2.5.2, where the service option connection records to be restored are determined as follows:
If SR_ID<sub>r</sub> equals ‘111’, the mobile station shall restore all remaining service option connection records from the stored service configuration; otherwise, if SR_ID<sub>r</sub> equals ‘000’, the mobile station shall restore service option connection records corresponding to SR_ID<sub>s</sub> indicated by SR_ID<sub>RESTORE_BITMAP</sub><sub>r</sub> received in this message; otherwise, the mobile station shall restore the service option connection record corresponding to the SR_ID<sub>r</sub> received in this message.

Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) for each of the restored service option connections with a ‘restore indication’ and Layer 3 shall identify each of these Call Control instances by the value of the CON_REF field corresponding to the restored service option connection.

The mobile station shall perform the following:

- If SR_ID<sub>r</sub> equals ‘111’, the mobile station shall disable the enhanced origination timers corresponding to each Enhanced Origination Message sent with SYNC_ID_INCL field set to ‘1’ and shall remove the corresponding TAG value from the list TAG_OUTSTANDING_LIST.

- Otherwise, the mobile station shall disable the enhanced origination timer corresponding to the Enhanced Origination Message with SR_ID field set to either ‘111’ or to the SR_ID<sub>r</sub> value received in this message and shall remove the corresponding TAG value from the list TAG_OUTSTANDING_LIST.

If the SR_ID_RELEASE_BITMAP_INCL field is included and is set to ‘1’, the mobile station shall release the indicated service option connection record(s) from the current service configuration, where the service option connection records to be released are determined as follows:

- The mobile station shall release service option connection records corresponding to SR_IDs indicated by SR_ID_RELEASE_BITMAP<sub>r</sub> received in this message.

- Layer 3 shall terminate a Call Control instance for each of the released service option connections.

Otherwise, the mobile station shall perform the following:

Prior to this message, if a Service Connect Message, General Handoff Direction Message (with service configuration), or Universal Handoff Direction Message (with service configuration) was not successfully received or accepted by the mobile station since entering the Traffic Channel Substate, the mobile station shall perform the following:
The mobile station shall set the service configuration parameters (i.e., those signaled via the Service Configuration information record and the Non-Negotiable Service Configuration information record) to their default values as specified in 2.6.4.2.

The mobile station shall process the received Service Configuration Record as specified in 2.6.4.1.12, shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 (if included), and shall begin to use the service configuration specified by the Service Connect Message, General Handoff Direction Message or Universal Handoff Direction Message containing a service configuration record as the current service configuration and shall begin to process Forward and Reverse Traffic Channel frames accordingly. If the action time was specified by a Service Connect Message, the mobile station shall send a Service Connect Completion Message within $T_{56m}$ seconds after the action time. The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

If SYNC_ID_INCL is set to ‘1’, the mobile station shall perform the following:

- The mobile station shall store the synchronization identifier received from the base station ($SYNC_IDs = SYNC_IDr$).
- The mobile station shall store the new service configuration corresponding to $SYNC_IDs$ as specified in 2.6.4.1.2.2.5.1.

Otherwise, the mobile station shall set $SYNC_IDs$ to NULL.

If P_REV_IN_USE is greater than six, the Non-Negotiable Service Configuration information record is not included in this message, and the value of SR_ID corresponding to the logical resource of ‘0000’ in the LOGICAL_TO_PHYSICAL_MAPPING_TABLE is NULL, the mobile station shall set this SR_ID field to the value specified in the Service Configuration information record.

If CC_INFO_INCL equals ‘1’, then for each of the NUM_CALLS_ASSIGN occurrences of the call control parameters included in the message, the mobile station shall perform the following:

- If RESPONSE_IND equals ‘1’, and TAG matches any of the TAG values contained in the list TAG_OUTSTANDING_LIST, the Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10). The mobile station shall identify this Call Control instance by CON_REF. The mobile station shall disable the enhanced origination timer associated with TAG and remove the TAG value specified by TAG from the list TAG_OUTSTANDING_LIST.
- If RESPONSE_IND equals '0', the mobile station shall store the bypass indicator (BYPASS_ALERT_ANSWERs = BYPASS_ALERT_ANSWERr) and the Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10). The mobile station shall identify this Call Control instance by CON_REF.
+ The mobile station shall exit this subfunction and activate the Normal Service Subfunction.

- If USE_TYPE0_PLCM equals ‘1’, the mobile station shall set PLCM_TYPEₙ to ‘0000’.

- The mobile station shall not initiate service negotiation for a new service configuration.

- For any service option connection that is part of the current or pending service configuration, the mobile station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.

- If SERV_NEGₙ changes from enabled to disabled (see 2.6.6.2.5.1), the mobile station shall activate the SO Negotiation Subfunction.

- If the mobile station receives one of the following service negotiation messages, the mobile station shall process the message according to the specified requirements:

  1. Service Connect Message: The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T₅₆m seconds.

  2. Service Option Control Message: If the service option connection specified by the message is part of the current or pending service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the mobile station shall interpret the action time of the message as specified in 2.6.4.1.5, and shall process the message in accordance with the requirements for the service option; otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T₅₆m seconds.

  3. Service Request Message: The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T₅₆m seconds.

  4. Service Response Message: The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T₅₆m seconds.

  5. General Handoff Direction Message: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

     - The mobile station shall not perform the above procedures for the previous message. But the call assignments from the previous message (if any) shall take effect at the action time of the previous message.

     - The mobile station shall perform the above procedures for this message (that is, begin to use the service configuration specified by the General Handoff Direction Message) at the action time of this message.
6. **Universal Handoff Direction Message**: If the SCR_INCLUDED field is included in this message and is set to ‘1’:

   If the mobile station has not rejected this message, the mobile station shall remain in this subfunction until the action time specified in the message, and shall perform the following:

   - The mobile station shall not perform the above procedures for the previous message. But the call assignments from the previous message (if any) shall take effect at the action time of the previous message.
   - The mobile station shall perform the above procedures for this message (that is, begin to use the service configuration and call assignments (if any) specified by the *Universal Handoff Direction Message*) at the action time of this message.

   - If the mobile station receives one of the following service option negotiation messages, the mobile station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000010’) within $T_{56m}$ seconds:
     1. *Service Option Request Order*
     2. *Service Option Response Order*
     3. *Service Option Control Order*

2.6.4.1.2.5.1 Storing a Service Configuration with SYNC_ID

The mobile station shall set NUM_SYNC_ID_SUPPORTED as follows:

- If the mobile station has not reported the Capability Information information record with the ADD_NUM_SYNC_ID field, the mobile station shall set NUM_SYNC_ID_SUPPORTED to four.
- If the mobile station has reported the Capability Information information record with the ADD_NUM_SYNC_ID field, the mobile station shall set NUM_SYNC_ID_SUPPORTED to five plus the value of the ADD_NUM_SYNC_ID field included in the Capability Information information record.

The mobile station shall be capable of storing a minimum of NUM_SYNC_ID_SUPPORTED service configurations along with their corresponding SYNC_ID, SID and NID.

Two SYNC_IDs are considered to be equal if and only if both the length and value of the SYNC_IDs is equal.

The mobile station shall use the following procedure in the order listed below to store the current service configuration when it is associated with a SYNC_ID:

- If the mobile station has a stored service configuration associated with SID$_s$, NID$_s$ and SYNC_ID$_s$, then the mobile station shall delete the stored service configuration.
• If the number of stored service configurations is NUM_SYNC_ID_SUPPORTED or more, the mobile station shall not delete the \((NUM\_SYNC\_ID\_SUPPORTED - 1)\) most recently used service configuration(s) and corresponding synchronization identifier(s), SID(s), NID(s).

• The mobile station shall store the current service configuration (that is, parameters conveyed by both the Service Configuration information record and the Non-negotiable Service Configuration information record) and the SYNC_IDs corresponding to the current service configuration along with SID_s and NID_s.

2.6.4.1.2.5.2 Restoring a stored Service Configuration based on SYNC_ID

When restoring a stored service configuration based on SYNC_ID, the mobile station shall restore only those parameters defined in the current P_REV_IN_USE_s.

2.6.4.1.2.6 SO Negotiation Subfunction

The SO Negotiation Subfunction is only supported for mobile stations operating in Band Class 0.

Service option negotiation is not supported for P_REV_IN_USE_s greater than six.

Upon activation of the SO Negotiation Subfunction, the mobile station shall delete from the current service configuration any service option connection which does not use primary traffic on both the Forward and Reverse Traffic Channels and the Layer 3 shall terminate the corresponding Call Control instances. The Call Control instance corresponding to the service option connection which uses primary traffic, if any, shall be identified by NULL.

While the SO Negotiation Subfunction is active, the mobile station shall perform the following:

• If the current service configuration includes a service option connection, the mobile station shall process the received primary traffic bits in accordance with the requirements for the service option associated with the service option connection; otherwise, the mobile station shall discard the received primary traffic bits.

• If the current service configuration includes a service option connection, the mobile station shall transmit primary traffic bits in accordance with the requirements for the service option associated with the service option connection; otherwise, the mobile station shall transmit null traffic on the Reverse Fundamental Channel, if the Fundamental Channel is present or transmit power control bits on the Reverse Pilot Channel, if only the Dedicated Control Channel is present.

24 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.
If the current service configuration includes a service option connection, the mobile station may send a *Service Option Control Order* to invoke a service option specific function in accordance with the requirements for the service option associated with the service option connection.

To initiate service option negotiation, the mobile station shall set SO_REQs to the number of the requested service option and shall send a *Service Option Request Order* containing the requested service option number.

If SERV_NEGs changes from disabled to enabled (see 2.6.6.2.5.1), the mobile station shall set SO_REQs to NULL and shall activate the Normal Service Subfunction.

If the mobile station receives a *Service Option Request Order*, it shall process the order as follows:

- If the mobile station accepts the requested service option, the mobile station shall set SO_REQs to NULL and shall send a *Service Option Response Order* accepting the requested service option within T_{58m} seconds. The mobile station shall interpret the message action time of the *Service Option Request Order* in accordance with the requirements for the requested service option and the mobile station shall begin using the service configuration implied by the requested service option in accordance with those requirements. The implied service configuration shall include the default Forward and Reverse multiplex options and radio configurations associated with the requested service option, and shall include one service option connection for which the service option connection reference is 1, the service option is the requested service option, and the Forward and Reverse Traffic Channel types are both primary traffic. If a Call Control instance currently exists, the Layer 3 shall use this Call Control instance for a new service option connection; otherwise, the Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) and this Call Control instance shall be identified by both a connection reference with a value of 1 and a default identifier with a value of NULL.

- If the mobile station does not accept the requested service option and has an alternative service option to request, the mobile station shall set SO_REQs to the alternative service option number and shall send a *Service Option Request Order* requesting the alternative service option within T_{58m} seconds.

- If the mobile station does not accept the requested service option and does not have an alternative service option to request, the mobile station shall set SO_REQs to NULL and shall send a *Service Option Response Order* to reject the request within T_{58m} seconds. The mobile station shall continue to use the current service configuration.

If the mobile station receives a *Service Option Response Order*, it shall process the order as follows:

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If the service option number specified in the order is equal to SO_REQs, the mobile station shall set SO_REQs to NULL. The mobile station shall interpret the message action time of the Service Option Response Order in accordance with the requirements for the specified service option, and the mobile station shall begin using the service configuration implied by the specified service option in accordance with those requirements. The implied service configuration shall include the default Forward and Reverse multiplex options and radio configurations associated with the specified service option, and shall include one service option connection for which the service option connection reference is 1, the service option is the specified service option, and the Forward and Reverse Traffic Channel types are both primary traffic. If a Call Control instance currently exists, the Layer 3 shall use this Call Control instance for a new service option connection; otherwise, the Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) and this Call Control instance shall be identified by both a connection reference with a value of 1 and a default identifier with a value of NULL.

If the order indicates a service option rejection, the mobile station shall set SO_REQs to NULL. The mobile station shall continue to use the current service configuration.

If the order does not indicate a service option rejection and the service option specified in the order is not equal to SO_REQs, the mobile station shall set SO_REQs to NULL and shall send a Mobile Station Reject Order (ORDQ = '00000001') within T58m seconds. The mobile station shall continue to use the current service configuration.

If the mobile station receives a Service Option Control Order, it shall process the order as follows:

- If the current service configuration includes a service option connection, the mobile station shall interpret the message action time of the Service Option Control Order in accordance with the requirements for the service option associated with the service option connection and the mobile station shall process the Service Option Control Order in accordance with those requirements;
- otherwise, the mobile station shall send a Mobile Station Reject Order (ORDQ = '00000010') within T56m seconds.

If the mobile station receives one of the following service negotiation messages, the mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000010’) within T56m seconds:

1. Service Connect Message
2. Service Option Control Message
3. Service Request Message
4. Service Response Message
2.6.4.1.3 Ordering of Messages

The Layer 2 protocol does not guarantee delivery of messages in any order. If the mobile station requires that the base station receive a set of messages in a certain order, the mobile station shall send each message in assured mode requiring confirmation of delivery and shall wait for the confirmation of delivery of each message before transmitting the next message in the set.

2.6.4.1.4 Processing the In-Traffic System Parameters Message

The mobile station shall store the following parameters from the In-Traffic System Parameters Message:

- System identification (SID<sub>s</sub> = SID<sub>r</sub>)
- Network identification (NID<sub>s</sub> = NID<sub>r</sub>)
- Search window size for the Active Set and the Candidate Set (SRCH_WIN_A<sub>s</sub> = SRCH_WIN_A<sub>r</sub>)
- Search window size for the Neighbor Set (SRCH_WIN_N<sub>s</sub> = SRCH_WIN_N<sub>r</sub>)
- Search window size for the Remaining Set (SRCH_WIN_R<sub>s</sub> = SRCH_WIN_R<sub>r</sub>)
- Pilot detection threshold (T_ADD<sub>s</sub> = T_ADD<sub>r</sub>)
- Pilot drop threshold (T_DROP<sub>s</sub> = T_DROP<sub>r</sub>)
- Active Set versus Candidate Set comparison threshold (T_COMP<sub>s</sub> = T_COMP<sub>r</sub>)
- Drop timer value (T_TDROP<sub>s</sub> = T_TDROP<sub>r</sub>)
- Drop timer range value (T_TDROP_RANGE<sub>s</sub> = T_TDROP_RANGE<sub>r</sub>) if T_TDROP_RANGE_INCL<sub>r</sub> is equal to ‘1’; otherwise, (T_TDROP_RANGE<sub>s</sub> = ‘0000’)
- Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTED<sub>s</sub> = FOR_PDCH_SUPPORTED<sub>r</sub>)
- Short Data Burst supported indicator (SDB_SUPPORTED<sub>s</sub> = SDB_SUPPORTED<sub>r</sub>)
- If included, permission for the mobile station to request QoS settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message (MOB_QOS<sub>s</sub> = MOB_QOS<sub>r</sub>)
- Mobile station initiated position location determination supported indicator (MS_INIT_POS_LOC_SUP_IND<sub>s</sub> = MS_INIT_POS_LOC_SUP_IND<sub>r</sub>)
- PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED<sub>s</sub> = PDCH_CHM_SUPPORTED<sub>r</sub>) if included; otherwise, set PDCH_CHM_SUPPORTED<sub>s</sub> to ‘0’.
- Reverse Packet Data Channel supported indicator (REV_PDCH_SUPPORTED<sub>s</sub> = REV_PDCH_SUPPORTED<sub>r</sub>) if included; otherwise, set REV_PDCH_SUPPORTED<sub>s</sub> to ‘0’.
- Channel configuration request allowed indicator (USE_CH_CFG_RRM<sub>s</sub> = USE_CH_CFG_RRM<sub>r</sub>) if included; otherwise, set USE_CH_CFG_RRM<sub>s</sub> to ‘0’.
• Maximum age for retention of Neighbor Set members
  (NGHBR_MAX_AGE_s = NGHBR_MAX_AGE_r)

• Protocol revision level (P_REV_s = P_REV_r), and protocol revision level currently in use
  (P_REV_IN_USE_s = min (P_REV_s, MOB_P_REV_p of the current band class) )

• Slope of the handoff add/drop criterion (SOFT_SLOPE_s = SOFT_SLOPE_r)

• Intercept of the handoff add criterion (ADD_INTERCEPT_s = ADD_INTERCEPT_r)

• Intercept of the handoff drop criterion (DROP_INTERCEPT_s = DROP_INTERCEPT_r)

• If included, neighbor pilot strength measurement threshold offset (T_MULCHAN_s = T_MULCHAN_r)

• If included, Reverse Supplemental Code Channel beginning of transmission preamble length (BEGIN_PREAMBLE_s = BEGIN_PREAMBLE_r)

• If included, Reverse Supplemental Code Channel discontinuous transmission resumption preamble length (RESUME_PREAMBLE_s = RESUME_PREAMBLE_r)

• If included, Slotted Timer (T_SLOTTED_s = T_SLOTTED_r)

• If the mobile station supports packet data service options, the mobile station shall store
  the packet data services zone identifier (PACKET_ZONE_ID_s = PACKET_ZONE_ID_r).

• If the mobile station supports packet data service options and the
  PZ_HYST_PARMS_INCL_ENABLED field is included, the mobile station shall store the
  packet zone hysteresis enabled indicator (PZ_HYST_ENABLED_s = PZ_HYST_ENABLED_r);
  otherwise, the mobile station shall set PZ_HYST_ENABLED_s to ‘1’.

  perform the following:

  • If the PZ_HYST_PARMS_INCL_ENABLED field is included, the mobile station shall store the
    packet zone hysteresis enabled indicator (PZ_HYST_ENABLED_s = PZ_HYST_ENABLED_r);
    otherwise, the mobile station shall set PZ_HYST_ENABLED_s to ‘0’.

  • If the PZ_HYST_LIST_LEN field is included, the mobile station shall store the packet
    zone hysteresis list length (PZ_HYST_LIST_LEN_s = PZ_HYST_LIST_LEN_r);
    otherwise, the mobile station shall set PZ_HYST_LIST_LEN_s to 4.

  • If the PZ_HYST_ACT_TIMER field is included, the mobile station shall store the packet
    zone hysteresis activation timer (PZ_HYST_ACT_TIMER_s = PZ_HYST_ACT_TIMER_r);
    otherwise, the mobile station shall set PZ_HYST_ACT_TIMER_s to NULL_30 seconds.

  • If the PZ_HYST_TIMER_MUL field and the PZ_HYST_TIMER_EXP field are included, the mobile station shall store the packet zone hysteresis timer (PZ_HYST_TIMER_s = PZ_HYST_TIMER_MUL_r \times 8 ^ {PZ_HYST_TIMER_EXP_r});
    otherwise, the mobile station shall set PZ_HYST_TIMER_s to NULL_60 seconds.

• If ENC_SUPPORTED_r is equal to ‘1’, the mobile station shall store:
  – Signaling encryption supported indicator (SIG_ENCRYPT_SUP_s = SIG_ENCRYPT_SUP_r)
User information encryption supported indicator (UI_ENCRYPT_SUP_s = 
   UI_ENCRYPT_SUP_r)

Concurrent services supported indicator (CS_SUPPORTED_s = CS_SUPPORTED_r).

Maximum number of additional service reference identifiers allowed in origination
   (MAX_ADD_SERV_INSTANCE_s = MAX_ADD_SERV_INSTANCE_r), if included; otherwise,
   the mobile station shall set MAX_ADD_SERV_INSTANCE_r to 0.

Control Hold Mode supported indicator (CHM_SUPPORTED_s = CHM_SUPPORTED_r) if
   included; otherwise, the mobile station shall perform the following:
   - If P_REV_IN_USE_s is less than six, set CHM_SUPPORTED_s to '0'.
   - Otherwise, set CHM_SUPPORTED_s to '1'.

CDMA off time report supported indicator
   (CDMA_OFF_TIME_REP_SUP_IND_s = CDMA_OFF_TIME_REP_SUP_IND_r).

If CDMA_OFF_TIME_REP_SUP_IND_r is equal to ‘1’, the mobile station shall store CDMA
   off time report threshold (CDMA_OFF_TIME_REP_THRESHOLD_s =
   CDMA_OFF_TIME_REP_THRESHOLD_r in units specified by
   CDMA_OFF_TIME_REP_UNIT_r).

The mobile station shall set BCMC_ON_TRAFFIC_SUP_s to BCMC_ON_TRAFFIC_SUP_r. If
   BCMC_ON_TRAFFIC_SUP_r is set to ‘1’, the mobile station shall store
   AUTO_REQ_TRAF_ALLOWED_IND_s = AUTO_REQ_TRAF_ALLOWED_IND_r.

The mobile station shall determine its roaming status (see 2.6.5.3). The mobile station
   should indicate to the user whether the mobile station is roaming.

2.6.4.1.5 Message Action Times

A Forward Traffic Channel message without a USE_TIME field or with a USE_TIME field set
   to ‘0’ has an implicit action time. A message that has its USE_TIME field set to ‘1’ has an
   explicit action time that is specified in the ACTION_TIME field of the message.

A message with an explicit action time is called a pending message.

Unless otherwise specified, a message having an implicit action time shall take effect no
   later than the first 80 ms boundary (relative to System Time plus FRAME_OFFSET_s × 1.25
   ms) occurring at least 80 ms after the end of the frame containing the last bit of the
   message. A message with an explicit action time, except for a Power Up Function Message,
   shall take effect when System Time minus FRAME_OFFSET_s × 1.25 ms (in 80 ms units) 
   modulo 64 becomes equal to the message’s ACTION_TIME field. A Power Up Function
   Message shall take effect ACTION_TIME_FRAME frames after the time when System Time
   minus FRAME_OFFSET_s × 1.25 ms (in 80 ms units) modulo 64 becomes equal to the
   message’s ACTION_TIME field. The difference in time between ACTION_TIME and the end
   of the frame containing the last bit of the message shall be at least 80 ms.

The mobile station shall support two pending messages at any given time, not including
   pending Service Option Control Orders or Service Option Control Messages. The number of
   pending Service Option Control Orders or Service Option Control Messages that the mobile
station is required to support is specific to the service option (see the relevant service option description). In addition, the mobile station shall support one pending Power Up Function Message.

2.6.4.1.6 Long Code Transition Request Processing

The mobile station performs these procedures upon receiving a Long Code Transition Request Order.

If the Long Code Transition Request Order requests a transition to the private long code, and the mobile station is able to generate the private long code (see 2.3.12.3), and the mobile station accepts the request, the mobile station shall send a Long Code Transition Response Order (ORDQ = ‘00000011’) within T_{56m} seconds. The mobile station shall use the private long code on both the Forward Traffic Channel and the Reverse Traffic Channel. The mobile station shall store the public long code mask and PLCM_TYPES currently in use and begin using the private long code at the explicit action time (see 2.6.4.1.5) specified in the message. At the action time of the message, the mobile station should indicate to the user that the voice privacy mode is active. If the Long Code Transition Request Order requests a private long code transition, and the mobile station is not able to generate the private long code or the mobile station does not accept the request, the mobile station shall send a Long Code Transition Response Order (ORDQ = ‘00000010’) within T_{56m} seconds.

If the Long Code Transition Request Order requests a transition to the public long code and the mobile station accepts the request, the mobile station shall send a Long Code Transition Response Order (ORDQ = ‘00000010’) within T_{56m} seconds. The mobile station shall use the public long code on both the Forward Traffic Channel and the Reverse Traffic Channel. The mobile station shall begin using the public long code that is stored previously, derived from PLCM_TYPES as specified in 2.3.6, at the explicit action time (see 2.6.4.1.5) specified in the message. At the action time of the message, the mobile station should indicate to the user that the voice privacy mode is inactive. If the Long Code Transition Request Order requests a public long code transition, and the mobile station does not accept the request, the mobile station shall send a Long Code Transition Response Order (ORDQ = ‘00000011’) within T_{56m} seconds.

2.6.4.1.7 Power Up Function (PUF)

Figure 2.6.4.1.7-1 illustrates the general structure of a PUF attempt. A PUF pulse is the interval during which the mobile station transmits at the specified power level while executing the Power Up Function.

A PUF probe is one or more consecutive Traffic Channel frames. A PUF probe consists of three parts: PUF setup, PUF pulse, and PUF recovery. PUF_{SETUP\_SIZE} is the duration of the PUF setup part, in power control groups. PUF_{PULSE\_SIZE} is the duration of the PUF pulse, in power control groups. The PUF recovery period occupies the remainder of the last frame of the PUF probe.

A PUF attempt is a sequence of PUF probes sent by the mobile station in response to a Power Up Function Message. A PUF attempt begins at an offset frame boundary within 80 ms of the ACTION\_TIME specified in the Power Up Function Message. A PUF attempt can be terminated in one of four ways:
• The mobile station receives a Power Up Function Completion Message.
• The mobile station has transmitted the maximum number of PUF probes specified in the Power Up Function Message.
• The mobile station has transmitted the maximum number of probes allowed at its maximum output power.
• The mobile station receives a new Power Up Function Message.

Figure 2.6.4.1.7-1. Structure of PUF Attempt

2.6.4.1.7.1 Processing the Power Up Function Message
The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (message requires a capability that is not supported by the mobile station) if any of the following conditions are detected:
• PUF_FREQ_INCL₀ is set to ‘1’ and PUF_BAND_CLASS₀ is not supported by the mobile station.
• PUF_FREQ_INCL₀ is set to ‘1’ and the mobile station is unable to re-tune to the PUF Target Frequency during (PUF_SETUP_SIZE₀ + 1) power control groups.
The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00001100’ (invalid Frequency Assignment), if the Frequency Assignment specified in the message is the same as the Serving Frequency (PUF_FREQ_INCL is equal to ‘1’, PUF_BAND_CLASS is equal to CDMABAND and PUF_CDMA_FREQ is equal to CDMACH). If the mobile station is processing a PUF probe, the mobile station shall wait for the PUF probe to complete. It shall then terminate the current PUF attempt. The mobile station shall store the following parameters:

- Maximum number of PUF probes transmitted at full power level (MAX_PWR_PUF = MAX_PWR_PUF + 1)
- Total number of PUF probes (TOTAL_PUF_PROBES = TOTAL_PUF_PROBES + 1)
- PUF interval (PUF_INTERVAL = PUF_INTERVAL)
- Number of PUF setup power control groups (PUF_SETUP_SIZE = PUF_SETUP_SIZE + 1)
- Number of PUF pulse power control groups (PUF_PULSE_SIZE = PUF_PULSE_SIZE + 1)
- Power increase of initial PUF pulse (PUF_INIT_PWR = PUF_INIT_PWR)
- Power increase for each successive PUF pulse (PUF_PWR_STEP = PUF_PWR_STEP)
- Frequency included indicator (PUF_FREQ_INCL = PUF_FREQ_INCL)

If PUF_FREQ_INCL equals ‘1’, the mobile station shall store the following:

- PUF probe Target Frequency CDMA Channel number (PUF_TF_CDMACH = PUF_CDMA_FREQ)
- PUF probe Target Frequency CDMA band class (PUF_TF_CDMABAND = PUF_BAND_CLASS)

The mobile station shall set CURRENT_PUF_PROBE equal to 0. The mobile station shall then begin the PUF attempt at the time specified in 2.6.4.1.7.2.

2.6.4.1.7.2 Power Up Function Procedures

The mobile station shall process the initial PUF probe beginning at the start of the frame which starts ACTION_TIME_FRAME × 20 ms + FRAME_OFFSET × 1.25 ms after the System Time specified by ACTION_TIME. The mobile station shall process additional PUF probes beginning at intervals of PUF_INTERVAL frames from the beginning of the initial PUF probe. The mobile station shall transmit the PUF probes as described in 2.6.4.1.7.2.1 and 2.6.4.1.7.2.2.
2.6.4.1.7.2.1 PUF Probe On Serving Frequency

The mobile station shall process each PUF probe as follows:

- The mobile station shall use closed loop power control procedures as specified in [2].
- The mobile station shall use the gated output procedures specified in [2].
- The mobile station shall control its mean output power as specified in [2].
- The mobile station shall monitor its output power during the PUF pulse, and should monitor its output power at least once during each power control group of the PUF pulse. If the mobile station detects that the transmit power level specified in [2] is equal to or greater than the maximum power output of the mobile station at any time during a PUF pulse, the mobile station shall decrement MAX_PWR_PUFs by one for that PUF pulse.
- The mobile station shall transmit the traffic channel preamble for the duration of the PUF probe on the Reverse Fundamental Channel.

After the processing of each PUF probe, the mobile station shall increment CURRENT_PUF_PROBES by 1. If MAX_PWR_PUFs is equal to 0, the mobile station shall terminate the PUF attempt. If CURRENT_PUF_PROBES equal to TOTAL_PUF_PROBES, the mobile station shall terminate the PUF attempt.

2.6.4.1.7.2.2 PUF Probe On PUF Target Frequency

The mobile station shall process each PUF probe as follows:

- The mobile station shall use closed loop power control procedures as specified in [2].
- The mobile station shall use the gated output procedures specified in [2].
- The mobile station shall control its mean output power as specified in [2].
- The mobile station shall store the following Serving Frequency parameters from its current configuration:
  - CDMA Band Class \(\text{PUF}_\text{SF}_\text{CDMABAND}_s = \text{CDMABAND}_s\)
  - Frequency assignment \(\text{PUF}_\text{SF}_\text{CDMACH}_s = \text{CDMACH}_s\)
- The mobile station shall monitor its output power during the PUF pulse, and should monitor its output power at least once during each power control group of PUF pulse. If the mobile station detects that the transmit power level specified in [2] is equal to or greater than the maximum power output of the mobile station at any time during a PUF pulse, the mobile station shall decrement the MAX_PWR_PUFs by one for that PUF pulse.
• At the beginning of the PUF probe, the mobile station shall disable its transmitter, stop processing the Forward Supplemental Code Channel (if any), or the Forward Supplemental Channel (if any), disable all corrections to the mobile station time reference (see [2]), tune to the CDMA channel specified by PUF_TF_CDMACHS, and PUF_TF_CDMABANDS and re-enable its transmitter.

• The mobile station shall transmit the traffic channel preamble on the Reverse Fundamental Channel during the PUF pulse at PUF_TX_PWRs.

• The mobile station should disable its transmitter immediately after the end of the PUF pulse, and shall disable its transmitter before the end of the first power control group after the PUF pulse. It shall then tune to its assigned CDMA channel as given by CDMACHS and CDMBANDS.

• If the interval between the time that the mobile station tunes to the PUF Target Frequency and the time that it re-tunes to the Serving Frequency is equal to or greater than \((N_2m \times 0.02)\) seconds, the mobile station shall wait to receive a period of \((N_3m \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs.

• The mobile station shall then re-enable its transmitter and re-enable any adjustments to the mobile station time reference.

• If the Forward Supplemental Code Channel assignment has not expired while the mobile station has tuned to the PUF Target Frequency, then the mobile station shall resume processing the Forward Supplemental Code Channels after re-tuning to the Serving Frequency.

• If the Forward Supplemental Channel assignment has not expired while the mobile station has tuned to the PUF Target Frequency, then the mobile station shall resume processing the Forward Supplemental Channels after re-tuning to the Serving Frequency.

• If the Reverse Supplemental Code Channel assignment has not expired while the mobile station has tuned to the PUF Target Frequency, then the mobile station may resume transmitting the Reverse Supplemental Code Channels after re-tuning to the Serving Frequency.

• If the Reverse Supplemental Channel assignment has not expired while the mobile station has tuned to the PUF Target Frequency, then the mobile station may resume transmitting the Reverse Supplemental Code Channels after re-tuning to the Serving Frequency.

After the processing of each PUF probe, the mobile station shall increment CURRENT_PUF_PROBES by one. If MAX_PWR_PUFs is equal to 0, the mobile station shall terminate the PUF attempt. If CURRENT_PUF_PROBES is equal to TOTAL_PUF_PROBES, the mobile station shall terminate the PUF attempt.

2.6.4.1.7.3 Processing the Power Up Function Completion Message

The mobile station shall terminate any PUF attempt no later than the completion of the current probe in progress and shall discard any pending Power Up Function Message. If LOC_IND_r is equal to ‘1’, the mobile station may store the following parameters:
• Mobile Station Latitude (MS_LATs = MS_LATr)
• Mobile Station Longitude (MS_LONGs = MS_LONGr)
• Time stamp (MS_LOC_TSTAMPs = MS_LOC_TSTAMPr)

2.6.4.1.8 Forward Traffic Channel Supervision

When in the Mobile Station Control on the Traffic Channel State, the mobile station shall continuously monitor the Forward Channel, except:

• During a PUF probe in which it transmits on a PUF target frequency (see 2.6.4.1.7),
• During a search of pilots on a CDMA Candidate Frequency (see 2.6.6.2.8.3),
• During a search of analog frequencies (see 2.6.6.2.10).

When a Forward Common Power Control Channel is not assigned, the mobile station shall perform the procedure described in 2.6.4.1.8.1. When a Forward Forward Common Power Control Channel is assigned, the mobile station shall perform the procedure described in 2.6.4.1.8.2.

2.6.4.1.8.1 Forward Traffic Channel Supervision when a Forward Common Power Control Channel is not assigned

The mobile station shall monitor the physical channel corresponding to FPC_PRI_CHANs as follows:

• If RESQ_ENABLEDs is equal to ‘1’ and FPC_PRI_CHANs is equal to ‘0’, the mobile station shall perform the following:
  – While the mobile station’s transmitter is enabled:
    + If the rescue attempt timer is not enabled and the mobile station receives a period of \((N2m \times 20)\) ms with insufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, then the mobile station shall perform the following:
      o disable its transmitter, and
      o enable the rescue delay timer with an initial value of \((RESQ_DELAY_TIMEs \times 80)\) ms.
    + If the rescue attempt timer is enabled and the mobile station receives a period of \((N3m \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, then the mobile station shall disable the rescue attempt timer, and shall resume Forward and Reverse Traffic Channel power control as specified in 2.6.4.1.1 and 2.6.6.2.7.2, respectively.
  – While the mobile station’s transmitter is disabled:
+ If the mobile station did not disable its transmitter due to an acknowledgment failure and the mobile station receives a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, then the mobile station should re-enable its transmitter, and shall also perform the following:

- disable the rescue delay timer or rescue allowed timer, if either is enabled.
- send a Call Rescue Cancel Order in assured mode, if the mobile station is not otherwise required to send an Extended Pilot Strength Measurement Message.

• Otherwise, the mobile station shall perform the following:
  - If the mobile station receives a period of \((N_{2m} \times 20)\) ms with insufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, it shall disable its transmitter.
  - Thereafter, if the mobile station receives a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, then the mobile station should re-enable its transmitter.

The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be enabled when the mobile station first enables its transmitter when in the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State. The fade timer shall be reset for \(T_{5m}\) seconds whenever the mobile station receives a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs. The mobile station shall disable the fade timer when it tunes to a PUF target frequency, and shall re-enable the fade timer at the end of the PUF probe. If the timer expires, the mobile station shall disable its transmitter and declare a loss of the Forward Traffic Channel.

The mobile station also enables, disables, and resets the fade timer as described in 2.6.6.2.8 and 2.6.6.2.10 when it performs a hard handoff or a periodic search.

2.6.4.1.8.2 Forward Traffic Channel Supervision when a Forward Common Power Control Channel is assigned

The mobile station shall monitor the Forward Common Power Control Channel as follows:

- If the mobile station receives a period of \((N_{16m} \times 1.25)\) ms with insufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile, it shall disable its transmitter.

- Thereafter, if the mobile station receives a period of \((N_{17m} \times 1.25)\) ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile, then the mobile station should re-enable its transmitter.

The mobile station shall establish a Forward Traffic Channel fade timer. The timer shall be enabled when the mobile station first enables its transmitter when in the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State. The fade
timer shall be reset for $T_{5m}$ seconds whenever the mobile station receives a period of $(N_{17m} \times 1.25)$ ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile. If the timer expires, the mobile station shall disable its transmitter and declare a loss of the Forward Traffic Channel.

The mobile station also enables, disables, and resets the fade timer as described in 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 periodic search.

Additionally, the mobile station shall perform a ping as follows:

- The mobile station shall establish a Forward Traffic Channel ping timer as follows:
  - When the mobile station first enables its transmitter in the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State, the mobile station shall enable the Forward Traffic Channel ping timer and set it to $T_{78m}$ seconds.
  - When the mobile station receives a message that assigns a F-CPCCH, the mobile station shall enable the Forward Traffic Channel ping timer and set it to $T_{78m}$ seconds.

- When the mobile station receives a Physical Layer PDCH-SDU destined for this mobile station on the F-PDCH or on the shared F-DCCH (See [3]), the Forward Traffic Channel ping timer shall be reset for $T_{78m}$ seconds.

- When the Forward Traffic Channel ping timer expires, the mobile station shall send a L2 Acknowledgment Order in assured mode if there is no other Layer 3 message to be sent in assured mode available for transmission.

### 2.6.4.1.9 Processing the Extended Release Message and the Extended Release Mini Message

- Upon receiving the Extended Release Message or the Extended Release Mini Message, the mobile station shall process the message as follows:
  - If USE_EXT_CH_IND$_r$ is equal to ‘1’, then the mobile station shall set USE_EXT_CH_IND$_s$ to USE_EXT_CH_IND$_r$; otherwise, the mobile station shall set USE_EXT_CH_IND$_s$ to ‘0’.
  - If the mobile station determines that the configuration specified by CH_IND$_r$ or 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 mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000111’ (message can not be handled by the current mobile station configuration) and the mobile station shall not perform the remaining procedures in this section.
  - If USE_EXT_CH_IND$_s$ is equal to ‘0’ and CH_IND$_r$ is equal to ‘111’ or the physical channels indicated by the two least significant bits of CH_IND$_r$ includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the Layer 3 shall send a “release indication” to all Call Control instances and shall perform the following:
The mobile station shall set $TBR\_RAND\_SUPPR\_ENABLE_s = TBR\_RAND\_SUPPR\_ENABLE_r$.  

The mobile station shall set $TBR\_RAND\_WINDOW_s$ to $TBR\_RAND\_WINDOW_r$.  

Enter the Release Substate with a base station extended release indication if the message is the Extended Release Message.  

Enter the Release Substate with a base station extended release mini message indication if the message is the Extended Release Mini Message.  

Otherwise, the mobile station shall perform the following:  

If the received message is the Extended Release Message, the mobile station shall send an Extended Release Response Message to the base station. If the received message is the Extended Release Mini Message, the mobile station shall send an Extended Release Response Mini Message to the base station.  

If $USE\_EXT\_CH\_IND_s$ is equal to ‘1’, then the mobile station shall perform the following:  

- If $SWITCHING\_PARMS\_INCL_r$ is included and equal to ‘1’, the mobile station shall set $NUM\_SOFT\_SWITCHING\_FRAMES\_CHM_s$ to $NUM\_SOFT\_SWITCHING\_FRAMES\_CHM_r + 1$, and $NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM_s$ to $NUM\_SOFTER\_SWITCHING\_FRAMES\_CHM_r + 1$.  

- If $EXT\_CH\_IND_r$ indicates that F-DCCH is assigned and F-FCH is not assigned, the mobile station shall set $FPC\_PRI\_CHAN_s$ to ‘1’ at the action time of the message.  

- If $EXT\_CH\_IND_r$ indicates that F-FCH is assigned and F-DCCH is not assigned, the mobile station shall set $FPC\_PRI\_CHAN_s$ to ‘0’ at the action time of the message.  

- If $EXT\_CH\_IND_r$ indicates that an R-FCH is to be released, then the mobile station shall stop transmitting on R-FCH at the action time specified by the message. If $EXT\_CH\_IND_r$ indicates that an F-FCH is to be released, then the mobile station shall stop processing F-FCH at the action time specified by the message.  

- If $EXT\_CH\_IND_r$ indicates that an R-DCCH is to be released, then the mobile station shall stop transmitting on R-DCCH at the action time specified by the message. If $EXT\_CH\_IND_r$ indicates that an F-DCCH is to be released, then the mobile station shall stop processing F-DCCH at the action time specified by the message.  

- If $EXT\_CH\_IND_r$ indicates that an R-PDCH is to be released, then the mobile station shall stop transmitting on R-PDCH at the action time
specified by the message.

- If \( \text{GATING\_RATE\_INCL}_r \) is equal to ‘1’, the mobile station shall set \( \text{PILOT\_GATING\_RATE}_s = \text{PILOT\_GATING\_RATE}_r \) at the action time of the message.

- If \( \text{PDCH\_CONTROL\_HOLD}_r \) is equal to ‘1’, the mobile station shall perform the following:
  
  ⊕ Set \( \text{PILOT\_GATING\_USE\_RATE} \) to ‘1’ and start the reverse pilot gating and R-CQICH gating at \( \text{PILOT\_GATING\_RATE}_s \) at the action time of the message.

  ⊕ The mobile station shall cancel the forward and reverse supplemental channel assignment, if any, at the action time of the message.

- The mobile station shall set \( \text{EXT\_CH\_IND}_s \) to \( \text{EXT\_CH\_IND}_r \).

+ Otherwise (\( \text{USE\_EXT\_CH\_IND}_s \) is equal to ‘0’), the mobile station shall perform the following:

  - The mobile station shall update \( \text{CH\_IND}_s \) as follows: If the least significant bit of \( \text{CH\_IND}_r \) equals ‘1’, the mobile station shall set \( \text{CH\_IND}_s = '10' \). If the second most significant bit of \( \text{CH\_IND}_r \) equals ‘1’, the mobile station shall set \( \text{CH\_IND}_s = '01' \).

  - If \( \text{CH\_IND}_r \) is equal to ‘001’ or ‘101’, the mobile station shall set \( \text{FPC\_PRI\_CHAN}_s \) to ‘1’ at the action time of the message.

  - If \( \text{CH\_IND}_r \) is equal to ‘010’, the mobile station shall set \( \text{FPC\_PRI\_CHAN}_s \) to ‘0’ at the action time of the message.

  - If the least significant bit of \( \text{CH\_IND}_r \) equals ‘1’, then the mobile station shall stop transmitting on R-FCH and stop processing F-FCH, if assigned, at the action time specified by the message.

  - If the second most significant bit of \( \text{CH\_IND}_r \) equals ‘1’, then the mobile station shall stop transmitting on R-DCCH and stop processing F-DCCH, if assigned, at the action time specified by the message.

  - If \( \text{GATING\_RATE\_INCL}_r \) equals ‘1’, the mobile station shall set \( \text{PILOT\_GATING\_RATE}_s = \text{PILOT\_GATING\_RATE}_r \) at the action time of the message.

  - If the most significant bit of \( \text{CH\_IND}_r \) equals ‘1’, the mobile station shall set \( \text{PILOT\_GATING\_USE\_RATE} \) to ‘1’. The mobile station shall start the reverse pilot gating at \( \text{PILOT\_GATING\_RATE}_s \) at the action time of the message. Furthermore, if the least significant bit of \( \text{CH\_IND}_r \) equals ‘1’ (that is, the Fundamental Channel is being released), the mobile station shall store the configuration used for the Fundamental Channel. The
The mobile station shall cancel the forward and reverse supplemental channel assignment, if any, at the action time of the message.

- If a Forward Packet Data Channel is assigned, the mobile station shall perform the following:

  ◊ Stop processing the Forward Packet Data Channel at the action time specified by the message.

  ◊ If a Reverse Packet Data Channel is assigned, the mobile station shall stop transmitting on the Reverse Packet Data Channel at the action time specified by the message.

  ◊ If the two least significant bits of CH_IND_r is equal to ‘00’, the mobile station shall perform the following:

    - If EXT_CH_IND_s signals the allocation of F-FCH and R-FCH, and does not signal allocation of F-DCCH nor R-DCCH, the mobile station shall set CH_IND_s = ’01’ at the action time specified by the message.

    - If EXT_CH_IND_s signals the allocation of F-DCCH and R-DCCH, and does not signal allocation of F-FCH nor R-FCH, the mobile station shall set CH_IND_s = ’10’ at the action time specified by the message.

    - If EXT_CH_IND_s signals the allocation of F-FCH, R-FCH, F-DCCH and R-DCCH, the mobile station shall set CH_IND_s = ’11’ at the action time specified by the message.

2.6.4.1.10 Processing the Resource Allocation Message and Resource Allocation Mini Message

The mobile station shall process the Resource Allocation Message and the Resource Allocation Mini Message as follows:

- The mobile station shall set FPC_PRI_CHAN_s = FPC_PRI_CHAN_r at the action time of the message.

- If a F-PDCH is not assigned and the Fundamental Channel was previously established prior to transitioning to the Control Hold Mode, the mobile station shall start processing F-FCH and start transmitting on R-FCH at the action time of the message. The mobile station shall establish the Fundamental Channel with the same configuration as previously used, and shall set CH_IND_s to ‘11’.

- The mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall start the continuous reverse pilot at the action time of the message and, if a F-PDCH is assigned, the mobile station shall start the continuous R-CQICH as defined in [3].
2.6.4.1.11 Reserved

2.6.4.1.12 Processing the Service Configuration Record

The mobile station shall update the Service Configuration information record currently in use as follows:

- If P_REV_IN_USE is less than eight, the mobile station shall update the multiplex option information as follows:
  - The mobile station shall store the forward Fundamental Channel multiplex option \([\text{FOR\_FCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
  - The mobile station shall store the reverse Fundamental Channel multiplex option \([\text{REV\_FCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).
  - The mobile station shall store the forward Dedicated Control Channel multiplex option \([\text{FOR\_DCCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
  - The mobile station shall store the reverse Dedicated Control Channel multiplex option \([\text{REV\_DCCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).

- If P_REV_IN_USE is greater than or equal to eight, the mobile station shall update the multiplex option information as follows:
  - If FCH_DCCH_MUX_OPTION_IND is equal to ‘00’:
    - The mobile station shall store the forward Fundamental Channel multiplex option \([\text{FOR\_FCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
    - The mobile station shall store the forward Dedicated Control Channel multiplex option \([\text{FOR\_DCCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
    - The mobile station shall store the reverse Fundamental Channel multiplex option \([\text{REV\_FCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).
    - The mobile station shall store the reverse Dedicated Control Channel multiplex option \([\text{REV\_DCCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).
  - If FCH_DCCH_MUX_OPTION_IND is equal to ‘01’:
    - The mobile station shall store the forward Fundamental Channel multiplex option \([\text{FOR\_FCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
    - The mobile station shall store the reverse Fundamental Channel multiplex option \([\text{REV\_FCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).
  - If FCH_DCCH_MUX_OPTION_IND is equal to ‘10’:
    - The mobile station shall store the forward Dedicated Control Channel multiplex option \([\text{FOR\_DCCH\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r]\).
    - The mobile station shall store the reverse Dedicated Control Channel multiplex option \([\text{REV\_DCCH\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r]\).
  - If FCH_DCCH_MUX_OPTION_IND is equal to ‘11’:
The mobile station shall store the forward Fundamental Channel multiplex option (\text{FOR\_MUX\_OPTION}_s = \text{FOR\_MUX\_OPTION}_r).

The mobile station shall store the reverse Fundamental Channel multiplex option (\text{REV\_MUX\_OPTION}_s = \text{REV\_MUX\_OPTION}_r).

The mobile station shall store the forward Dedicated Control Channel multiplex option (\text{FOR\_DCCH\_MUX\_OPTION}_s = \text{FOR\_DCCH\_MUX\_OPTION}_r).

The mobile station shall store the reverse Dedicated Control Channel multiplex option (\text{REV\_DCCH\_MUX\_OPTION}_s = \text{REV\_DCCH\_MUX\_OPTION}_r).

The mobile station shall store the set of number of bits per frame of the forward Fundamental Channel and Dedicated Control Channel \([\text{FOR\_NUM\_BITS}_s = \text{FOR\_NUM\_BITS}_r]\).

The mobile station shall store the set of number of bits per frame of the reverse Fundamental Channel and Dedicated Control Channel \([\text{REV\_NUM\_BITS}_s = \text{REV\_NUM\_BITS}_r]\).

If a service option connection has been omitted from the service option connection records, the Layer 3 shall terminate the call control instance (currently existing or pending instantiation) identified by the connection reference corresponding to the omitted service option connection.

If this is the first Service Configuration Record received from the base station in a Service Connect Message, General Handoff Direction Message, or Universal Handoff Direction Message and accepted by the mobile station since entering the Traffic Channel substate, the mobile station shall also identify the Call Control instance currently identified by NULL by the connection reference assigned to the first service option connection, \text{CON\_REF}_r; otherwise, the mobile station shall identify the Call Control instance corresponding to the first service option connection listed in this Service Configuration information record by the NULL identifier.

The mobile station shall delete all instances of current service option connection records. For each of the \text{NUM\_CON\_REC}_r occurrences of the service option connection record \(\text{SO\_CON\_REC}_i\), the mobile station shall perform the following:

- The mobile station shall store the service option connection reference \(\text{SO\_CON\_REC}_i[\cdot].\text{CON\_REF} = \text{CON\_REF}_r\).

- The mobile station shall store the service option \(\text{SO\_CON\_REC}_i[\cdot].\text{SERVICE\_OPTION} = \text{SERVICE\_OPTION}_r\).

- The mobile station shall store the forward traffic channel traffic type \(\text{SO\_CON\_REC}_i[\cdot].\text{FOR\_TRAFFIC} = \text{FOR\_TRAFFIC}_r\).

- The mobile station shall store the reverse traffic channel traffic type \(\text{SO\_CON\_REC}_i[\cdot].\text{REV\_TRAFFIC} = \text{REV\_TRAFFIC}_r\).
- The mobile station shall store the encryption mode indicator for user information privacy (SO_CON_RECs[i].UI_ENCRYPT_MODE = UI_ENCRYPT_MODEr).

- The mobile station shall store the service reference identifier (SO_CON_RECs[i].SR_ID = SR_IDr).

- If RLP_INFO_INCLr equals ‘1’, the mobile station shall store the Radio Link Protocol block of bits (SO_CON_RECs[i].RLP_BLOB = RLP_BLOBr).

- If QOS_PARMS_INCLr equals ‘1’, the mobile station shall store the QoS parameters block (SO_CON_RECs[i].QOS_PARMS = QOS_PARMSr).

- If FCH_CC_INCLr equals ‘1’, the mobile station shall perform the following:
  - The mobile station shall store the indicator for 5ms frames on Fundamental Channel as follows: if FCH_FRAME_SIZEr equals ‘1’, the mobile station shall set FCH_5MS_FRAMESs = ‘1’; otherwise, it is set to ‘0’.
  - The mobile station shall store the Forward Fundamental Channel Radio Configuration (FOR_FCH_RC_s = FOR_FCH_RC_r).
  - The mobile station shall store the Reverse Fundamental Channel Radio Configuration (REV_FCH_RC_s = REV_FCH_RC_r).

- If DCCH_CC_INCLr equals ‘1’, the mobile station shall perform the following:
  - The mobile station shall store the indicator for 5ms frames on Dedicated Control Channel as follows: If DCCH_FRAME_SIZEr equals ‘10’ or ‘11’, the mobile station shall set DCCH_5MS_FRAMESs = ‘1’; otherwise, it is set to ‘0’.
  - The mobile station shall store the Forward Dedicated Control Channel Radio Configuration (FOR_DCCH_RC_s = FOR_DCCH_RC_r).
  - The mobile station shall store the Reverse Dedicated Control Channel Radio Configuration (REV_DCCH_RC_s = REV_DCCH_RC_r).

- If FOR_SCH_CC_INCLr equals ‘1’, the mobile station shall store the NUM_FOR_SCHr occurrences of the Forward Supplemental Channel channel configuration records as follows:
  - The mobile station shall store the Forward Supplemental Channel Identification (FOR_SCH_ID[FOR_SCH_IDr]s = FOR_SCH_IDr).
  - The mobile station shall store the Forward Supplemental Channel Multiplex Option (FOR_SCH_MUX[FOR_SCH_IDr]s = FOR_SCH_MUXr).
  - The mobile station shall store the Forward Supplemental Channel Radio Configuration (FOR_SCH_RC[FOR_SCH_IDr]s = SCH_RC_r).
  - The mobile station shall store the Forward Supplemental Channel Coding Type (FOR_SCH_CODING[FOR_SCH_IDr]s = CODINGr).

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- If FRAME_40_USED_r and FRAME_80_USED_r are both equal to '0', the mobile station shall set FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '00' (i.e., 20 ms frame length).
- If FRAME_40_USED_r is equal to '1', the mobile station shall set FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '01' (i.e., 40 ms frame length).
- If FRAME_80_USED_r is equal to '1', the mobile station shall set FOR_SCH_FRAME_LENGTH_s[FOR_SCH_ID_r] to '10' (i.e., 80 ms frame length).
- F_MAX_RATE_IDX_s[FOR_SCH_ID_r] = MAX_RATE_r.

- If REV_SCH_CC_INCL_r equals '1', the mobile station shall store the NUM_REV_SCH_r occurrences of the Reverse Supplemental Channel channel configuration records as follows:
  - The mobile station shall store the Reverse Supplemental Channel Identification (REV_SCH_ID[REV_SCH_ID_r]s = REV_SCH_ID_r).
  - The mobile station shall store the Reverse Supplemental Channel Multiplex Option (REV_SCH_MUX[REV_SCH_ID_r]s = REV_SCH_MUX_r).
  - The mobile station shall store the Reverse Supplemental Channel Radio Configuration (REV_SCH_RC[REV_SCH_ID_r]s = SCH_RCr).
  - The mobile station shall store the Reverse Supplemental Channel Coding Type (REV_SCH_CODING[REV_SCH_ID_r]s = CODING_r).
- If FRAME_40_USED_r and FRAME_80_USED_r are both equal to '0', the mobile station shall set REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '00' (i.e., 20 ms frame length).
- If FRAME_40_USED_r is equal to '1', the mobile station shall set REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '01' (i.e., 40 ms frame length).
- If FRAME_80_USED_r is equal to '1', the mobile station shall set REV_SCH_FRAME_LENGTH_s[REV_SCH_ID_r] to '10' (i.e., 80 ms frame length).
- R_MAX_RATE_IDX_s[REV_SCH_ID_r] = MAX_RATE_r.

- If FOR_PDCH_CC_INCL_r equals '1', the mobile station shall perform the following:
  - The mobile station shall store the Forward Packet Data Channel multiplex option (FOR_PDCH_MUX_OPTION_s = FOR_PDCH_MUX_OPTION_r).
  - The mobile station shall store the Forward Packet Data Channel Radio Configuration (FOR_PDCH_RC_s = FOR_PDCH_RC_r).

- If REV_PDCH_CC_INCL_r equals '1', the mobile station shall store the following:
  - The Reverse Packet Data Channel multiplex option for the higher data rates (REV_PDCH_MUX_OPTION_HIGH_RATE_s = REV_PDCH_MUX.Option_HIGH_RATE_r).
- The Reverse Packet Data Channel multiplex option for the lower data rates
  \((\text{REV\_PDCH\_MUX\_OPTION\_LOW\_RATE}_s = \text{REV\_PDCH\_MUX\_OPTION\_LOW\_RATE}_r)\).
- The Reverse Packet Data Channel Radio Configuration \((\text{REV\_PDCH\_RC}_s = \text{REV\_PDCH\_RC}_r)\).

2.6.4.1.13 Processing the Non-Negotiable Service Configuration Record

The mobile station shall update the Non-Negotiable Service Configuration information record currently in use as follows:

- If \(\text{FPC\_INCL}_r\) equals ‘1’, the mobile station shall perform the following:
  - The mobile station shall store the Power Control Subchannel indicator
    \((\text{FPC\_PRI\_CHAN}_s = \text{FPC\_PRI\_CHAN}_r)\).
  - The mobile station shall store the forward power control operation mode
    \((\text{FPC\_MODE\_NO\_SCH}_s = \text{FPC\_MODE}_r)\).
  - The mobile station shall set \(\text{FPC\_MODE}_s = \text{FPC\_MODE\_NO\_SCH}_s\) if there is no
    forward Supplemental Channel assignment in progress (see 2.6.6.2.5.1.1).
  - If \(\text{FPC\_OLPC\_FCH\_INCL}_r\) equals ‘1’, the mobile station shall perform the
    following:
      + The mobile station shall store the Fundamental Channel target Frame Error
        Rate \((\text{FPC\_FCH\_FER}_s = \text{FPC\_FCH\_FER}_r)\).
      + The mobile station shall store the minimum Fundamental Channel Outer
        Loop Eb/Nt setpoint \((\text{FPC\_FCH\_MIN\_SETPT}_s = \text{FPC\_FCH\_MIN\_SETPT}_r)\).
      + The mobile station shall store the maximum Fundamental Channel Outer
        Loop Eb/Nt setpoint \((\text{FPC\_FCH\_MAX\_SETPT}_s = \text{FPC\_FCH\_MAX\_SETPT}_r)\).
  - If \(\text{FPC\_OLPC\_DCCH\_INCL}_r\) equals ‘1’, the mobile station shall perform the
    following:
      + The mobile station shall store the Dedicated Control Channel target Frame Error Rate
        \((\text{FPC\_DCCH\_FER}_s = \text{FPC\_DCCH\_FER}_r)\).
      + The mobile station shall store the minimum Dedicated Control Channel
        Outer Loop Eb/Nt setpoint \((\text{FPC\_DCCH\_MIN\_SETPT}_s = \text{FPC\_DCCH\_MIN\_SETPT}_r)\).
      + The mobile station shall store the maximum Dedicated Control Channel
        Outer Loop Eb/Nt setpoint \((\text{FPC\_DCCH\_MAX\_SETPT}_s = \text{FPC\_DCCH\_MAX\_SETPT}_r)\).
- If \(\text{GATING\_RATE\_INCL}_r\) equals ‘1’, the mobile station shall store the Reverse Pilot
  Channel gating rate \((\text{PILOT\_GATING\_RATE}_s = \text{PILOT\_GATING\_RATE}_r)\).
- If \(\text{FOR\_SCH\_INCL}_r\) equals ‘1’, the mobile station shall store the \(\text{NUM\_FOR\_SCH}_r\)
  occurrences of the Forward Supplemental Channel information as follows:
The mobile station shall store the Forward Supplemental Channel Multiframe Offset \( \text{FOR\_SCH\_FRAME\_OFFSET}[\text{FOR\_SCH\_ID}_r] = \text{FOR\_SCH\_FRAME\_OFFSET}_r \). 

- If \( \text{REV\_SCH\_CC\_INCL}_r \) equals ‘1’, the mobile station shall store the \( \text{NUM\_REV\_SCH}_r \) occurrences of the Reverse Supplemental Channel information as follows:
  - The mobile station shall store the Reverse Supplemental Channel Multiframe Offset \( \text{REV\_SCH\_FRAME\_OFFSET}[\text{REV\_SCH\_ID}_r] = \text{REV\_SCH\_FRAME\_OFFSET}_r \).

- The mobile station shall determine the Logical-to-Physical Mapping to be used as follows:
  - If \( \text{LPM\_IND}_r \) equals ‘00’ and an F-PDCH is assigned, the mobile station shall reset the Logical-to-Physical Mapping to their default values as specified in Table 2.6.4.2-2 but with the following modification for requirement 1 stated in Table 2.6.4.2-2:
    + The mobile station shall set the SR_ID field to the value specified in the Service Configuration information record.
  - If \( \text{LPM\_IND}_r \) equals ‘00’ and \( \text{P\_REV\_IN\_USE}_s \) is greater than six and an F-PDCH is not assigned, the mobile station shall reset the Logical-to-Physical Mapping to their default values as specified in Table 2.6.4.2-1 but with the following modification for requirement 1 stated in Table 2.6.4.2-1:
    + The mobile station shall set the SR_ID field to the value specified in the Service Configuration information record.
  - If \( \text{LPM\_IND}_r \) equals ‘00’ and \( \text{P\_REV\_IN\_USE}_s \) is equal to or less than six, the mobile station shall reset the Logical-to-Physical Mapping to their default values as follows:
    + Default number of Logical-to-Physical Mapping entries \( \text{NUM\_LPM\_ENTRIES}_s = '0100' \).
    + Default Table(0) Logical-to-Physical Mapping service reference identifier \( \text{LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE}[0].\text{SR\_ID}_s = '000' \).
    + Default Table(0) Logical-to-Physical Mapping logical resource identifier \( \text{LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE}[0].\text{LOGICAL\_RESOURCE}_s = '0001' \).
    + Default Table(0) Logical-to-Physical Mapping physical resource identifier:
      - If \( \text{CH\_IND}_s \) is equal to ‘01’ or ‘11’, the mobile station shall set \( \text{LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE}[0].\text{PHYSICAL\_RESOURCE}_s \) to ‘0000’.
      - If \( \text{CH\_IND}_s \) is equal to ‘10’, the mobile station shall set \( \text{LOGICAL\_TO\_PHYSICAL\_MAPPING\_TABLE}[0].\text{PHYSICAL\_RESOURCE}_s \) to ‘0001’.

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+ Default Table(0) Logical-to-Physical Mapping forward mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].FORWARD_FLAGs = ‘1’).

+ Default Table(0) Logical-to-Physical Mapping reverse mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].REVERSE_FLAGs = ‘1’).

+ Default Table(0) Logical-to-Physical Mapping priority
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PRIORITYs = ‘0000’).

+ Default Table(1) Logical-to-Physical Mapping service reference identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].SR_IDs = ‘001’).

+ Default Table(1) Logical-to-Physical Mapping logical resource identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].LOGICAL_RESOURCEs = ‘0000’).

+ Default Table(1) Logical-to-Physical Mapping physical resource identifier:
  o If CH_INDs is equal to ‘01’ or ‘11’, the mobile station shall set
    LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCEs to ‘0000’.
  o If CH_INDs is equal to ‘10’, the mobile station shall set
    LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCEs to ‘0001’.

+ Default Table(1) Logical-to-Physical Mapping forward mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].FORWARD_FLAGs = ‘1’).

+ Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].REVERSE_FLAGs = ‘1’).

+ Default Table(1) Logical-to-Physical Mapping priority
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PRIORITYs = ‘0000’).

+ Default Table(2) Logical-to-Physical Mapping service reference identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].SR_IDs = ‘001’).

+ Default Table(2) Logical-to-Physical Mapping logical resource identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].LOGICAL_RESOURCEs = ‘0000’).

+ Default Table(2) Logical-to-Physical Mapping physical resource identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PHYSICAL_RESOURCEs to ‘0010’).

+ Default Table(2) Logical-to-Physical Mapping forward mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].FORWARD_FLAGs = ‘1’).

+ Default Table(2) Logical-to-Physical Mapping reverse mapping indicator
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].REVERSE_FLAGs = ‘1’).

+ Default Table(2) Logical-to-Physical Mapping priority
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].PRIORITYs = ‘0000’).

+ Default Table(3) Logical-to-Physical Mapping service reference identifier
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].SR_IDs = '001').

+ Default Table(3) Logical-to-Physical Mapping logical resource identifier
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].LOGICAL_RESOURCEs = '0000').

+ Default Table(3) Logical-to-Physical Mapping physical resource identifier
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].PHYSICAL_RESOURCEs to '0011').

+ Default Table(3) Logical-to-Physical Mapping forward mapping indicator
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].FORWARD_FLAGs = '1').

+ Default Table(3) Logical-to-Physical Mapping reverse mapping indicator
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].REVERSE_FLAGs = '1').

+ Default Table(3) Logical-to-Physical Mapping priority
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[3].PRIORITYs = '0000').

- If LPM_INDr equals '01', the mobile station shall use the Logical-to-Physical Mapping included in this Non-Negotiable Service Configuration Record. The mobile station shall perform the following: The mobile station shall delete the Logical-to-Physical Mapping currently in use. The mobile station shall store the number of Logical-to-Physical Mapping entries (NUM_LPM_ENTRIESs = NUM_LPM_ENTRIESr). For each \(i^{th}\) record of the NUM_LPM_ENTRIESr Logical-to-Physical Mapping records included in the received Non-Negotiable Service Configuration Record:
  
  + The mobile station shall store the Logical-to-Physical Mapping service reference identifier (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].SR_IDs = SR_IDr).

  + The mobile station shall store the Logical-to-Physical Mapping logical resource identifier
    (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].LOGICAL_RESOURCEs = LOGICAL_RESOURCEr).

  + The mobile station shall store the Logical-to-Physical Mapping Physical Channel
    (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].PHYSICAL_RESOURCEs = PHYSICAL_RESOURCEr).

  + The mobile station shall store the Logical-to-Physical Mapping forward mapping indicator
    (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].FORWARD_FLAGs = FORWARD_FLAGr).

  + The mobile station shall store the Logical-to-Physical Mapping reverse mapping indicator
    (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REVERSE_FLAGs = REVERSE_FLAGr).

  + The mobile station shall store the Logical-to-Physical Mapping priority
(LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].PRIORITY_s = PRIORITY_r).

- If LPM_IND_r equals ‘10’, the mobile station shall use the Logical-to-Physical Mapping currently in use.

- For each of the NUM_REC_r occurrences of the service-specific records included in the Non-negotiable Service Configuration Record, the mobile station shall perform the following:
  - The mobile station shall store the Short Data Burst service option number omitted indicator (SDB_SO_OMIT_s[SR_ID_r] = SDB_SO_OMIT_r).

- The mobile station shall store the following:
  - USE_FLEX_NUM_BITS_s = USE_FLEX_NUM_BITS_r
  - USE_VAR_RATE_s = USE_VAR_RATE_r
  - If USE_VAR_RATE_r is equal to ‘1’, then the mobile station shall store the following:
    + R_INC_RATE_ALLOWED_s = R_INC_RATE_ALLOWED_r
    + F_INC_RATE_ALLOWED_s = F_INC_RATE_ALLOWED_r
  - If USE_FLEX_NUM_BITS_r or USE_VAR_RATE_r is equal to ‘1’, then the mobile station shall store the following:
    + USE_ERAM_s = USE_ERAM_r

- If NUM_BITS_TABLES_INCL_r is included and is equal to ‘1’, the mobile station shall store NUM_BITS_TABLES_COUNT+1 instances of the Flexible Rate Table (NUM_RECS triplets of (NUM_BITS_IDX, NUM_BITS, CRC_LEN_IDX) corresponding to each NUM_BITS_TABLE_ID) as follows:
  - For each of the NUM_RECS occurrences of the three field record consisting of NUM_BITS_IDX, NUM_BITS, and CRC_LEN_IDX the mobile station shall store the following
    + NUM_BITS_s[NUM_BITS_TABLE_ID_r][NUM_BITS_IDX_r] = NUM_BITS_r;
    + CRC_LEN_IDX_s[NUM_BITS_TABLE_ID_r][NUM_BITS_IDX_r] = CRC_LEN_IDX_r;

- If USE_OLD_FLEX_MAPPING_r is included and equal to ‘0’, the mobile station shall store the following:
  - FFCH_NBIT_TABLE_ID_s = FFCH_NBIT_TABLE_ID_r.
  - RFCH_NBIT_TABLE_ID_s = RFCH_NBIT_TABLE_ID_r.
  - FSCH_NBIT_TABLE_ID_s[1] = FSCH0_NBIT_TABLE_ID_r.
  - FSCH_NBIT_TABLE_ID_s[2] = FSCH1_NBIT_TABLE_ID_r.
  - RSCH_NBIT_TABLE_ID_s[1] = RSCH0_NBIT_TABLE_ID_r.
  - RSCH_NBIT_TABLE_ID_s[2] = RSCH1_NBIT_TABLE_ID_r.
  - FDCCH_NBIT_TABLE_ID_s = FDCCH_NBIT_TABLE_ID_r.
If FDCCH_NBIT_TABLE_IDs is not equal to ‘0000’, then the mobile station shall store FDCCH_NBITS_IDXs = FDCCH_NBITS_IDXr.

- RDCCH_NBIT_TABLE_IDs = RDCCH_NBIT_TABLE_IDr.

- If RDCCH_NBIT_TABLE_IDs is not equal to ‘0000’, then the mobile station shall store RDCCH_NBITS_IDXs = RDCCH_NBITS_IDXr.

- Otherwise, the mobile station shall use the previously stored values for the above variables.

- If USE_FLEX_NUM_BITS r is equal to ‘0’, the mobile station shall store the following:
  - FFCH_NBIT_TABLE_IDs = ‘0000’.
  - RFCH_NBIT_TABLE_IDs = ‘0000’.
  - FSCH_NBIT_TABLE_IDs[1] = ‘0000’.
  - RSCH_NBIT_TABLE_IDs[1] = ‘0000’.
  - FDCCH_NBIT_TABLE_IDs = ‘0000’.
  - FDCCH_NBITS_IDXs = ‘0000’.
  - RDCCH_NBIT_TABLE_IDs = ‘0000’.
  - FDCCH_NBITS_IDXs = ‘0000’.

- If VAR_TABLES_INCL r is included and is equal to ‘1’, the mobile station shall store VAR_RATE_TABLES_COUNT+1 instances of the Variable Rate Mask Table (NUM_RECS pairs of (NUM_BITS_IDX, MASK) corresponding to each VAR_RATE_TABLE_ID) as follows:
  - For each of the NUM_RECS + 1 occurrences of the two-field record consisting of NUM_BITS_IDX and MASK the mobile station shall store the following:
    - MASKs[VAR_RATE_TABLE_IDr][NUM_BITS_IDXr] = MASKr;
  - If FSCH_VAR_TABLE_IDs[1] is not equal to ‘000’, then the mobile station shall store the following:
    - For row=1, …, 15
      - For i=1, …, row,
        - If the $i^{th}$ bit position in MASKs[FSCH_VAR_TABLE_IDs[1]][row] is equal to ‘1’, then the mobile station shall set VAR_FSCH_RATE_OFFSETs[1][row][i] to i,
        - otherwise, the mobile station shall set VAR_FSCH_RATE_OFFSETs[1][row][i] to ‘0’.
  - If FSCH_VAR_TABLE_IDs[2] is not equal to ‘000’, then the mobile station shall store the following:
+ For row=1, …, 15
  o For i=1, …, row,
    ◊ If the \(i^{th}\) bit position in \(\text{MASK}_{s}[\text{FSCH\_VAR\_TABLE\_ID}_{s}[2]][\text{row}]\) is equal to '1', then the mobile station shall set \(\text{VAR\_FSCH\_RATE\_OFFSET}_{s}[2][\text{row}][i]\) to \(i\),
    ◊ otherwise, the mobile shall set \(\text{VAR\_FSCH\_RATE\_OFFSET}_{s}[2][\text{row}][i]\) to '0'.

- If \(\text{RSCH\_VAR\_TABLE\_ID}_{s}[1]\) is not equal to '000', then the mobile station shall store the following:
  + For row=1, …, 15
    o For i=1, …, row,
      ◊ If the \(i^{th}\) bit position in \(\text{MASK}_{s}[\text{RSCH\_VAR\_TABLE\_ID}_{s}[1]][\text{row}]\) is equal to '1', then the mobile station shall set \(\text{VAR\_RSCH\_RATE\_OFFSET}_{s}[1][\text{row}][i]\) to \(i\),
      ◊ otherwise, the mobile shall set \(\text{VAR\_RSCH\_RATE\_OFFSET}_{s}[1][\text{row}][i]\) to '0'.

- If \(\text{RSCH\_VAR\_TABLE\_ID}_{s}[2]\) is not equal to '000', then the mobile station shall store the following:
  + For row=1, …, 15
    o For i=1, …, row,
      ◊ If the \(i^{th}\) bit position in \(\text{MASK}_{s}[\text{RSCH\_VAR\_TABLE\_ID}_{s}[2]][\text{row}]\) is equal to '1', then the mobile station shall set \(\text{VAR\_RSCH\_RATE\_OFFSET}_{s}[2][\text{row}][i]\) to \(i\),
      ◊ otherwise, the mobile shall set \(\text{VAR\_RSCH\_RATE\_OFFSET}_{s}[2][\text{row}][i]\) to '0'.

• If \(\text{USE\_OLD\_VAR\_MAPPING}_{r}\) is included and equal to '0', the mobile station shall store the following:
  - \(\text{FSCH\_VAR\_TABLE\_ID}_{s}[1] = \text{FSCH0\_VAR\_TABLE\_ID}_{r}\).
  - \(\text{FSCH\_VAR\_TABLE\_ID}_{s}[2] = \text{FSCH1\_VAR\_TABLE\_ID}_{r}\).
  - \(\text{RSCH\_VAR\_TABLE\_ID}_{s}[1] = \text{RSCH0\_VAR\_TABLE\_ID}_{r}\).
  - \(\text{RSCH\_VAR\_TABLE\_ID}_{s}[2] = \text{RSCH1\_VAR\_TABLE\_ID}_{r}\).

• Otherwise, use the previously stored values for the above four variables.

• If \(\text{USE\_VAR\_RATE}_{r}\) is equal to '0', the mobile station shall store the following:
  - \(\text{FSCH\_VAR\_TABLE\_ID}_{s}[1] = '000'\).
  - \(\text{FSCH\_VAR\_TABLE\_ID}_{s}[2] = '000'\).
If LTU_TABLES_INCL\(_r\) is included and is equal to ‘1’, then the mobile station shall store NUM_LTU_TABLES + 1 instances of the LTU Table which determines the number of LTUs per frame for convolutionally encoded supplemental channels for each number of bits per frame. Each LTU Table is identified by its LTU_TABLE_ID.

- For each of the NUM_ROWS +1 rows of the LTU Table, the mobile station shall store the following:
  \[ LTU\_TABs[LTU\_TABLE\_ID\_r][NBITS\_IDX\_r] = NUM\_LTUS\_r \]

If USE_OLD_LTU_MAPPING\(_r\) is included and is equal to ‘0’, then the mobile station shall use the previously stored values for the above four variables.

- If LTU_INFO_INCL\(_r\) is equal to ‘0’, then the mobile station shall store the following:
  - FSCH_LTU_TAB_IDs[1] = '000'
  - FSCH_LTU_TAB_IDs[2] = '000'
  - RSCH_LTU_TAB_IDs[1] = '000'
  - RSCH_LTU_TAB_IDs[2] = '000'

If PARTITION_TABLES_INCL\(_r\) is included and is equal to ‘1’, then the mobile station shall store NUM_PARTITION_TABLES + 1 instances of the Partition Table which determines the number of bits allocated to each service per FCH or DCCH frame as follows. Each Partition Table is identified by its PARTITION_TABLE_ID.

- For each of the NUM_ROWS+1 rows of the Partition Table, the mobile station shall store the following:
  \[ PART\_TABs[PARTITION\_TABLE\_ID\_r][CATEGORY\_r].MUX\_HEADER\_LEN = MUX\_HEADER\_LEN\_r \]
  \[ PART\_TABs[PARTITION\_TABLE\_ID\_r][CATEGORY\_r].MUX\_HEADER = MUX\_HEADER\_r \]
  \[ PART\_TABs[PARTITION\_TABLE\_ID\_r][CATEGORY\_r].NUM\_PARTITIONS = NUM\_PARTITIONS\_r \]
  + For i=1, ..., NUM_PARTITION\_TABLES+1; the mobile station shall store the following:
o PART_TABs[PARTITION_TABLE_IDr][CATEGORYr]. PARTITION_SR_ID[i] = SR_IDr

o PART_TABs[PARTITION_TABLE_IDr][CATEGORYr]. PARTITION_NBITS[i] = SRV_NUM_BITSr

- Else (if PARTITION_TABLES_INCL r is included and is equal to ‘0’), the mobile station shall use the previously stored values for the PART_TABs.

- If USE_OLD_PART_MAPPING r is included and is equal to ‘0’, then the mobile station shall store the following:
  - FFCH_PART_TAB_IDs = FFCH_PART_TAB_IDr
  - RFCH_PART_TAB_IDs = RFCH_PART_TAB_IDr
  - FDCCH_PART_TAB_IDs = FDCCH_PART_TAB_IDr
  - RDCCH_PART_TAB_IDs = RDCCH_PART_TAB_IDr

- If USE_FLEX_NUM_BITS s is equal to ‘0’, then the mobile station shall store the following:
  - FFCH_PART_TAB_IDs = ‘000’
  - RFCH_PART_TAB_IDs = ‘000’
  - FDCCH_PART_TAB_IDs = ‘000’
  - RDCCH_PART_TAB_IDs = ‘000’

- If SWITCHING_PARMS_INCL r is included and equal to ‘1’, set
  NUM_SOFT_SWITCHING_FRAMES_CHMs to
  NUM_SOFT_SWITCHING_FRAMES_CHMr + 1, and
  NUM_SOFTER_SWITCHING_FRAMES_CHMs to
  NUM_SOFTER_SWITCHING_FRAMES_CHMr + 1.

- If RPC_INCL r is equal to ‘1’ and the mobile station supports any Radio Configuration greater than 2, the mobile station shall perform the following:
  - If RPC_ADJ_REC_TYPE is equal to ‘0000’, the mobile station shall update the Reverse Channel Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for each reverse link code channel received in this message.
  - If RPC_ADJ_REC_TYPE is equal to ‘0001’ or ‘0010’, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for each transmission rate, frame length, coding type received in this message.
  - If RPC_ADJ_REC_TYPE is equal to ‘0011’, at the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for the R-CQICH.
If RPC_ADJ_REC_TYPE is equal to ‘0100’, the mobile station shall do the following:

- At the first R-PDCH frame boundary at or after the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for any combination of the following channels:
  - R-REQCH
  - R-SPICH
  - R-PDCCH possibly for each encoder packet size, or for the boosted and non boosted modes
  - R-PDCH possibly for each encoder packet size, or for the boosted and non boosted modes, or for each encoder packet size and transmission round

- At the action time of the message, the mobile station shall update the Reverse Link Attribute Adjustment Gain Table (see [2]) containing an offset relative to the Reverse Pilot Channel power for the R-ACKCH.

- If REV_SPICH_ADJ_INCL_r is equal to ‘1’, the mobile station shall set REV_SPICH_EP_SIZE_s to REV_SPICH_EP_SIZE_r+1.

The mobile station shall determine the BCMC Logical-to-Physical Mapping to be used as follows:

- If BCMC_LPM_INCL_r equals ‘0’, the mobile station shall delete the BCMC Logical-to-Physical Mapping currently in use.
- If BCMC_LPM_IND_r is included and equals ‘01’, the mobile station shall use the BCMC Logical-to-Physical Mapping included in this Non-Negotiable Service Configuration Record. The mobile station shall do the following:
  - The mobile station shall delete the BCMC Logical-to-Physical Mapping currently in use.
  - The mobile station shall store the number of BCMC Logical-to-Physical Mapping entry for each BCMC_FLOW_ID (see 2.6.13.11) included in NNSCEntries (BCMC_NUM_LPM_ENTRIES_s = BCMC_NUM_LPM_ENTRIES_r).

For each i_th record of the BCMC_NUM_LPM_ENTRIES_r BCMC Logical-to-Physical Mapping records included in the received Non-Negotiable Service Configuration Record:

- The mobile station shall store the BCMC Logical-to-Physical Mapping BCMC flow identifier
  (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BCMC_FLOW_ID_s =

+ The mobile station shall store the BCMC Logical-to-Physical Mapping Physical Channel
(BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].PHYSICAL_RESOURCE_Es = PHYSICALRESOURCEr).

+ The mobile station shall store the BCMC Logical-to-Physical Mapping forward mapping indicator
(BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].FORWARD_FLAGs = FORWARD_FLAGr).

+ The mobile station shall store the BCMC Logical-to-Physical Mapping reverse mapping indicator
(BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REVERSE_FLAGs = REVERSE_FLAGr).

+ The mobile station shall store the BCMC Logical-to-Physical Mapping
BSR_ID included indicator
(BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BSR_ID_INCLs = BSR_ID_INCLr).

+ If the BSR_ID_INCLr is set to ‘1’, the mobile station shall store the following:
  o BCMC Logical-to-Physical Mapping BSR_ID length indicator
    (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BSR_ID_LEN_INDs = BSR_ID_LEN_INDr).
  o BCMC Logical-to-Physical Mapping BSR_ID
    (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].BSR_IDs = BSR_IDr).

+ If the BSR_ID_INCLr is set to ‘0’, the mobile station shall store the following:
  o BCMC Logical-to-Physical Mapping Forward Traffic Channel traffic type
    (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].FOR_TRAFFICs = FOR_TRAFFICr).
  o BCMC Logical-to-Physical Mapping Reverse Traffic Channel traffic type
    (BCMC_LOGICAL_TO_PHYSICAL_MAPPING_TABLE[i].REV_TRAFFICs = REV_TRAFFICr).

- If BCMC_LPM_INDr is included and equals ‘10’, the mobile station shall use the
  BCMC Logical-to-Physical Mapping currently in use.

• If a BCMC_FLOW_ID (See 2.6.13.11) has been omitted from the BCMC Logical-to-
  Physical Mapping, the mobile station shall perform the following:
  - Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE,
    cause= FLOW_NOTAVAILABLE, reason_ind) to the BCMC Service Layer, where
    reason_ind is set to CALL_RELEASE.
Layer 3 shall terminate the call control instance identified by the BCMC_FLOW_ID corresponding to the omitted BCMC flow.

- If a BCMC_FLOW_ID (See 2.6.13.11) has been added to the BCMC Logical-to-Physical Mapping, the mobile station shall perform the following:
  - Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=SUCCESS) to the BCMC Service Layer.
  - Layer 3 shall instantiate a call control instance and identify it by the BCMC_FLOW_ID corresponding to this BCMC flow.

- If REV_PDCH_PARMS_INCLr is equal to ‘1’, then the mobile station shall store the following:
  - If REV_PDCH_PARMS_1_INCLr is equal to ‘1’, the base station shall set:
    + REV_PDCH_MAX_AUTO_TPRs to REV_PDCH_MAX_AUTO_TPRr, and
    + REV_PDCH_NUM_ARQ_ROUNDS_NORMALs to REV_PDCH_NUM_ARQ_ROUNDS_NORMALr+1.
  - If REV_PDCH_OPER_PARMS_INCLr is equal to ‘1’, the mobile station shall set:
    + REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKETs to REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKETr+1,
    + REV_PDCH_DEFAULT_PERSISTENCEs to REV_PDCH_DEFAULT_PERSISTENCEr,
    + REV_PDCH_RESET_PERSISTENCEs to REV_PDCH_RESET_PERSISTENCEr, and
    + REV_PDCH_GRANT_PRECEDENCEs to REV_PDCH_GRANT_PRECEDENCEr.
    + REV_PDCH ALWAYS_ACK_FINAL_ROUNDs to REV_PDCH ALWAYS_ACK_FINAL_ROUNDr.
    + REV_PDCH_MSIB_SUPPORTEDs to REV_PDCH_MSIB_SUPPORTEDr, and
    + REV_PDCH_SOFT_HANDOFF SWITCHING_RESET_INDs to REV_PDCH_SOFT_HANDOFF SWITCHING_RESET_INDr.
  - REV_PDCH BOOST_PARMS_INCLs to REV_PDCH BOOST_PARMS_INCLr.
  - If REV_PDCH BOOST_PARMS_INCLs is equal to ‘1’, the base station shall set REV_PDCH_NUM_ARQ_ROUNDS_BOOSTs to REV_PDCH_NUM_ARQ_ROUNDS_BOOSTr+1, and REV_PDCH BOOST OVERSHOOTs to REV_PDCH BOOST OVERSHOOTr.
  - REV_REQCH_ENABLEDs to REV_REQCH_ENABLEDr+1.
  - If REV_REQCH_ENABLEDs is equal to ‘0’, the mobile station shall set REV_PDCH_REQCH_TRIGGERs to NULL.
If REV_REQCH_ENABLED is equal to ‘1’, the mobile station shall set REV_REQCH_PARMS_INCL to REV_REQCH_PARMS_INCLr; otherwise, the mobile station shall set REV_REQCH_PARMS_INCL to ‘0’.

If REV_REQCH_PARMS_INCL is equal to ‘1’, the mobile station shall set the following:

- REV_REQCH_QUICK_REPEAT_ALLOWED to REV_REQCH_QUICK_REPEAT_ALLOWEDr.
- REV_REQCH_POWER_REPORTS_PARMS_INCL to REV_REQCH_POWER_REPORTS_PARMS_INCLr.

If REV_REQCH_POWER_REPORTS_PARMS_INCL is equal to ‘1’, the mobile station shall store the following:

- REV_REQCH_POWER_HEADROOM_INCREASE to REV_REQCH_POWER_HEADROOM_INCREASEr.
- REV_REQCH_POWER_HEADROOM_DECREASE to REV_REQCH_POWER_HEADROOM_DECREASEr.
- REV_REQCH_HEADROOM_DURATION to REV_REQCH_HEADROOM_DURATIONr.
- REV_REQCH_MAX_POWER_UPDATE_DURATION to REV_REQCH_MAX_POWER_UPDATE_DURATIONr.

REV_PDCH_CRC_PARMS_INCL to REV_PDCH_CRC_PARMS_INCLr.

If REV_PDCH_CRC_PARMS_INCL is equal to ‘1’, the mobile station shall store the following:

- REV_PDCH_INIT_TARGET_TPR to REV_PDCH_INIT_TARGET_TPRr.
- REV_PDCH_MAX_TARGET_TPR to REV_PDCH_MAX_TARGET_TPRr.
- REV_PDCH_QUICK_START_THRESH to REV_PDCH_QUICK_START_THRESHr.

The mobile station shall set (k = 0).

For i = 1 to (11 × (REV_PDCH_EP_MAP_LENr +1)), if REV_PDCH_EP_MAPr[i]=1, the mobile station shall set:

- (k = k+1),
- REV_PDCH_STEP_UP[i] to (the kth occurrence of REV_PDCH_STEP_UPr)/32, and
- REV_PDCH_STEP_DOWN[i] to (the kth occurrence of REV_PDCH_STEP_DOWNr)/32.

The mobile station shall set (k = 0).
For i = 0 to 6, the mobile station shall perform the following:

+ If REV_PDCH_SR_ID_MAP_r[i]=0, the mobile station shall set
  - REV_PDCH_BOOST_ALLOWED[i]s to NULL, and
  - REV_PDCH_AUTO_ALLOWED[i]s to NULL.

+ Otherwise, the mobile station shall perform the following:
  - The mobile station shall set (k = k+1).
  - REV_PDCH_BOOST_ALLOWED_s[i] to the k^{th} occurrence of
    REV_PDCH_BOOST_ALLOWED_r, and
  - REV_PDCH_AUTO_ALLOWED_s[i] to the k^{th} occurrence of
    REV_PDCH_AUTO_ALLOWED_r.

- If REV_REQCH_PARMS_INCL_s is equal to '1', for i = 0 to 6, if
  REV_PDCH_SR_ID_MAP_r[i]= '0', the mobile station shall set:
    - REV_REQCH_USE_DEFAULT_TAB_s[i] to NULL,
    - REV_PDCH_BUFFER_SIZE_s[i] to NULL,
    - REV_REQCH_BUF_QUANT_PARM_1_s[i] to NULL,
    - REV_REQCH_BUF_QUANT_PARM_2_s[i] to NULL,
    - REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_MIN_DURATION to NULL,
    - REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_POWER_REPORTS to
      NULL,
    - REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_BUFFER_REPORTS to
      NULL,
    - REV_PDCH_REQCH_TRIGGER_s[i].REV_REQCH_USE_WATERMARKS to
      NULL.

- The mobile station shall set (k = 0).

- If REV_REQCH_PARMS_INCL_s is equal to '1', the mobile station shall perform
  the following:
    + For i = 0 to 7, if either of the following conditions is true:
      - i < 7, and REV_PDCH_SR_ID_MAP[i] = '1', or
      - i = 7,
      the mobile station shall perform the following:
        - The mobile station shall set (k = k+1).
The mobile station shall set

\[ \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_MIN_DURATION} \]

\[ \text{REV_REQCH_MIN_DURATION}_r \times 16, \text{using the } k^{\text{th}} \text{ occurrence of} \]

\[ \text{REV_REQCH_MIN_DURATION}_r; \]

- The mobile station shall set \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_POWER_REPORTS} \) to the \( k^{\text{th}} \) occurrence of \( \text{REV_REQCH_USE_POWER_REPORTS}_r; \)

- The mobile station shall set \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_BUFFER_REPORTS} \) to the \( k^{\text{th}} \) occurrence of \( \text{REV_REQCH_USE_BUFFER_REPORTS}_r; \)

- The mobile station shall set \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_WATERMARKS} \) to the \( k^{\text{th}} \) occurrence of \( \text{REV_REQCH_USE_WATERMARKS}_r; \)

- If either any of the following conditions is are true,

  - \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_BUFFER_REPORTS} \) is equal to ‘1’.
  - \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_BUFFER_REPORTS} \) is equal to ‘1’.
  - \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_POWER_REPORTS} \) is equal to ‘1’.
  - \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_WATERMARKS} \) is equal to ‘1’.

  The mobile station shall perform the following:

  - The mobile station shall set \( \text{REV_REQCH_USE_DEFAULT_TAB}_s[i] \) to the \( k^{\text{th}} \) occurrence of \( \text{REV_REQCH_USE_DEFAULT_TAB}_r. \)
  - If \( \text{REV_REQCH_USE_DEFAULT_TAB}_s[i] \) is equal to ‘000’, then, for \( j = 1 \) to 13, the mobile station shall set \( \text{REV_PDCH_BUFFER_SIZE}_s[i][j] \)
    to
    \[ 2 \times \text{REV_REQCH_BUF_QUANT_PARM}_1_r \times j^2 + \]
    \[ \text{REV_REQCH_BUF_QUANT_PARM}_2_r \times j, \]
    using the \( k^{\text{th}} \) occurrences of \( \text{REV_REQCH_BUF_QUANT_PARM}_1_r, \)
    and \( \text{REV_REQCH_BUF_QUANT_PARM}_2_r. \)
  - If \( \text{REV_REQCH_USE_DEFAULT_TAB}_s[i] \) is not equal to ‘000’, then, for \( j = 1 \) to 13, the mobile station shall set
    \( \text{REV_PDCH_BUFFER_SIZE}_s[i][j] \) to the buffer size value specified in
    the \( j^{\text{th}} \) row of the buffer size table corresponding to
    \( \text{REV_REQCH_USE_DEFAULT_TAB}_s[i]. \)
The mobile station shall set

\[ \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_WATERMARKS} \]

to the \( k \)th occurrence of \( \text{REV_REQCH_USE_WATERMARKS} \).

If \( \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_USE_WATERMARKS} \) is equal to ‘1’, the mobile station shall store the following:

\[ \diamond \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_HIGH_WATERMARK} \]

to \( \text{REV_REQCH_HIGH_WATERMARK}_1 \times 8^{\text{REV_REQCH_HIGH_WATERMARK}_2} \), using the \( k \)th occurrences of \( \text{REV_REQCH_HIGH_WATERMARK}_1 \) and \( \text{REV_REQCH_HIGH_WATERMARK}_2 \).

\[ \diamond \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_LOW_WATERMARK} \]

to \( \text{REV_REQCH_LOW_WATERMARK}_1 \times 8^{\text{REV_REQCH_LOW_WATERMARK}_2} \), using the \( k \)th occurrences of \( \text{REV_REQCH_LOW_WATERMARK}_1 \) and \( \text{REV_REQCH_LOW_WATERMARK}_2 \).

\[ \diamond \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_CEILING} \]

to \( \text{REV_REQCH_CEILING}_1 \times 8^{\text{REV_REQCH_CEILING}_2} \), using the \( k \)th occurrences of \( \text{REV_REQCH_CEILING}_1 \) and \( \text{REV_REQCH_CEILING}_2 \).

\[ \diamond \text{REV_PDCH_REQCH_TRIGGER}_s[i].\text{REV_REQCH_FLOOR}s[i] \]

to \( \text{REV_REQCH_FLOOR}_1 \times 8^{\text{REV_REQCH_FLOOR}_2} \), using the \( k \)th occurrences of \( \text{REV_REQCH_FLOOR}_1 \), and \( \text{REV_REQCH_FLOOR}_2 \).

2.6.4.1.14 Processing the Security Mode Command Message

The mobile station shall process the received Security Mode Command Message as follows:

- The mobile station shall set \( \text{D_SIG_ENCRYPT_MODE}_s \) to \( \text{D_SIG_ENCRYPT_MODE}_r \).

- If \( \text{MSG_INTEGRITY_SUP} \) is set to ‘0’, the mobile station shall perform the following:
  - If \( \text{D_SIG_ENCRYPT_MODE}_r \) is not equal to ‘000’, the mobile station shall perform the following:
    - Set \( \text{ENCRYPT_MODE}_s \) to ‘11’
    - Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the CMEAKEY is associated with the AUTHR of the Origination Message or Page Response Message, or the CMEAKEY associated with the AUTHU generated during Unique Challenge-Response procedure as described in 2.3.12.1.4).
    - Set \( \text{ENC.KEY}[\text{KEY.ID}] \) to the 128-bit pattern.
    - Set \( \text{TX_EXT_SSEQ}[0][\text{KEY.ID}], \text{TX_EXT_SSEQ}[1][\text{KEY.ID}], \text{RX_EXT_SSEQ}[0][\text{KEY.ID}], \text{RX_EXT_SSEQ}[1][\text{KEY.ID}] \) to \( 1 + 256 \times \)
NEW_SSEQ_H if either of the following conditions is true:

- The NEW_SSEQ_H field is included in the last *Origination Message* or *Page Response Message* and TX_EXT_SSEQ[0][KEY_ID] and TX_EXT_SSEQ[1][KEY_ID] have not been initialized by the last *Channel Assignment Message*, *Extended Channel Assignment Message*, or an earlier f-dsch *Security Mode Command Message* (see 2.3.12.4.1.3).

- This message is a response to a *Security Mode Request Message* (see 2.3.12.4.1.3) that includes an NEW_SSEQ_H field.

- If MSG_INTEGRITY_SUP is set to ‘1’ and CHANGE_KEYs_T is set to ‘1’, the mobile station shall perform the following:
  - Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
  - Set ENCRIPT_MODEs to ‘11’.
  - If KEY_ID is equal to ‘00’ or ‘01’, the mobile station shall perform the following:
    - Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times \text{NEW_SSEQ_H}$ included in the *Origination Message*, *Page Response Message*, or *Security Mode Request Message*.
    - Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the CMEAKEY is associated with the AUTHR of the *Origination Message* or *Page Response Message*, or the CMEAKEY associated with the AUTHU generated during the Unique Challenge-Response procedure as described in 2.3.12.1.4).
    - Set ENC_KEY[KEY_ID] to the 128-bit pattern.
    - Set INT_KEY[KEY_ID] to the 128-bit pattern.
    - Set LAST_2G_KEY_IDs to KEY_ID.
  - If KEY_ID is equal to ‘10’ or ‘11’, the mobile station shall perform the following:
    - Set TX_EXT_SSEQ[0][KEY_ID][0], TX_EXT_SSEQ[1][KEY_ID][0], RX_EXT_SSEQ[0][KEY_ID][0], and RX_EXT_SSEQ[1][KEY_ID][0] to $1 + 256 \times \text{NEW_SSEQ_H}$ included in the *Authentication Response Message* or *Security Mode Request Message*.
    - Set ENC_KEY[KEY_ID] to the latest CK generated by AKA.
    - Set INT_KEY[KEY_ID] to the latest IK generated by AKA.
    - Set LAST_3G_KEY_IDs to KEY_ID.
    - If the mobile station supports R-UIM, then the mobile shall set USE_UAKs to USE_UAKs; otherwise, the mobile station shall perform the following:
      - Set USE_UAKs to ‘0’.

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If USE_UAKr is equal to ‘1’, then the mobile station shall send a Mobile Station Reject Order with ORDQ equal to ‘00010100’ (UAK not supported).

- Perform the key-strength-reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZEr as described in 2.3.12.5.3.

- Send a Security Mode Completion Order.

• For each of the service option connections specified by the CON_REF field included in this message, the mobile station shall set the user information encryption mode in the corresponding service option connection record (SO_CON_RECs[i]) to UI_ENCRYPT_MODEr (i.e., set SO_CON_RECs[i].UI_ENCRYPT_MODE to UI_ENCRYPT_MODEr where SO_CON_RECs[i].CON_REF = CON_REFr).

• For each of the service option connections specified by the CON_REF field included in this message, at the action time of the message the mobile station shall start encrypting user information (e.g., voice and data) using the encryption algorithm specified by SO_CON_RECs[i].UI_ENCRYPT_MODE where SO_CON_RECs[i].CON_REF = CON_REFr (see Table 3.7.4.5-1).

• If ENC_KEY_SIZEr is included, the mobile station shall set ENC_KEY_SIZEs to ENC_KEY_SIZEr.

• If ENC_KEY_SIZEr is included and not set to reserved value and if current key strength is greater than the desired key strength specified by ENC_KEY_SIZEr according to Table 3.7.4.5-2, mobile station shall perform the key-strength-reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZEr as described in 2.3.12.5.4. The current key strength is 64 bit if KEY_ID is equal to ‘00’ or ‘01’ and is 128 bit if KEY_ID is equal to ‘10’ or ‘11’.

• If C_SIG_ENCRYPT_MODE is included, the mobile station shall set C_SIG_ENCRYPT_MODEs to C_SIG_ENCRYPT_MODEr.

2.6.4.2 Traffic Channel Initialization Substate

In this substate, the mobile station verifies that it can receive the Forward Traffic Channel and begins transmitting on the Reverse Traffic Channel.

If this substate is entered from the Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State with an Initialization Failure indication, the mobile station shall perform the procedures as specified in 2.6.4.2.1, and shall not perform any of the remaining procedures in this section.

Otherwise, upon entering the Traffic Channel Initialization Substate, the mobile station shall perform the following:

• The mobile station shall perform registration initialization as specified in 2.6.5.5.4.1.

• Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the acknowledgment procedures as specified in [4].
• The mobile station shall initialize Forward Traffic Channel power control as specified in 2.6.4.1.1.1.

• The mobile station shall initialize the list TAG_OUTSTANDING_LIST to be empty.

• If P_REV_IN_USE_s is less than seven, the mobile station shall set CS_SUPPORTED_s to ‘0’.

• If P_REV_IN_USE_s is less than nine, the mobile station shall set FOR_PDCH_SUPPORTED_s to ‘0’.

• The mobile station shall set USE_ERAM_s to ‘0’.

• The mobile station shall set the following variables to their initial default values given below:
  – If the mobile station had included the FOR_PDCH Capability Type-specific fields in the Origination Message or Page Response Message, the mobile station shall store one plus the value included in the ACK_DELAY field of the message as ACK_DELAY and the value included in the NUM_ARQ_CHAN field of the message as NUM_ARQ_CHAN.
  – Default power control step size
    (PWR_CNTL_STEP_s = ‘000’)
  – Default Reverse Supplemental Channel power offset adjustment relative to Reverse Pilot Channel power
    + RLGAIN_SCH_PILOT_s [0]= ‘000000’
    + RLGAIN_SCH_PILOT_s [1]= ‘000000’
  – Default Reverse Discontinuous Transmission Duration on Reverse Supplemental Code Channel (REV_DTX_DURATION_s = ‘0000’)
  – Default Reverse Discontinuous Transmission Duration on Reverse Supplemental Channel (REV_SCH_DTX_DURATION_s = ‘0000’)
  – Default channel on which the mobile station is to perform the primary inner loop estimation and the base station is to multiplex the Power Control Subchannel:
    + If CH_IND_s is equal to ‘01’ or if EXT_CH_IND_s indicates that F-FCH is assigned and F-DCCH is not assigned, the mobile station shall set FPC_PRI_CHAN_s to ‘0’.
    + If CH_IND_s is equal to ‘10’ or if EXT_CH_IND_s indicates that F-DCCH is assigned and F-FCH is not assigned, the mobile station shall set FPC_PRI_CHAN_s to ‘1’.
    + If EXT_CH_IND_s indicates that neither F-FCH nor F-DCCH is assigned, the mobile station shall set FPC_PRI_CHAN_s to NULL.
  – Default forward power control operation mode used except during the forward Supplemental Channel interval
    (FPC_MODE_NO_SCH_s = ‘000’)

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– Default forward power control operation mode used during the forward Supplemental Channel interval
  (FPC_MODE_SCHs = '000')
– Default forward power control operation mode
  (FPC_MODEs = '000')
– Slotted timer (T_SLOTTEDs =T74m)
– Reduced slot cycle mode enabled indicator (RSC_MODE_ENABLED = NO).
– Radio environment reporting mode enabled indicator (RER_MODE_ENABLED = NO).
– Tracking zone mode enabled indicator (TKZ_MODE_ENABLED = NO).
– Tracking zone mode pending indicator (TKZ_MODE_PENDING = NO).
– Default Reverse Pilot Channel gating (PILOT_GATING_USE_RATE='0')
– Default begin preamble for Reverse Supplemental Code Channels
  (BEGIN_PREAMBLEs = '000')
– Default resume preamble for Reverse Supplemental Code Channels
  (RESUME_PREAMBLEs = '000')
– Default start time for Reverse Supplemental Code Channel assignment
  (REV_START_TIMEs = NULL)
– Default retry delays:
  + RETRY_DELAYs[010] = 0
  + RETRY_DELAYs[011] = 0
– Default neighbor pilot strength measurement threshold offset
  (T_MULCHANs = '000')
– Default start time for forward Supplemental Code Channel Assignment
  (FOR_START_TIMEs = NULL)
– Default number of Reverse Supplemental Code Channels
  (NUM_REV_CODESs = '000')
– Default reverse use T_ADD abort indicator
  (USE_T_ADD_ABORTs = '0')
– Default Supplemental Channel Request Message sequence number
  (SCRM_SEQ_NUMs = NULL)
– Default indicator to ignore reverse Supplemental Code Channel assignment
  (IGNORE_SCAMs = '0')
– Default indicator to ignore reverse Supplemental Channel assignment
  (IGNORE_ESCAMs = '0')
– Default search period for the candidate search
  (SEARCH_PERIODs = '1111')
– Default search window size for the Candidate Frequency Search Set
  (CF_SRCH_WIN_Ns = SRCH_WIN_Ns)
– Default search window size for the Remaining Set on the CDMA Candidate
  Frequency (CF_SRCH_WIN_Rs = SRCH_WIN_Rs)
– Default pilot PN sequence offset increment for the CDMA Candidate Frequency
  (CF_PILOT_INCs = PILOT_INCs)
– Default Candidate Frequency search priorities included indicator
  (CF_SEARCH_PRIORITY_INCLs = '0')
– Default Candidate Frequency search window size included indicator
  (CF_SRCH_WIN_NGHBR_INCLs = '0')
– Default Candidate Frequency search window offset included indicator
  (CF_SRCH_OFFSET_INCLs = '0')
– Default periodic search indicator
  (PERIODIC_SEARCHs = '0')
– Default return-if-handoff-fail indicator
  (RETURN_IF_HANDOFF_FAILs = '0')
– Default total pilot $E_c/I_0$ threshold
  (MIN_TOTAL_PILOT_EC_I0s = '00000')
– Default total pilot $E_c$ threshold
  (SF_TOTAL_EC_THRESHs = '11111')
– Default total pilot $E_c/I_0$ threshold
  (SF_TOTAL_EC_I0_THRESHs = '11111')
– Default received power difference threshold
  (DIFF_RX_PWR_THRESHs = '00000')
– Default maximum wait time on the CDMA Target Frequency
  (TF_WAIT_TIMEs = '1111')
– Default Candidate Frequency Search Set
  (Candidate Frequency Search Set is empty)
– Default Analog Frequency Search Set
  (Analog Frequency Search Set is empty)
– Default Candidate Frequency CDMA band
  (CF_CDMABANDs = NULL)
– Default Candidate Frequency CDMA channel
  (CF_CDMACHs = NULL)
– Default indicator for 5ms frames on Fundamental Channel
  (FCH_5MS_FRAMESs = '0')
– Default indicator for 5ms frames on Dedicated Control Channel
  (DCCH_5MS_FRAMESs = '0')
– Default start time unit for Supplemental Channel
  (START_TIME_UNITs = ‘000’)

– Default Forward Supplemental Channel FER report indicator
  (FOR_SCH_FER_REPs = ‘0’)

– Default Forward Supplemental Channel Configuration parameters:
  + Set the Forward Supplemental Channel frame length
    FOR_SCH_FRAME_LENGTHs[0] to NULL.
  + Set the Forward Supplemental Channel Multiplex Option FOR_SCH_MUXs[0]
    to NULL.
  + Set the Forward Supplemental Channel Radio Configuration
    FOR_SCH_RCs[0] to NULL.
  + Set the Forward Supplemental Channel Coding Type FOR_SCH_CODINGs[0]
    to NULL.
  + Set QOF_IDs[0][SCCL_INDEXs][i] to NULL, for all integer values of i from 0 to
    15.
  + Set FOR_SCH_CC_INDEXs[0][SCCL_INDEXs][i] to NULL, for all integer
    values of i from 0 to 15.
  + Set the Forward Supplemental Channel frame length
    FOR_SCH_FRAME_LENGTHs[1] to NULL.
  + Set the Forward Supplemental Channel Multiplex Option FOR_SCH_MUXs[1]
    to NULL.
  + Set the Forward Supplemental Channel Radio Configuration
    FOR_SCH_RCs[1] to NULL.
  + Set the Forward Supplemental Channel Coding Type FOR_SCH_CODINGs[1]
    to NULL.
  + Set QOF_IDs[1][SCCL_INDEXs][i] to NULL, for all integer values of i from 0 to
    15.
  + Set FOR_SCH_CC_INDEXs[1][SCCL_INDEXs][i] to NULL, for all integer
    values of i from 0 to 15.

– Call Origination Transaction Identifier
  (TAGs = ‘0000’).

– Default Reverse Supplemental Channel Configuration parameters:
  + REV_WALSH_IDs[0][0000] = 1
  + REV_WALSH_IDs[0][0001] = 1
  + REV_WALSH_IDs[0][0010] = 1
  + REV_WALSH_IDs[0][0011] = 1
+ REV_WALSH_IDs[0][0100] = 0
+ REV_WALSH_IDs[0][0101] = 0
+ REV_WALSH_IDs[0][0110] = 0
+ REV_WALSH_IDs[1][0000] = 1
+ REV_WALSH_IDs[1][0001] = 1
+ REV_WALSH_IDs[1][0010] = 1
+ REV_WALSH_IDs[1][0011] = 0
+ REV_WALSH_IDs[1][0100] = 0
+ REV_WALSH_IDs[1][0101] = 0
+ REV_WALSH_IDs[1][0110] = 0

+ Set the Reverse Supplemental Channel frame length
  REV_SCH_FRAME_LENGTHs[0] to NULL.
+ Set the Reverse Supplemental Channel Multiplex Option REV_SCH_MUXs[0]
  to NULL.
+ Set the Reverse Supplemental Channel Radio Configuration
  REV_SCH_RCs[0] to NULL.
+ Set the Reverse Supplemental Channel Coding Type REV_SCH_CODINGs[0]
  to NULL.
+ Set the Reverse Supplemental Channel frame length
  REV_SCH_FRAME_LENGTHs[1] to NULL.
+ Set the Reverse Supplemental Channel Multiplex Option REV_SCH_MUXs[1]
  to NULL.
+ Set the Reverse Supplemental Channel Radio Configuration
  REV_SCH_RCs[1] to NULL.
+ Set the Reverse Supplemental Channel Coding Type REV_SCH_CODINGs[1]
  to NULL.

• If P_REV_IN_USEs is greater than six and the ASSIGN_MODEr field of the Channel
  Assignment Message or Extended Channel Assignment Message is equal to ‘000’ or
  ‘100’, then the mobile station shall initialize the logical to physical mapping table
  (LOGICAL_TO_PHYSICAL_MAPPING_TABLE) according to the requirements in Table
  2.6.4.2-1:

<table>
<thead>
<tr>
<th>SR_ID</th>
<th>LOGICAL_</th>
<th>PHYSICAL_</th>
<th>FORWARD_</th>
<th>REVERSE_</th>
<th>PRIORITY</th>
</tr>
</thead>
</table>

Table 2.6.4.2-1. Default Logical to Physical Mapping Table, ASSIGN_MODEr equal to
‘000’ or ‘100’
<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>RESOURCE</th>
<th>FLAG</th>
<th>FLAG</th>
<th>FLAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0001</td>
<td>(shall be set according to requirement 2)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

(shall be set according to requirement 1)

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>RESOURCE</th>
<th>FLAG</th>
<th>FLAG</th>
<th>FLAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0000</td>
<td>(shall be set according to requirement 3)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Where requirement 1 is as follows:

+ The SR_ID field shall be set to NULL.

Requirement 2 is as follows:

+ If CH_INDₘ is equal to ‘01’, the PHYSICALRESOURCE field shall be set to ‘0000’.
+ If CH_INDₘ is equal to ‘10’, the PHYSICALRESOURCE field shall be set to ‘0001’.
+ If CH_INDₘ is equal to ‘11’, there shall be two entries in the default LPM table where the PHYSICALRESOURCE field shall be set to ‘0000’ and ‘0001’ respectively.

Requirement 3 is as follows:

+ If CH_INDₘ is equal to ‘01’:
  
  o If the Radio Configuration in use is less than three, the PHYSICALRESOURCE field shall be set to ‘0000’; otherwise, there shall be three entries in the default LPM table where the PHYSICALRESOURCE field shall be set to ‘0000’, ‘0010’, and ‘0011’ respectively.

+ If CH_INDₘ is equal to ‘10’:
  
  o There shall be three entries in the default LPM table where the PHYSICALRESOURCE field shall be set to ‘0001’, ‘0010’, and ‘0011’ respectively.

+ If CH_INDₘ is equal to ‘11’:
  
  o There shall be four entries in the default LPM table where the PHYSICALRESOURCE field shall be set to ‘0000’, ‘0001’, ‘0010’, and ‘0011’ respectively.
If \( P_{REV\_IN\_USE} \) is greater than eight and the \( ASSIGN\_MODE_r \) field of the Extended Channel Assignment Message is equal to ‘101’, then the mobile station shall initialize the logical to physical mapping table (LOGICAL_TO_PHYSICAL_MAPPING_TABLE) according to the requirements in Table 2.6.4.2-2:

Table 2.6.4.2-2. Default Logical to Physical Mapping Table, \( ASSIGN\_MODE_r \) equal to ‘101’

<table>
<thead>
<tr>
<th>SR_ID</th>
<th>LOGICAL_RESOURCE</th>
<th>PHYSICALRESOURCE</th>
<th>FORWARD_FLAG</th>
<th>REVERSE_FLAG</th>
<th>PRIORIT Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0000</td>
<td>(shall be set according to requirement 1)</td>
<td>(shall be set according to requirement 2)</td>
<td>(shall be set according to requirement 2)</td>
<td>0000</td>
</tr>
<tr>
<td></td>
<td>0000</td>
<td>(shall be set according to requirement 3)</td>
<td>(shall be set according to requirement 3)</td>
<td>(shall be set according to requirement 3)</td>
<td>0000</td>
</tr>
</tbody>
</table>

Where requirement 1 is as follows:

+ The SR_ID field shall be set to NULL.

Requirement 2 is as follows:

+ If \( EXT\_CH\_IND_s \) is equal to ‘00001’, then there shall be two entries in the default LPM table where the mobile station shall set:
  - PHYSICALRESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the first entry, and
  - PHYSICALRESOURCE to ‘0000’, FORWARD_FLAG to ‘0’, and REVERSE_FLAG to ‘1’ for the second entry.

+ If \( EXT\_CH\_IND_s \) is equal to ‘00010’, then there shall be two entries in the default LPM table where the mobile station shall set:
  - PHYSICALRESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the first entry, and
  - PHYSICALRESOURCE to ‘0001’, FORWARD_FLAG to ‘0’, and REVERSE_FLAG to ‘1’ for the second entry.

+ If \( EXT\_CH\_IND_s \) is equal to ‘00011’, then the mobile station shall set PHYSICALRESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’.
+ If EXT_CH_IND₈ is equal to ‘00100’, then the mobile station shall set
  PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’.

+ If EXT_CH_IND₈ is equal to ‘00101’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the first entry, and
  o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the second entry.

+ If EXT_CH_IND₈ is equal to ‘00110’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the first entry, and
  o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the second entry.

+ If EXT_CH_IND₈ is equal to ‘01000’, then the mobile station shall set
  PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’.

+ If EXT_CH_IND₈ is equal to ‘01001’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the first entry, and
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the second entry.

+ If EXT_CH_IND₈ is equal to ‘01010’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the first entry, and
  o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the second entry.

+ If EXT_CH_IND₈ is equal to ‘01011’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the first entry, and
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the second entry.

+ If EXT_CH_IND₈ is equal to ‘01100’, then there shall be two entries in the
  default LPM table where the mobile station shall set:
PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the first entry, and

PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
REVERSE_FLAG to '1' for the second entry.

+ If EXT_CH_INDₗ is equal to '01101', then there shall be three entries in the
default LPM table where the mobile station shall set:

PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the first entry, and

PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
REVERSE_FLAG to '1' for the second entry, and

PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
REVERSE_FLAG to '1' for the third entry.

+ If EXT_CH_INDₗ is equal to '01110', then there shall be three entries in the
default LPM table where the mobile station shall set:

PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the first entry, and

PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '1', and
REVERSE_FLAG to '1' for the second entry, and

PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '1', and
REVERSE_FLAG to '1' for the third entry.

Requirement 3 is as follows:

+ If EXT_CH_INDₗ is equal to '00001', then there shall be four entries in the
default LPM table where the mobile station shall set:

PHYSICAL_RESOURCE to '0000', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the first entry,

PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the second entry,

PHYSICAL_RESOURCE to '0011', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the third entry, and

PHYSICAL_RESOURCE to '0100', FORWARD_FLAG to '1', and
REVERSE_FLAG to '0' for the fourth entry.

+ If EXT_CH_INDₗ is equal to '00010', then there shall be four entries in the
default LPM table where the mobile station shall set:

PHYSICAL_RESOURCE to '0001', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the first entry,

PHYSICAL_RESOURCE to '0010', FORWARD_FLAG to '0', and
REVERSE_FLAG to '1' for the second entry,
If $\text{EXT\_CH\_IND}_s$ is equal to '00011', then there shall be four entries in the default LPM table where the mobile station shall set:

- PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the first entry,
- PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the second entry,
- PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the third entry,
- PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '0' for the fourth entry.

If $\text{EXT\_CH\_IND}_s$ is equal to '00100', then there shall be four entries in the default LPM table where the mobile station shall set:

- PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the first entry,
- PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the second entry,
- PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the third entry,
- PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '0' for the fourth entry.

If $\text{EXT\_CH\_IND}_s$ is equal to '00101', then there shall be five entries in the default LPM table where the mobile station shall set:

- PHYSICAL\_RESOURCE to '0000', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the first entry,
- PHYSICAL\_RESOURCE to '0001', FORWARD\_FLAG to '0', and REVERSE\_FLAG to '1' for the second entry,
- PHYSICAL\_RESOURCE to '0010', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the third entry,
- PHYSICAL\_RESOURCE to '0011', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '1' for the fourth entry,
- PHYSICAL\_RESOURCE to '0100', FORWARD\_FLAG to '1', and REVERSE\_FLAG to '0' for the fifth entry.

If $\text{EXT\_CH\_IND}_s$ is equal to '00110', then there shall be five entries in the default LPM table where the mobile station shall set:
o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’ for the first entry,

o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’ for the second entry,

o PHYSICAL_RESOURCE to ‘0010’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’ for the third entry,

o PHYSICAL_RESOURCE to ‘0011’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘1’ for the fourth entry, and

o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
  REVERSE_FLAG to ‘0’ for the fifth entry.

+ If EXT_CH_IND₈ is equal to ‘01000’, then there shall be one entry in the
default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the third entry:

+ If EXT_CH_IND₈ is equal to ‘01001’, then there shall be two entries in the
default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the first entry,
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the fourth entry.

+ If EXT_CH_IND₈ is equal to ‘01010’, then there shall be four entries in the
default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘0’, and
    REVERSE_FLAG to ‘1’ for the first entry,
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the fourth entry.

+ If EXT_CH_IND₈ is equal to ‘01011’, then there shall be four entries in the
default LPM table where the mobile station shall set:
  o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the first entry,
  o PHYSICAL_RESOURCE to ‘0010’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘0’ for the second entry,
  o PHYSICAL_RESOURCE to ‘0011’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘0’ for the third entry, and
  o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and
    REVERSE_FLAG to ‘1’ for the fourth entry.

+ If EXT_CH_IND₈ is equal to ‘01100’, then there shall be four entries in the
default LPM table where the mobile station shall set:
o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the first entry,
o PHYSICAL_RESOURCE to ‘0010’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the second entry,
o PHYSICAL_RESOURCE to ‘0011’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the third entry, and
o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the fourth entry.

+ If EXT_CH_IND_s is equal to ‘01101’, then there shall be five entries in the default LPM table where the mobile station shall set:
o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the first entry,
o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘0’, and REVERSE_FLAG to ‘1’ for the second entry,
o PHYSICAL_RESOURCE to ‘0010’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the third entry,
o PHYSICAL_RESOURCE to ‘0011’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the fourth entry, and
o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the fifth entry.

+ If EXT_CH_IND_s is equal to ‘01110’, then there shall be five entries in the default LPM table where the mobile station shall set:
o PHYSICAL_RESOURCE to ‘0000’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the first entry,
o PHYSICAL_RESOURCE to ‘0001’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the second entry,
o PHYSICAL_RESOURCE to ‘0010’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the third entry,
o PHYSICAL_RESOURCE to ‘0011’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘0’ for the fourth entry, and
o PHYSICAL_RESOURCE to ‘0100’, FORWARD_FLAG to ‘1’, and REVERSE_FLAG to ‘1’ for the fifth entry.

• If P_REV_IN_USE_s is equal to or less than six, the mobile station shall initialize the logical to physical mapping table (LOGICAL_TO_PHYSICAL_MAPPING_TABLE) as follows:

  – Default number of Logical-to-Physical Mapping entries
    (NUM_LPM_ENTRIES_s = ‘0100’)
– Default Table(0) Logical-to-Physical Mapping service reference identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].SR_IDs = '000')

– Default Table(0) Logical-to-Physical Mapping logical resource identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].LOGICAL_RESOURCEs = '0001')

– Default Table(0) Logical-to-Physical Mapping physical resource identifier:
   + If CH_INDs is equal to ‘01’ or ‘11’, the mobile station shall set
     LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCEs to
     ‘0000’.
   
   + If CH_INDs is equal to ‘10’, the mobile station shall set
     LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PHYSICAL_RESOURCEs to
     ‘0001’.

– Default Table(0) Logical-to-Physical Mapping forward mapping indicator
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].FORWARD_FLAGs = ‘1’)

– Default Table(0) Logical-to-Physical Mapping reverse mapping indicator
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].REVERSE_FLAGs = ‘1’)

– Default Table(0) Logical-to-Physical Mapping priority
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[0].PRIORITYs = ‘0000’)

– Default Table(1) Logical-to-Physical Mapping service reference identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].SR_IDs = '001')

– Default Table(1) Logical-to-Physical Mapping logical resource identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].LOGICAL_RESOURCEs = '0000')

– Default Table(1) Logical-to-Physical Mapping physical resource identifier:
   + If CH_INDs is equal to ‘01’ or ‘11’, the mobile station shall set
     LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCEs to
     ‘0000’.
   
   + If CH_INDs is equal to ‘10’, the mobile station shall set
     LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PHYSICAL_RESOURCEs to
     ‘0001’.

– Default Table(1) Logical-to-Physical Mapping forward mapping indicator
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].FORWARD_FLAGs = ‘1’)

– Default Table(1) Logical-to-Physical Mapping reverse mapping indicator
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].REVERSE_FLAGs = ‘1’)

– Default Table(1) Logical-to-Physical Mapping priority
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[1].PRIORITYs = ‘0000’)

– Default Table(2) Logical-to-Physical Mapping service reference identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].SR_IDs = '001')

– Default Table(2) Logical-to-Physical Mapping logical resource identifier
 (LOGICAL_TO_PHYSICAL_MAPPING_TABLE[2].LOGICAL_RESOURCEs = '0000')
• If BCMC_ON_TRAFFIC_SUP is set to ‘1’, the mobile station shall set AUTO_REQ_TRAF_ALLOWED_INDs to ‘1’.

• The mobile station shall disable the TMS_Slotted timer, and set SLOTTEDs to YES.

• The mobile station shall set REV_SPICH_EP_SIZE to 5.

• If FOR_PDCH_PARMS_INCL is equal to ‘0’, the mobile station shall perform the following:
  - The mobile station shall set RLGAIN_ACKCH_PILOT to 0.
  - The mobile station shall set RLGAIN_CQICH_PILOT to 0.

• If REV_PDCH_PARMS_INCL is equal to ‘0’, the mobile station shall perform the following:
  - The mobile station shall set RLGAIN_SPICH_PILOT to 0.
  - The mobile station shall set RLGAIN_REQCH_PILOT to 0.
  - The mobile station shall set RLGAIN_PDCCH_PILOT to 0.
  - The mobile station shall set REV_PDCH_MAX_AUTO_TPRs to 8 (1dB).
The mobile station shall set `REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKETs` to 9.

- The mobile station shall set `REV_PDCH_DEFAULT_PERSISTENCEs` to ‘0’.
- The mobile station shall set `REV_PDCH_RESET_PERSISTENCEs` to ‘0’.
- The mobile station shall set `REV_PDCH_NUM_ARQ_ROUNDS_NORMALs` to 3.
- The mobile station shall set `REV_PDCH_NUM_ARQ_ROUNDS_BOOSTs` to 3.
- The mobile station shall set `REV_PDCH_MSIB_SUPPORTEDs` to ‘0’.
- The mobile station shall set `REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_INDs` to ‘0’.
- The mobile station shall set `REV_PDCH_TABLE_SELs` to ‘0’.

- The mobile station shall set `REV_PDCH_BUFFER_SIZES` to NULL.
- For `i = 0` to `7`, the mobile station shall set `s` to `REV_REQCH_BUF_QUANT_PARM_1s[i]` to NULL and `REV_REQCH_BUF_QUANT_PARM_2s[i]` to NULL.
- The mobile station shall set `REV_REQCH_POWER_HEADROOM_INCREASEs` to NULL.
- The mobile station shall set `REV_REQCH_USE_POWER_REPORTSs` to NULL.
- The mobile station shall set `REV_REQCH_POWER_HEADROOM_DECREASEs` to NULL.
- The mobile station shall set `REV_REQCH_HEADROOM_DURATIONSs` to NULL.
- The mobile station shall set `REV_REQCH_MAX_POWER_UPDATE_DURATIONSs` to NULL.
- The mobile station shall set `REV_PDCH_INIT_TARGET_TPRs` to 0 (0dB).
- The mobile station shall set `REV_PDCH_MAX_TARGET_TPRs` to 0 (0dB).
- The mobile station shall set `REV_PDCH_QUICK_START_THRESHs` to 72 (9dB).
- The mobile station shall set `REV_REQCH_QUICK_REPEAT_ALLOWEDs` to NULL.
- The mobile station shall set `REV_PDCH_GRANT_PRECEDENCEs` to ‘1’.
- The mobile station shall set `REV_PDCH_ALWAYS_ACK_FINAL_ROUNDSs` to ‘0’.

For `i = 1` to `(11 × (REV_PDCH_EP_MAP_LENr + 1))`, the mobile station shall perform the following:
- If `i <= 11`, the mobile station shall perform the following:
  - The mobile station shall set `REV_PDCH_STEP_UPs[i]` and `REV_PDCH_STEP_DOWNs[i]` as specified on the `i`th row of Table 2.6.4.2-3.

For `i = 11` to `22`, the mobile station shall perform the following:
- The mobile station shall set `REV_PDCH_MAX_AUTO_TPRs` to 1.
If \( i \leq 10 \), the mobile station shall set \( \text{REV}_\text{PDCH}_\text{STEP}_\text{UP}[i] \) to 0, and it shall set \( \text{REV}_\text{PDCH}_\text{STEP}_\text{DOWN}[i] \) to 0.

- The mobile station shall set \( \text{REV}_\text{PDCH}_\text{BOOST}_\text{ALLOWED} \) to ‘0’.

- For \( i = 0 \) to 6, the mobile station shall perform the following:

  - The mobile station shall set \( \text{REV}_\text{PDCH}_\text{AUTO}_\text{ALLOWED} \) to ‘1’.
  - \( \text{REV}_\text{PDCH}_\text{BOOST}_\text{ALLOWED}[i] \) to ‘0’.
  - \( \text{REV}_\text{PDCH}_\text{AUTO}_\text{ALLOWED}[i] \) to ‘1’.

- The mobile station shall set \( \text{REV}_\text{REQCH}_\text{ENABLED} \) to ‘0’.

- The mobile station shall set \( \text{REV}_\text{PDCH}_\text{REQCH}_\text{TRIGGER} \) to NULL.

- The mobile station shall set \( \text{REV}_\text{PDCH}_\text{BOOST}_\text{OVERSHOOT} \) to 0.

Table 2.6.4.2-3. Default \( \text{REV}_\text{PDCH}_\text{STEP}_\text{UP} \) and \( \text{REV}_\text{PDCH}_\text{STEP}_\text{DOWN} \) tables

<table>
<thead>
<tr>
<th>EP_SIZE</th>
<th>REV_PDCH_STEP_UP</th>
<th>REV_PDCH_STEP_DOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>192</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>408</td>
<td>1.75</td>
<td>0.0625</td>
</tr>
<tr>
<td>792</td>
<td>0.9375</td>
<td>0.09375</td>
</tr>
<tr>
<td>1560</td>
<td>0.5</td>
<td>0.125</td>
</tr>
<tr>
<td>3096</td>
<td>0.28125</td>
<td>0.15625</td>
</tr>
<tr>
<td>4632</td>
<td>0.15625</td>
<td>0.1875</td>
</tr>
<tr>
<td>6168</td>
<td>0.125</td>
<td>0.21875</td>
</tr>
<tr>
<td>9240</td>
<td>0.0625</td>
<td>0.28125</td>
</tr>
<tr>
<td>12312</td>
<td>0.03125</td>
<td>0.375</td>
</tr>
<tr>
<td>15384</td>
<td>0.03125</td>
<td>0.59375</td>
</tr>
<tr>
<td>18456</td>
<td>0</td>
<td>0.875</td>
</tr>
</tbody>
</table>

- The mobile station shall set \( \text{USE}_\text{CH}_\text{CFG}_\text{RRM} \) to ‘0’.

- If the ASSIGN_MODE field from the \textit{Channel Assignment Message} equals ‘000’, the mobile station shall set \( \text{SERV}_\text{NEG} \) to disabled.

- If the ASSIGN_MODE field from the \textit{Channel Assignment Message} equals ‘100’, the mobile station shall set \( \text{SERV}_\text{NEG} \) to enabled.

- The mobile station shall determine the service configuration as follows:

  - If \( \text{SERV}_\text{NEG} \) equals disabled, the initial service configuration shall include Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse Traffic Channels, and shall include no service option connections.
– If SERV_NEG equals enabled, and if GRANTED_MODE equals ‘00’, the initial service configuration shall include the multiplex option and radio configuration for the Forward and Reverse Traffic Channels as specified by DEFAULT_CONFIG, and shall include no service option connections.

– If SERV_NEG equals enabled and GRANTED_MODE equals ‘01’ or ‘10’:
  + If the mobile station enters the Traffic Channel Initialization Substate because of receiving the Channel Assignment Message, the initial service configuration shall include the default Forward and Reverse Traffic Channel multiplex options and transmission rates corresponding to the service option requested by the mobile station in the Origination Message, in the case of a mobile station originated call, or the Page Response Message, in the case of a mobile station terminated, and shall include no service option connections.
  + If the mobile station enters the Traffic Channel Initialization Substate because of receiving the Extended Channel Assignment Message, the initial service configuration shall include the default Forward and Reverse Traffic Channel multiplex options that are derived from the radio configurations corresponding to the Table 3.7.2.3.21-7, and shall include no service option connections.

– If SERV_NEG equals enabled and GRANTED_MODE equals ‘11’, the mobile station shall begin to use the stored service configuration corresponding to SYNC_ID as the current service configuration and shall begin to process Forward and Reverse Traffic Channel frames accordingly. The set of service option connections to be restored are determined as follows:
  + If SR_ID_RESTORE equals ‘111’, the mobile station shall restore all the service option connections from the stored service configuration.
  + If SR_ID_RESTORE equals ‘000’, the mobile station shall restore the service option connections indicated by SR_ID_RESTORE_BITMAP from the stored service configuration.
  + Otherwise, the mobile station shall restore the service option connection corresponding to SR_ID_RESTORE from the stored service configuration.

– If SERV_NEG equals disabled, the mobile station shall perform the following:
  + If the call is mobile station originated and the Origination Message requests a special service option, the mobile station shall set SO_REQs to the special service option number.
  + If the call is mobile station originated and the Origination Message does not request a special service option, the mobile station shall set SO_REQs to 1 (the default service option number).
  + If the call is mobile station terminated, the mobile station shall set SO_REQs to the service option number requested in the Page Response Message.

While in the Traffic Channel Initialization Substate, the mobile station shall perform the following:
• The mobile station shall monitor Forward Traffic Channels associated with one or more pilots in the Active Set.

• The mobile station shall perform pilot strength measurements as specified in 2.6.6.2.2, but shall not send Pilot Strength Measurement Messages or Extended Pilot Strength Measurement Messages.

• The mobile station shall perform registration timer maintenance as specified in 2.6.5.5.4.2.

• If the bits of TMSI_CODEs-p are not all equal to ‘1’ and if System Time (in 80 ms units) exceeds TMSI_EXP_TIMEs-p × 2^{12}, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’ within T66m seconds.

• If the full-TMSI timer expires or has expired, the mobile station shall set all the bits of TMSI_CODEs-p to ‘1’. The mobile station shall update the registration variables as described in 2.6.5.5.2.5.

• If the Forward Packet Data Channel is assigned, whenever the mobile station transmitter is disabled, the MS shall set FPDCH_DTX_INDICATORs to ‘1’.

• If the Forward Packet Data Channel is assigned, whenever the mobile station transmitter is enabled, the mobile station shall perform the following procedures:
  - The MS shall set FPDCH_DTX_INDICATORs to ‘0’.
  - If the mobile station transmitter has been disabled for at least TX_DISABLED_TIMERs, the mobile station shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) primitive to the MAC layer.

If the mobile station does not support the assigned CDMA Channel (see [2]) or all of the assigned Forward Traffic code channels (see [2]), the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with an error indication (see 2.6.1.1).

If the mobile station supports the assigned CDMA Channel and the assigned Forward Traffic code channels, the mobile station shall perform the following:

• The mobile station shall tune to the assigned CDMA Channel.

• The mobile station shall set its code channel for the assigned Forward Traffic code channel.

• The mobile station shall set its Forward and Reverse Traffic Channel frame offsets to the assigned frame offset as determined by FRAME_OFFSETs.

• The mobile station shall set its Forward and Reverse Traffic Channel long code masks to the public long code mask (see [2]).

If all of the following conditions are true:

• F-CPCCH is assigned, and

• EARLY_RL_TRANSMIT_INDs equals ‘1’;

the mobile station shall perform the following:
• The mobile station shall adjust its transmit power as specified in [2].

• The mobile station shall transmit the Traffic Channel preamble as specified in [2] and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]).

• If CH_IND equals ‘00’, the mobile station shall commence R-CQICH reporting as specified in [2].

• If the mobile station receives 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 within $T_{79m}$ seconds after entering this substate, the mobile station shall perform the following additional functions while it remains in the Traffic Channel Initialization Substate:

  - The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).

  - The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.

• If the mobile station does not receive 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 within $T_{79m}$ seconds after entering this substate, the mobile station shall perform the following:

  - The mobile station shall disable its transmitter.

  - The mobile station shall discard any messages queued for transmission, and those messages received and pending processing.

  - The mobile station shall remain in this substate and perform the procedures below.

If all of the following conditions are true:

• F-CPCCH is assigned, and

• EARLY_RL_TRANSMIT_IND equals ‘0’, or EARLY_RL_TRANSMIT_IND equals ‘1’ and the $T_{79m}$ timer has expired.

the mobile station shall perform the following:

• If the mobile station receives 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 within $T_{50m}$ seconds after entering this substate, the mobile station shall perform the following additional functions while it remains in the Traffic Channel Initialization Substate:
- The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).

- The mobile station shall adjust its transmit power as specified in [2].

- The mobile station shall transmit the Traffic Channel preamble as specified in [2], and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]).

- If CH_INDₐ equals ‘00’, the mobile station shall commence R-CQICH reporting as specified in [2].

- The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.

- If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an acknowledgment failure, the mobile station shall perform the following:

  + If the Direct Channel Assignment call set-up procedure was used and DIRECT_CH_ASSIGN_RECOVER_INDₐ is set to ‘1’, the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

  o If any of the following conditions is met:

    ◊ The mobile station is able to select the last pilot mobile station was monitoring before entering Mobile Station Control on the Traffic Channel State and the pilot has sufficient signal strength, or

    ◊ The mobile station is able to select a pilot with sufficient signal strength that is listed in NGHBR_REC_LIST, the ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the selected pilot is equal to ‘1’ and the mobile station has sufficient information to monitor BCCH or PCH from base station corresponding to the selected pilot.

    Then the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication on the selected pilot.

    o Otherwise, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

  + Otherwise, the mobile station shall disable its transmitter and enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).
• If the mobile station does not receive 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 within \(T_{50m}\) seconds after entering this substate, the mobile station shall perform the following:

- If the Direct Channel Assignment call setup procedure was used and \(\text{DIRECT_CH_ASSIGN_RECOVER_INDs} = '1'\), the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

+ If any of the following conditions is met:
  
  o 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
  
  o The mobile station is able to select a pilot with sufficient signal strength that is listed in \(\text{NGHBR_REC_LIST}\), and the ACCESS_ENTRY_HO field of the \(\text{NGHBR_REC}\) 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 enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

If all of the following conditions are true:

• \(\text{F-CPCCH}\) is not assigned, and

• \(\text{EARLY_RL_TRANSMIT_INDs} = '1'\),

the mobile station shall perform the following:

• The mobile station shall adjust its transmit power as specified in [2].

• The mobile station shall transmit the Traffic Channel preamble as specified in [2], and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]).

• If \(\text{CH_INDs} = '00'\), the mobile station shall commence R-CQICH reporting as specified in [2].
• If the mobile station receives a period of \((N_{5m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN within \(T_{79m}\) seconds after entering this substate, the mobile station shall perform the following additional functions while it remains in the Traffic Channel Initialization Substate:

  - The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).

  - The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.

• If the mobile station does not receive a period of \((N_{5m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN within \(T_{79m}\) seconds after entering this substate, the mobile station shall perform the following:

  - The mobile station shall disable its transmitter.

    - The mobile station shall discard any messages queued for transmission, and those messages received and pending processing.

  - The mobile station shall remain in this substate and perform the procedures below.

If all of the following conditions are true:

• F-CPCCH is not assigned, and

• EARLY_RL_TRANSMIT_IND equals ‘0’, or EARLY_RL_TRANSMIT_IND equals ‘1’ and the \(T_{79m}\) timer has expired,

the mobile station shall perform the following:

• If the mobile station receives a period of \((N_{5m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN within \(T_{50m}\) seconds after entering this substate, the mobile station shall perform the following additional functions while it remains in the Traffic Channel Initialization Substate:

  - The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).

  - The mobile station shall adjust its transmit power as specified in [2].

  - The mobile station shall transmit the Traffic Channel preamble as specified in [2], and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]).

  - If CH_IND equals ‘00’, the mobile station shall commence R-CQICH reporting as specified in [2].
- The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.

- If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an acknowledgment failure, the mobile station shall perform the following:
  
  + If the Direct Channel Assignment call setup procedure was used and DIRECT_CH_ASSIGN_RECOVER_INDs is set to ‘1’, the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

  o If any of the following conditions is met:
    
    ◊ The mobile station is able to select the last pilot mobile station was monitoring before entering Mobile Station Control on the Traffic Channel State and the pilot has sufficient signal strength, or
    
    ◊ The mobile station is able to select a pilot with sufficient signal strength that is listed in NGHBR_REC_LIST, and the ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the selected pilot is equal to ‘1’ and the mobile station has sufficient information to monitor BCCH or PCH from base station corresponding to the selected pilot.

    Then the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication on the selected pilot.

  o Otherwise, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

  + Otherwise, the mobile station shall disable its transmitter and enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

• If the mobile station does not receive a period of \((N_{5m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN within \(T_{50m}\) seconds after entering this substate, the mobile station shall perform the following:

  - If the Direct Channel Assignment call setup procedure was used and DIRECT_CH_ASSIGN_RECOVER_INDs is set to ‘1’, the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

    + If all of the following conditions are 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 enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

The mobile station shall then perform the procedures specified in 2.6.4.2.2.

2.6.4.2.1 Return to Traffic Channel Initialization Substate with Initialization Failure Indication

If F-CPCCH is assigned, the mobile station shall perform the following:

- The mobile station shall perform the following functions while it remains in the Traffic Channel Initialization Substate:
  - The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).
  - The mobile station shall continue transmitting the Traffic Channel preamble as specified in [2], the mobile station shall continue R-CQICH reporting as specified in [2], and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]).
  - The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.
  - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an acknowledgment failure, the mobile station shall perform the following:
If the Direct Channel Assignment call setup procedure was used and DIRECT_CH.Assign.RECOVER_INDs is set to '1', the mobile station shall perform the following:

1. The mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

2. 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.

3. 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).

If F-CPCCH is not assigned, the mobile station shall perform the following:

- The mobile station shall perform the following functions while it remains in the Traffic Channel Initialization Substate:
  - The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, 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).
  - The mobile station shall continue transmitting the Traffic Channel preamble as specified in [2], and Layer 3 shall send an acquiring dedicated channel indication to Layer 2 (see [4]). Furthermore, if CH_INDs equals ‘00’, the mobile station shall continue R-CQICH reporting as specified in [2].
  - The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.
  - If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an acknowledgment failure, the mobile station shall perform the following:
+ If the Direct Channel Assignment call setup procedure was used and DIRECT_CH_ASSIGN_RECOVER_INDs is set to ‘1’, the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

   o If any of the following conditions is met:

      ◊ The mobile station is able to select the last pilot mobile station was monitoring before entering Mobile Station Control on the Traffic Channel State and the pilot has sufficient signal strength, or

      ◊ The mobile station is able to select a pilot with sufficient signal strength that is listed in NGHBR_REC_LIST, and the ACCESS_ENTRY_HO field of the NGHBR_REC corresponding to the selected pilot is equal to ‘1’ and the mobile station has sufficient information to monitor BCCH or PCH from base station corresponding to the selected pilot.

      Then the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication on the selected pilot.

   o Otherwise, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

+ Otherwise, the mobile station shall disable its transmitter and enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

The mobile station shall then perform the procedures specified in 2.6.4.2.2.

2.6.4.2.2 Exiting the Traffic Channel Initialization Substate

The mobile station should provide diversity combining of the Forward Fundicated Channels associated with pilots in the Active Set if the mobile station receives multiple pilots in the Extended Channel Assignment Message.

If Layer 3 does not receive a forward dedicated channel acquired indication from Layer 2 (see [4]) within T_{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_INDs is set to ‘1’, the mobile station shall perform the following: the mobile station shall enter the Update Overhead Information Substate of the System Access State with a direct channel assignment failure indication.

   - 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_CHANs 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_INDs equals ‘1’, and the mobile station has transmitted the Traffic Channel preamble for the duration corresponding to \(T_{21-13} \times 1.25\) ms

the mobile station shall perform the following:

• If CH_INDs is equal to ‘01’, the mobile station shall begin transmitting on the Reverse Fundamental Channel.

• If CH_INDs is equal to ‘11’ and FUNDICATED_BCMC_INDs equals ‘0’, or if CH_INDs is equal to ‘11’ and FUNDICATED_BCMC_INDs equals ‘1’ and REV_FCH_ASSIGNEDs is equal to ‘1’, the mobile station shall begin transmitting on the Reverse Fundamental Channel.

• If CH_INDs is equal to ‘10’ or ‘11’, the mobile station shall begin transmitting on the Reverse Dedicated Control Channel when the mobile station has user data or signaling traffic to send on the Reverse Dedicated Control Channel.

• If CH_INDs equals ‘00’, the mobile station shall perform the following:

- If EXT_CH_INDs signals the allocation of a R-FCH, the mobile station shall begin transmitting on the Reverse Fundamental Channel.
- If EXT_CH_IND signals the allocation of a R-DCCH, the mobile station shall begin transmitting on the Reverse Dedicated Control Channel when the mobile station has user data or signaling traffic to send on the Reverse Dedicated Control Channel.

- If EXT_CH_IND signals the allocation of a R-PDCH, the mobile station shall begin transmitting on the Reverse Packet Data Channel when the mobile station has user data or signaling traffic to send on the Reverse Packet Data Channel.

- If SERV_NEG equals disabled, the mobile station shall activate the SO Negotiation Subfunction.

- If SERV_NEG equals enabled and the GRANTED_MODE is ‘00’, ‘01’, or ‘11’, the mobile station shall activate the Normal Service Subfunction.

- If SERV_NEG equals enabled and the GRANTED_MODE is ‘10’, the mobile station shall activate the Waiting for Service Connect Message Subfunction.

- The mobile station shall perform the following:
  - If SERV_NEG equals enabled and GRANTED_MODE is equal to ‘11’, the mobile station shall perform the following:
    - The mobile station shall restore the stored service configuration as specified in 2.6.4.1.2.2.5.2.
    - For the first service option connection (with corresponding connection reference CON_REFi) listed in this stored Service Configuration information record, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with the received BYPASS_ALERT_ANSWER. The mobile station shall identify this Call Control instance by the corresponding CON_REFi and also identify this Call Control instance by the NULL identifier.
    - For each of the remaining service option connection (with corresponding connection reference CON_REFi) that will be restored from the stored service configuration record, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with a ‘restore indication’. The mobile station shall identify each of these Call Control instances by the corresponding CON_REFi.
    - The mobile station shall store the synchronization identifier corresponding to the restored service configuration as SYNC_IDs.
  - Otherwise, the mobile station shall perform the following:
    - If the BCMC_ORIG_ONLY_IND field is not included or is included and set to ‘0’ in the Origination Message, Page Response Message, or Reconnect Message, the Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) for each service instance being initiated.
+ The Layer 3 shall assign a default identifier of NULL to the Call Control instance corresponding to the SR_ID field of the Origination Message, Page Response Message, or Reconnect Message.

+ If P_REV_IN_USE is greater than or equal to 11, the mobile station shall set a call control timer to a value of $T_{42m}$ seconds.

- The Layer 3 shall enter the Traffic Channel Substate.

2.6.4.3 Traffic Channel Substate

In this substate, the mobile station may exchange Traffic Channel frames with the base station in accordance with the current service configuration. The mobile station may perform the gating operation of Reverse Pilot Channel.

The mobile station can be in the Active Mode or Control Hold Mode while in this substate.

The following are the attributes when the mobile station is in the Active Mode of Traffic Channel Substate:

- PILOT_GATING_USE_RATE is set to ‘0’ (i.e., the reverse pilot (r-pich) is not gated).
- Flow of data traffic is permitted by the Multiplex Sublayer.

The following are the attributes when the mobile station is in the Control Hold Mode of Traffic Channel Substate:

- PILOT_GATING_USE_RATE is set to ‘1’.
- The reverse pilot (r-pich) may be gated (if PILOT_GATING_RATE is not equal to ‘00’).
- If a Forward Packet Data Channel is not assigned, then the flow of data traffic is blocked by the Multiplex Sublayer.
- If a Forward Packet Data Channel is assigned, then the flow of both data traffic and signaling traffic is blocked by the Multiplex Sublayer.

Figure 2.6.4.3-1 shows the valid transitions between the modes of a Traffic Channel Substate when a F-PDCH is not assigned in Control Hold Mode and the over-the-air Upper Layer Signaling Messages that trigger transitions between these modes.
Active Mode

Control Hold Mode

Extended Release Message,
Extended Release Mini Message, or
Universal Handoff Direction Message.

Resource Allocation (Mini) Message,
Extended Supplemental Channel Assignment Message,
Forward/Reverse Supplemental Channel Assignment Mini Message, or
Universal Handoff Direction Message.

Note: The mode transition occurs when the fields are set appropriately.

Figure 2.6.4.3-1. Mobile Station Modes When a F-PDCH is not Assigned in Control Hold Mode

Figures 2.6.4.3-2 and 2.6.4.3-3 show the valid transitions between the modes of a Traffic Channel Substate when a F-PDCH is assigned in Control Hold Mode and the triggers that cause transitions between these modes.
Active Mode
(PILOT_GATING_USE_RATE = 0)

Control Hold Mode
(PILOT_GATING_USE_RATE = 1)

Receive Extended Release Message, Extended Release Mini Message, or Universal Handoff Direction Message.

Lower layer trigger

Note: The mode transition occurs when the fields are set appropriately.

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.
Active Mode
(PILOT_PILOT_USE_RATE = 0)

Control Hold Mode
(PILOT_PILOT_USE_RATE = 1)

Without F-DCCH
MAC-ControlHoldTrafficReceived.Indication

With F-DCCH
Receive Resource Allocation (Mini) Message,
Extended Supplemental Channel Assignment Message,
Forward/Reverse Supplemental Channel Assignment Mini Message,
Universal Handoff Direction Message, or
MAC-ControlHoldTrafficReceived.Indication

Note: The mode transition occurs when
the fields are set appropriately

Active Mode
(PILOT_GATING_USE_RATE = 0)

Control Hold Mode
(PILOT_GATING_USE_RATE = 1)

Without F-DCCH
MAC-ControlHoldTrafficReceived.Indication

With F-DCCH
Receive Resource Allocation (Mini) Message,
Extended Supplemental Channel Assignment Message,
Forward/Reverse Supplemental Channel Assignment Mini Message,
Universal Handoff Direction Message, or
MAC-ControlHoldTrafficReceived.Indication

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_NEGs equals enabled, the call is mobile station originated, and
  GRANTED_MODEs 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_INDs 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_INDs 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.

- The mobile station shall perform Forward Traffic Channel supervision as specified
  in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the Layer 3 shall
  terminate all Call Control instances, and shall enter the System Determination
  Substate of the Mobile Station Initialization State with a system lost indication (see
  2.6.1.1).

- The mobile station may send a Pilot Strength Measurement Mini Message to report
  pilot strength order change information, periodic pilot strength information, or
  threshold based pilot strength information, as specified in the Mobile Assisted Burst
  Operation Parameters Message (see 2.6.6.2.5.2).

- The mobile station shall adjust its transmit power as specified in [2].

- The mobile station shall perform Forward Traffic Channel power control as specified
  in 2.6.4.1.1.

- The mobile station shall perform handoff processing as specified in 2.6.6.

- The mobile station shall process Forward and Reverse Traffic Channel frames in
  accordance with requirements for the active service subfunction (see 2.6.4.1.2.2).

- The mobile station shall perform registration timer maintenance as specified in
  2.6.5.5.4.2.
• If the mobile station is directed to send a Data Burst Message, the mobile station shall send a Data Burst Message. If PILOT_GATING_USE_RATE is set to ‘1’, the mobile station may request to transition to the Active Mode (PILOT_GATING_USE_RATE set to ‘0’) prior to sending the Data Burst Message.

• If a Forward Packet Data Channel is not assigned and the mobile station has user data to send and PILOT_GATING_USE_RATE is equal to ‘1’, then the mobile station may send a Resource Request Message, Resource Request Mini Message, Supplemental Channel Request Message, or Supplemental Channel Request Mini Message to request for continuous reverse pilot transmission and user traffic transmission.

• When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is equal to ‘1’, and the mobile station has data or signaling messages to send, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’.

• When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is equal to ‘1’, and the mobile station receives MAC-ControlHoldTrafficReceived.Indication, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ at the transition_time indicated in MAC-ControlHoldTrafficReceived.Indication.

• When a Forward Packet Data Channel is assigned, and if the mobile station receives SIG-RemoveFPDCHLeg.Request(index), then, at the first 20 ms boundary (relative to System Time plus FRAME_OFFSET_s × 1.25 ms) occurring at least 20 ms after the reception of this indication, for the specified member of the F-PDCH reduced active set indicated by index, where index is the index of the member in the F-PDCH reduced active set, the mobile station shall perform the following procedures:
  ___ the mobile station shall set FOR_PDCH_INCLs to ‘0’, and remove this pilot from the F-PDCH reduced active set, and
  ___ if this is the last pilot in the F-PDCH reduced active set, Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC layer.

• If the mobile station is directed by the user to request a new service configuration, the mobile station shall initiate service negotiation or service option negotiation in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

• The mobile station may send a Service Option Control Message or Service Option Control Order to invoke a service option specific function in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

• If the mobile station is directed by the user to request a private long code transition and has the long code mask (see 2.3.12.3), the mobile station shall send a Long Code Transition Request Order (ORDQ = ‘00000001’) in assured mode.

• If the mobile station is directed by the user to request a public long code transition, the mobile station shall send a Long Code Transition Request Order (ORDQ = ‘00000000’) in assured mode.
• If the mobile station is directed by the user to operate in analog mode, allowing
operation in either wide or narrow analog mode, the mobile station shall send the
Request Analog Service Order in assured mode.

• If the mobile station is directed by the user to operate in wide analog mode, the
mobile station shall send the Request Wide Analog Service Order in assured mode.

• If the mobile station supports BCMC operation, it shall perform the procedures as
specified in 2.6.13.

• If the mobile station is directed by the user to operate in narrow analog mode, the
mobile station shall send the Request Narrow Analog Service Order in assured mode.

• If the mobile station is directed by the user to originate a call or if the mobile station
is to monitor BCMC on traffic channel, the mobile station shall perform the
following:

  - If this is an emergency call origination, the mobile station shall perform the
    following:

    + If it can be indicated to the base station within an existing Call Control
      instance, the mobile station shall send an indication to this Call Control
      instance that the user has originated an emergency call.

    + Otherwise, the mobile station shall perform the following:

      o For each service instance being initiated in the Enhanced Origination
        Message, the mobile station shall perform the following:

        ◊ increment the stored value of TAGs to the next unused integer value,
        ◊ add TAGs to the list TAG_OUTSTANDING_LIST,
        ◊ associate the TAGs value to the corresponding service instance. and
        ◊ set an enhanced origination timer associated with TAGs to a value of
          T42m seconds.

      o The mobile station shall send an Enhanced Origination Message to the
        base station, with the TAG or ADD_TAG field of each call included in the
        message set to its associated TAGs.

      o Upon sending the Enhanced Origination Message and prior to receiving a
        Layer 3 response from the base station, if the mobile station is directed
        by the user to cancel this call, the mobile station shall perform the
        following:

        ◊ The mobile station shall send a Call Cancel Message to the base
          station, with each TAG or ADD_TAG field included in the message set
to the TAG value in the list TAG_OUTSTANDING_LIST corresponding
to the call(s) being cancelled.

        ◊ The mobile station shall remove the TAG field corresponding to each
          call being cancelled from the list TAG_OUTSTANDING_LIST.
If the enhanced origination timer expires, the mobile station shall remove the associated TAG field corresponding to this call from TAG_LARGE_LIST.

Otherwise, the mobile station shall perform the following:

- If this is a packet data call origination, the mobile station shall first determine the following conditions:
  - If RETRY_DELAYs[001] is not 0, the mobile station shall not send the Enhanced Origination Message until after the system time stored in RETRY_DELAYs[001].
  - If RETRY_DELAYs[010] is not 0, the mobile station shall not send the Enhanced Origination Message until after the system time stored in RETRY_DELAYs[010].

+ If this contains BCMC origination, the mobile station shall determine the following conditions:
  - If BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY is not zero for the BCMC flow corresponding to BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID, the mobile station shall not include the BCMC flow (See section 2.6.13.11) in the Enhanced Origination Message until after the system time stored in BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY.

+ If the above conditions do not prohibit the mobile station from sending an Enhanced Origination Message at this time, the mobile station shall perform the following:
  - If P_REV_IN_USEs is greater than or equal to 11 and the Enhanced Origination Message is being sent to perform packet data dormant handoff, the mobile station shall include all dormant packet data service instances (see [42]) up to the limit specified by MAX_ADD_SERV_INSTANCEs.
  - For each service instance being initiated in the Enhanced Origination Message, the mobile station shall perform the following:
    - increment the stored value of TAGs to the next unused integer value,
    - add TAGs to the list TAG_LARGE_LIST,
    - associate the TAGs value to the corresponding service instance, and

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25 Packet data origination refers to origination with SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]
set an enhanced origination timer associated with TAGs to a value of $T_{42m}$ seconds.

- The mobile station shall send an *Enhanced Origination Message* to the base station, with the TAG or ADD_TAG field of each call included in the message set to its associated TAGs.

  + Upon sending the *Enhanced Origination Message* and prior to receiving a Layer 3 response from the base station, if the mobile station is directed by the user to cancel this call, the mobile station shall perform the following:

    - The mobile station shall send a *Call Cancel Message* to the base station, with each TAG or ADD_TAG field included in the message set to the TAG value in the list TAG_OUTSTANDING_LIST corresponding to the call(s) being cancelled.

    - The mobile station shall disable the enhanced origination timer and shall remove the TAG field corresponding to each call being cancelled from the list TAG_OUTSTANDING_LIST.

    + If the enhanced origination timer expires, the mobile station shall remove the associated TAG field from TAG_OUTSTANDING_LIST.

- If the Layer 3 receives a “call release request” from a Call Control instance, Layer 3 shall perform the following:

  - If there are no other active or pending calls, the Layer 3 shall enter the *Release Substate* with a mobile station release indication (see 2.6.4.4).

  - Otherwise, the mobile station shall perform the following:

    + The mobile station shall send a Service Request Message, Resource Release Request Message, or a Resource Release Request Mini Message to the base station requesting to release the service option connection.

    + If the mobile station sends a Resource Release Request Message or a Resource Release Request Mini Message, it shall set the purge service indicator field to ‘0’.

- If the Layer 3 receives a request to release a BCMC call [BCMC-Stop-Monitor.Request(BCMC_FLOW_ID)] from Upper Layer, Layer 3 shall perform the following:

  - If there are no other active or pending calls, the Layer 3 shall enter the *Release Substate* with a mobile station release indication (see 2.6.4.4).

  - Otherwise, the mobile station shall send a Resource Release Request Message to the base station requesting to release the BCMC flow (See section 2.6.13.11).

- If the Layer 3 receives a “call inactive indication” from a Call Control instance, Layer 3 shall perform the following:
If there are no other active or pending calls, the Layer 3 shall enter the Release Substate with a service inactive indication (see 2.6.4.4).

Otherwise, the mobile station shall perform the following:

+ The mobile station shall send a Service Request Message, Resource Release Request Message, or a Resource Release Request Mini Message to the base station requesting to release the service option connection and purge the service.

+ If the mobile station sends a Resource Release Request Message or a Resource Release Request Mini Message, it shall set the purge service indicator field to ‘1’.

• If the mobile station is directed by the user to power down, the Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the Release Substate with a power-down indication (see 2.6.4.4).

• If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an acknowledgment failure, then:
  – If RESQ_ENABLEDs is equal to ‘1’ and FPC_PRI_CHANs is equal to ‘0’, the mobile station shall perform the following:
    + disable its transmitter, and
    + enable the rescue delay timer with an initial value of (RESQ_DELAY_TIMEs × 80) ms.
  – Otherwise, the Layer 3 shall terminate all Call Control instances, and the mobile station shall disable its transmitter and shall enter the System Determination Substate of the Mobile Station Initialization State with a system lost indication (see 2.6.1.1).

• The mobile station shall perform the following:
  – The mobile station may send the Resource Request Message or Resource Request Mini Message in accordance with requirements for the currently connected service option whenever RETRY_DELAYs[RETRY_TYPE] is equal to 0, where, RETRY_TYPE is equal to ‘010’.

  – The mobile station shall not send the Resource Request Message or Resource Request Mini Message whenever RETRY_DELAYs[RETRY_TYPE] is set to infinity, where, RETRY_TYPE is equal to ‘010’.

  – If USE_CH_CFG_RRM is equal to ‘0’, the mobile station shall set CH_IND_INCL to ‘0’ in the Resource Request Message and Resource Request Mini Message; otherwise, the mobile station may request a channel configuration in the Resource Request Message or Resource Request Mini Message.
− If RETRY_DELAYs[RETRY_TYPE] is not 0 or infinity, the mobile station shall not send the Resource Request Message or Resource Request Mini Message until after the system time stored in RETRY_DELAYs[RETRY_TYPE], where, RETRY_TYPE is equal to ‘010’.

− The mobile station may send the Supplemental Channel Request Message or Supplemental Channel Request Mini Message whenever RETRY_DELAYs[RETRY_TYPE] is set to ‘0’, where, RETRY_TYPE is equal to ‘011’.

− The mobile station shall not send the Supplemental Channel Request Message or Supplemental Channel Request Mini Message whenever RETRY_DELAYs[RETRY_TYPE] is set to infinity, where, RETRY_TYPE is equal to ‘011’.

− If RETRY_DELAYs[RETRY_TYPE] is not 0 or infinity, the mobile station shall not send the Supplemental Channel Request Message or Supplemental Channel Request Mini Message until after the system time stored in RETRY_DELAYs[RETRY_TYPE], where, RETRY_TYPE is equal to ‘011’.

− The mobile station shall not send a Short Data Burst (see [30], [42]) whenever RETRY_DELAYs[RETRY_TYPE] is set to infinity, where, RETRY_TYPE is equal to ‘100’ or ‘101’.

− If RETRY_DELAYs[RETRY_TYPE] is not 0 or infinity, where, RETRY_TYPE is equal to ‘100’ or ‘101’, the mobile station shall not send a Short Data Burst (see [30], [42]) until the maximum of the system time stored in RETRY_DELAYs[100] and RETRY_DELAYs[101].

− At the system time stored in RETRY_DELAYs[RETRY_TYPE], the mobile station shall reset RETRY_DELAYs[RETRY_TYPE] to 0, where RETRY_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’ or ‘101’.

• The mobile station may send a Resource Release Request Message or a Resource Release Request Mini Message to request for reverse pilot gating operation to be performed or to request a service option connection to be disconnected. The mobile station may send a Resource Release Request Message to request one or more BCMC flows to be disconnected.

• The mobile station may send a Shared Channel Configuration Order (ORDQ = ‘00000000’) to request for R-FCH assignment. The mobile station may send a Shared Channel Configuration Order (ORDQ = ‘00000001’) to request release of the R-FCH.

• When the Reverse Packet Data Channel is assigned, the mobile station shall not send a Supplemental Channel Request Message or Supplemental Channel Request Mini Message containing a request for Reverse Supplemental Channel assignment.

• The mobile station may enter the Release Substate with a service inactive indication (see 2.6.4.4) if the service corresponding to the packet data service option instance is inactive at the mobile station.
• If Layer 3 receives a “substate timer expired indication” from a Call Control instance, the Layer 3 shall perform the following:

- If there are no other active or pending calls, the Layer 3 shall terminate this Call Control instance; and 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).

- Otherwise, the mobile station shall send a Service Request Message, Resource Release Request Message, or a Resource Release Request Mini Message.

• If there are no active or pending calls, the Layer 3 shall enter the Release Substate with a mobile station release indication.

• If Layer 3 receives a ‘message rejected indication’ from a Call Control instance, mobile station shall send a Mobile Station Reject Order (ORDQ set to the applicable reason code as determined from Table 2.7.3-1) within T56m seconds as follows:

  - If P_REV_IN_USEₜ is equal to or greater than seven, the mobile station shall include the CON_REF_INCL field with this message and shall perform the following: if the corresponding Call Control instance is identified by NULL, the mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection reference of the service option connection corresponding to this Call Control instance; otherwise, the mobile station shall set the CON_REF_INCL field of the message to ‘1’ and the CON_REF field of the message to the connection reference of the service option connection corresponding to this Call Control instance.

• If Layer 3 is requested by the upper layers to query base station identification number, SID, NID, and LAT/LONG related information for one or more pilots, and PILOT_INFO_REQ_SUPPORTEDₜ equals ‘1’, mobile station shall send a Base Station Status Request Message with a “Pilot Information” record type to the base station.

• If the mobile station needs to suspend its CDMA Traffic Channel processing for applications other than a PUF probe, hard handoff, or periodic search, then, prior to suspending its CDMA Traffic Channel processing, the mobile station shall perform the following:

  - If CDMA_OFF_TIME_REPORT_SUP_INDₜ is equal to ‘1’ and the total time it needs to suspend processing the CDMA Traffic Channel is longer than CDMA_OFF_TIME_REPORT_THRESHOLDₜ, the mobile station shall send a CDMA Off Time Report Message. Otherwise, the mobile shall not send a CDMA Off Time Report Message.

• The mobile station may send a CDMA Off Time Report Message with CDMA_OFF_TIME_ENABLE set to ‘0’ to cancel a previously reported CDMA Traffic Channel processing suspension.
• If the mobile station receives a message which is included in the following list and every message field value is within its permissible range, the mobile station shall process the message as described below and in accordance with the message’s action time (see 2.6.4.1.5).

1. *Alert With Information Message*: If P_REV_IN_USE is less than seven, the Layer 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by NULL.

2. *Analog Handoff Direction Message*: If the analog mode directed by the base station is supported by the mobile station, the mobile station shall process the message as specified in 2.6.6.2.9, and shall perform the following at the action time of the message:
   - If P_REV_IN_USE is equal to or greater than seven, the mobile station shall perform the following: if CON_REF_INCL equals ‘0’, the Layer 3 shall terminate all Call Control instances (if there are any) except the one identified by NULL; otherwise, the Layer 3 shall terminate all Call Control instances (if there are any) except the one identified by CON_REF.
   - The mobile station shall perform the following (see [6] for handoff to a wide analog channel and [22] for handoff to an 800 MHz narrow analog channel):
     - If this Call Control instance is in the *Waiting for Order Substate*, the mobile station shall enter the Waiting for Order Task.
     - If this Call Control instance is in the *Waiting for Mobile Station Answer Substate*, the mobile station shall enter the Waiting for Answer Task.
     - If this Call Control instance is in the *Conversation Substate*, the mobile station shall enter the Conversation Task.
   - If the mobile station is directed to an unsupported operation mode or band class, the mobile station shall respond with a *Mobile Station Reject Order* with ORDQ equal to ‘00000110’ (message requires a capability that is not supported by the mobile station).

3. *Audit Order*

4. *Authentication Challenge Message*: The Layer 3 shall send a “reset waiting for order substate timer indication” to all Call Control instances. The mobile station shall process the message and shall respond as specified in 2.3.12.1.4 within T32m seconds, regardless of the value of AUTHs.

5. *Authentication Request Message*: The mobile station shall process the message and shall respond as specified in 2.3.12.5.2.

6. *Base Station Challenge Confirmation Order*: The Layer 3 shall send a “reset waiting for order substate timer indication” to all Call Control instances. The mobile station shall process the message and shall respond with an SSD
Update Confirmation Order or SSD Update Rejection Order as specified in 2.3.12.1.5 within $T_{32m}$ seconds.

7. **Base Station Status Response Message**: The Layer 3 shall deliver the information contained in this message to the Upper Layer entity that requested for this information.

8. **Call Assignment Message**: The mobile station shall process this message as follows:

- If $\text{RESPONSE\_IND}_r$ equals ‘1’, then for each of the $\text{TAG}_r$ or $\text{ADD\_TAG}_r$ fields that matches any of the TAG values contained in the list $\text{TAG\_OUTSTANDING\_LIST}$, the mobile station shall perform the following:

  + If $\text{ACCEPT\_IND}_r$ or $\text{ADD\_ACCEPT\_IND}_r$ associated with the $\text{TAG}_r$ or $\text{ADD\_TAG}_r$ equals ‘0’, the mobile station shall disable the enhanced origination timer associated with $\text{TAG}_r$ and shall remove the TAG value specified by $\text{TAG}_r$ from the list $\text{TAG\_OUTSTANDING\_LIST}$.

  + If $\text{ACCEPT\_IND}_r$ or $\text{ADD\_ACCEPT\_IND}_r$ associated with the $\text{TAG}_r$ or $\text{ADD\_TAG}_r$ equals ‘1’ and $\text{USE\_OLD\_SERV\_CONFIG}_r$ field associated with this TAG is not set to ‘1’, the mobile station shall perform the following:

    o If there already exists or currently pending instantiation a Call Control instance identified by $\text{CON\_REF}_r$ or $\text{ADD\_CON\_REF}_r$ associated with the $\text{TAG}_r$ or $\text{ADD\_TAG}_r$, the mobile station shall send a Mobile Station Reject Order with $\text{ORDQ}$ field set to ‘00010010’ (a call control instance is already present with the specified identifier), with the $\text{CON\_REF}$ field of the order set to the $\text{CON\_REF}_r$ or $\text{ADD\_CON\_REF}_r$.

    o Otherwise, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) at the action time of the message. The mobile station shall identify this Call Control instance by $\text{CON\_REF}_r$ or $\text{ADD\_CON\_REF}_r$ associated with the $\text{TAG}_r$ or $\text{ADD\_TAG}_r$. If a service option connection corresponding to this call has not been established, the mobile station should wait for the base station to initiate service negotiation to establish the service option connection.

    o The mobile station shall disable the enhanced origination timer corresponding to this TAG and shall remove the TAG value from the list $\text{TAG\_OUTSTANDING\_LIST}$.

  + If $\text{ACCEPT\_IND}_r$ equals ‘1’ and $\text{USE\_OLD\_SERV\_CONFIG}_r$ field is included and is set to ‘1’, the mobile station shall perform the following:

    o At the action time of this message, the mobile station shall restore the indicated service option connection record(s) from the stored
service configuration, where the service option connection records to
be restored are determined as follows:

- If SR_IDr equals ‘111’, the mobile station shall restore all remaining
  service option connection records from the stored service
  configuration; otherwise, the mobile station shall restore the service
  option connection record corresponding to the SR_IDr received in
  this message.

- Layer 3 shall instantiate a Call Control instance (as specified in
  2.6.10) for each of the restored service option connections with a
  ‘restore indication’ and Layer 3 shall identify each of these Call
  Control instances by the value of the CON_REF field corresponding
  to the restored service option connection.

- The mobile station shall disable the enhanced origination timer
  corresponding to TAGr and shall remove the TAG value specified by
  TAGr from the list TAG_OUTSTANDING_LIST.

  - If RESPONSE_INDr equals ‘1’, then for each of the and TAGr or ADD_TAGr
    fields that does not match with any of the TAG values contained in the list
    TAG_OUTSTANDING_LIST, the mobile station shall send a Mobile Station
    Reject Order with ORDQ field set to ‘00010011’ (TAG received does not
    match TAG stored), with the TAG field of the order set to the TAGr or
    ADD_TAGr, and the CON_REF field of the order set to CONREFER or
    ADD_CON_REFER.

  - If RESPONSE_INDr equals ‘0’ and USE_OLD_SERV_CONFIGr field is not
    included or is included and is set to ‘0’, the mobile station shall perform the
    following for each of the CONREFER or ADD_CON_REFER:

      + If there already exists or currently pending instantiation a Call Control
        instance identified by CONREFER or ADD_CON_REFER, the mobile station
        shall send a Mobile Station Reject Order with ORDQ field set to
        ‘00010010’ (a call control instance is already present with the specified
        identifier), with the CON_REF field of the order set to the CONREFER or
        ADD_CON_REFER.

      + Otherwise, if the mobile station does not accept this call assignment, the
        mobile station shall send a Mobile Station Reject Order with ORDQ field
        set to ‘00010000’ (call assignment not accepted), with the CON_REF field
        of the order set to the CONREFER or ADD_CON_REFER.

      + Otherwise, at the action time of the message, the mobile station shall
        store the bypass indicator (BYPASS_ALERT ANSWERs =
        BYPASS_ALERT_ANSWERr) and the Layer 3 shall instantiate a Call
        Control instance (as specified in 2.6.10). The mobile station shall
        identify this Call Control instance by the CONREFER or ADD_CON_REFER.
If a service option connection corresponding to this call has not been established, the mobile station should wait for the base station to initiate service negotiation to establish the service option connection.

- If RESPONSE_IND_r equals ‘0’ and USE_OLD_SERV_CONFIG_r field is included and is set to ‘1’, the mobile station shall perform the following:

  + At the action time of this message, the mobile station shall restore the indicated service option connection record(s) from the stored service configuration, where the service option connection records to be restored are determined as follows:

    - If SR_ID_r equals ‘111’, the mobile station shall restore all remaining service option connection records from the stored service configuration; otherwise, the mobile station shall restore the service option connection record corresponding to the SR_ID_r received in this message.

    + If SR_ID_r equals ‘111’, the mobile station shall perform the following:

      - For the first remaining service option connection (with corresponding connection reference CON_REF_i) listed in this stored Service Configuration information record, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with the received BYPASS_ALERT_ANSWERS. The mobile station shall identify this Call Control instances by the corresponding CON_REF_i.

      - For each of the remaining service option connections, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) for each of the restored service option connections with a ‘restore indication’ and Layer 3 shall identify each of these Call Control instances by the value of the CON_REF field corresponding to the restored service option connection.

    + If SR_ID_r is not equal to ‘111’, Layer 3 shall instantiate a Call Control instance (as specified in 2.6.10) with the received BYPASS_ALERT_ANSWERS for the service option connection record corresponding to the SR_ID_r received in this message.

9. **Candidate Frequency Search Control Message:** The mobile station shall process the message as specified in 2.6.6.2.5.1.

10. **Candidate Frequency Search Request Message:** The mobile station shall process the message as specified in 2.6.6.2.5.1.

11. **Continuous DTMF Tone Order:** Support of this order by the mobile station is optional. If P_REV_IN_USE_s is less than seven, the Layer 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3 shall perform the
following: if CON_REF_INCLr equals ‘0’, the Layer 3 shall deliver this message
to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
deliver this message to the Call Control instance identified by CON_REFr.

12. **Data Burst Message**

13. **Extended Alert With Information Message**: The mobile station shall perform the
following: If CON_REF_INCLr equals ‘0’, the Layer 3 shall deliver this message
to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
deliver this message to the Call Control instance identified by CON_REFr.

14. **Extended Flash With Information Message**: The mobile station shall perform the
following: If CON_REF_INCLr equals ‘0’, the Layer 3 shall deliver this message
to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
deliver this message to the Call Control instance identified by CON_REFr.

15. **Extended Handoff Direction Message**: The Layer 3 shall send a “reset waiting for
order substate timer indication” to all Call Control instances. The mobile
station shall process the message as specified in 2.6.6.2.5.1.

16. **Extended Neighbor List Update Message**: The mobile station shall process the
message as specified in 2.6.6.2.5.1.

17. **Extended Release Message**: The mobile station shall process the message as
specified in 2.6.4.1.9.

18. **Extended Release Mini Message**: The mobile station shall process the message
as specified in 2.6.4.1.9.

19. **Forward Supplemental Channel Assignment Mini Message**: The mobile station
shall process the message as specified in 2.6.6.2.5.1.

20. **Flash With Information Message**: If P_REV_IN_USEs is less than seven, the Layer
3 shall deliver this message to the Call Control instance; otherwise, the Layer 3
shall deliver this message to the Call Control instance identified by NULL.

21. **Extended Supplemental Channel Assignment Message**: The mobile station shall
process the message as specified in 2.6.6.2.5.1.

22. **General Handoff Direction Message**: The Layer 3 shall send a “reset waiting for
order substate timer indication” to all Call Control instances. The mobile
station shall process the message as specified in 2.6.6.2.5.1.

23. **In-Traffic System Parameters Message**: The mobile station shall process the
message as specified in 2.6.4.1.4.

24. **Local Control Order**

25. **Lock Until Power-Cycled Order**: The mobile station shall disable its transmitter
and record the reason for the **Lock Until Power-Cycled Order** in the mobile
station’s semi-permanent memory (LCKRSN_Ps-p equals the least-significant
four bits of ORDQr). The mobile station should notify the user of the locked
condition. The Layer 3 shall terminate all Call Control instances, and 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**.

26. **Long Code Transition Request Order**: The mobile station shall process the
message as specified in 2.6.4.1.6.

27. **Maintenance Order**: If P_REV_IN_USEs is less than seven, the Layer 3 shall
deliver this message to the Call Control instance; otherwise, the Layer 3 shall
perform the following: if CON_REF_INCLr equals ‘0’, the Layer 3 shall deliver
this message to the Call Control instance identified by NULL; otherwise, the
Layer 3 shall deliver this message to the Call Control instance identified by
CON_REFr.

28. **Maintenance Required Order**: The mobile station shall record the reason for the
**Maintenance Required Order** in the mobile station’s semi-permanent memory
(MAINTRSNs-p equals the least-significant four bits of ORDQr). The mobile
station shall remain in the unlocked condition. The mobile station should
notify the user of the maintenance required condition.

29. **Message Encryption Mode Order**: The mobile station shall process the message
as specified in 2.3.12.2.

30. **Mobile Station Registered Message**: The mobile station shall process the
message as specified in 2.6.5.5.4.3.

31. **Mobile Assisted Burst Operation Parameters Message**: The mobile station shall
process the message as specified in 2.6.6.2.5.1.

32. **Neighbor List Update Message**: The mobile station shall process the message as
specified in 2.6.6.2.5.1.

33. **Outer Loop Report Request Order**: The mobile station shall send the **Outer Loop
Report Message** in assured mode to the base station.

34. **Parameter Update Order**: The Layer 3 shall send a “reset waiting for order
substate timer indication” to all Call Control instances. The mobile station
shall increment COUNTs-p (see 2.3.12.1.3). The mobile station shall send a
**Parameter Update Confirmation Order** within T56m seconds. The mobile station
shall set the ORDQ field of the **Parameter Update Confirmation Order** to the
same value as the ORDQ field of the **Parameter Update Order**.

35. **Periodic Pilot Measurement Request Order**: The mobile station shall process the
order as specified in 2.6.6.2.5.1.

36. **Pilot Measurement Request Order**: The mobile station shall process the order as
specified in 2.6.6.2.5.1.

37. **Power Control Message**: The mobile station shall process the message as
specified in 2.6.4.1.1.3.

38. **Power Control Parameters Message**: The mobile station shall process the
message as specified in 2.6.4.1.1.2.

39. **Power Up Function Message**: The mobile station shall process the message as specified in 2.6.4.1.7.1.

40. **Power Up Function Completion Message**: The mobile station shall process the message as specified in 2.6.4.1.7.3.

41. **Rate Change Message**: The mobile station shall process the message as specified in 2.6.4.1.1.4.

42. **Release Order**: The Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the *Release Substate* with a base station release indication (see 2.6.4.4).

43. **Resource Allocation Message**: The mobile station shall process the message as specified in 2.6.4.1.10.

44. **Resource Allocation Mini Message**: The mobile station shall process the message as specified in 2.6.4.1.10.

45. **Retrieve Parameters Message**: The mobile station shall send, within $T_{56m}$ seconds, a *Parameters Response Message*.

46. **Retry Order**: The mobile station shall process the order as follows:

   - If $RETRY\_TYPE_r$ is equal to ‘000’, the mobile station shall set $RETRY\_DELEY_r[RTRY\_TYPE]$ to 0, where $RETRY\_TYPE$ is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.

   - If $RETRY\_TYPE_r$ is equal to ‘001’, ‘100’, or ‘101’, then the mobile station shall perform the following:

     - If $RETRY\_DELEY_r$ is equal to ‘00000000’, then the mobile station shall set $RETRY\_DELEY_s[RTRY\_TYPE]$ to 0.

     - If $RETRY\_DELEY_r$ is not equal to ‘00000000’, the mobile station shall set $RETRY\_DELEY_s[RTRY\_TYPE]$ as follows:

       + If the most significant bit of the $RETRY\_DELEY_r$ is 0, set $RETRY\_DELEY\_UNIT_s$ to 1000ms. If the most significant bit of the $RETRY\_DELEY_r$ is ‘1’, set $RETRY\_DELEY\_UNIT_s$ to 60000ms.

       + The mobile station shall set $RETRY\_DELEY\_VALUE_s$ to the seven least significant bits of $RETRY\_DELEY_r$.

       + The mobile station shall store the next system time 80 ms boundary
         + $RETRY\_DELEY\_VALUE_s \times RETRY\_DELEY\_UNIT_s$ ms as
           $RETRY\_DELEY_s[RTRY\_TYPE]$.

   - If $RETRY\_TYPE_r$ is equal to ‘010’ or ‘011’, the mobile station shall perform the following:

     - If $RETRY\_DELEY_r[RTRY\_TYPE]$ is ‘00000000’, then the mobile station shall set $RETRY\_DELEY_s[RTRY\_TYPE]$ to 0.
– If RETRY_DELAY[RETRY_TYPE] is ‘11111111’, then the mobile station shall set RETRY_DELAY[RETRY_TYPE] to infinity.

– If RETRY_DELAY[RETRY_TYPE] is not equal to ‘00000000’ or ‘11111111’, the mobile station shall store the next system time 80 ms boundary + RETRY_DELAY[RETRY_TYPE] × 320 ms as RETRY_DELAY[RETRY_TYPE].

47. **Reverse Supplemental Channel Assignment Mini Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

48. **Security Mode Command Message**: The mobile station shall process the message as specified in 2.6.4.1.14.

49. **Send Burst DTMF Message**: Support of this message by the mobile station is optional. If P_REV_IN_USE is less than seven, the Layer 3 shall deliver this message to the Call Control instance; otherwise, the Layer 3 shall perform the following: if CON_REF_INCL equals ‘0’, the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

50. **Service Connect Message**: The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2) if the message is not rejected due to the following conditions:

- If the CC_INFO_INCL field is included in this message and is set to ‘1’, the mobile station shall perform the following for each of the NUM_CALLS_ASSIGN call assignments included in this message:

  + If there already exists or currently pending instantiation a Call Control instance identified by CON_REF, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010010’ (a call control instance is already present with the specified identifier), with the CON_REF field of the order set to CON_REF.

  + If RESPONSE_IND equals ‘1’ and TAG does not match any of the TAG values contained in the list TAG_OUTSTANDING_LIST, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010011’ (TAG received does not match TAG stored), with the TAG field of the order set to TAGr, and the CON_REF field of the order set to CON_REF.

  + If the mobile station does not accept this call assignment, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010000’ (call assignment not accepted), with the CON_REF field of the order set to CON_REF.

51. **Service Option Control Message**: The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).
52. **Service Option Control Order:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

53. **Service Option Request Order:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

54. **Service Option Response Order:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

55. **Service Redirection Message:** The mobile station shall process the message as follows:

   If RECORD_TYPE\textsubscript{r} is equal to ‘00000000’, the mobile station shall perform the following:
   
   - The mobile station shall set RETURN\_IF\_FAIL\textsubscript{s} = RETURN\_IF\_FAIL\textsubscript{r}.
   - If DELETE\_TMSI\textsubscript{r} is equal to ‘1’, the mobile station shall set all the bits of TMSI\_CODE\textsubscript{s-p} to ‘1’.
   - The mobile station shall disable the full-TMSI timer.
   - The Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the Release Substate with an NDSS off indication (see 2.6.4.4).

   If RECORD\_TYPE\textsubscript{r} is not equal to ‘00000000’, REDIRECT\_TYPE\textsubscript{r} is ‘1’, and the mobile station supports the band class and operating mode specified in the message, the mobile station shall perform the following:

   - The mobile station shall store the redirection record received in the message as REDIRECT\_REC\textsubscript{s}.
   - The mobile station shall enable NDSS\_ORIG\textsubscript{s} and shall record the dialed digits (if any) corresponding to the last MS originated call.
   - The mobile station shall set RETURN\_IF\_FAIL\textsubscript{s} = RETURN\_IF\_FAIL\textsubscript{r}.
   - If DELETE\_TMSI\textsubscript{r} is equal to ‘1’, the mobile station shall set all the bits of TMSI\_CODE\textsubscript{s-p} to ‘1’.
   - The mobile station shall disable the full-TMSI timer.
   - The Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the Release Substate with a redirection indication (see 2.6.4.4). Otherwise, the mobile station shall discard the message and send a Mobile Station Reject Order (ORDQ set to the applicable reason code as determined from Table 2.7.3-1) within T\textsubscript{56m} seconds.

56. **Service Request Message:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).
57. **Service Response Message:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

58. **Set Parameters Message:** If the mobile station can set all of the parameters specified by the PARAMETER_ID fields in the message, the mobile station shall set them; otherwise, the mobile station shall send, within T_{56m} seconds, a Mobile Station Reject Order.

59. **SSD Update Message:** The Layer 3 shall send a “reset waiting for order substate timer indication” to all Call Control instances. The mobile station shall process the message and respond with a Base Station Challenge Order as specified in 2.3.12.1.5 within T_{32m} seconds.

60. **Status Request Message:** The mobile station shall send, within T_{56m} seconds, a Status Response Message. If the message does not specify any qualification information (QUAL_INFO_TYPE_r is equal to ‘00000000’), the mobile station shall include the requested information records in the Status Response Message. If the message specifies a band class (QUAL_INFO_TYPE_r is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_r) in the Status Response Message. If the message specifies a band class and an operating mode (QUAL_INFO_TYPE_r is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_r) and operating mode (OP_MODE_r) in the Status Response Message.

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).

61. **Status Request Order:** If CDMABAND_s is equal to ‘00000’, the mobile station shall send a Status Message within T_{56m} seconds. The mobile station shall respond with information corresponding to the current band class and operating mode.

62. **Supplemental Channel Assignment Message:** The mobile station shall process the message as specified in 2.6.6.2.5.1.

63. **TMSI Assignment Message:** The mobile station shall store the TMSI zone and
code as follows:

- The mobile station shall store the length of the TMSI zone field by setting ASSIGNING_TMSI_ZONE_LENs-p to TMSI_ZONE_LENr,
- The mobile station shall store the assigning TMSI zone number by setting the ASSIGNING_TMSI_ZONE_LENs-p least significant octets of ASSIGNING_TMSI_ZONEs-p to TMSI_ZONEr, and
- The mobile station shall store the TMSI code by setting TMSI_CODEs-p to TMSI_CODEr.

The mobile station shall set the TMSI expiration time by setting TMSI_EXP_TIMEs-p to TMSI_EXP_TIMEr. 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.

64. Universal Handoff Direction Message: The Layer 3 shall send a “reset waiting for order substate timer indication” to all Call Control instances. The mobile station shall process the message as specified in 2.6.6.2.5.1.

65. User Zone Reject Message: The mobile station shall process this message as specified in 2.6.9.2.2.

66. User Zone Update Message: The mobile station shall process this message as specified in 2.6.9.2.2.

67. BCMC Order: The mobile station shall process this message as follows:
- If ORDQ_r is set to ‘00000000’, the mobile station shall perform the following for each of the BCMC flows that the base station is responding to:
  - If CLEAR_ALL_RETRY_DELAY_r equals ‘1’, the mobile station shall delete the currently stored BCMC Retry Delay List.
  - If CLEAR_RETRY_DELAY_r equals ‘1’, the mobile station shall delete the entry in the BCMC_RETRY_DELAY_LIST s[i] corresponding to BCMC_FLOW_ID (See section 2.6.13.11) in this message.
  - If ALL_BCMC_REASON_r or BCMC_REASON_r equals ‘0000’, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_NOT_AVAILABLE, reason_ind=CURRENT_SYS) for each of the corresponding BCMC_FLOW_ID to the BCMC Service Layer.
  - If ALL_BCMC_REASON_r or BCMC_REASON_r equals ‘0001’, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_NOT_TRANSMITTED, reason_ind=CURRENT_SYS) for each of the corresponding BCMC_FLOW_ID to the BCMC Service Layer.
  - If ALL_BCMC_REASON_r or BCMC_REASON_r equals ‘0010’, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_TRANSMITTED_IN_IDLE, reason_ind=CURRENT_SYS) for each of the corresponding BCMC_FLOW_ID to the BCMC Service Layer.
– If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0011’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = SUCCESS, cause = REGISTRATION_ACCEPTED, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.

– If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0100’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=AUTHORIZATION_FAILURE, reason_ind=CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.

– If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0101’, the mobile station shall perform the following:

  + Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=RETRY_LATER, reason_ind=CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.

  + For each of the corresponding `BCMC_FLOW_ID`, if there is a `BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID` which is same as `BCMC_FLOW_ID` (See section 2.6.13.11), the mobile station shall set `BCMC_RETRY_DELAY_LISTs[i].RETRYDELAY` to current system time plus `ALL_BCMC_RETRY_DELAYr/BCMC_RETRY_DELAYr`; otherwise, the mobile station shall add new `BCMC_RETRY_DELAY_LISTs[i]` to the BCMC Retry Delay List and shall set `BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID` to the `BCMC_FLOW_ID`, `BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY` to current system time plus `ALL_BCMC_RETRY_DELAYr/BCMC_RETRY_DELAYr`.

68. *In-Traffic BCMC Service Parameters Message*: The mobile station shall process this message as follows:

The mobile station shall store the following parameters:

- Autonomous BCMC request on traffic channel allowed indicator (`AUTO_REQ_TRAF_ALLOWED_INDs = AUTO_REQ_TRAF_ALLOWED_INDr`).

- BCMC in idle state supported indicator (`BCMC_ON_IDLE_SUP_INDs = BCMC_ON_IDLE_SUP_INDr`).

- Only traffic state BCMC flows included indicator (`BCMC_FLOWS_ON_TRAFFIC_ONLY_INDs = BCMC_FLOWS_ON_TRAFFIC_ONLY_IND`) if `BCMC_FLOWS_ON_TRAFFIC_ONLY_INDr` is included; otherwise, `BCMC_FLOWS_ON_TRAFFIC_ONLY_INDs = ‘1’.`
Length of time stamp for use on r-csch
(ACH_TIME_STAMP_SHORT_LENGTH_s = ACH_TIME_STAMP_SHORT_LENGTH_r) if NON_DEFAULT_VALUE_INCLUDED_r equals ‘1’; otherwise, ACH_TIME_STAMP_SHORT_LENGTH_s shall be set to 10.

Length of time stamp
(TIME_STAMP_LONG_LENGTH_s = TIME_STAMP_LONG_LENGTH_r) if NON_DEFAULT_VALUE_INCLUDED_r equals ‘1’; otherwise, TIME_STAMP_LONG_LENGTH_s shall be set to 52.

Unit for time stamp length (TIME_STAMP_UNIT_s = TIME_STAMP_UNIT_r) if NON_DEFAULT_VALUE_INCLUDED_r equals ‘1’; otherwise, TIME_STAMP_UNIT_s shall be set to 6.

For i=1 to the number of flows included in this message, store the following:
- BCMC_FLOW_LIST_s[i].BCMC_FLOW_ID = ith occurrence of BCMC_FLOW_ID (BCMC flow identifier). See section 2.6.13.11.
- If AUTH_SIGNATURE_REQUIRED_r equals ‘1’, BCMC_FLOW_LIST_s[i].AUTH_SIGNATURE_REQ_IND = ith occurrence of AUTH_SIGNATURE_REQ_INDr (Authorization signature required indication).
- BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IDLE_IND = ith occurrence of BCMC_FLOW_ON_TRAFFIC_IDLE_INDr (BCMC flow on traffic state or idle state supported identifier) if BCMC_FLOW_ON_TRAFFIC_IDLE_INDr is included; otherwise, BCMC_FLOW_LIST_s[i].BCMC_FLOW_ON_TRAFFIC_IDLE_IND = ‘01’.

69. Shared Channel Configuration Order: The mobile station shall process this message as follows:
- If ORDQ_r is set to ‘00000000’, the mobile station shall perform the following:
  - The mobile station shall set REV_FCH_ASSIGNED_s to ‘1’.
  - If CH_IND_s is equal to ‘11’, the mobile station shall begin transmitting on the Reverse Fundamental Channel.
  - If CH_IND_s is equal to ‘00’ and EXT_CH_IND_s is equal to ‘01111’, ‘10001’, ‘10011’, or ‘10101’, the mobile station shall begin transmitting on the Reverse Fundamental Channel and do the following:
    + If EXT_CH_IND_s is equal to ‘01111’, store EXT_CH_IND_s = ‘00110’
    + If EXT_CH_IND_s is equal to ‘10001’, store EXT_CH_IND_s = ‘10010’
    + If EXT_CH_IND_s is equal to ‘10011’, store EXT_CH_IND_s = ‘01110’
+ If EXT_CH_IND is equal to ‘10101’, store EXT_CH_IND = ‘10110’

• If ORDQ_s is set to ‘00000001’, the mobile station shall do the following:
  – The mobile station shall set REV_FCH_ASSIGNED_s to ‘0’.
  – If CH_IND_s is equal to ‘11’, the mobile station shall stop transmitting on the Reverse Fundamental Channel.
  – If CH_IND_s is equal to ‘00’ and EXT_CH_IND_s is equal to ‘00110’, ‘10010’, ‘01110’, or ‘10110’, the mobile station shall stop transmitting on the Reverse Fundamental Channel and do the following:
    + If EXT_CH_IND_s is equal to ‘00110’, store EXT.CH_IND_s = ‘01111’
    + If EXT_CH_IND_s is equal to ‘10010’, store EXT.CH_IND_s = ‘10001’
    + If EXT_CH_IND_s is equal to ‘01110’, store EXT.CH_IND_s = ‘10011’
    + If EXT.CH_IND_s is equal to ‘10110’, store EXT.CH_IND_s = ‘10101’

70. Service Status Order: For each of the SERVICE_STATUS field included in this message, the mobile station shall indicate the status to corresponding service instance. For each of the SERVICE_STATUS field set to ‘001’ (service request rejected), the mobile station shall perform the following:
• The mobile station shall terminate the call control instance corresponding to the SR_ID associated with this SERVICE_STATUS field.
• The mobile station shall send an indication to the affected service instance indicating that the call control instance has been terminated.
• If a TAG is associated with the SR_ID corresponding to this SERVICE_STATUS field, the mobile station shall remove the TAG value from the TAG_OUTSTANDING_LIST and disable the corresponding enhanced origination timer.

• If the mobile station receives a message that is not included in the above list, cannot be processed, or requires a capability which is not supported, the mobile station shall discard the message and send a Mobile Station Reject Order (ORDQ set to the applicable reason code as determined from Table 2.7.3-1) within T56m seconds. If the mobile station receives a Call Control message (see 2.6.10) which is directed to a Call Control instance that does not exists, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00010001’ (no call control instance present with the specified identifier) to the base station within T56m seconds.

• If the bits of TMSI_CODE_s-p are not all equal to ‘1’, and if System Time (in 80 ms units) exceeds TMSI_EXP_TIME_s-p × 2^{12}, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’ within T66m seconds.

• If the full-TMSI timer expires or has expired, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’. The mobile station shall update the registration variables as described in 2.6.5.5.2.5.
• If the Forward Packet Data Channel is assigned, whenever the mobile station transmitter is disabled, the MS shall set FPDCH_DTX_INDICATOR to '1'.

• If the Forward Packet Data Channel is assigned, whenever and the mobile station transmitter is enabled, the mobile station shall perform the following procedures:

  - The MS shall set FPDCH_DTX_INDICATOR to '0'. If the Forward Packet Data Channel is assigned and the mobile station transmitter is disabled, the MS shall set FPDCH_DTX_INDICATOR to '1'.

  - If the mobile station transmitter has been disabled for more than at least TX_DISABLED_TIMER, then the mobile station shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) primitive to the MAC layer when the mobile station re-enables its transmitter.

69. Service Status Order: For each of the SERVICE_STATUS field included in this message, the mobile station shall indicate the status to corresponding service instance:

2.6.4.4 Release Substate

In this substate, the mobile station confirms the disconnect of all calls and physical channels.

Upon entering the Release Substate, the mobile station shall perform the following:

• The mobile station shall set the substate timer for T_{55m} seconds.

• If the mobile station enters the Release Substate with a power-down indication, the mobile station shall send a Release Order (ORDQ = '00000001'), and shall perform power-down registration procedures (see 2.6.5.4.4). The Layer 3 shall terminate all Call Control instances.

• If the mobile station enters the Release Substate with a mobile station release indication, the mobile station shall send a Release Order as follows:

  - If the mobile station supports operation in the reduced slot cycle mode following release from the traffic channel, the mobile station shall set ORDQ to '00000011', RETURN_CAUSE to '0000', and perform the following:

    + If T_SLOTTED is equal to 0, the mobile station shall perform the following:

      o Set the RSC_MODE_IND field as specified in 2.7.3.5. If RSC_MODE_IND is set to '1', then:

        ◇ Set RSC_MODE_ENABLED to YES.

        ◇ Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as specified in 2.7.3.5, and store the system time specified by these fields as RSC_END_TIME.

        ◇ Set the RSCI field as specified in 2.7.3.5 and store it as RSCI; if RSCI is equal to '0111', set SLOTTED to NO.
Set IGNORE_QPCHₘ to ‘1’.

+ Otherwise, the mobile station shall set the RSC_MODE_IND field to ‘0’.

− Otherwise, the mobile station shall set ORDQ to ‘00000000’, and set RETURN_CAUSEₘ to ‘0000’.

If the mobile station enters the Release Substate with a service inactive indication, the mobile station shall send a Release Order (ORDQ = ‘00000010’), and set RETURN_CAUSEₘ to ‘0000’.

If the mobile station enters the Release Substate with a base station release indication, the mobile station shall send a Release Order (ORDQ = ‘00000000’). The Layer 3 shall terminate all Call Control instances. The mobile station shall disable its transmitter, set RETURN_CAUSEₘ to ‘0000’, and shall perform the procedures as specified in 2.6.4.4.1.

• If the mobile station entered the Release Substate with a base station extended release indication, the mobile station shall perform the following:

− The mobile station shall send an Extended Release Response Message to the base station as follows:

  + If the RSC_MODE_SUPPORTED field in the received Extended Release Message was set to ‘1’ and the mobile station requests operation in the reduced slot cycle mode, the mobile station shall set the RSC_MODE_IND field to ‘1’ and perform the following:

    o Set RSC_MODE_ENABLED to YES.

    o Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as specified in 2.7.2.3.2.25, and store the system time specified by these fields as RSC_END_TIME. The value of RSC_END_TIME shall be no later than the system time specified by MAX_RSC_END_TIME_UNITᵣ and MAX_RSC_END_TIME_VALUEᵣ received in the Extended Release Message.

    o Set the RSCI field as specified in 2.7.2.3.2.25 and store it as RSCIₘ; if RSCIₘ is equal to ‘0111’, set SLOTTEDₘ to NO.

    o Set IGNORE_QPCHₘ to IGNORE_QPCHᵣ received in the Extended Release QPCH Message.

  + Otherwise, the mobile station shall set the RSC_MODE_IND field to ‘0’.

− The Layer 3 shall terminate all Call Control instances.

− The mobile station shall disable its transmitter, set RETURN_CAUSEₘ to ‘0000’, and shall perform the procedures as specified in 2.6.4.4.1.

• If the mobile station entered the Release Substate with a base station extended release with mini message indication, then the mobile station shall perform the following:
The mobile station shall send an *Extended Release Response Mini Message* to the base station.

The Layer 3 shall terminate all Call Control instances.

The mobile station shall disable its transmitter, set RETURN_CAUSEs to ‘0000’, and shall perform the procedures as specified in 2.6.4.4.1.

- If the mobile station enters the *Release Substate* with a redirection indication, the mobile station shall send a *Release Order* (ORDQ = ‘00000000’) and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a redirection indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control instances.

- If the mobile station enters the *Release Substate* with an NDSS off indication, the mobile station shall send a *Release Order* (ORDQ = ‘00000000’), and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with an NDSS off indication (see 2.6.1.1). The Layer 3 shall terminate all Call Control instances.

While in the *Release Substate*, the mobile station shall perform the following:

- If the substate timer expires, the Layer 3 shall terminate all Call Control instances, and the mobile station shall disable its transmitter and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a release indication (see 2.6.1.1).

- The mobile station shall perform Forward Traffic Channel supervision as specified in 2.6.4.1.8. If a loss of the Forward Traffic Channel is declared, the Layer 3 shall terminate all Call Control instances, and shall enter the *System Determination Substate* of the *Mobile Station Initialization State* with a release indication (see 2.6.1.1).

- The mobile station shall adjust its transmit power as specified in [2].

- The mobile station shall perform Forward Traffic Channel power control as specified in 2.6.4.1.1.

- The mobile station shall perform handoff processing as specified in 2.6.6.

- If the Fundamental Channel is present, the mobile station shall transmit null traffic, except when transmitting signaling traffic, on the Reverse Fundamental Channel.

- The mobile station shall process Forward Traffic Channel signaling traffic and shall discard other types of Forward Traffic Channel traffic.

- The mobile station shall perform registration timer maintenance as specified in 2.6.5.5.4.2.
• If Layer 3 receives a L2-Condition.Notification primitive from Layer 2 indicating an
acknowledgment failure, the Layer 3 shall terminate all Call Control instances, and
the mobile station shall disable its transmitter and enter the System Determination
Substate of the Mobile Station Initialization State with a release indication (see
2.6.1.1).

• If the Layer 3 receives an “enter traffic channel substate indication” from a Call
Control instance, the Layer 3 shall enter the Traffic Channel substate.

• If Layer 3 receives a ‘message rejected indication’ from a Call Control instance,
mobile station shall send a Mobile Station Reject Order (ORDQ set to the applicable
reason code as determined from Table 2.7.3-1) within $T_{56m}$ seconds as follows:
  - If P_REV_IN_USE is equal to or greater than seven, the mobile station shall
    include the CON_REF_INCL field with this message and shall perform the
    following: if the corresponding Call Control instance is identified by NULL, the
    mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or
    set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection
    reference of the service option connection corresponding to this Call Control
    instance; otherwise, the mobile station shall set the CON_REF_INCL field of the
    message to ‘1’ and the CON_REF field of the message to the connection
    reference of the service option connection corresponding to this Call Control
    instance.

• If the mobile station receives a message which is included in the following list, and
  if every message field value is within its permissible range, the mobile station shall
  process the message as described below and in accordance with the message’s
  action time (see 2.6.4.1.5):
  1. Alert With Information Message: If P_REV_IN_USE is less than seven, the Layer
     3 shall deliver this message to the Call Control instance; otherwise, the Layer 3
     shall deliver this message to the Call Control instance identified by NULL.
  2. Authentication Request Message: The mobile station shall process the message
     and shall respond as specified in 2.3.12.5.2.
  3. Candidate Frequency Search Control Message: The mobile station shall process
     the message as specified in 2.6.6.2.5.1.
  4. Candidate Frequency Search Request Message: The mobile station shall
     process the message as specified in 2.6.6.2.5.1.
  5. Data Burst Message
  6. Extended Alert With Information Message: The mobile station shall perform the
     following: If CON_REF_INCL equals ‘0’, the Layer 3 shall deliver this message
     to the Call Control instance identified by NULL; otherwise, the Layer 3 shall
     deliver this message to the Call Control instance identified by CON_REF.
  7. Extended Handoff Direction Message: The mobile station shall process the
     message as specified in 2.6.6.2.5.1.
8. **Extended Neighbor List Update Message**: The mobile station shall process the message as specified in 2.6.6.2.5.12.6.6.2.6.3.

9. **Extended Supplemental Channel Assignment Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

10. **General Handoff Direction Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

11. **In-Traffic System Parameters Message**: The mobile station shall process the message as specified in 2.6.4.1.4.

12. **Local Control Order**

13. **Mobile Assisted Burst Operation Parameters Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

14. **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_Ps-p equals the least-significant four bits of ORDQr). The mobile station should notify the user of the locked condition. The Layer 3 shall terminate all Call Control instances. The Layer 3 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.

15. **Maintenance Required Order**: The mobile station shall record the reason for the Maintenance Required Order in the mobile station’s semi-permanent memory (MAINTRSNPs-p equals the least-significant four bits of ORDQr). The mobile station shall remain in the unlocked condition. The mobile station should notify the user of the maintenance required condition.

16. **Mobile Station Registered Message**: The mobile station shall process the message as specified in 2.6.5.5.4.3.

17. **Neighbor List Update Message**: The mobile station shall process the message as specified in 2.6.6.2.6.32.6.6.2.5.1.

18. **Outer Loop Report Request Order**: The mobile station shall send the Outer Loop Report Message in assured mode to the base station.

19. **Power Control Message**: The mobile station shall process the message as specified in 2.6.4.1.1.3.

20. **Power Control Parameters Message**: The mobile station shall process the message as specified in 2.6.4.1.1.2.

21. **Power Up Function Message**: The mobile station shall process the message as specified in 2.6.4.1.7.1.

22. **Power Up Function Completion Message**: The mobile station shall process the message as specified in 2.6.4.1.7.3.
23. **Rate Change Message:** The mobile station shall process the message as specified in 2.6.4.1.1.4.

24. **Release Order:** The mobile station shall disable its transmitter. The Layer 3 shall terminate all Call Control instances. The mobile station shall set RSC_MODE_ENABLED to NO. If the mobile station enters the Release Substate with a power-down indication, the mobile station may power down; otherwise, the mobile station shall perform the procedures as specified in 2.6.4.4.1.

25. **Retrieve Parameters Message:** The mobile station shall send, within $T_{56m}$ seconds, a Parameters Response Message.

26. **Retry Order:** The mobile station shall process the order as follows:
   - If RETRY_TYPE$_r$ is equal to ‘000’, the mobile station shall set RETRY_DELAY$_s[RETRY_TYPE]$ to 0, where RETRY_TYPE is equal to ‘001’, ‘010’, ‘011’, ‘100’, or ‘101’.
   - If RETRY_TYPE$_r$ is equal to ‘001’, ‘100’, or ‘101’, then the mobile station shall perform the following:
     - If RETRY_DELAY$_r$ is equal to ‘00000000’, then the mobile station shall set RETRY_DELAY$_s[RETRY_TYPE_r]$ to 0.
     - If RETRY_DELAY$_r$ is not equal to ‘00000000’, the mobile station shall set RETRY_DELAY$_s[RETRY_TYPE_r]$ as follows:
       + If the most significant bit of the RETRY_DELAY$_r$ is 0, set RETRY_DELAY_UNIT$_s$ to 1000ms. If the most significant bit of the RETRY_DELAY$_r$ is ‘1’, set RETRY_DELAY_UNIT$_s$ to 60000ms.
       + The mobile station shall set RETRY_DELAY_VALUE$_s$ to the seven least significant bits of RETRY_DELAY$_r$.
       + The mobile station shall store the next system time 80 ms boundary + RETRY_DELAY_VALUE$_s$ × RETRY_DELAY_UNIT$_s$ ms as RETRY_DELAY$_s[RETRY_TYPE_r]$.

27. **Service Option Control Message:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

28. **Service Option Control Order:** The mobile station shall process the message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

29. **Service Redirection Message:** The mobile station shall disable its transmitter. If the mobile station enters the Release Substate with a power-down indication, the mobile station may power down (if powering down, the Layer 3 shall terminate all Call Control instances); otherwise, the mobile station shall process the message as follows:
   - If RECORD_TYPE$_r$ is ‘00000000’, the mobile station shall perform the following:
- The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
- If DELETE_TMSI_r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’.
- The mobile station shall disable the full-TMSI timer.
- The Layer 3 shall terminate all Call Control instances, and shall enter the System Determination Substate of the Mobile Station Initialization State with an NDSS off indication (see 2.6.1.1).

• If RECORD_TYPE is not equal to ‘00000000’, REDIRECT_TYPE_r is ‘1’, and the mobile station supports the band class and operating mode specified in the message, the mobile station shall perform the following:
  - The mobile station shall store the redirection record received in the message as REDIRECT_REC_s.
  - The mobile station shall set RETURN_IF_FAIL_s = RETURN_IF_FAIL_r.
  - If DELETE_TMSI_r is equal to ‘1’, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’.
  - The mobile station shall disable the full-TMSI timer.
  - The Layer 3 shall terminate all Call Control instances, and shall enter the System Determination Substate of the Mobile Station Initialization State with a redirection indication (see 2.6.1.1).

• Otherwise, the mobile station shall discard the message and send a Mobile Station Reject Order (ORDQ set to the applicable reason code as determined from Table 2.7.3-1) within T56_m seconds.

30. Status Request Message: The mobile station shall send, within T56_m seconds, a Status Response Message. If the message does not specify any qualification information (QUAL_INFO_TYPE_r is equal to ‘00000000’), the mobile station shall include the requested information records in the Status Response Message. If the message specifies a band class (QUAL_INFO_TYPE_r is equal to ‘00000001’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_r) in the Status Response Message. If the message specifies a band class and an operating mode (QUAL_INFO_TYPE_r is equal to ‘00000010’), the mobile station shall only include the requested information records for the specified band class (BAND_CLASS_r) and operating mode (OP_MODE_r) in the Status Response Message. If the message specifies a band class or a band class and an operating mode which are not supported by the mobile station, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00000110’ (message requires a capability that is not supported by the mobile station). If the response to this message exceeds the allowable length, the mobile station shall send a Mobile Station Reject Order with ORDQ set to ‘00001000’ (response message would exceed the allowable length). If the message specifies an information record which is not supported by the mobile station for the
specified band class and operating mode, the mobile station shall send a *Mobile Station Reject Order* with ORDQ set to ‘00001001’ (information record is not supported for the specified band class and operating mode).

31. **Status Request Order**: If CDMABAND\(_s\) is equal to ‘00000’, the mobile station shall send, a *Status Message* within \(T_{56m}\) seconds. The mobile station shall respond with information corresponding to the current band class and operating mode.

32. **Supplemental Channel Assignment Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

33. **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.

34. **Universal Handoff Direction Message**: The mobile station shall process the message as specified in 2.6.6.2.5.1.

35. **User Zone Reject Message**: The mobile station shall process this message as specified in 2.6.9.2.2.

36. **User Zone Update Message**: The mobile station shall process this message as specified in 2.6.9.2.2.

37. **Extended Release Message**:

   - If USE\_EXT\_CH\_IND is equal to ‘0’ and CH\_IND is equal to ‘111’ or the physical channels indicated by the two least significant bits of CH\_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, then the mobile station shall perform the following:

     - If the mobile station supports operation in the reduced slot cycle mode following release of the traffic channel, the mobile station shall perform the following:

       + If RSC\_MODE\_ENABLED is equal to YES, the mobile station shall
perform the following:

ο If RSC_MODE_SUPPORTEDᵣ is equal to ‘1’, the mobile station
shall perform the following:

◊ Set RSC_END_TIME to the earlier of the current value of
RSC_END_TIME, and the system time specified by
MAX_RSC_END_TIME_UNITᵣ and
MAX_RSC_END_TIME_VALUEᵣ.

◊ Set IGNORE_QPCHₛ to IGNORE_QPCHᵣ.

ο If RSC_MODE_SUPPORTEDᵣ is equal to ‘0’, the mobile station
shall set RSC_MODE_ENABLED to NO.

+ If RSC_MODE_ENABLED is equal to NO, the mobile station shall
perform the following:

ο If REQ_RSCI_INCLᵣ is included and set to ‘1’, and the mobile
station sent a Release Order with ORDQ equal to ‘00000011’, the
mobile station shall send an Extended Release Response Message
with the RSC_MODE_IND field set to ‘1’, and perform the
following:

◊ Set RSC_MODE_ENABLED to YES.

◊ Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE
fields as specified in 2.7.2.3.2.25, and store the system time
specified by these fields as RSC_END_TIME. The value of
RSC_END_TIME shall be no later than the system time
specified by MAX_RSC_END_TIME_UNITᵣ and
MAX_RSC_END_TIME_VALUEᵣ received in the Extended
Release Message.

◊ Set the RSCI field as specified in 2.7.2.3.2.25 and store it as
RSCIₛ; if RSCIₛ is equal to ‘0111’, set SLOTTEDₛ to NO.

◊ Set IGNORE_QPCHₛ to IGNORE_QPCHᵣ.

− The mobile station shall disable its transmitter.

− The Layer 3 shall terminate all Call Control instances.

− If the mobile station enters the Release Substate with a power-down
indication, the mobile station may power down; otherwise, the mobile
station shall perform the procedures as specified in 2.6.4.4.1.

Otherwise, the mobile station shall discard the Extended Release Message
and send a Mobile Station Reject Order with ORDQ field set to ‘00000010’
(message not accepted in this state) within T₅₆ₘ seconds.
• If the mobile station receives a message that is not included in the above list or cannot be processed, the mobile station shall discard the message and send a
  Mobile Station Reject Order (ORDQ set to the applicable reason code as determined from Table 2.7.3-1) within T56m seconds. If the mobile station receives a Call Control message (see 2.6.10) which is directed to a Call Control instance that does not exist, the mobile station shall send a Mobile Station Reject Order with ORDQ field set to ‘00010001’ (no call control instance present with the specified identifier) to the base station within T56m seconds.

• If the bits of TMSI_CODE_s-p are not all equal to ‘1’, and if System Time (in 80 ms units) exceeds TMSI_EXP_TIME_s-p \times 2^{12}, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’ within T66m seconds.

• If the full-TMSI timer expires or has expired, the mobile station shall set all the bits of TMSI_CODE_s-p to ‘1’. The mobile station shall update the registration variables as described in 2.6.5.5.2.5.

2.6.4.4.1 Procedures for Exiting the Release Substate

The mobile station shall perform the following procedures in the order listed below.

If the mobile station received an Extended Release Message with the RER_MODE_ENABLED field set to ‘1’, then the mobile station shall set RER_MODE_ENABLED to YES, RER_COUNT to 0, and shall perform the following:

• The mobile station shall store the following:
  – Maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in radio environment reporting mode (RER_MAX_NUM_MSG_s = infinity, if RER_MAX_NUM_MSG_IDX_r is equal to ‘111’; otherwise, RER_MAX_NUM_MSG_s = 2^{RER_MAX_NUM_MSG_IDX_r}).
  – Maximum number of pilots to maintain in RER_PILOT_LIST (MAX_RER_PILOT_LIST_SIZE_s = MAX_RER_PILOT_LIST_SIZE_r).
  – System identification for radio environment reporting mode (RER_SIDs = SIDs).
  – Network identification for radio environment reporting mode (RER_NIDs = NIDs).

• The mobile station shall initialize the radio environment report pilot list (RER_PILOT_LIST) to contain the set of pilots that made up the Active Set on the Traffic Channel.

• The mobile station shall enable the radio environment report timer with an initial value of infinity if RER_TIME_r is equal to ‘111’; otherwise, the mobile station shall enable the radio environment report timer with an initial value of 2^{RER_TIME_r} seconds if RER_TIME_UNIT_r is equal to ‘00’, or 2^{RER_TIME_r} minutes if RER_TIME_UNIT_r is equal to ‘10’.

If the mobile station received an Extended Release Message with the TKZ_MODE_ENABLED field set to ‘1’, then the mobile station shall set TKZ_COUNT to 0, and shall perform the following:

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• The mobile station shall store the following:
  – Tracking zone identifier (TKZ_ID_s = TKZ_ID_r).
  – Tracking zone list length (TKZ_LIST_LEN_s = TKZ_LIST_LEN_r).
  – TKZ timer (TKZ_TIMER_s = TKZ_TIMER_r).
  – Maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in tracking zone mode (TKZ_MAX_NUM_MSG_s = infinity, if TKZ_MAX_NUM_MSG_IDX_r is equal to ‘111’; otherwise, TKZ_MAX_NUM_MSG_s = 2^TKZ_MAX_NUM_MSG_IDX_r).
  – System identification for tracking zone mode (TKZ_SIDs = SIDs).
  – Network identification for tracking zone mode (TKZ_NIDs = NIDs).
  – Tracking zone update period (TKZ_UPDATE_PRD_s = TKZ_UPDATE_PRD_r).

• If RER_MODE_ENABLED is equal to NO, the mobile station shall set TKZ_MODE_ENABLED to YES; otherwise, the mobile station shall set TKZ_MODE_PENDING to YES.

• If TKZ_MODE_ENABLED is equal to YES, the mobile station shall perform the following:
  – Initialize the tracking zone list (TKZ_LIST) to contain TKZ_IDs.
  – Enable the tracking zone update timer with an initial value of infinity if TKZ_UPDATE_PRD_s is equal to ‘1111’; otherwise, the mobile station shall enable the tracking zone update timer with an initial value of 2^TKZ_UPDATE_PRD_s + 6 seconds.

The mobile station shall perform the following procedures to determine whether to enter the Mobile Station Idle State or System Determination Substate of the Mobile Station Initialization State.

If the mobile station received an Extended Release Message with DIRECT_TO_IDLE_INFO_INCL field equal to ‘1’ and RELEASE_TYPE_r equal to ‘011’, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization Substate with a release indication (see 2.6.1.1).

If the mobile station received an Extended Release Message with DIRECT_TO_IDLE_INFO_INCL field equal to ‘1’, RELEASE_TYPE_r equal to a value other than ‘011’, and all the following conditions are met:
  • The system indicated by this message is a preferred system according to system selection process of the mobile station, and
  • If the BAND_CLASS field is included in this message, the mobile station supports the band class capability specified by this field, and
  • If the SR1_TD_MODE field is included in this message, the mobile station supports the transmit diversity capability specified by this field, and
• The mobile station is able to select one of the pilots in the DIRECT TO IDLE record of the Extended Release Message with sufficient signal strength to enter Mobile Station Idle State.

then, the mobile station shall perform the following:

• If RELEASE_TYPE equals ‘000’, the mobile station shall perform the following:
  – If FREQ_INCL equals ‘1’, the mobile station shall set CDMABAND to BAND_CLASS and CDMACH to CDMA_FREQ.
  – The mobile station shall store the following:
    + PAGECH = PAGE_CH
    + PRAT = PRAT
  – The mobile station shall then perform the following:
    + Set its code channel to PAGECHs,
    + Set the Paging Channel data rate as determined by PRATs,
    + The mobile station shall enter the Mobile Station Idle State on the CDMA Channel specified by CDMABANDs and CDMACHs and acquire the specified Paging Channel. If BCMC_INFO_INCL is included and is equal to ‘1’, the mobile station may start monitoring the BCMC flows corresponding to the BCMC_FLOW_IDs (See section 2.6.13.11) included in this message after entering the Mobile Station Idle State as specified in section 2.6.13, using the BCMC flow information included in this message.

• If RELEASE_TYPE equals ‘001’, the mobile station shall perform the following:
  – If FREQ_INCL equals ‘1’, the mobile station shall set CDMABAND to BAND_CLASS and CDMACH to CDMA_FREQ.
  – The mobile station shall store the following:
    + BCCH = SR1_BCCH_CODE_CHAN_NON_TD
    + BCCH_CODE_RATE = SR1_CRAT_NON_TD
    + BRAT = SR1_BRAT_NON_TD
  – The mobile station shall then perform the following:
    + Set its Primary Broadcast Control Channel code channel to BCCHs,
    + Set the Primary Broadcast Control Channel data rate as determined by BRATs,
    + Set the Primary Broadcast Control Channel code rate as determined by BCCH_CODE_RATEs,
    + The mobile station shall enter the Mobile Station Idle State on the CDMA Channel specified by CDMABANDs and CDMACHs and acquire the specified Primary Broadcast Control Channel. If BCMC_INFO_INCL is included and is equal to ‘1’, the mobile station may start monitoring the BCMC flows
corresponding to the BCMC_FLOW_IDs (See section 2.6.13.11) included in this message after entering the Mobile Station Idle State as specified in section 2.6.13, using the BCMC flow information included in this message.

- If RELEASE_TYPE_r equals '010', the mobile station shall perform the following:
  - If FREQ_INCL_r equals '1', the mobile station shall set CDMABAND_s to BAND_CLASS_r and CDMACH_s to CDMA_FREQ_r.
  - The mobile station shall store the following:
    + BCCH_s = SR1_BCCH_CODE_CHAN_TD_r
    + BCCH_CODE_RATE_s = SR1_CRAT_TD_r
    + BRAT_s = SR1_BRAT_TD_r
  - The mobile station shall then perform the following:
    + Set its Primary Broadcast Control Channel code channel to BCCH_s,
    + Set the Primary Broadcast Control Channel data rate as determined by BRAT_s,
    + Set the Primary Broadcast Control Channel code rate as determined by BCCH_CODE_RATE_s,
    + The mobile station shall enter the Mobile Station Idle State on the CDMA Channel specified by CDMABAND_s and CDMACH_s and acquire the specified Primary Broadcast Control Channel that supports Transmit Diversity. If BCMC_INFO_INCL_r is included and is equal to '1', the mobile station may start monitoring the BCMC flows corresponding to the BCMC_FLOW_IDs (See section 2.6.13.11) included in this message after entering the Mobile Station Idle State as specified in section 2.6.13, using the BCMC flow information included in this message.

Otherwise, the mobile station shall perform the following:

- If RELEASE_TO_IDLE_IND_s is equal to '0', the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1).
- If RELEASE_TO_IDLE_IND_s is equal to '1', the mobile station shall perform the following:
  - If the mobile station has stored BCCH information (BCCH Walsh Code, BCCH data rate, and BCCH code rate) for a base station which has sufficient pilot strength, the mobile station shall restore the BCCH information to BCCH_s, BRAT_s and BCCH_CODE_RATE_s, and then perform the following:
    - Set its Primary Broadcast Control Channel code channel to BCCH_s,
    - Set the Primary Broadcast Control Channel data rate as determined by BRAT_s,
    - Set the Primary Broadcast Control Channel code rate as determined by
The mobile station shall enter the Mobile Station Idle State.

Otherwise, the mobile station shall perform the following:

If the mobile station has stored PCH information (PCH number and PCH data rate) for a base station which has sufficient pilot strength, the mobile station shall restore the PCH information to PAGECHs and PRATs, and then perform the following:

- Set its code channel to PAGECHs,
- Set the Paging Channel data rate as determined by PRATs,
- The mobile station shall enter the Mobile Station Idle State,

Otherwise, the mobile station shall perform the following:

- If IDLE_SID is equal to SIDs, IDLE_CDMABAND is equal to CDMABANDs, IDLE_NID is equal to NIDs, and IDLE_P_REV is equal to P_REVs, and the mobile station decides to enter the Mobile Station Idle State, the mobile station shall perform the following:
  - The mobile station shall set CDMACHs to IDLE_CDMA_CHAN.
  - If IDLE_BCCH_CHAN is equal to '1', the mobile station shall perform the following:
    - Set its Primary Broadcast Control Channel code channel to BCCHs,
    - Set the Primary Broadcast Control Channel data rate as determined by BRATs,
    - Set the Primary Broadcast Control Channel code rate as determined by BCCH_CODE_RATEs,
    - The mobile station shall enter the Mobile Station Idle State.
  - If IDLE_BCCH_CHAN is equal to '0', the mobile station shall perform the following:
    - Set its code channel to PAGECHs,
    - Set the Paging Channel data rate as determined by PRATs,
    - The mobile station shall enter the Mobile Station Idle State.
- Otherwise, the mobile station shall enter the System Determination Substate of the Mobile Station Initialization State with a release indication (see 2.6.1.1).
2.6.5 Registration

2.6.5.1 Forms of Registration

Registration is the process by which the mobile station notifies the base station of its location, status, identification, slot cycle, and other characteristics. The mobile station informs the base station of its location and status so that the base station can efficiently page the mobile station when establishing a mobile station terminated call. For operation in the slotted mode, the mobile station supplies the SLOT_CYCLE_INDEX parameter so that the base station can determine which slots the mobile station is monitoring. The mobile station supplies the station class mark and the protocol revision number so that the base station knows the capabilities of the mobile station.

The CDMA system supports 12 different forms of registration:

1. Power-up registration. The mobile station registers when it powers on, switches from using a different frequency block designator, switches from using a different band class, switches from using an alternative operating mode, upon the insertion of an R-UIM into a powered-on ME, or switches from using the analog system.

2. Power-down registration. The mobile station registers when it powers off if previously registered in the current serving system.

3. Timer-based registration. The mobile station registers when a timer expires.

4. Distance-based registration. The mobile station registers when the distance between the current base station and the base station in which it last registered exceeds a threshold.

5. Zone-based registration. The mobile station registers when it enters a new zone.

6. Parameter-change registration. The mobile station registers when certain of its stored parameters change or when it enters a new system.

7. Ordered registration. The mobile station registers when the base station requests it.

8. Implicit registration. When a mobile station successfully sends an Origination Message, Reconnect Message, or Page Response Message, the base station can infer the mobile station’s location. This is considered an implicit registration.

9. Traffic Channel registration. Whenever the base station has registration information for a mobile station that has been assigned to a Traffic Channel, the base station can notify the mobile station that it is registered.

10. User Zone Registration. The mobile station registers when it selects an active User Zone (see 2.6.9.1.2).

11. Encryption/Message Integrity re-sync required registration. The mobile station registers when extended encryption is turned on and the mobile station determines that it can not decrypt any messages from the base station (see 2.3.12.4.1.3) or the mobile station registers when message integrity is supported and the mobile station determines that it can not validate the MACI of any messages from the base station.

12. BCMC registration. BCMC registration is performed by a mobile station currently
monitoring or desiring to monitor a BCMC flow.

The first five forms of registration, User Zone Registration, and Encryption/Message Integrity re-sync required registration, as a group, are called autonomous registration and are enabled by roaming status (see 2.6.5.3). Parameter-change registration is independent of roaming status. Ordered registration is initiated by the base station through an *Order Message*. Implicit registration does not involve the exchange of any registration messages between the base station and the mobile station. The base station can obtain registration information by sending the *Status Request Message* to the mobile station on either the f-csch or the f-dsch. The base station can obtain limited registration information by sending the *Status Request Order* to the mobile station on the f-dsch. The mobile station can be notified that it is registered through the *Mobile Station Registered Message*.

Any of the various forms of autonomous registration and parameter-change registration can be enabled or disabled. The forms of registration that are enabled and the corresponding registration parameters are communicated in the *System Parameters Message* on the Paging Channel, or the ANSI-41 *System Parameters Message* on the Primary Broadcast Control Channel.

In addition, the mobile station may enable or disable autonomous registration for each type of roaming described in 2.6.5.3.

### 2.6.5.1.1 Power-Up Registration

Power-up registration is performed when the mobile station is turned on. To prevent multiple registrations when power is quickly turned on and off, or when the R-UIM is quickly inserted and removed, the mobile station delays $T_{57m}$ seconds before registering, after entering the *Mobile Station Idle State*.

The mobile station shall maintain a power-up/initialization timer. While the power-up/initialization timer is active, the mobile station shall not make registration access attempts.

Power-up registration is also performed when the mobile station changes to a different operating mode, band class, serving system, or frequency block (see 2.6.5.5.1.1), or as indicated by [40]. A power-up registration is also performed when the mobile station changes band classes, serving system, or frequency block designator if the conditions stated in 2.6.5.1.1 are met.

### 2.6.5.1.2 Power-Down Registration

Power-down registration is performed when the user directs the mobile station to power off. If power-down registration is performed, the mobile station does not power off until after completing the registration attempt.

The mobile station does not perform power-down registration if it has not previously registered in the system that corresponds to the current SID$_{s}$ and NID$_{s}$ (see 2.6.5.2.4).
2.6.5.1.3 Timer-Based Registration

Timer-based registration causes the mobile station to register at regular intervals. Its use also allows the system to automatically deregister mobile stations that did not perform a successful power-down registration. Timer-based registration uses a Paging Channel or a Forward Common Control Channel slot counter (equivalent to a timer with time increments of 80 ms). Timer-based registration is performed when the counter reaches a maximum value (REG_COUNT_MAXs) that is controlled by the base station via the REG_PRD field of the System Parameters Message or ANSI-41 System Parameters Message. The base station disables timer-based registration by setting REG_PRD to zero.

The mobile station shall maintain a timer-based registration counter (REG_COUNTs). The mobile station shall compute and store the timer expiration count (REG_COUNT_MAXs) as

\[ \text{REG_COUNT_MAX}_s = \lfloor 2^{\text{REG_PRD}/4} \rfloor. \]

The mobile station shall maintain an indicator of timer-based registration timer enable status (COUNTER_ENABLEDs).

The counter is reset when the mobile station powers on and when the mobile station switches from different band classes, different serving systems, different frequency blocks, and alternate operating modes. The counter is also reset after each successful registration.

Whenever the mobile station changes COUNTER_ENABLEDs from NO to YES, it shall set REG_COUNTs as follows:

If the mobile station supports the procedure described in section 2.6.5.1.3.1 and the conditions for suppression of randomization of timer-based registration are met, the mobile station shall set REG_COUNTs to 0; otherwise, the mobile station shall set REG_COUNTs based upon the value of TBR_RAND_WINDOWs as shown in Table 2.6.5.1.3-1. When setting REG_COUNTs to a pseudorandom value, the mobile station shall use the pseudorandom number generator specified in 2.6.7.2.

Table 2.6.5.1.3-1. Percentage of Randomization for Timer-based registration

<table>
<thead>
<tr>
<th>Value of TBR_RAND_WINDOW (binary)</th>
<th>Meaning</th>
<th>REG_COUNTs</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>0% randomization</td>
<td>0</td>
</tr>
<tr>
<td>01</td>
<td>25% randomization</td>
<td>Pseudorandom value between 0 and ( \lfloor \text{REG_COUNT_MAX}_s/4 \rfloor - 1 )</td>
</tr>
<tr>
<td>10</td>
<td>50% randomization</td>
<td>Pseudorandom value between 0 and ( \lfloor \text{REG_COUNT_MAX}_s/2 \rfloor - 1 )</td>
</tr>
<tr>
<td>11</td>
<td>100% randomization</td>
<td>Pseudorandom value between 0 and (( \text{REG_COUNT_MAX}_s - 1 ))</td>
</tr>
</tbody>
</table>

If the mobile station is operating in the non-slotted mode, it shall increment the timer-based registration counter once per 80 ms whenever COUNTER_ENABLEDs equals YES. If the mobile station is operating in slotted mode, it may increment the timer-based registration counter once per slot.
registration counter when it begins to monitor the Paging Channel (see 2.6.2.1.1.3) or the Forward Common Control Channel. A mobile station operating in the slotted mode shall increment the counter by the same amount that the counter would have been incremented if the mobile station had been operating in the non-slotted mode. \(^{26}\)

2.6.5.1.3.1 Timer-Based Registration based on Frequency of Implicit Registrations

A mobile station may support a procedure to prevent unnecessary timer-based registrations when implicit registrations are sent frequently.

If the mobile station supports this procedure, the mobile station shall set REG_COUNTs to 0 when it changes COUNTER_ENABLEDs from NO to YES if all of the following conditions for suppression of randomization of timer-based registrations are met:

- the mobile station has been powered on for the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds,
- in every period of \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.08\) consecutive seconds in the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds the mobile station sent at least one Origination Message, Page Response Message, or Reconnect Message, or the mobile station was in the Mobile Station Control on the Traffic Channel State for at least part of the period,
- the mobile station was not in the Mobile Station Control on the Traffic Channel State for the entire duration of the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds, and,
- TBR_RAND_SUPPR_ENABLEs is equal to ‘1’.

- If either of the following two conditions are true:
  - the mobile station was not in the Mobile Station Control on the Traffic Channel State at any time during the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds, or
  - the mobile station was in the Mobile Station Control on the Traffic Channel State during the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds, but it was not continuously in the Mobile Station Control on the Traffic Channel State for the entire duration of the past \(\left\lfloor 2\frac{\text{REG_PRD}}{4} \right\rfloor \times 0.32\) seconds.

2.6.5.1.4 Distance-Based Registration

Distance-based registration causes a mobile station to register when the distance between the current base station and the base station in which it last registered exceeds a threshold. The mobile station determines that it has moved a certain distance by computing a distance measure based on the difference in latitude and longitude between the current base station and the base station where the mobile station last registered. If this distance measure exceeds the threshold value, the mobile station registers.

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\(^{26}\) 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.
The mobile station stores the base station latitude (BASE_LAT_REG_s-p), the base station longitude (BASE_LONG_REG_s-p) and the registration distance (REG_DIST_REG_s-p), of the base station to which the first access probe (for a Registration Message, Origination Message, Reconnect 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:

\[
DISTANCE = \left\lfloor \frac{\sqrt{\Delta(lat)^2 + \Delta(long)^2}}{16} \right\rfloor
\]

where

\[
\Delta(lat) = BASE_LAT_s - BASE_LAT_REG_s-p
\]

and

\[
\Delta(long) = (BASE_LONG_s - BASE_LONG_REG_s-p) \times \cos (\pi/180 \times BASE_LAT_REG_s-p/14400).
\]

The mobile station shall compute DISTANCE with an error of no more than ±5% of its true value when |BASE_LAT_REG_s-p/14400| is less than 60 and with an error of no more than ±7% of its true value when |BASE_LAT_REG_s-p/14400| is between 60 and 70.

2.6.5.1.5 Zone-Based Registration

Registration zones are groups of base stations within a given system and network. A base station’s zone assignment is identified by the REG_ZONE field of the System Parameters Message or ANSI-41 System Parameters Message or Mobile Station Registered Message.

Zone-based registration causes a mobile station to register whenever it determines it is in a new zone (see 2.6.5.5.2.1), not on its internally stored list of visited registration zones. A zone is added to the list whenever a registration (including implicit registration) occurs, and is deleted upon expiration of a timer. After a system access, timers are enabled for every zone except one that was successfully registered by the access.

A mobile station can be registered in more than one zone. Zones are uniquely identified by a zone number (REG_ZONE) plus the SID and NID of the zone.

The mobile station shall store a list of the zones in which the mobile station has registered (ZONE_LIST_s). Each entry in ZONE_LIST_s shall include the zone number (REG_ZONE) and the (SID, NID) pair for the zone. The mobile station shall be capable of storing at least N entries in ZONE_LIST_s. The mobile station provides storage for one entry of ZONE_LIST_s in semi-permanent memory, ZONE_LISTs-p (see 2.3.4).

The mobile station shall maintain a zone list entry timer for each entry in ZONE_LIST_s. When an entry in ZONE_LIST_s is removed from the list, the corresponding zone list entry

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27 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.
timer shall be disabled. The timer duration shall be as determined from the stored value of
ZONE_TIMERs using Table 3.7.2.3.2.1-1. The mobile station shall provide a means to
examine each timer's value while the timer is active, so that the age of list entries can be
compared.

If the mobile station supports one of more band classes that contain multiple frequency
block designators Band Class 1, Band Class 2, Band Class 4, Band Class 5, Band Class 7,
Band Class 10, or Band Class 11, the mobile station shall maintain an identifier of the
frequency block designator for each entry in ZONE_LISTs (see [245]). When the mobile
station adds a zone to ZONE_LISTs, the mobile station shall include the identifier for the
frequency block designator. 28

If the mobile station supports multiple band classes, the mobile station shall maintain an
identifier of the band class for each entry in ZONE_LISTs (see [245]). When the mobile
station adds a zone to ZONE_LISTs, the mobile station shall include the identifier for the
band class.

The base station controls the maximum number of zones in which a mobile station may be
considered registered, by means of the TOTAL_ZONES field of the System Parameters
Message or ANSI-41 System Parameters Message or Mobile Station Registered Message.
When an entry is added to the zone list, or if TOTAL_ZONES is decreased, the mobile
station removes entries from the zone list if there are more entries than allowed by the
setting of TOTAL_ZONES.

Whenever ZONE_LISTs contains more than TOTAL_ZONES entries, the mobile station
shall delete the excess entries according to the following rules:

- If TOTAL_ZONES is equal to zero, the mobile station shall delete all entries.
- If TOTAL_ZONES is not equal to zero, the mobile station shall delete those entries
  having active zone list entry timers, starting with the oldest entry, as determined by
  the timer values, and continuing in order of decreasing age until no more than
  TOTAL_ZONES entries remain.

The mobile station shall store a list of the systems/networks in which the mobile station
has registered (SID_NID_LISTs). Each entry in SID_NID_LISTs shall include the (SID, NID)
pair for the system/network. The mobile station shall be capable of storing N10m entries in
SID_NID_LISTs. A base station shall be considered to be in the SID_NID_LISTs only if the
base station’s SID and NID are found in an entry in SID_NID_LISTs. The mobile station
shall provide storage for one entry of SID_NID_LISTs in semi-permanent memory
(SID_NID_LISTs-p).

If the mobile station supports one or more band classes that contain multiple frequency
block designators Band Class 1, Band Class 2, Band Class 4, Band Class 5, Band Class 7,
Band Class 10, or Band Class 11, the mobile station shall maintain an identifier of the

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28 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.
frequency block designator for each entry in SID_NID_LISTs (see [245]). When the mobile station adds an entry to SID_NID_LISTs, the mobile station shall include the identifier for the frequency block designator.

If the mobile station supports multiple band classes, the mobile station shall maintain an identifier of the band class for each entry in SID_NID_LISTs (see [245]). When the mobile station adds an entry to SID_NID_LISTs, the mobile station shall include the identifier for the band class.

The mobile station shall maintain a SID/NID list entry timer for each entry in SID_NID_LISTs. When an entry in SID_NID_LISTs is removed from the list, the corresponding SID/NID list entry timer shall be disabled. The timer duration shall be as determined from the stored value of ZONE_TIMERs using Table 3.7.2.3.2.1-1. The mobile station shall provide a means to examine each timer’s value while the timer is active, so that the age of list entries can be compared.

Whenever SID_NID_LISTs contains more than N_{10m} entries, the mobile station shall delete the excess entries according to the following rule:

- The mobile station shall delete those entries having active SID/NID list entry timers, starting with the oldest entry, as determined by the timer values, and continuing in order of decreasing age.

Whenever MULT_SIDS is equal to ‘0’ and SID_NID_LIST contains entries with different SIDs, the mobile station shall delete the excess entries according to the following rules:

- If the SID/NID entry timer for any entry is disabled, the mobile station shall delete all entries not having the same SID as the entry whose timer is disabled;
- Otherwise, the mobile station shall delete all entries not having the same SID as the newest entry in SID_NID_LIST, as determined by the timer values.

Whenever MULT_NIDS is equal to ‘0’, and SID_NID_LIST contains more than one entry for any SID, the mobile station shall delete the excess entries for each SID according to the following rules:

- If the SID/NID entry timer for any entry is disabled, the mobile station shall delete all entries for that SID except the entry whose timer is disabled;
- For all other SIDs, the mobile station shall delete all entries for each SID except the newest entry, as determined by the timer values.

2.6.5.1.6 Parameter-Change Registration

Parameter-change registration is performed when a mobile station modifies any of the following stored parameters:

- The preferred slot cycle index (SLOT_CYCLE_INDEX_{p})
- The station class mark (SCM_{p})
- The call termination enabled indicators (MOB_TERM_HOME_{p}, MOB_TERM_FOR_SiD_{p}, and MOB_TERM_FOR_NID_{p})
Parameter-change registration is also performed when any of the following capabilities supported by the mobile station changes:

- The band classes
- The band subclasses
- The power classes
- The radio configurations
- The operating modes
- Transmit diversity (OTD or STS)
- Quick Paging Channel
- Spreading Rate 3 common channels support
- Encryption capability

Parameter-change registration is performed whenever there is no entry in the mobile station’s SID_NID_LISTs that matches the base station’s SID and NID.

Parameter-change registration is independent of the roaming status of the mobile station.29

Whenever a parameter changes, the mobile station shall delete all entries from SID_NID_LISTs.

2.6.5.1.7 Ordered Registration

The base station can command the mobile station to register by sending a Registration Request Order. Ordered registration is performed in the Mobile Station Order and Message Processing Operation (2.6.2.4). Requirements are specified in 2.6.5.2.3.

2.6.5.1.8 Implicit Registration

Whenever an Origination Message, Reconnect 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 2.6.5.3.

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 2.6.5.4.3.

2.6.5.1.10 User Zone Registration

User Zone registration is performed when the mobile station selects an active User Zone

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29 The indicator REG_ENABLED does not govern parameter-change registration.
Encryption/Message Integrity re-sync required registration is performed when the mobile station determines that it cannot 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.

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.

A base station is a member of a cellular or PCS system and a network. A network is a subset of a system.

Systems are labeled with an identification called the system identification or SID; networks within a system are given a network identification or NID. A network is uniquely identified by the pair (SID, NID). The SID number 0 is a reserved value. The NID number 0 is a reserved value indicating all base stations that are not included in a specific network. The NID number 65535 (2^{16}-1) is a reserved value the mobile station may use for roaming status determination (see 2.6.5.3) to indicate that the mobile station considers the entire SID (regardless of NID) as home (non-roaming).

Figure 2.6.5.2-1 shows an example of systems and networks. SID i contains three networks labeled t, u, and v. A base station in system i that is not in one of these three networks is in NID 0.
2.6.5.3 Roaming

The mobile station has a list of one or more home (non-roaming) (SID, NID) pairs. A mobile station is roaming if the stored (SID<sub>s</sub>, NID<sub>s</sub>) pair (received in the System Parameters Message on the Paging Channel, or the ANSI-41 System Parameters Message on the Primary Broadcast Control Channel) does not match one of the mobile station’s non-roaming (SID, NID) pairs. Two types of roaming are defined: A mobile station is a foreign NID roamer if the mobile station is roaming and there is some (SID, NID) pair in the mobile station’s (SID, NID) list for which SID is equal to SID<sub>s</sub>. A mobile station is a foreign SID roamer if there is no (SID, NID) pair in the mobile station’s (SID, NID) list for which SID is equal to SID<sub>s</sub>.  

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30 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 not equal to (SID<sub>s</sub> = 2, NID<sub>s</sub> = 3).
The mobile station may use the special NID value 65535 to indicate that the mobile station considers all NIDs within a SID to be non-roaming (i.e., that the mobile station is not roaming when operating with any base station in that system).

The mobile station shall store three 1-bit parameters in its permanent memory (see 2.3.8). These parameters are MOB_TERM_HOME, MOB_TERM_FOR_SID, and MOB_TERM_FOR_NID. The mobile station shall set MOB_TERM_HOME to ‘1’ if the mobile station is configured to receive mobile station terminated calls when using a home (SID, NID) pair; otherwise, the mobile station shall set MOB_TERM_HOME to ‘0’. The mobile station shall set MOB_TERM_FOR_SID to ‘1’ if the mobile station is configured to receive mobile station terminated calls when it is a foreign SID roamer; otherwise MOB_TERM_FOR_SID shall be set to ‘0’. The mobile station shall set MOB_TERM_FOR_NID to ‘1’ if the mobile station is configured to receive mobile station terminated calls when it is a foreign NID roamer; otherwise the mobile station shall set MOB_TERM_FOR_NID to ‘0’.

The mobile station determines the registration status using these parameters and the HOME_REG, FOR_NID_REG, and FOR_SID_REG fields of the System Parameters Message or ANSI-41 System Parameters Message.

The mobile station shall store a mobile station call termination enabled indicator, MOB_TERMs. The mobile station shall set MOB_TERMs to YES if any of the following conditions is met:

- The mobile station is not roaming, and MOB_TERM_HOME is equal to ‘1’; or
- The mobile station is a foreign NID roamer and MOB_TERM_FOR_NID is equal to ‘1’; or
- The mobile station is a foreign SID roamer and MOB_TERM_FOR_SID is equal to ‘1’; otherwise the mobile station shall set MOB_TERMs to NO.

The mobile station shall store a registration status indicator, REG_ENABLEDs. The mobile station shall set the indicator REG_ENABLEDs to YES if any of the following conditions is met for the mobile station:

- The mobile station is not roaming, and both HOME_REG and MOB_TERM_HOME are equal to ‘1’; or
- The mobile station is a foreign NID roamer and both FOR_NID_REG and MOB_TERM_FOR_NID are equal to ‘1’; or
- The mobile station is a foreign SID roamer and both FOR_SID_REG and MOB_TERM_FOR_SID are equal to ‘1’; otherwise the mobile station shall set REG_ENABLEDs to NO.

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.
The mobile station performs autonomous registrations if REG_ENABLEDs is YES.

2.6.5.4 Registration Timers and Indicators

The mobile station shall provide the following registration timers:

- Power-up/initialization timer (see 2.6.5.1.1).
- Timer-based registration timer (see 2.6.5.1.3).
- Zone list entry timers (see 2.6.5.1.5).
- SID/NID list entry timers (see 2.6.5.1.5).
- BCMC frequency registration timer (see 2.6.13).
- BCMC registration required timer (see 2.6.13).

The mobile station shall provide a means of enabling and disabling each timer. When a timer is disabled, it shall not be considered expired. A timer that has been enabled is referred to as active.

2.6.5.5 Registration Procedures

2.6.5.5.1 Actions in the Mobile Station Initialization State

2.6.5.5.1.1 Power-Up or Change to a Different Operating Mode, Band Class, Serving System, Frequency Block Designator, or R-UIM Insertion.

Upon power-up, the mobile station shall perform the following actions:

- Delete all entries of ZONE_LISTs.
- If ZONE_LISTs-p contains an entry, copy the entry to ZONE_LISTs and disable the corresponding entry timer.
- Delete all entries of SID_NID_LISTs.
- If SID_NID_LISTs-p contains an entry, copy the entry to SID_NID_LISTs and disable the corresponding entry timer.
- Set the registered flag (REGISTEREDs) to NO.
- Set timer-based registration enable status (COUNTER_ENABLEDs) to NO.
- Set autonomous registration enable status (REG_ENABLEDs) to NO.
- Set RETURN_CAUSEs to ‘0000’.
- Set KEY_ID, LAST_2G_KEY_IDs, and LAST_3G_KEY_IDs to ‘00’.
- Set ENC_KEY[i] and INT_KEY[i] to NULL, where i ranges from ‘00’ to ‘11’.
- Set D_SIG_ENCRYPT_MODEs and C_SIG_ENCRYPT_MODEs to ‘000’.
- Set RESTORE_KEYs to ‘0’.

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If the UIM contains IK and CK, the mobile station shall set KEY_ID to ‘10’, RESTORE KEYS to ‘1’, INT_KEY[KEY_ID] to IK, ENC_KEY[KEY_ID] to CK, TX_EXT_SSEQ[.] [KEY_ID] and TX_EXT_SSEQ[.] [KEY_ID] to any 24-bit value multiplied by 256.

If any of the following conditions is true: Upon switching

- BYPASS_REG_IND is equal to ‘00’ and the mobile station has switched from using CDMA from using CDMA in a different band class,
  - in a different band class, or
  - in a different serving system in a band class that supports multiple serving systems (e.g., Band Class 0), or
  - in a different frequency block designator in a band class that supports frequency block designator allocations (e.g. Band Class 1)

- BYPASS_REG_IND is equal to ‘01’ and, for a reason other than processing the Extended CDMA Channel List Message, the mobile station has switched from using CDMA from using CDMA in a different serving system in a band class that supports multiple serving systems (e.g., Band Class 0),
  - in a different band class, or
  - in a different serving system in a band class that supports multiple serving systems (e.g., Band Class 0), or
  - in a different frequency block designator in a band class that supports frequency block designator allocations (e.g. Band Class 1)

- BYPASS_REG_IND is equal to ‘10’, SID is different than REG_SID and the mobile station has switched from using CDMA from using CDMA in a different frequency block in a band class that supports frequency block allocations (e.g. Band Class 1), or
  - in a different band class, or
  - in a different serving system in a band class that supports multiple serving systems (e.g., Band Class 0), or
  - in a different frequency block designator in a band class that supports frequency block designator allocations (e.g. Band Class 1)

- the mobile station has switched from using the 800 MHz analog system,

the mobile station shall perform the following actions:

- Set timer-based registration enable status (COUNTER_ENABLED) to NO.
- Set autonomous registration enable status (REG_ENABLED) to NO.
- Set RETURN_CAUSE to ‘0000’.
- Set the registered flag (REGISTERED) to NO.
- Set KEY_ID, LAST_2G_KEY_ID, and LAST_3G_KEY_ID to ‘00’. 
• Set ENC_KEY[i] and INT_KEY[i] to NULL, where i ranges from ‘00’ to ‘11’.
• Set RESTORE_KEYS to ‘0’.
• If the UIM contains IK and CK, the mobile station shall set KEY_ID to ‘10’, RESTORE_KEYS to ‘1’, INT_KEY[KEY_ID] to IK, ENC_KEY[KEY_ID] to CK, TX_EXT_SSEQ[.]_[KEY_ID] and TX_EXT_SSEQ[.]_[KEY_ID] to any 24-bit value multiplied by 256.

2.6.5.5.1.2 Timer Maintenance

While in the Mobile Station Initialization State, the mobile station shall update all active registration timers (see 2.6.5.4). If any timer expires while in this state, the mobile station shall preserve the expiration status so that further action can be taken in the Mobile Station Idle State.

2.6.5.5.1.3 Entering the Mobile Station Idle State

Before entering the Mobile Station Idle State from the Mobile Station Initialization State, the mobile station shall perform the following action:
• If REGISTERED is equal to NO, enable the power-up/initialization timer with an expiration time of T57m seconds (see 2.6.5.1.1) only when the mobile station is entering this state with a power-up indication.

2.6.5.5.2 Actions in the Mobile Station Idle State

Requirements in this section and its subsections apply only when the mobile station is in the Mobile Station Idle State.

2.6.5.5.2.1 Idle Registration Procedures

These procedures are performed whenever the mobile station is in the Mobile Station Idle State (see 2.6.2.1.3).

While in the Mobile Station Idle State, the mobile station shall update all active registration timers (see 2.6.5.4).

If the power-up/initialization timer has expired or is disabled, the mobile station shall perform the following actions in the order given. If any action necessitates a registration, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with a registration indication.

1. The timer-based registration timer shall be enabled (COUNTER_ENABLED = YES) and the timer count (REG_COUNT) shall be set to a pseudorandom number as specified in 2.6.5.1.3, if the following conditions are met:
   a. COUNTER_ENABLED is equal to NO; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. REG_ENABLED is equal to YES; and
   d. REG_PRD is not equal to zero.
2. If any zone list entry timer (see 2.6.5.1.5) has expired, the mobile station shall delete the corresponding entry from ZONE_LISTs.

3. If any SID/NID list entry timer (see 2.6.5.1.5) has expired, the mobile station shall delete the corresponding entry from SID_NID_LISTs.

4. The mobile station shall perform power-up registration, as specified in 2.6.5.1.1, if all the following conditions are met:
   a. POWER_UP_REGs is equal to '1'; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. REGISTEREDs is equal to NO, and
   d. REG_ENABLEDs is equal to YES.

5. The mobile station shall perform parameter-change registration (see 2.6.5.1.6) if all the following conditions are met:
   a. PARAMETER_REGs is equal to '1'; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. There is no entry of SID_NID_LISTs whose SID and NID fields match the stored SIDs and NIDs.

6. The mobile station shall perform timer-based registration (see 2.6.5.1.3) if all the following conditions are met:
   a. COUNTER_ENABLEDs is equal to YES; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. REG_ENABLEDs is equal to YES; and
   d. REG_COUNTs is greater than or equal to REG_COUNT_MAXs.

7. The mobile station shall perform distance-based registration (see 2.6.5.1.4) if all the following conditions are met:
   a. REG_DISTs is not equal to zero; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. REG_ENABLEDs is equal to YES; and
   d. The current base station’s distance from the base station in which the mobile station last registered (see 2.6.5.1.4) is greater than or equal to REG_DIST_REGs-p.

8. The mobile station shall perform zone-based registration (see 2.6.5.1.5) if all the following conditions are met:
   a. TOTAL_ZONESs is not equal to zero; and
   b. The stored configuration parameters are current (see 2.6.2.2); and
   c. REG_ENABLEDs is equal to YES; and
d. There is no entry of ZONE_LISTs whose SID, NID and REG_ZONE fields match the stored SIDs, NIDs and REG_ZONEs.

9. The mobile station shall perform User Zone registration (see 2.6.2.5.1.10) if it selects an active User Zone (see 2.6.9.1.2).

10. The mobile station shall perform encryption/message integrity re-sync required registration (see 2.6.5.1.11) if all the following conditions are met:
   a. REG_SECURITY_RESYNC is equal to YES or REGISTER_IN_IDLEs is equal to ‘1’;
   and
   b. None of the above registrations have been performed since the last entering of the Mobile Station Idle State.

2.6.5.5.2.2 Processing the Registration Fields of the System Parameters Message and ANSI-41 System Parameters Message

When the mobile station processes the System Parameters Message or ANSI-41 System Parameters Message, it shall perform the following actions:

1. If REG_PRD_s is equal to zero, the mobile station shall set COUNTER_ENABLED_s to NO.

2. If REG_PRD_s is not equal to zero, the mobile station shall set REG_COUNT_MAX_s as specified in 2.6.5.1.3.

3. The mobile station shall update its roaming status and set REG_ENABLED_s as specified in 2.6.5.3.

4. If ZONE_LIST_s contains more than TOTAL_ZONES_s entries, the mobile station shall delete the excess entries according to the rules specified in 2.6.5.1.5.

5. If MULT_SIDS_s is equal to ‘0’ and SID_NID_LIST contains entries with different SIDs, delete the excess entries according to the rules specified in 2.6.5.1.5.

6. If MULT_NIDS_s is equal to ‘0’ and SID_NID_LIST contains more than one entry for any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.

2.6.5.5.2.3 Ordered Registration

Ordered registration is performed after receiving a Registration Request Order while in the Mobile Station Order and Message Processing Operation (see 2.6.2.4).

The mobile station shall enter the Update Overhead Information Substate of the System Access State with a registration indication within T33m seconds after the Registration Request Order is received.

2.6.5.5.2.4 Power Off

These procedures are performed when the mobile station is directed by the user to power off.

The mobile station shall perform the following actions:
• If an entry of ZONE_LIST_s does not have an active timer, copy that entry to ZONE_LIST_s-p; otherwise, delete any entry in ZONE_LIST_s-p.

• If an entry of SID_NID_LIST_s does not have an active timer, copy that entry to SID_NID_LIST_s-p; otherwise, delete any entry in SID_NID_LIST_s-p.

The mobile station shall perform power-down registration (see 2.6.5.1.2) by entering the System Access State with a registration indication within $T_{33m}$ seconds after the user directs the mobile station to power off, if all the following conditions are true:

• REG_ENABLED_s equals YES; and
• POWER_DOWN_REG_s equals ‘1’; and
• There is an entry of SID_NID_LIST_s for which the SID and NID fields are equal to SID_s and NID_s; and
• The power-up_INITIALIZATION timer (see 2.6.5.1.1) is disabled or has expired.

2.6.5.2.5 Full-TMSI Timer Expiration

When the mobile station sets all the bits of TMSI_CODE_s-p to ‘1’ upon expiration of the full-TMSI timer (see 2.6.2), the mobile station shall delete all entries from SID_NID_LIST_s and ZONE_LIST_s.

2.6.5.3 Actions in the System Access State

Requirements in this section and its subsections apply only when the mobile station is in the System Access State.

2.6.5.3.1 Successful Access, Registration, or Implicit Registration

These procedures shall be performed after the mobile station receives confirmation of delivery of a Registration Message, Origination Message, Reconnect Message, or Page Response Message sent on the r-csch (see 2.6.3.1.2).

• Disable the power-up_INITIALIZATION timer (see 2.6.5.1.1).
• If the mobile station supports the 800 MHz analog mode, set the First-Idle ID status to enabled (see[6]).
• Set DIGITAL_REG_s-p to ‘00000001’.
• Set REG_COUNT_s to zero.
• Set REGISTERED_s to YES.
• If an explicit or implicit registration was sent, set SLOT_CYCLE_INDEX_REG to the slot cycle index the mobile station included in the message.

If BYPASS_REG_IND_s is equal to ‘00’, the mobile station shall perform the following:

− Delete all entries from ZONE_LIST_s belonging to a different band class (see [245]) than CDMABAND_s.
− If CDMABAND_s contains multiple serving systems, delete all entries from ZONE_LIST_s that have a SID from a different serving system than SERVSYS_s.
– If CDMABANDs contains multiple frequency block designators, delete all entries from ZONE_LISTs belonging to a different frequency block designator (see [45]) than the frequency block designator associated with REG_SIDzs.

– If CDMABANDs = ‘00000’ or CDMABANDs = ‘00011’, delete all entries from ZONE_LISTs that have a SID from a different serving system than SERVSYSzs.

– If CDMABANDs = ‘00001’, CDMABANDs = ‘00010’, CDMABANDs = ‘00100’, CDMABANDs = ‘00101’, CDMABANDs = ‘00111’, or CDMABANDs = ‘01010’, delete all entries from ZONE_LISTs belonging to a different frequency block (see [2]) than the frequency block associated with REG_SIDzs.

• Add REG_REG_ZONEzs, REG_SIDzs, and REG_NIDzs to ZONE_LISTs if not already in the list. If required, include the band class identifier and block identifier for the current band and frequency block designator as specified in 2.6.5.1.5.

• Disable the zone list entry timer for the entry of ZONE_LISTs containing REG_REG_ZONEzs, REG_SIDzs, and REG_NIDzs. For any other entry of ZONE_LISTs whose entry timer is not active, enable the entry timer with the duration specified by REG_ZONE_TIMERzs (see 2.6.5.1.5).

• If ZONE_LISTs contains more than TOTAL_ZONESs entries, delete the excess entries according to the rules specified in 2.6.5.1.5.

• If BYPASS_REG_INDzs is equal to ‘00’, the mobile station shall perform the following:
  – Delete all entries from SID_NID_LISTs belonging to a different band class (see [245]) than CDMABANDzs.
  – If CDMABANDzs contains multiple serving systems, delete all entries from SID_NID_LISTs that have a SID from a different serving system than SERVSYSzs.
  – If CDMABANDzs contains multiple frequency block designators, delete all entries from SID_NID_LISTs belonging to a different frequency block designator (see [45]) than the frequency block designator associated with REG_SIDzs.

– If CDMABANDzs = ‘00000’ or CDMABANDzs = ‘00011’, delete all entries from SID_NID_LISTs that have a SID from a different serving system than SERVSYSzs.

– If CDMABANDzs = ‘00001’, CDMABANDzs = ‘00010’, CDMABANDzs = ‘00100’, CDMABANDzs = ‘00101’, CDMABANDzs = ‘00111’, or CDMABANDzs = ‘01010’, delete all entries from SID_NID_LISTs belonging to a different frequency block (see [2]) than the frequency block associated with REG_SIDzs.

• Add REG_SIDzs and REG_NIDzs to SID_NID_LISTs if not already in the list. If required, include the band class identifier and block identifier for the current band and frequency block designator as specified in 2.6.5.1.5.

• Disable the SID/NID list entry timer for the entry of SID_NID_LISTs containing REG_SIDzs, and REG_NIDzs. For any other entry of SID_NID_LISTs whose entry timer is not active, enable the entry timer with the duration specified in 2.6.5.1.5.

• If SID_NID_LISTs contains more than N10m entries, delete the excess entries according to the rules specified in 2.6.5.1.5.
• If MULT_SIDS_s is equal to ‘0’ and SID_NID_LIST contains entries with different
REG_SIDs, delete the excess entries according to the rules specified in 2.6.5.1.5.
• If MULT_NIDS_s is equal to ‘0’ and SID_NID_LIST contains more than one entry for
any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.
• Set the stored location of last registration (BASE_LAT_REG_s-p and BASE_LONG-
_REGs-p) to the current base station’s location (BASE_LATs and BASE_LONGs). Set
the stored registration distance (REG_DIST_REGs-p) to the current base station’s
registration distance (REG_DISTs).
• Set REG_SECURITY_RESYNC to NO.
• Set REGISTER_IN_IDLE_s to ‘0’.
• If MSG_INTEGRITY_SUP_s is equal to ‘1’, the mobile station shall set the key set-up
timer for T75m.

These procedures shall be performed after the mobile station receives confirmation of
delivery of any other message:
• If the mobile station supports the 800 MHz analog mode, set the First-Idle ID status
to enabled (see [6]).
• Set DIGITAL_REG_s-p to ‘00000001’.
• If BYPASS_REG_IND_s is equal to ‘00’, the mobile station shall perform the following:
  — Delete all entries from ZONE_LIST_s belonging to a different band class (see
[245]) than CDMABAND_s.
  — If CDMABAND_s contains multiple serving systems, delete from ZONE_LIST_s all
entries from ZONE_LIST_s that have a SID from a different serving system than
SERVSYS_s.
  — If CDMABAND_s contains multiple frequency block designators, delete all entries
from ZONE_LIST_s belonging to a different frequency block designator (see [45])
than the frequency block designator associated with SID_s.
• If CDMABAND_s = ‘00000’ or CDMABAND_s = ‘00011’, delete from ZONE_LIST_s all
entries from ZONE_LIST_s that have a SID from a different serving system than
SERVSYS_s.
• If CDMABAND_s = ‘00001’, CDMABAND_s = ‘00010’, CDMABAND_s = ‘00100’,
CDMABAND_s = ‘00101’, CDMABAND_s = ‘00111’, or CDMABAND_s = ‘01010’, delete
all entries from ZONE_LIST_s belonging to a different frequency block (see [2]) than
the frequency block associated with SID_s.
• For any entry of ZONE_LIST_s not matching REG_ZONE_s, SIDs, and NIDs and not
having an active entry timer, enable the entry timer with the duration specified by
ZONE_TIMER_s (see 2.6.5.1.5).
• If BYPASS_REG_IND_s is equal to ‘00’, the mobile station shall perform the following:
Delete all entries from SID_NID_LISTs belonging to a different band class (see [245]) than CDMABANDs.

If CDMABANDs contains multiple serving systems, delete from SID_NID_LISTs all entries from SID_NID_LISTs that have a SID from a different serving system than SERVSYSs.

If CDMABANDs contains multiple frequency block designators, delete all entries from SID_NID_LISTs belonging to a different frequency block designator (see [45]) than the frequency block designator associated with SIDs.

If CDMABANDs = '00000' or CDMABANDs = '00011', delete from SID_NID_LISTs all entries from SID_NID_LISTs that have a SID from a different serving system than SERVSYSs.

If CDMABANDs = '00001', CDMABANDs = '00010', CDMABANDs = '00100', CDMABANDs = '00101', CDMABANDs = '00111', or CDMABANDs = '01010', delete all entries from SID_NID_LISTs belonging to a different frequency block (see [2]) than the frequency block associated with SIDs.

For any entry of SID_NID_LISTs not matching SIDs and NIDs and not having an active entry timer, enable the entry timer with the duration specified by ZONE_TIMERs (see 2.6.5.1.5).

2.6.5.5.3.2 Unsuccessful Access

These procedures are performed when the mobile station declares an access attempt failure when in the System Access State (see 2.6.3).

The mobile station shall perform the following actions:

- If the mobile station supports the 800 MHz analog mode, set the First-Idle ID status to enabled (see [6]).
- Set DIGITAL_REGs-p to '00000001'.
- If an explicit or implicit registration was sent, set SLOT_CYCLE_INDEX_REG to min(SLOT_CYCLE_INDEX_REG, slot cycle index the mobile station included in the message).
- If BYPASS_REG_INDs is equal to '00', the mobile station shall perform the following:

  - Delete all entries from ZONE_LISTs belonging to a different band class (see [245]) than CDMABANDs.
  - If CDMABANDs contains multiple serving systems, delete from ZONE_LISTs all entries from ZONE_LISTs that have a SID from a different serving system than SERVSYSs.
  - If CDMABANDs contains multiple frequency block designators, delete all entries from ZONE_LISTs belonging to a different frequency block designator (see [45]) than the frequency block designator associated with SIDs.
• If CDMABAND\(_s\) = '00000' or CDMABAND\(_s\) = '00011', delete from ZONE_LIST\(_s\) all entries from ZONE_LIST\(_s\) that have a SID from a different serving system than SERVSYS\(_s\).

• If CDMABAND\(_s\) = '00001', CDMABAND\(_s\) = '00010', CDMABAND\(_s\) = '00100', CDMABAND\(_s\) = '00101', CDMABAND\(_s\) = '00111', or CDMABAND\(_s\) = '01010', delete all entries from ZONE_LIST\(_s\) belonging to a different frequency block (see [2]) than the frequency block associated with SID\(_s\).

• For any entry of ZONE_LIST\(_s\) not matching REG_ZONE\(_s\), SID\(_s\), and NID\(_s\) and not having an active entry timer, enable the entry timer with the duration specified by ZONE_TIMER\(_s\) (see 2.6.5.1.5).

• If BYPASS_REG_IND\(_s\) is equal to '00', the mobile station shall perform the following:
  - Delete all entries from SID_NID_LIST\(_s\) belonging to a different band class (see [45]) than CDMABAND\(_s\).
  - If CDMABAND\(_s\) contains multiple serving systems, delete from SID_NID_LIST\(_s\) all entries from SID_NID_LIST\(_s\) that have a SID from a different serving system than SERVSYS\(_s\).
  - If CDMABAND\(_s\) contains multiple frequency block designators, delete all entries from SID_NID_LIST\(_s\) belonging to a different frequency block designator (see [45]) than the frequency block designator associated with SID\(_s\).

• If CDMABAND\(_s\) = '00000' or CDMABAND\(_s\) = '00011', delete from SID_NID_LIST\(_s\) all entries from SID_NID_LIST\(_s\) that have a SID from a different serving system than SERVSYS\(_s\).

• If CDMABAND\(_s\) = '00001', CDMABAND\(_s\) = '00010', CDMABAND\(_s\) = '00100', CDMABAND\(_s\) = '00101', CDMABAND\(_s\) = '00111', or CDMABAND\(_s\) = '01010', delete all entries from SID_NID_LIST\(_s\) belonging to a different frequency block (see [2]) than the frequency block associated with SID\(_s\).

• For any entry of SID_NID_LIST\(_s\) not matching SID\(_s\) and NID\(_s\) and not having an active entry timer, enable the entry timer with the duration specified by ZONE_TIMER\(_s\) (see 2.6.5.1.5).

2.6.5.3.3 Power Off

These procedures are performed when the mobile station is directed by the user to power off.

The mobile station shall perform the following actions:

• If an entry of ZONE_LIST\(_s\) does not have an active timer, copy that entry to ZONE_LIST\(_s\)-p; otherwise, delete any entry in ZONE_LIST\(_s\)-p.

• If an entry of SID_NID_LIST\(_s\) does not have an active timer, copy that entry to SID_NID_LIST\(_s\)-p; otherwise, delete any entry in SID_NID_LIST\(_s\)-p.
2.6.5.5.4 Actions in the Mobile Station Control on the Traffic Channel State

Requirements in this section and its subsections apply only when the mobile station is in the Mobile Station Control on the Traffic Channel State.

2.6.5.5.4.1 Traffic Channel Initialization

Upon entering the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State, the mobile station shall set COUNTER_ENABLEDS to NO, shall set TBR_RAND_SUPPR_ENABLES to ‘0’, and shall set TBR_RAND_WINDOWS to ‘11’.

2.6.5.5.4.2 Timer Maintenance

While in the Mobile Station Control on the Traffic Channel State, the mobile station shall update all active registration timers.

If a zone list entry timer expires, the mobile station shall delete the corresponding entry from ZONE_LISTS. If a SID/NID list entry timer expires, the mobile station shall delete the corresponding entry from SID_NID_LISTS.

2.6.5.5.4.3 Processing the Mobile Station Registered Message

The mobile station receives the Mobile Station Registered Message on the Forward Traffic Channel when the mobile station is considered registered for the base station whose location and other parameters are included in the message.

The mobile station shall store the following parameters:

- System identification (SID_S = SID_R)
- Network identification (NID_S = NID_R)
- Registration zone (REG_ZONE_S = REG_ZONE_R)
- Number of registration zones to be retained (TOTAL_ZONES_S = TOTAL_ZONES_R)
- Zone timer length (ZONE_TIMER_S = ZONE_TIMER_R)
- Multiple SID storage indicator (MULT_SIDS_S = MULT_SIDS_R)
- Multiple NID storage indicator (MULT_NIDS_S = MULT_NIDS_R)
- Base station latitude (BASE_LAT_S = BASE_LAT_R)
- Base station longitude (BASE_LONG_S = BASE_LONG_R)
- Registration distance (REG_DIST_S = REG_DIST_R)

The mobile station shall perform the following actions:

- If the mobile station supports the 800 MHz analog mode, set the First-Idle ID status to enabled (see [6]).
- Set DIGITAL_REG_S-P to ‘00000001’.
- Add REG_ZONE_S, SID_S, and NID_S to ZONE_LIST_S if not already in the list. If required, include the band class identifier and block identifier for the current band and frequency block designtator as specified in 2.6.5.1.5.
• If BYPASS_REG_IND is equal to ‘00’, delete all entries from ZONE_LISTs belonging to a different band class (see [245]) than CDMABANDs.

• Disable the zone list entry timer for the entry of ZONE_LISTs containing REG_ZONES, SIDs, and NIDs. For any other entry of ZONE_LISTs whose entry timer is not active, enable the entry timer with the duration specified by ZONE_TIMERs (see 2.6.5.1.5).

• If ZONE_LISTs contains more than TOTAL_ZONES entries, delete the excess entries according to the rules specified in 2.6.5.1.5.

• If BYPASS_REG_IND is equal to ‘00’, delete all entries from SID_NID_LISTs belonging to a different band class (see [245]) than CDMABANDs.

• Add SID and NID to SID_NID_LISTs if not already in the list. If required, include the band class identifier and block identifier for the current band and frequency block designator as specified in 2.6.5.1.5.

• Disable the SID/NID list entry timer for the entry of SID_NID_LISTs containing SIDs, and NIDs. For any other entry of SID_NID_LISTs whose entry timer is not active, enable the entry timer with the duration specified in 2.6.5.1.5.

• If SID_NID_LISTs contains more than N10m entries, delete the excess entries according to the rules specified in 2.6.5.1.5.

• If MULT_SIDS is equal to ‘0’ and SID_NID_LIST contains entries with different SIDs, delete the excess entries according to the rules specified in 2.6.5.1.5.

• If MULT_NIDS is equal to ‘0’ and SID_NID_LIST contains more than one entry for any SID, delete the excess entries according to the rules specified in 2.6.5.1.5.

• Set the stored location of last registration (BASE_LAT_REGs-p and BASE_LONG-REGs-p) to the base station’s location (BASE_LATs and BASE_LONGs). Set the stored registration distance (REG_DIST_REGs-p) to the base station’s registration distance (REG_DISTs).

• Update its roaming status and set MOB_TERM as specified in 2.6.5.3. The mobile station should indicate to the user whether the mobile station is roaming.

2.6.5.4.4 Power Off

These procedures are performed when the mobile station is directed by the user to power off.

The mobile station shall perform the following actions:

• If an entry of ZONE_LISTs does not have an active timer, copy that entry to ZONE_LISTs-p; otherwise, delete the entry in ZONE_LISTs-p if ZONE_LISTs-p contains an entry.

• If an entry of SID_NID_LISTs does not have an active timer, copy that entry to SID_NID_LISTs-p; otherwise, delete the entry in SID_NID_LISTs-p if SID_NID_LISTs-p contains an entry.
2.6.6 Handoff Procedures

This section presents an overview and mobile station requirements for handoffs occurring while the mobile station is in the Mobile Station Control on the Traffic Channel State (see 2.6.4). Mobile station requirements for handoffs occurring while the mobile station is in the Mobile Station Idle State are specified in 2.6.2.1.4.

2.6.6.1 Overview

2.6.6.1.1 Types of Handoff

The mobile station supports the following three handoff procedures while in the Mobile Station Control on the Traffic Channel State:

- **Soft Handoff**: A handoff in which the mobile station commences communications with a new base station without interrupting communications with the old base station. Soft handoff can only be used between CDMA Channels having identical Frequency Assignments. Soft handoff provides diversity of Forward Traffic Channels and Reverse Traffic Channel paths on the boundaries between base stations.

- **CDMA-to-CDMA Hard Handoff**: A handoff in which the mobile station is transitioned between disjoint sets of base stations, different band classes, different Frequency Assignments, different long code masks, or different frame offsets.

- **CDMA-to-Analog Handoff**: A handoff in which the mobile station is directed from a CDMA traffic channel to an analog voice channel.

The mobile station shall support soft handoffs on the same Frequency Assignment (see 2.6.6.2.7). The mobile station shall support CDMA-to-CDMA hard handoffs between band classes on which it supports CDMA operation (see 2.6.6.2.8). The mobile station shall support CDMA-to-Analog handoffs from band classes on which it supports CDMA operation to band classes on which it supports analog operation (see 2.6.6.2.9).

2.6.6.1.2 Pilot Sets

Within section 2.6.6 the term pilot refers to a Pilot Channel identified by a pilot sequence offset (see [2]), a Walsh function or a quasi-orthogonal function (see [2]), and a Frequency Assignment (see [2]). A pilot is associated with the Forward Traffic Channels in the same Forward CDMA Channel. All pilots in a pilot set have the same CDMA Frequency Assignment.

The mobile station searches for pilots on the current CDMA Frequency Assignment to detect the presence of CDMA Channels and to measure their strengths. When the mobile station detects a pilot of sufficient strength that is not associated with any of the Forward Traffic Channels assigned to it, it sends a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message to the base station. The base station can then assign a Forward Traffic Channel associated with that pilot to the mobile station and direct the mobile station to perform a handoff.
The pilot search parameters and the rules for Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message transmission are expressed in terms of the following sets of pilots:

- **Active Set**: The pilots associated with the Forward Traffic Channels assigned to the mobile station.
- **Candidate Set**: The pilots that are not currently in the Active Set but have been received by the mobile station with sufficient strength to indicate that the associated Forward Traffic Channels could be successfully demodulated.
- **Neighbor Set**: The pilots that are not currently in the Active Set or the Candidate Set and are likely candidates for handoff.
- **Remaining Set**: The set of all possible pilots in the current system on the current CDMA Frequency Assignment, excluding the pilots in the Neighbor Set, the Candidate Set, and the Active Set. This set of possible pilots consists of pilots whose pilot PN sequence offset indices are integer multiples of PILOT_INCs.

The base station may direct the mobile station to search for pilots on a different CDMA frequency to detect the presence of CDMA Channels and to measure their strengths. The mobile station reports the results of the search to the base station using the Candidate Frequency Search Report Message. Depending upon the pilot strength measurements reported in the Candidate Frequency Search Report Message, the base station can direct the mobile station to perform an inter-frequency hard handoff.

The pilot search parameters are expressed in terms of the following sets of pilots on the CDMA Candidate Frequency:

- **Candidate Frequency Neighbor Set**: A list of pilots on the CDMA Candidate Frequency.
- **Candidate Frequency Search Set**: A subset of the Candidate Frequency Neighbor Set that the base station may direct the mobile station to search.

2.6.6.2 Requirements

2.6.6.2.1 Pilot Search

For the pilot sets defined in 2.6.6.1.2, the base station sets the search window (range of PN offsets) in which the mobile station is to search for usable multipath components (i.e., multipath components that the mobile station can use for demodulation of the associated Forward Traffic Channel) of the pilots in the set.

Search performance criteria are defined in [11].
This search shall be governed by the following:

- **Active Set and Candidate Set**: The search procedures for pilots in the Active Set and Candidate Set shall be identical. The search window size\(^{31}\) for each pilot in the Active Set and Candidate Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to SRCH_WIN_A\(_s\). The mobile station should center the search window for each pilot of the Active Set and Candidate Set around the earliest arriving usable multipath component of the pilot. If the mobile station receives a value greater than or equal to 13 for SRCH_WIN_A\(_r\), it may store and use the value 13 in SRCH_WIN_A\(_s\).

### Table 2.6.6.2.1-1. Searcher Window Sizes

<table>
<thead>
<tr>
<th>SRCH_WIN_A</th>
<th>window_size (PN chips)</th>
<th>SRCH_WIN_A</th>
<th>window_size (PN chips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRCH_WIN_N</td>
<td></td>
<td>SRCH_WIN_N</td>
<td></td>
</tr>
<tr>
<td>SRCH_WIN_NGHBR</td>
<td></td>
<td>SRCH_WIN_NGHBR</td>
<td></td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td></td>
<td>SRCH_WIN_R</td>
<td></td>
</tr>
<tr>
<td>CF_SRCH_WIN_N</td>
<td></td>
<td>CF_SRCH_WIN_N</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>4</td>
<td>8</td>
<td>60</td>
</tr>
<tr>
<td>1</td>
<td>6</td>
<td>9</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>11</td>
<td>130</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>12</td>
<td>160</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>13</td>
<td>226</td>
</tr>
<tr>
<td>6</td>
<td>28</td>
<td>14</td>
<td>320</td>
</tr>
<tr>
<td>7</td>
<td>40</td>
<td>15</td>
<td>452</td>
</tr>
</tbody>
</table>

### Table 2.6.6.2.1-2. Search Window Offset

<table>
<thead>
<tr>
<th>SRCH_OFFSET_NGHBR</th>
<th>Offset (PN chips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF_SRCH_OFFSET_NGHBR</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>window_size/2</td>
</tr>
<tr>
<td>2</td>
<td>window_size</td>
</tr>
<tr>
<td>3</td>
<td>3 × window_size /2</td>
</tr>
<tr>
<td>4</td>
<td>- window_size /2</td>
</tr>
<tr>
<td>5</td>
<td>- window_size</td>
</tr>
<tr>
<td>6</td>
<td>-3 × window_size /2</td>
</tr>
<tr>
<td>7</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

\(^{31}\) 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.
• **Neighbor Set:** If SRCH_WIN_NGHBR_INCLs is equal to ‘1’, the search window size for each pilot in the Neighbor Set shall be the number of PN chips specified in Table 2.6.6.2.1-1, corresponding to SRCH_WIN_NGHBRs associated with the pilot being searched. If SRCH_WIN_NGHBR_INCLs is equal to ‘0’, the search window size for each pilot in the Neighbor Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to SRCH_WIN_Ns. If SRCH_OFFSET_INCLs is equal to ‘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 SRCH_OFFSET_NGHBRs associated with the pilot being searched. If SRCH_OFFSET_INCLs is equal to ‘0’, the search window offset for each pilot in the Neighbor Set shall be zero PN chip. The mobile station should center the search window for each pilot in the Neighbor Set around the pilot’s PN sequence offset plus the corresponding search window offset, using timing defined by the mobile station’s time reference (see [2]). If SEARCH_PRIORITY_INCLs is equal to ‘1’, the mobile station should use SEARCH_PRIORITYs for the corresponding pilot to schedule its neighbor search. If the mobile station supports hopping pilot beacons and the TIMING_INCL field of the NGHBR_REC for the corresponding pilot is equal to ‘1’, then the mobile station shall use the information included in the NGHBR_TX_OFFSET, NGHBR_TX_DURATION, and NGHBR_TX_PERIOD fields of the NGHBR_REC for the corresponding pilot to schedule the time for searching the neighbor. If ADD_PILOT_REC_INCL field of the NGHBR_REC for the corresponding pilot is equal to ‘1’, the mobile station shall use the information included in the NGHBR_PILOT_REC field for searching the neighbor.

• **Remaining Set:** The search window size for each pilot in the Remaining Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to SRCH_WIN_Rs. The mobile station should center the search window for each pilot in the Remaining Set around the pilot’s PN sequence offset, using timing defined by the mobile station’s time reference (see [2]). The mobile station should only search for Remaining Set pilots whose pilot PN sequence offset indices are equal to integer multiples of PILOT_INCs.
Candidate Frequency Search Set: If CF_SRCH_WIN_NGHBR_INCLs is equal to ‘1’, the search window size for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-1, corresponding to SRCH_WIN_NGHBRs associated with the pilot being searched. If CF_SRCH_WIN_NGHBR_INCLs is equal to ‘0’, the search window size for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-1 corresponding to CF_SRCH_WIN_Ns. If CF_SRCH_OFFSET_INCLs is equal to ‘1’, the search window offset for each pilot in the Candidate Frequency Search Set shall be the number of PN chips specified in Table 2.6.6.2.1-2, corresponding to SRCH_OFFSET_NGHBRs associated with the pilot being searched. If CF_SRCH_OFFSET_INCLs is equal to ‘0’, the search window offset for each pilot in the Candidate Frequency Search Set shall be zero PN chips. The mobile station should center the search window for each pilot in the Candidate Frequency Search Set around the pilot’s PN sequence offset plus the corresponding search window offset using timing defined by the mobile station’s time reference (see [2]). If CF_SEARCH_PRIORITY_INCLs is equal to ‘1’, the mobile station should use SEARCH_PRIORITYs associated with each pilot to schedule a search of its Candidate Frequency Search Set.

2.6.6.2.2 Pilot Strength Measurements

The mobile station assists the base station in the handoff process and in the Reverse Supplemental Code Channel operation and in the Reverse Supplemental Channel operation by measuring and reporting the strengths of received pilots.

For an SR1 pilot, the mobile station should use the searcher element (see [2]) to compute the strength of a pilot (PS) by adding the ratios of received pilot energy per chip, Ec, to total received spectral density (noise and signals), Io, of at most k usable multipath components, where k is the number of demodulating elements (see [2]) supported by the mobile station.

For an SR3 pilot, the pilot strength is given by

$$\frac{1}{3} \times \left( \frac{E_c}{I_o} \right)_{Primary} + \left( \frac{E_c}{I_o} \right)_{1} + \left( \frac{E_c}{I_o} \right)_{2} \right)$$

where:

- \( \left( \frac{E_c}{I_o} \right)_{Primary} \) is the pilot Ec/Io measured on the Primary carrier (computed as specified above for SR1 pilots),

- \( \left( \frac{E_c}{I_o} \right)_{1} \) is the pilot Ec/Io measured on the pilot on the lower frequency of the two remaining SR3 frequencies (computed as specified above for SR1 pilots), and \( \Delta_1 \) is the pilot power level on the lower frequency of the two remaining SR3 frequencies.
relative to that of the primary SR3 pilot, i.e. $\Delta_1 = 10^{(-\text{SR3_PILOT\_POWER1/10})}$.

- $\left(\frac{E_c}{I_o}\right)_2$ is the pilot Ec/Io measured on the pilot on the higher frequency of the two remaining SR3 frequencies (computed as specified above for SR1 pilots), and $\Delta_2$ is the pilot power level on the higher frequency of the two remaining SR3 frequencies relative to that of the primary SR3 pilot, i.e. $\Delta_2 = 10^{(-\text{SR3_PILOT\_POWER2/10})}$.

2.6.6.2.3 Handoff Drop Timer

The mobile station shall maintain a handoff drop timer for each pilot in the Active Set and Candidate Set.

If $\text{P\_REV\_IN\_USE}_s$ is less than or equal to three or $\text{SOFT\_SLOPE}_s$ is equal to ‘000000’, the mobile station shall perform the following:

- For the Candidate Set, the mobile station shall start the timer whenever the strength of the corresponding pilot becomes less than $T_{\text{DROP}_s}$. The mobile station shall reset and disable the timer if the strength of the corresponding pilot exceeds $T_{\text{DROP}_s}$.

- For the Active Set, the mobile station shall start the timer whenever the strength of the corresponding pilot becomes less than $T_{\text{DROP}_s}$. The mobile station shall reset and disable the timer if the strength of the corresponding pilot exceeds $T_{\text{DROP}_s}$.

If $\text{P\_REV\_IN\_USE}_s$ is greater than three and $\text{SOFT\_SLOPE}_s$ is not equal to ‘000000’, the mobile station shall perform the following:

- For the Candidate Set, the mobile station shall start the timer whenever the strength of the corresponding pilot becomes less than $T_{\text{DROP}_s}$. The mobile station shall reset and disable the timer if the strength of the corresponding pilot exceeds $T_{\text{DROP}_s}$.

- For the Active Set, the mobile station shall sort the $N_A$ pilots in the Active Set in order of increasing strengths, i.e., $PS_1 < PS_2 < PS_3 < \ldots < PS_{N_A}$ where the strength $PS_i$ is as defined in 2.6.6.2.2. The mobile station shall start the timer whenever the strength $PS_i$ satisfies the following inequality:

$$10 \times \log_{10} PS_i < \max \left( \frac{\text{SOFT\_SLOPE}\_s}{8} \times 10 \times \log_{10} \sum_{j=1}^{2} \frac{\text{DROP\_INTERCEPT}\_s + \frac{\Delta_{\text{DROP}}}{2}}{2} - \frac{T_{\text{DROP}_s}}{2} \right)$$

where $i = 1, 2, \ldots, PS_{N_A}$.

For the Active Set, the mobile station shall start the timer even if the timer has previously expired. The mobile station shall reset and disable the timer whenever the above inequality is not satisfied for the corresponding pilot.

If $T_{\text{T\_DROP\_RANGE}_s}$ is equal to ‘0000’ or if $\text{P\_REV\_IN\_USE}_s$ is less than 9, then the mobile station shall perform the following:
• If $T_{TDROP}$ equals zero, the mobile station shall consider the timer expired within 100 ms of enabling it.

• Otherwise, the mobile station shall consider the timer expired within 10% of the timer expiration value shown in Table 2.6.6.2.3-1 corresponding to $T_{TDROP}$. If $T_{TDROP}$ changes, the mobile station shall begin using the new value for all handoff drop timers within 100 ms.

Table 2.6.6.2.3-1. Handoff Drop Timer Expiration Values

<table>
<thead>
<tr>
<th>$T_{TDROP}$</th>
<th>Timer Expiration (seconds)</th>
<th>$T_{TDROP}$</th>
<th>Timer Expiration (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.1</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>9</td>
<td>39</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>11</td>
<td>79</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>12</td>
<td>112</td>
</tr>
<tr>
<td>5</td>
<td>9</td>
<td>13</td>
<td>159</td>
</tr>
<tr>
<td>6</td>
<td>13</td>
<td>14</td>
<td>225</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>15</td>
<td>319</td>
</tr>
</tbody>
</table>

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:
    $$\max(0.1 \text{ seconds}, \text{range-based minimum timer expiration value}),$$
    where the range-based minimum timer expiration value equals:
    $$(\text{nominal timer expiration value}) - (\text{timer expiration range value}),$$
    where:
    o the nominal timer expiration value is the timer expiration value in Table 2.6.6.2.3-1 corresponding to $T_{TDROP}$ and,
    o the timer expiration range value is the timer expiration range value in Table 2.6.6.2.3-2 corresponding to $T_{TDROP}_{\text{RANGE}}$.
  – 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_TDROPs and,

the timer expiration range value is the timer expiration range value in Table 2.6.6.2.3-2 corresponding to T_TDROP_RANGEs.

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

<table>
<thead>
<tr>
<th>T_TDROP_RANGE [binary]</th>
<th>Timer Expiration Range (seconds)</th>
<th>T_TDROP_RANGE [binary]</th>
<th>Timer Expiration Range (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0</td>
<td>1000</td>
<td>27</td>
</tr>
<tr>
<td>0001</td>
<td>1</td>
<td>1001</td>
<td>39</td>
</tr>
<tr>
<td>0010</td>
<td>2</td>
<td>1010</td>
<td>55</td>
</tr>
<tr>
<td>0011</td>
<td>4</td>
<td>1011</td>
<td>79</td>
</tr>
<tr>
<td>0100</td>
<td>6</td>
<td>1100</td>
<td>112</td>
</tr>
<tr>
<td>0101</td>
<td>9</td>
<td>1101</td>
<td>159</td>
</tr>
<tr>
<td>0110</td>
<td>13</td>
<td>1110</td>
<td>225</td>
</tr>
<tr>
<td>0111</td>
<td>19</td>
<td>1111</td>
<td>319</td>
</tr>
</tbody>
</table>

The mobile station shall indicate the status of the handoff drop timer for all pilots in the Active Set and Candidate Set when transmitting a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message.

2.6.6.2.4 Pilot PN Phase

The mobile station shall measure the arrival time, PILOT_ARRIVAL, for each pilot reported to the base station. The pilot arrival time shall be the time of occurrence, as measured at the mobile station antenna connector, of the earliest arriving usable multipath component of the pilot (for SR3 pilots, it is based on the earliest arriving usable multipath component from all three carriers). The arrival time shall be measured relative to the mobile station’s time reference (see [2]) in units of PN chips. The mobile station shall compute the reported pilot PN phase, PILOT_PN_PHASE, as

\[
Pilot_PN\ Phase = (Pilot_{Arrayival} + (64 \times Pilot_{PN})) \mod 2^{15},
\]

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 $P_{REV\_IN\_USEs}$ is less than seven or a Extended Pilot Strength Measurement Message if $P_{REV\_IN\_USEs}$ is equal to or greater than seven.

2. **Analog Handoff Direction Message:** The mobile station shall process the message as specified in 2.6.6.2.9.

3. **Neighbor List Update Message:** If $P_{REV\_IN\_USE}s$ is greater than or equal to eight, the mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000010' (message not accepted in this state); otherwise, the mobile station shall process the message as specified in 2.6.6.2.6.3 and set SEARCH_PRIORITY_INCLs, SRCH_WIN_NGHBR_INCLs, and SRCH_OFFSET_INCLs to '0', and set TIMING_INCL for each of the neighboring base stations in the Neighbor List Update Message to '0'.

4. **Extended Handoff Direction Message:** The mobile station shall process the message as follows:

   The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000110' (capability not supported), if the mobile station does not support the band class specified in the Extended Handoff Direction Message.

   If the mobile station does not send a Mobile Station Reject Order in response to the Extended Handoff Direction Message, the mobile station shall perform the following at the action time of the message:

   • The mobile station shall send a Handoff Completion Message or an Extended Handoff Completion Message as specified in 2.6.6.2.5.2.

   • Update the Active Set, Candidate Set, and Neighbor Set in accordance with the Extended Handoff Direction Message processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and 2.6.6.2.6.3).

   • The mobile station shall delete all pilots that are not listed in the Active Set from the Active Set of the Supplemental Channel for the Forward Supplemental Channel Assignment (if any). If these deleted pilots include all pilots in the Active Set of the Supplemental Channel, the mobile station shall cancel the Forward Supplemental Channel Assignment.

   • Discontinue use of all Forward Traffic Channels associated with pilots not listed in the Extended Handoff Direction Message.

   • The mobile station shall update the Code Channel List, CODE_CHAN_LISTs, as specified in 2.6.8.
• If the mobile station is currently processing Forward Supplemental Code Channels, then it shall continue processing the Forward Supplemental Code Channels using the updated Code Channel List, CODE_CHAN_LISTs.

• The mobile station shall set IGNORE_SCAMs and IGNORE_ESCAMs to ‘0’.

• If HARD_INCLUDED is equal to ‘1’, perform the following actions:
  – If FRAME_OFFSETr is not equal to FRAME_OFFSETs, change the frame offset on all of the code channels of the Forward Traffic Channel and of the Reverse Traffic Channel.
  – If RESET_L2r is equal to ‘1’, Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset the acknowledgment procedures as specified in [4]. The acknowledgment procedures shall be reset immediately after the action time of the Extended Handoff Direction Message.
  – If RESET_FPCr is equal to ‘1’, initialize the Forward Traffic Channel power control counters as specified in 2.6.4.1.1.1.
  – If SERV_NEG_TYPEr is equal to ‘1’, set SERV_NEGs to enabled; otherwise set SERV_NEGs to disabled.
  – Use the long code mask specified by the PRIVATE_LCMr (see 2.3.12.3) as follows:
    + If PRIVATE_LCMr equals ‘1’, the mobile station shall use the Private Long Code Mask as specified in 2.3.6.
    + If PRIVATE_LCMr equals ‘0’, the mobile station shall use the Public Long Code Mask derived from PLCM_TYPEs as specified in 2.3.6.
    + The mobile station shall and indicate to the user the voice privacy mode status.
  – Process the ENCRYPT_MODE field as specified in 2.3.12.2.

• Store the following parameters from the current configuration:
  – Serving Frequency Assignment (SF_CDMACHs = CDMACHs)
  – Serving Frequency band class (SF_BAND_CLASSs = BAND_CLASSs)
  – Serving Frequency frame offset (SF_FRAME_OFFSETs = FRAME_OFFSETs)

• If HARD_INCLUDED is not equal to ‘1’, set NUM_PREAMBLEs = ‘000’.

• Store the following parameters from the Extended Handoff Direction Message:
  – Extended Handoff Direction Message sequence number (HDM_SEQs = HDM_SEQr)
  – If SEARCHINCLUDED is equal to ‘1’, then store the following:
    + Search window size for the Active Set and Candidate Set (SRCH_WIN_As = SRCH_WIN_Ar )
    + Pilot detection threshold (T_ADDs = T_ADDr)
Perform a soft or hard handoff depending on the following conditions:

- If any of the following conditions is true, the mobile station shall perform a hard handoff:
  - HARD_INCLUDED is set to ‘1’ and either BAND_CLASSr is not equal to SF_CDMABANDs, CDMA_FREQr is not equal to SF_CDMACHs, or FRAME_OFFSETr is not equal to SF_FRAME_OFFSETs, or
  - The set of pilots specified by the message is disjoint from the Active Set prior to the action time of the message.

- If the mobile station performs a hard handoff, it shall perform the following:
  - If a Periodic Serving Frequency Pilot Report Procedure is in progress, abort the procedure (see 2.6.6.2.12).
  - If a Candidate Frequency periodic search is in progress, abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4) and set PERIODIC_SEARCHs to ‘0’.
+ The mobile station shall cancel the Forward Supplemental Channel assignment or the Reverse Supplemental Channel assignment (if any).

+ Perform the actions specified in 2.6.6.2.8.1. If the message specifies more than one pilot, the mobile station shall also perform the actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.

– Otherwise, the mobile station shall perform a soft handoff as specified in 2.6.6.2.7.

5. Candidate Frequency Search Request Message: The mobile station shall process the message as follows:

The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported), if the following condition is true:

• SEARCH_MODEr is not equal to ‘0000’, and the mobile station does not support the capability specified by SEARCH_MODEr.

If none of the above conditions is true, the mobile station shall perform the actions described in the remainder of this section to process the Candidate Frequency Search Request Message.

If SEARCH_MODEr is equal to ‘0000’, the mobile station shall process the Candidate Frequency Search Request Message as follows:

• The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00001100’ (invalid Frequency Assignment), if the Frequency Assignment specified in the message is the same as the Serving Frequency (BAND_CLASSr is equal to CDMABANDs and CDMA_FREQr is equal to CDMACHs).

• The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00001010’ (search set not specified), if SEARCH_TYPEr is equal to ‘01’ or ‘11’, and one of the following conditions is true:

  – PILOT_UPDATEr is equal to ‘0’ and the Candidate Frequency Search Set before the action time of the Candidate Frequency Search Request Message is empty, or

  – PILOT_UPDATEr is equal to ‘1’ and the message specifies an empty search set.

• The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00001101’ (search period too short), if SEARCH_TYPEr is equal to ‘11’ and search_period is less than (max (fwd_time, rev_time) + T71m) seconds, where search_period, fwd_time and rev_time are defined below.

(In the following, if PILOT_UPDATEr is equal to ‘1’, rec_search_set is the set of pilots specified in the Candidate Frequency Search Request Message with the corresponding SEARCH_SET field set to ‘1’; otherwise, rec_search_set is the Candidate Frequency Search Set before the action time of the Candidate Frequency Search Request Message.)
search_period = time period corresponding to SEARCH_PERIOD, shown in Table 2.6.6.2.8.3.2-1

\[ \text{fwd_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the Candidate Frequency, to search } \text{rec_search_set}, \text{ and to re-tune to the Serving Frequency; if the mobile station searches } \text{rec_search_set} \text{ in multiple visits, } \text{fwd_time} \text{ is the total time for all visits to the Candidate Frequency in a search period (see 2.6.6.2.8.3.2)} \]

\[ \text{rev_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to the Candidate Frequency, to search } \text{rec_search_set}, \text{ and to re-tune to the Serving Frequency; if the mobile station searches } \text{rec_search_set} \text{ in multiple visits, } \text{rev_time} \text{ is the total time for all visits to the Candidate Frequency in a search period} \]

• If the mobile station does not send a Mobile Station Reject Order in response to the Candidate Frequency Search Request Message, it shall perform the following:
  
  − The mobile station shall send a Candidate Frequency Search Response Message in assured mode, within T56m seconds of receiving the Candidate Frequency Search Request Message. The mobile station shall set the fields of the Candidate Frequency Search Response Message as follows:

  + The mobile station shall set TOTAL_OFF_TIME_FWD and TOTAL_OFF_TIME_REV to its estimate of the total number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, in order to tune to the Candidate Frequency, to search \text{rec_search_set}, \text{ and to re-tune to the Serving Frequency (see 2.6.6.2.8.3.2). If the mobile station searches } \text{rec_search_set} \text{ in multiple visits to the Candidate Frequency, the mobile station shall report the total number of frames or power control groups in all visits in a search period for which it will need to suspend its current Forward Traffic Channel and the Reverse Traffic Channel processing.}
The mobile station shall set MAX_OFF_TIME_FWD and MAX_OFF_TIME_REV to its estimate of the maximum number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, during any single visit to tune to the Candidate Frequency, to search a subset of rec_search_set, and to re-tune to the Serving Frequency.\footnote{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.}

The mobile station shall set PCG_OFF_TIMES to ‘1’ if TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV and MAX_OFF_TIME_REV are expressed in units of power control groups. If these time estimates are expressed in units of frames, the mobile station shall set PCG_OFF_TIMES to ‘0’. The mobile station shall not use power control groups as the unit of duration if P_REV_IN_USEs is less than six.

If ALIGN_TIMING\textsubscript{r} is equal to ‘1’, the mobile station shall set ALIGN_TIMING\_USED to ‘1’ to indicate if it will align its search as requested by the base station; otherwise, the mobile station shall set ALIGN_TIMING\_USED to ‘0’. If ALIGN_TIMING\_USED is set to ‘1’, the mobile station shall set MAX_NUM_VISITS to the maximum number of visits per search period minus one. If MAX_NUM_VISITS is not equal to 0, the mobile station shall set INTER_VISIT_TIME, in units of frames or power control groups, to its estimate of the time between the beginning of consecutive visits to the Candidate Frequency within the same search period.

When the message takes effect, the mobile station shall perform the following actions:

If any periodic search is in progress, the mobile station shall abort it (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).

Store the following parameters from the Candidate Frequency Search Request Message:

- Candidate Frequency Search Request Message sequence number (CFSRM\_SEQ\textsubscript{s} = CFSRM\_SEQ\textsubscript{r})
- Periodic search flag: If SEARCH\_TYPE\textsubscript{r} is equal to ‘11’, the mobile station shall set PERIODIC\_SEARCH\textsubscript{s} to ‘1’; otherwise, the mobile station shall set PERIODIC\_SEARCH\textsubscript{s} to ‘0’.
Search period on the Candidate Frequency
(SEARCH_PERIOD_s = SEARCH_PERIOD_r)

Candidate Frequency search mode
(SEARCH_MODE_s = SEARCH_MODE_r)

Band class for the Candidate Frequency
(CF_CDMABAND_s = BAND_CLASS_r)

CDMA Channel number for the CDMA Candidate Frequency
(CF_CDMACH_s = CDMA_FREQ_r)

Serving Frequency total pilot Ec threshold
(SF_TOTAL_EC_THRESH_s = SF_TOTAL_EC_THRESH_r)

Serving Frequency total pilot Ec/I_o threshold
(SF_TOTAL_EC_I0_THRESH_s = SF_TOTAL_EC_I0_THRESH_r)

Received power difference threshold
(DIFF_RX_PWR_THRESH_s = DIFF_RX_PWR_THRESH_r)

Candidate Frequency Total pilot Ec/I_o threshold
(MIN_TOTAL_PILOT_EC_I0_s = MIN_TOTAL_PILOT_EC_I0_r)

Pilot detection threshold on the CDMA Candidate Frequency
(CF_T_ADD_s = CF_T_ADD_r)

Maximum time on the CDMA Target Frequency that the mobile station may wait to receive a period of \(N_{11m} \times 20\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN
(TF_WAIT_TIME_s = TF_WAIT_TIME_r)

Pilot PN sequence offset increment on the CDMA Candidate Frequency
(CF_PILOT_INC_s = CF_PILOT_INC_r)

Search window for pilots in the Neighbor Set on the CDMA Candidate Frequency
(CF_SRCH_WIN_N_s = CF_SRCH_WIN_N_r)

Search window for pilots in the Remaining Set on the CDMA Candidate Frequency
(CF_SRCH_WIN_R_s = CF_SRCH_WIN_R_r)

If PILOT_UPDATE is equal to ‘1’, the mobile station shall perform the following:

◊ Set CF_SEARCH_PRIORITY_INCL_s and CF_SRCH_WIN_NGHBR_INCL_s to the values corresponding to CF_NGHBR_SRCH_MODE shown in Table 2.6.2.5.1-1,

◊ Set CF_SRCH_OFFSET_INCL_s to CF_SRCH_OFFSET_INCL_r.

If PILOT_UPDATE is equal to ‘1’, the mobile station shall replace the Candidate Frequency Neighbor Set with all neighbor pilots specified in the Candidate Frequency Search Request Message. Specifically, the mobile station shall store the following:
◊ Set the NGHBR_PN field of the Candidate Frequency Neighbor Set Pilot Record to NGHBR_PN_r.

◊ Set the ADD_PILOT_REC_INCL field of the Candidate Frequency Neighbor Set Pilot Record to ADD_PILOT_REC_INCL_r. If ADD_PILOT_REC_INCL_r is equal to ‘1’, the mobile station shall store the following:

- Set the NGHBR_PILOT_REC_TYPE field of the Candidate Frequency Neighbor Set Pilot Record to NGHBR_PILOT_REC_TYPE_r.

- If NGHBR_PILOT_REC_TYPE_r equals ‘000’, the mobile station shall set the TD_POWER_LEVEL and TD_MODE fields of the Candidate Frequency Neighbor Set Pilot Record to TD_POWER_LEVEL_r and TD_MODE_r, respectively.

- If NGHBR_PILOT_REC_TYPE_r is equal to ‘001’, the mobile station shall:
  
  + Set the AUX_PILOT_QOF field of the Candidate Frequency Neighbor Set Pilot Record to QOF_r.

  + Set the AUX_PILOT_WALSH_CODE field of the Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

- If NGHBR_PILOT_REC_TYPE_r is equal to ‘010’, the mobile station shall:

  + Set the AUX_PILOT_TD_QOF field of the Candidate Frequency Neighbor Set Pilot Record to QOF_r.

  + Set the AUX_PILOT_WALSH_CODE field of the Candidate Frequency Neighbor Set Pilot Record to AUX_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.

  + Set the AUX_TD_POWER_LEVEL field of the Candidate Frequency Neighbor Set Pilot Record to AUX_TD_POWER_LEVEL_r.

  + Set the TD_MODE field of the Candidate Frequency Neighbor Set Pilot Record to TD_MODE_r.

- If NGHBR_PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:

  + Set the SR3_PRIMARY_PILOT field of Candidate Frequency Neighbor Set Pilot Record to SR3_PRIMARY_PILOT_r.

  + Set the SR3_PILOT_POWER1 field of Candidate Frequency Neighbor Set Pilot Record to SR3_PILOT_POWER1_r.
+ Set the SR3_PILOT_POWER2 field of Candidate Frequency Neighbor Set Pilot Record to SR3_PILOT_POWER2r.

- If NGHBR_PILOT_REC_TYPEr is equal to ‘100’, the mobile station shall:
  + Set the SR3_PRIMARY_PILOT field of Candidate Frequency Neighbor Set Pilot Record to SR3_PRIMARY_PILOTr.
  
  + Set the SR3_PILOT_POWER1 field of Candidate Frequency Neighbor Set Pilot Record to SR3_PILOT_POWER1r.
  
  + Set the SR3_PILOT_POWER2 field of Candidate Frequency Neighbor Set Pilot Record to SR3_PILOT_POWER2r.
  
  + Set the AUX_PILOT_QOF field of Candidate Frequency Neighbor Set Pilot Record to QOFr.
  
  + Set the AUX_PILOT_WALSH_CODE field of Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
  
  + If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of Candidate Frequency Neighbor Set Pilot Record to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field of Candidate Frequency Neighbor Set Pilot Record to QOFr and set the AUX_PILOT_WALSH_CODE1 field of Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
  
  + If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of Candidate Frequency Neighbor Set Pilot Record to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of Candidate Frequency Neighbor Set Pilot Record to QOFr and set the AUX_PILOT_WALSH_CODE2 field of Candidate Frequency Neighbor Set Pilot Record to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
If PILOT_UPDATE is equal to ‘1’ and CF_SEARCH_PRIORITY_INCL is equal to ‘1’, the mobile station shall store the search priority (SEARCH_PRIORITYs = SEARCH_PRIORITYr) associated with each of the neighboring base stations contained in the Candidate Frequency Neighbor Set.

If PILOT_UPDATE is equal to ‘1’ and CF_SRCH_WIN_NGHBR_INCL is equal to ‘1’, the mobile station shall perform the following:

◊ Store the neighbor pilot channel search window size (SRCH_WIN_NGHBRs = SRCH_WIN_NGHBRr) associated with each of the neighboring base stations contained in the Candidate Frequency Neighbor Set,

◊ If CF_SRCH_OFFSET_INCL is equal to ‘1’, store the neighbor pilot channel search window offset (SRCH_OFFSET_NGHBRs = SRCH_OFFSET_NGHBRr) associated with each of the neighboring base stations contained in the Candidate Frequency Neighbor Set.

If PILOT_UPDATE is equal to ‘1’, the mobile station shall replace the Candidate Frequency Search Set with all flagged pilots (those with the corresponding SEARCH_SET field set to ‘1’) specified in the Candidate Frequency Search Request Message.

+ If ALIGN_TIMING is equal to ‘1’ and the mobile station will align its search as requested by the base station, the mobile station shall set ALIGN_TIMING_USED to ‘1’ and SEARCH_OFFSET to SEARCH_OFFSETr; otherwise, the mobile station shall set ALIGN_TIMING_USED to ‘0’ and SEARCH_OFFSET to ‘000000’.

+ If the mobile station sets the PCG_OFF_TIMES field of the Candidate Frequency Search Response Message to ‘1’, it shall set SEARCH_TIME_RESOLUTION to 0.00125; otherwise, it shall set SEARCH_TIME_RESOLUTION to 0.02.

+ If SEARCH_TYPE is equal to ‘01’, the mobile station shall perform a single search of the Candidate Frequency Search Set, as described in 2.6.6.2.8.3.1. If SEARCH_TYPE is equal to ‘11’, the mobile station shall perform the periodic search procedures, as described in 2.6.6.2.8.3.2.
Table 2.6.6.2.5.1-1. Search Parameter Settings

<table>
<thead>
<tr>
<th>NGHBR_SRCH_MODE</th>
<th>SEARCH_PRIORITY_INCL</th>
<th>SRCH_WIN_NGHBR_INCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF_NGHBR_SRCH_MODE</td>
<td>CF_SEARCH_PRIORITY_INCL</td>
<td>CF_SRCH_WIN_NGHBR_INCL</td>
</tr>
<tr>
<td>00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>01</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

If SEARCH_MODE is equal to ‘0001’, and if the mobile station supports analog searching, the mobile station shall process the Candidate Frequency Search Request Message as follows:

- The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘0001101’ (search period too short), if SEARCH_TYPE is equal to ‘11’ and search_period is less than \( \text{max}(\text{fwd\_time}, \text{rev\_time}) + T71m) \) seconds where search_period, fwd_time and rev_time are defined below.

(In the following, rec_search_set is the set of analog frequencies specified in the Candidate Frequency Search Request Message.)

\[
\text{search\_period} = \text{time period corresponding to SEARCH\_PERIOD}_r \text{ shown in Table 2.6.6.2.8.3.2-1}
\]

\[
\text{fwd\_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to each analog frequency in rec_search_set and measure its strength, and to re-tune to the Serving Frequency; if the mobile station searches rec_search_set in multiple visits, fwd_time is the total time for all visits away from the Serving Frequency in a search period (see 2.6.6.2.10.2)}
\]

\[
\text{rev\_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to each analog frequency in rec_search_set and measure its strength, and to re-tune to the Serving Frequency; if the mobile station searches rec_search_set in multiple visits, rev_time is the total time for all visits away from the Serving Frequency in a search period}
\]

- If the mobile station does not send a Mobile Station Reject Order in response to the Candidate Frequency Search Request Message, it shall perform the following:
The mobile station shall send a *Candidate Frequency Search Response Message* in assured mode, within T_{56m} seconds of receiving the *Candidate Frequency Search Request Message*. The mobile station shall set the fields of the *Candidate Frequency Search Response Message* as follows:

- The mobile station shall set **TOTAL_OFF_TIME_FWD** and **TOTAL_OFF_TIME_REV** to its estimate of the total number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, in order to tune to each analog frequency in *rec_search_set*, to measure its strength, and to re-tune to the Serving Frequency (see 2.6.6.2.8.3.2). If the mobile station searches *rec_search_set* in multiple visits away from the Serving Frequency, the mobile station shall report the total number of frames or power control groups in all visits in a search period for which it will need to suspend its current Forward Traffic Channel and Reverse Traffic Channel processing.

- The mobile station shall set **MAX_OFF_TIME_FWD** and **MAX_OFF_TIME_REV** to its estimate of the maximum number of frames or power control groups for which it will need to suspend its current Forward Traffic Channel processing and Reverse Traffic Channel processing, respectively, during any single visit away from the Serving Frequency, to search a subset of *rec_search_set*, and to re-tune to the Serving Frequency.

- The mobile station shall set **PCG_OFF_TIMES** to ‘1’ if **TOTAL_OFF_TIME_FWD**, **MAX_OFF_TIME_FWD**, **TOTAL_OFF_TIME_REV** and **MAX_OFF_TIME_REV** are expressed in units of power control groups. If these time estimates are expressed in units of frames, the mobile station shall set **PCG_OFF_TIMES** to ‘0’. The mobile station shall not use power control groups as the unit of duration if **P_REV_IN_USEs** is less than six.

- If **ALIGN_TIMINGr** is equal to ‘1’, the mobile station shall set **ALIGN_TIMING_USED** to ‘1’ to indicate if it will align its search as requested by the base station; otherwise, the mobile station shall set **ALIGN_TIMING_USED** to ‘0’. If **ALIGN_TIMING_USED** is set to ‘1’, the mobile station shall set **MAX_NUM_VISITS** to the maximum number of visits per search period minus one. If **MAX_NUM_VISITS** is not equal to 0, the mobile station shall set **INTER_VISIT_TIME**, in units of frames or power control groups, to its estimate of the time between the beginning of consecutive visits away from the Serving Frequency within the same search period.

When the message takes effect, the mobile station shall perform the following actions:

- If any periodic search is in progress, the mobile station shall abort it (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
+ Store the following parameters from the Candidate Frequency Search Request Message:

- Candidate Frequency Search Request Message sequence number (CFSRM_SEQs = CFSRM_SEQr)
- Periodic search flag: If SEARCH_TYPEr is equal to ‘11’, the mobile station shall set PERIODIC_SEARCHs to ‘1’; otherwise, the mobile station shall set PERIODIC_SEARCHs to ‘0’.
- Search period for the analog frequencies search (SEARCH_PERIODs = SEARCH_PERIODr)
- Candidate Frequency search mode (SEARCH_MODEs = SEARCH_MODEr)
- Band class for the analog frequencies (CF_CDMABANDs = BAND_CLASSr)
- Serving Frequency total pilot Ec threshold (SF_TOTAL_EC_THRESHs = SF_TOTAL_EC_THRESHr)
- Serving Frequency total pilot Ec/I0 threshold (SF_TOTAL_EC_I0_THRESHs = SF_TOTAL_EC_I0_THRESHr)
- Candidate Frequency Analog Search Set: The mobile station shall replace the Candidate Frequency Analog Search Set with the analog frequencies included in the Candidate Frequency Search Request Message.

- If ALIGN_TIMINGr is equal to ‘1’ and the mobile station will align its search as requested by the base station, the mobile station shall set ALIGN_TIMING_USEDs to ‘1’ and SEARCH_OFFSETs to SEARCH_OFFSETr; otherwise, the mobile station shall set ALIGN_TIMING_USEDs to ‘0’ and SEARCH_OFFSETs to ‘000000’.
- If the mobile station sets the PCG_OFF_TIMES field of the Candidate Frequency Search Response Message to ‘1’, it shall set SEARCH_TIME_RESOLUTIONs to 0.00125; otherwise, it shall set SEARCH_TIME_RESOLUTIONs to 0.02.
- If SEARCH_TYPEr is equal to ‘01’, the mobile station shall perform a single search of the Candidate Frequency Analog Search Set as described in 2.6.6.2.10.1. If SEARCH_TYPEr is equal to ‘11’, the mobile station shall perform the periodic search procedures described in 2.6.6.2.10.2.

6. Candidate Frequency Search Control Message: The mobile station shall process the message as follows:

   - If SEARCH_MODEs 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_r 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_r 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 ‘00001011’ (search period too short), if SEARCH_TYPE_r is equal to ‘11’ and search_period is less than (max (fwd_time, rev_time) + T71m) seconds, where

  \[ \text{search\_period} = \text{time period corresponding to SEARCH\_PERIOD_r shown in Table 2.6.6.2.8.3.2-1}, \]

  \[ \text{fwd\_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the Candidate Frequency, to search the Candidate Frequency Search Set and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, fwd\_time is the total time for all visits to the Candidate Frequency in a search period (see 2.6.6.2.8.3.2)}, \]

  and

  \[ \text{rev\_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to the Candidate Frequency, to search the Candidate Frequency Search Set and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, rev\_time is the total time for all visits to the Candidate Frequency in a search period.} \]

• If the mobile station does not reject the *Candidate Frequency Search Control Message*, it shall perform the following actions when the message takes effect:

  − If any periodic search is in progress, the mobile station shall abort it (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).

  − If ALIGN_TIMING_r is equal to ‘1’ and the mobile station will align its search as requested by the base station, the mobile station shall set ALIGN_TIMING\__USED_s to ‘1’; otherwise, the mobile station shall set ALIGN_TIMING\_USED_s to ‘0’ and SEARCH\_OFFSET_s to ‘000000’.

  − If SEARCH_TYPE_r is equal to ‘00’, the mobile station shall set PERIODIC\_SEARCH_s to ‘0’.
− If SEARCH_TYPE\textsubscript{r} is equal to '01':
  + The mobile station shall set PERIODIC\_SEARCH\textsubscript{s} to '0'.
  + The mobile station shall perform a single search of the Candidate
    Frequency Search Set, as described in 2.6.6.2.8.3.1.
− If SEARCH_TYPE\textsubscript{r} is equal to '11':
  + The mobile station shall set PERIODIC\_SEARCH\textsubscript{s} to '1'.
  + The mobile station shall perform the periodic search procedures for the
    Candidate Frequency Search Set, as described in 2.6.6.2.8.3.2.

If SEARCH\_MODE\textsubscript{s} is equal to '0001':

• The mobile station shall send a \textit{Mobile Station Reject Order} with the ORDQ field
  set to '00001010' (search set not specified), if SEARCH\_TYPE\textsubscript{r} is not equal to '00'
  and the Candidate Frequency Analog Search Set is empty.

• The mobile station shall send a \textit{Mobile Station Reject Order} with the ORDQ field
  set to '00001101' (search period too short), if SEARCH\_TYPE\textsubscript{r} is equal to '11'
  and \textit{search\_period} is less than \textit{max (fwd\_time, rev\_time)} + T\textsubscript{71m} seconds,

where

\textit{search\_period} = time period corresponding to SEARCH\_PERIOD\textsubscript{r} shown in
  Table 2.6.6.2.8.3.2-1,

\textit{fwd\_time} = the mobile station’s estimate of the total length of time, in
  seconds, for which the mobile station will need to suspend its
  current Forward Traffic Channel processing in order to tune to
  each analog frequency in the Candidate Frequency Analog
  Search Set and measure its strength, and to re-tune to the
  Serving Frequency; if the mobile station searches the Candidate
  Frequency Analog Search Set in multiple visits, \textit{fwd\_time} is the
  total time for all visits away from the Serving Frequency in a
  search period (see 2.6.6.2.10.2),

and

\textit{rev\_time} = the mobile station’s estimate of the total length of time, in
  seconds, for which the mobile station will need to suspend its
  current Reverse Traffic Channel processing in order to tune to
  each analog frequency in the Candidate Frequency Analog
  Search Set and measure its strength, and to re-tune to the
  Serving Frequency; if the mobile station searches the Candidate
  Frequency Analog Search Set in multiple visits, \textit{fwd\_time} is the
  total time for all visits away from the Serving Frequency in a
  search period (see 2.6.6.2.10.2).

• If the mobile station does not reject the \textit{Candidate Frequency Search Control}
  Message, it shall perform the following actions when the message takes effect:
− If any periodic search is in progress, the mobile station shall abort it (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).

− If ALIGN_TIMINGr is equal to ‘1’ and the mobile station will align its search as requested by the base station, the mobile station shall set ALIGN_TIMING_USEDs to ‘1’; otherwise, the mobile station shall set ALIGN_TIMING_USEDs to ‘0’ and SEARCH_OFFSETs to ‘000000’.

− If SEARCH_TYPEn is equal to ‘00’, the mobile station shall set PERIODIC_SEARCHs to ‘0’.

− If SEARCH_TYPEn is equal to ‘01’:
  + The mobile station shall set PERIODIC_SEARCHs to ‘0’.
  + The mobile station shall perform a single search of the Candidate Frequency Analog Search Set, as described in 2.6.6.2.10.1.

− If SEARCH_TYPEn is equal to ‘11’:
  + The mobile station shall set PERIODIC_SEARCHs to ‘1’.
  + The mobile station shall perform the periodic search procedures for the Candidate Frequency Analog Search Set, as described in 2.6.6.2.10.2.

7. Extended Neighbor List Update Message: The mobile station shall update its neighbor set as specified in 2.6.6.2.6.3 and perform the following:

• If NGHBR_SRCH_MODEr is equal to ‘01’ or ‘11’, the mobile station shall store the search priority (SEARCH_PRIORITYs = SEARCH_PRIORITYr) associated with each of the neighboring base stations contained in the Extended Neighbor List Update Message which are in the mobile’s neighbor set.

• If NGHBR_SRCH_MODEr is equal to ‘01’ or ‘00’, the mobile station shall set the SRCH_OFFSET_INCLs field ‘0’.

• If NGHBR_SRCH_MODEr is equal to ‘10’ or ‘11’, the mobile station shall perform the following:
  − Store the neighbor pilot channel search window size (SRCH_WIN_NGHBRs = SRCH_WIN_NGHBRr) associated with each of the neighboring base stations contained in the Extended Neighbor List Updated Message which are in the mobile’s neighbor set,
  − If SRCH_OFFSET_INCLr equals ‘1’, set the SRCH_OFFSET_NGHBR field of NGHBR_REC[i] to the i\textsuperscript{th} occurrence of SRCH_OFFSET_NGHBRr, 
  − Set SRCH_OFFSET_INCLs to SRCH_OFFSET_INCLr.

• The mobile station shall update the default search window size for its Neighbor Set (SRCH_WIN_Ns = SRCH_WIN_Nr).

• The mobile station shall set SEARCH_PRIORITY_INCLs and SRCH_WIN_NGHBR_INCLs to the value specified in Table 2.6.6.2.5.1-1 corresponding to NGHBR_SRCH_MODEr.
• If USE_TIMING is equal to ‘1’, the mobile station shall store the timing included flag (TIMING_INCL) associated with each of the neighboring base stations contained in the *Extended Neighbor List Update Message* which are in the mobile station neighbor set; otherwise the mobile station shall set the timing included flag (TIMING_INCL) associated with each of the neighboring base stations to ‘0’.

• If USE_TIMING is equal to ‘1’ and TIMING_INCL is equal to ‘1’, the mobile station shall store the neighbor transmit time offset (NGHBR_TX_OFFSET = NGHBR_TX_OFFSET) associated with each of the neighboring base stations contained in the *Extended Neighbor List Update Message* which are in the mobile station neighbor set.

• If USE_TIMING is equal to ‘1’ and the TIMING_INCL is equal to ‘1’, then the mobile station shall perform the following:
  − If the GLOBAL_TIMING_INCL field is equal to ‘1’, then the mobile station shall store the neighbor transmit time duration (NGHBR_TX_DURATION = GLOBAL_TX_DURATION) and the neighbor transmit time duration (NGHBR_TX_PERIOD = GLOBAL_TX_PERIOD) contained in the *Extended Neighbor List Update Message*.
  − If the GLOBAL_TIMING_INCL field is equal to ‘0’, then the mobile station shall store the neighbor transmit time duration (NGHBR_TX_DURATION = NGHBR_TX_DURATION) and the neighbor transmit time duration (NGHBR_TX_PERIOD = NGHBR_TX_PERIOD) associated with each of the neighboring base stations contained in the *Extended Neighbor List Update Message* which are in the mobile station neighbor set.

• The mobile station shall set RESQ_ENABLED = RESQ_ENABLE. If RESQ_ENABLED is equal to ‘1’, then the mobile station shall store:
  − Call rescue delay timer value (RESQ_DELAY_TIME = RESQ_DELAY_TIME)
  − Call rescue allowed timer value (RESQ_ALLOWED_TIME = RESQ_ALLOWED_TIME)
  − Call rescue attempt timer value (RESQ_ATTEMPT_TIME = RESQ_ATTEMPT_TIME)
  − Code channel index for call rescue (RESQ_CODE_CHAN = RESQ_CODE_CHAN)
  − Quasi-Orthogonal Function mask identifier for call rescue (RESQ_QOF = RESQ_QOF)
  − Minimum time between consecutive rescues (RESQ_MIN_PERIOD = RESQ_MIN_PERIOD + 1) if RESQ_MIN_PERIOD_INCL is equal to ‘1’; otherwise, RESQ_MIN_PERIOD = ‘00000’.
- The required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled
  \((\text{RESQ\_NUM\_TOT\_TRANS\_20MS}_s = \text{RESQ\_NUM\_TOT\_TRANS\_20MS}_r)\) if included.

- The required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled
  \((\text{RESQ\_NUM\_TOT\_TRANS\_5MS}_s = \text{RESQ\_NUM\_TOT\_TRANS\_5MS}_r)\) if included.

- The mobile station shall set the Traffic Channel preamble length for Call Rescue Soft Handoff as follows:
  + If the mobile station is operating in Radio Configuration 1 or 2, set
    \(\text{RESQ\_NUM\_PREAMBLE\_RC1\_RC2}_s = \text{RESQ\_NUM\_PREAMBLE}_r\);
  + If the mobile station is operating in Radio Configuration greater 2, set
    \(\text{RESQ\_NUM\_PREAMBLE}_s = \text{RESQ\_NUM\_PREAMBLE}_r\).

- The power level adjustment to be applied to the last closed-loop power level when re-enabling the transmitter for call rescue soft handoff
  \((\text{RESQ\_POWER\_DELTA}_s = \text{RESQ\_POWER\_DELTA}_r)\).

- Set the \(\text{NGHBR\_RESQ\_CONFIGURED}\) field of \(\text{NGHBR\_REC}[i]\) to the \(i\)th occurrence of \(\text{NGHBR\_RESQ\_CONFIGURED}_r\).

  • For each of the neighboring base stations contained in the \textit{General Neighbor List Message}, the mobile station shall set \(\text{ADD\_PILOT\_REC\_INCL}\) field of
    \(\text{NGHBR\_REC}[i]\) to the \(i\)th occurrence of \(\text{ADD\_PILOT\_REC\_INCL}_r\). If \(\text{ADD\_PILOT\_REC\_INCL}_r\) equals ‘1’, for each pilot, the mobile station shall also perform the following:
    - Set the \(\text{NGHBR\_PILOT\_REC\_TYPE}\) field of \(\text{NGHBR\_PILOT\_REC}\) to \(\text{NGHBR\_PILOT\_REC\_TYPE}_r\).
    - If \(\text{NGHBR\_PILOT\_REC\_TYPE}_r\) is equal to ‘000’, the mobile station shall set
      the \(\text{TD\_POWER\_LEVEL}\) field of \(\text{NGHBR\_PILOT\_REC}\) to \(\text{TD\_POWER\_LEVEL}_r\)
      and set the \(\text{TD\_MODE}\) field of \(\text{NGHBR\_PILOT\_REC}\) to \(\text{TD\_MODE}_r\).
    - If \(\text{NGHBR\_PILOT\_REC\_TYPE}_r\) is equal to ‘001’, the mobile station shall:
      + Set the \(\text{AUX\_PILOT\_QOF}\) field of \(\text{NGHBR\_PILOT\_REC}\) to \(\text{QOF}_r\)
      + Set the \(\text{AUX\_PILOT\_WALSH\_CODE}\) field of \(\text{NGHBR\_PILOT\_REC}\) to
        \(\text{AUX\_PILOT\_WALSH}_r\) with the Walsh Code length specified by \(\text{WALSH\_LENGTH}_r\).
    - If \(\text{NGHBR\_PILOT\_REC\_TYPE}_r\) is equal to ‘010’, the mobile station shall:
      + Set the \(\text{AUX\_PILOT\_TD\_QOF}\) field of \(\text{NGHBR\_PILOT\_REC}\) to \(\text{QOF}_r\).
      + Set the \(\text{AUX\_PILOT\_WALSH\_CODE}\) field of \(\text{NGHBR\_PILOT\_REC}\) to
        \(\text{AUX\_WALSH}_r\) with the Walsh Code length specified by \(\text{WALSH\_LENGTH}_r\).
+ Set the AUX_TD_POWER_LEVEL field of NGHBR_PILOT_REC to
  AUX_TD_POWER_LEVEL
+ Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODE
  – If NGHBR_PILOT_REC_TYPE is equal to ‘011’, the mobile station shall:
    + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
      SR3_PRIMARY_PILOT
    + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
      SR3_PILOT_POWER1
    + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
      SR3_PILOT_POWER2
  – If NGHBR_PILOT_REC_TYPE is equal to ‘100’, the mobile station shall:
    + Set the SR3_PRIMARY_PILOT field of NGHBR_PILOT_REC to
      SR3_PRIMARY_PILOT
    + Set the SR3_PILOT_POWER1 field of NGHBR_PILOT_REC to
      SR3_PILOT_POWER1
    + Set the SR3_PILOT_POWER2 field of NGHBR_PILOT_REC to
      SR3_PILOT_POWER2
    + Set the AUX_PILOT_QOF field of NGHBR_PILOT_REC to QOF
    + Set the AUX_PILOT_WALSH_CODE field of NGHBR_PILOT_REC to
      AUX_PILOT_WALSH with the Walsh Code length specified by
      WALSH_LENGTH
    + If ADD_INFO_INCL1 is equal to ‘1’, set the AUX_PILOT_QOF1 field of
      NGHBR_PILOT_REC to QOF1 and set the AUX_PILOT_WALSH_CODE1
      field of NGHBR_PILOT_REC to AUX_PILOT_WALSH1 with the Walsh
      Code length specified by WALSH_LENGTH1; otherwise, set the
      AUX_PILOT_QOF1 field of NGHBR_PILOT_REC to QOF and set the
      AUX_PILOT_WALSH_CODE1 field of NGHBR_PILOT_REC to
      AUX_PILOT_WALSH with the Walsh Code length specified by
      WALSH_LENGTH
    + If ADD_INFO_INCL2 is equal to ‘1’, set the AUX_PILOT_QOF2 field of
      NGHBR_PILOT_REC to QOF2 and set the AUX_PILOT_WALSH_CODE2
      field of NGHBR_PILOT_REC to AUX_PILOT_WALSH2 with the Walsh
      Code length specified by WALSH_LENGTH2; otherwise, set the
      AUX_PILOT_QOF2 field of NGHBR_PILOT_REC to QOF and set the
      AUX_PILOT_WALSH_CODE2 field of NGHBR_PILOT_REC to
      AUX_PILOT_WALSH with the Walsh Code length specified by
      WALSH_LENGTH
  8. **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 *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 Code Channels specified in the *Supplemental Channel Assignment Message* is greater than the maximum number of Supplemental Code Channels supported by the mobile station.

- The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000011' (message structure not acceptable), if both USE_REV_HDM_SEQ and EXPL_REV_START_TIME or both USE_FOR_HDM_SEQ and EXPL_FOR_START_TIME specified in the *Supplemental Channel Assignment Message* are set to ‘1’.

- 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 *Supplemental Channel Assignment Message* is not in the Active Set and this message is not linked with a *General Handoff Direction Message*.

If none of the above conditions is true, the mobile station shall perform the following.

- The mobile station shall store the following parameters from the *Supplemental Channel Assignment Message*:
  - Use *General Handoff Direction Message* forward sequence number indicator (USE_FOR_HDM_SEQ = USE_FOR_HDM_SEQr)
  - If USE_FOR_HDM_SEQr is equal to ‘1’, then the mobile station shall store the following:
    + The sequence number of the *General Handoff Direction Message* to which this messaged is linked for the Forward Supplemental Code Channel assignment (FOR_LINKED_HDM_SEQ = FOR_LINKED_HDM_SEQr)
    + The forward Supplemental Code Channel assignment order (SCAM_FOR_ORDER = least significant bit of FOR_SUP_CONFIGr)
    + The forward duration assignment indicator (SCAM_FOR_DURATION_MODE = USE_FOR_DURATIONr).

- Use *General Handoff Direction Message* reverse sequence number indicator (USE_REV_HDM_SEQ = USE_REV_HDM_SEQr)
- If USE_REV_HDM_SEQr is equal to ‘1’, then the mobile station shall store the following:
  + The sequence number of the *General Handoff Direction Message* to which this messaged is linked for the Reverse Supplemental Code Channel assignment (REV_LINKED_HDM_SEQ = REV_LINKED_HDM_SEQr)
+ The reverse duration assignment indicator
(SCAM_REV_DURATION_MODEs = USE_REV_DUR_DURATIONr).

- If USE_RETRY_DELAYr is ‘0’, then the mobile station shall store 0 as RETRY_DELAYs. The mobile station may send subsequent Supplemental Channel Request Messages whenever RETRY_DELAYs is set to 0.

- If USE_RETRY_DELAYr is set to ‘1’, the mobile station shall interpret the Supplemental Channel Assignment Message as an indication that the base station has specified a Supplemental Channel Request Message retry delay in RETRY_DELAYr as follows:
  - The mobile station shall store the next system time 80 ms boundary + RETRY_DELAYr × 320 ms as RETRY_DELAYs. The mobile station shall not send any subsequent Supplemental Channel Request Message until after the system time stored in RETRY_DELAYs. At the system time stored in RETRY_DELAYs, the mobile station shall reset RETRY_DELAYs to 0.
  - If RETRY_DELAYr is ‘00000000’, then the mobile station shall store 0 as RETRY_DELAYs. The mobile station may send subsequent Supplemental Channel Request Messages whenever RETRY_DELAYs is set to 0.
  - If RETRY_DELAYr is ‘11111111’, then the mobile station shall store infinity as RETRY_DELAYs, and the mobile station shall not send any further Supplemental Channel Request Messages until the mobile station receives a new Supplemental Channel Assignment Message with no retry delay or a non-infinite retry delay specified, or until the mobile station receives a General Handoff Direction Message with a CLEAR_RETRY_DELAY indication set.

- If REV_INCLUDEDr is equal to ‘1’, then the mobile station shall process Reverse Supplemental Code Channel assignment information for the Supplemental Channel Assignment Message. This information shall be processed as follows:
  - The mobile station shall store USE_T_ADD_ABORTr, the Reverse Supplemental Code Channel assignment T_ADD abort indicator, as USE_T_ADD_ABORTs.
  - The mobile station shall store REV_DTX_DURATIONr, Reverse Supplemental Channel Discontinuous Transmission Duration, as REV_DTX_DURATIONs.
  - If REV_PARMS_INCLUDEDr is equal to ‘1’, the mobile station shall store the following:
    + T_MULCHANs = T_MULCHANr
    + BEGIN_PREAMBLEs = BEGIN_PREAMBLEr
    + RESUME_PREAMBLEs = RESUME_PREAMBLEr
  - If IGNORE_SCAMs is equal to ‘1’ and SCRM_SEQ_NUMr is not present or is present and is not equal to SCRM_SEQ_NUMs, then the mobile station shall not process the remaining Reverse Supplemental Code Channel assignment information in this message.
− If IGNORE_SCAMs is equal to ‘1’ and SCRM_SEQ_NUMr is present and is
equal to SCRM_SEQ_NUMs, then the mobile station shall set
IGNORE_SCAMs to ‘0’.
− The mobile station shall set REV_START_TIMEs as follows:
  + If EXPL_REV_START_TIMEr is equal to ‘1’, the mobile station shall set
    the REV_START_TIMEs to REV_START_TIMEr.
  + If USE_REV_HDM_SEQr is equal to ‘1’ and REV_LINKED_HDM_SEQr is
    not equal to HDM_SEQs, the mobile station shall set the
    REV_START_TIMEs to NULL.
  + If USE_REV_HDM_SEQr is equal to ‘1’ and REV_LINKED_HDM_SEQr is
    equal to HDM_SEQs, then the mobile station shall set the
    REV_START_TIMEs to the action time of the General Handoff Direction
    Message that is linked to the Supplemental Channel Assignment Message.
  + If EXPL_REV_START_TIMEr is equal to ‘0’ and USE_REV_HDM_SEQr is
    equal to ‘0’, the mobile station shall set the REV_START_TIMEs to the
    next 80 ms boundary following the action time of the Supplemental
    Channel Assignment Message.
− The mobile station shall set NUM_REV_CODESs to NUM_REV_CODESr. If
  REV_START_TIMEs is not equal to NULL, the mobile station shall perform the
  following actions:
  + If NUM_REV_CODESr is equal to ‘000’, the mobile station shall stop
    transmitting the Reverse Supplemental Code Channels at the start time
    specified by REV_START_TIMEs.
  + If NUM_REV_CODESr is not equal to ‘000’, the mobile station shall set
    PILOT_GATING_USE_RATE to ‘0’ at the action time of the message and
    the mobile station may start transmitting on NUM_REV_CODESs Reverse
    Supplemental Code Channels at the start time specified by
    REV_START_TIMEs for a duration of time specified by the following rules:
    o If USE_REV_DURATIONr is equal to ‘1’, the mobile station shall set
      REV_DURATIONS to REV_DURATIONSr. The mobile station may
      continue transmitting on the Reverse Supplemental Code Channels
      for a period of (REV_DURATIONS × 80) ms, or until it receives the
      action time of a subsequent General Handoff Direction Message or a
      Supplemental Channel Assignment Message that specifies a different
      Reverse Supplemental assignment duration or start time.
    o If USE_REV_DURATIONr is equal to ‘0’, the mobile station may
      continue to transmit indefinitely on the Reverse Supplemental Code
      Channels, or until it receives the action time of a subsequent General
      Handoff Direction Message or a Supplemental Channel Assignment
      Message that specifies a different Reverse Supplemental assignment
      duration or start time.
• If FOR_INCLUDED is equal to ‘1’, then the mobile station shall process Forward Supplemental Code Channel assignment information as follows:

  - The mobile station shall assign a value to FOR_START_TIMES according to the following rules:
    + If EXPL_FOR_START_TIME is equal to ‘1’, the mobile station shall set the FOR_START_TIMES to FOR_START_TIMEr.
    + If USE_FOR_HDM_SEQr is equal to ‘1’ and FOR_LINKED_HDM_SEQr is not equal to HDM_SEQs, the mobile station shall set the FOR_START_TIMES to NULL.
    + If USE_FOR_HDM_SEQr is equal to ‘1’ and FOR_LINKED_HDM_SEQr is equal to HDM_SEQs, then the mobile station shall set the FOR_START_TIMES to the action time of the General Handoff Direction Message that is linked to the Supplemental Channel Assignment Message.
    + If EXPL_FOR_START_TIME_r is equal to ‘0’ and USE_FOR_HDM_SEQr equals ‘0’, the mobile station shall set the FOR_START_TIMES to the action time of the Supplemental Channel Assignment Message.

  - If FOR_SUP_CONFIGr is equal to ‘00’ and FOR_START_TIMES is not equal to NULL, the mobile station should stop processing the Forward Supplemental Code Channels at the time specified by FOR_START_TIMES.

  - If FOR_SUP_CONFIGr is equal to ‘01’ and FOR_START_TIMES is not equal to NULL, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ at the action time of the message and start processing the Forward Supplemental Code Channels in the CODE_CHAN_LISTs at FOR_START_TIMES for a period of time specified by the following rules:
    + If USE_FOR_DURATION is equal to ‘1’, the mobile station shall set FOR_DURATIONs to FOR_DURATIONr. The mobile station shall continue processing the Forward Supplemental Code Channels for a period of (FOR_DURATIONs × 80) ms, or until it receives the action time of a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental assignment duration or start time.
    + If USE_FOR_DURATION_r is equal to ‘0’, the mobile station shall continue processing the Forward Supplemental Code Channels until it receives the action time of a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental assignment duration or start time.

  - If FOR_SUP_CONFIGr is equal to ‘10’, the mobile station shall perform the following:
    + The mobile station shall update the CODE_CHAN_LISTs as specified in 2.6.8.
+ If FOR_START_TIMEs is not equal to NULL the mobile station should stop processing Forward Supplemental Code Channels at the time specified by FOR_START_TIMEs.

- If FOR_SUP_CONFIGr is equal to ‘11’, the mobile station shall perform the following:
  + The mobile station shall update the CODE_CHAN_LISTs as specified in 2.6.8.
  + If FOR_START_TIMEs is not equal to NULL, then the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ at the action time of the message and start processing the Forward Supplemental Code Channels in the CODE_CHAN_LISTs at the time specified by FOR_START_TIMEs for a period of time specified by the following rules:
    - If USE_FOR_DURATIONr is equal to ‘1’, the mobile station shall set FOR_DURATIONs to FOR_DURATIONr. The mobile station shall continue processing the Forward Supplemental Code Channels for (FOR_DURATIONs × 80) ms, until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental assignment duration or start time.
    - If USE_FOR_DURATIONr is equal to ‘0’, the mobile station shall continue processing the Forward Supplemental Code Channels until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental assignment duration or start time.

9. General Handoff Direction Message: The mobile station shall process the message as follows:

   In addition to the requirements in this section, if the SCR_INCLUDED field is included in this message and is set to ‘1’ the mobile station shall also process this message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

   The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to the specified value if any of the following conditions is true, and shall not perform any other action described in this section for processing the General Handoff Direction Message:

   • The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported), if the mobile station does not support the band class specified in the General Handoff Direction Message.
• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000110' (capability not supported), if the number of forward or reverse Supplemental Code Channels specified in the *General Handoff Direction Message* is greater than the maximum number of Supplemental Code Channels supported by the mobile station.

• If the SCR_INCLUDED field is included in this message and is set to ‘1’, the mobile station shall perform the following:

  - The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000111’ (message cannot be handled by the current mobile station configuration), if the mobile station does not support the service configuration specified in the *General Handoff Direction Message*.
  
  - The mobile station shall send a *Mobile Station Reject Order* (ORDQ = ‘00000111’) within T56m seconds, if the mobile station supports the service configuration specified but does not accept the service configuration specified in the *General Handoff Direction Message*.

• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000111’ (message cannot be handled by the current mobile station configuration), if the NNSCR_INCLUDED field is included and set to ‘1’ and the SCR_INCLUDED field is either not included or included but set to ‘0’, and the mobile station does not support the configuration specified in the non-negotiable service configuration information record in the *General Handoff Direction Message*.

• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00001010’ (search set not specified), if the PERIODIC_SEARCH field is included in the *General Handoff Direction Message* and is set to ‘1’, and the Candidate Frequency Search Set is empty.

• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00001101’ (search period too short), if the PERIODIC_SEARCH field is included in the *General Handoff Direction Message* and is set to ‘1’, and search_period is less than (max \(fwd_time, rev_time\) + T71m seconds), where

\[
search\_period = \text{time period corresponding to SEARCH\_PERIOD}_{5} \text{ shown in Table 2.6.6.2.8.3.2-1},
\]

\[
fwd\_time = \text{the mobile station's estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the CDMA Candidate Frequency, to search the Candidate Frequency Search Set, and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, } fwd\_time \text{ is the total time for all visits to the CDMA Candidate Frequency in a search period (see 2.6.6.2.8.3.2),}
\]
and

\[ \text{rev\_time} = \text{the mobile station's estimate of the total length of time, in seconds,} \]
\[ \text{for which the mobile station will need to suspend its current Reverse} \]
\[ \text{Traffic Channel processing in order to tune to the CDMA Candidate} \]
\[ \text{Frequency, to search the Candidate Frequency Search Set, and to} \]
\[ \text{re-tune to the Serving Frequency; if the mobile station searches the} \]
\[ \text{Candidate Frequency Search Set in multiple visits,} \text{rev\_time is the} \]
\[ \text{total time for all visits to the CDMA Candidate Frequency in a} \]
\[ \text{search period.} \]

If none of the above conditions is true, the mobile station shall perform the actions

described in the remainder of this section to process the General Handoff Direction

Message 

at the action time of the message.

If EXTRA_PARMS is equal to ‘1’, the mobile station shall store the return on failure
indicator from the General Handoff Direction Message \( \text{RETURN\_IF\_HANDOFF\_FAIL}_s \)
\( = \text{RETURN\_IF\_HANDOFF\_FAIL}_r \); otherwise the mobile station shall set
\( \text{RETURN\_IF\_HANDOFF\_FAIL}_s \) to ‘0’.

The mobile station shall set \( \text{RETURN\_IF\_HANDOFF\_FAIL}_s \) to ‘0’ (disable return on
failure) if any of the following conditions is true:

- If \( \text{P\_REV\_IN\_USE}_s \) 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 \( \text{BAND\_CLASS}_r \) is equal to
    \( \text{CDMABAND}_s \) and \( \text{CDMA\_FREQ}_r \) is equal to \( \text{CDMACH}_s \), and
    \( \text{FRAME\_OFFSET}_r \) is equal to \( \text{FRAME\_OFFSET}_s \).

The mobile station shall store the following parameters from its current
configuration:

- CDMA band class \( \text{SF\_CDMABAND}_s = \text{CDMABAND}_s \)
- Frequency assignment \( \text{SF\_CDMACH}_s = \text{CDMACH}_s \)
- Frame Offset \( \text{SF\_FRAME\_OFFSET}_s = \text{FRAME\_OFFSET}_s \)

If \( \text{RETURN\_IF\_HANDOFF\_FAIL}_s \) is equal to ‘1’, the mobile station shall also store
the following parameters from its current configuration:

- Protocol revision level
  \( \text{SF\_P\_REV}_s = \text{P\_REV}_s \)

- Protocol revision level in use on the Serving Frequency
  \( \text{SF\_P\_REV\_IN\_USE}_s = \text{P\_REV\_IN\_USE}_s \)
• Search window size for the Active Set and Candidate Set
  \( SF_{SRCH\_WIN\_A_s} = SRCH\_WIN\_A_s \)  

• Search window size for the Neighbor Set
  \( SF_{SRCH\_WIN\_N_s} = SRCH\_WIN\_N_s \)

• Search window size for the Remainder Set
  \( SF_{SRCH\_WIN\_R_s} = SRCH\_WIN\_R_s \)

• Pilot detection threshold
  \( SF_{T\_ADDs} = T\_ADDs \)

• Pilot drop threshold
  \( SF_{T\_DROPs} = T\_DROPs \)

• Active Set versus Candidate Set comparison threshold
  \( SF_{T\_COMP} = T\_COMP \)

• Drop timer value
  \( SF_{T\_TDROP} = T\_TDROP \)

• Drop timer range value
  \( SF_{T\_TDROP\_RANGE} = T\_TDROP\_RANGE \)

• Soft slope for the dynamic add and drop thresholds
  \( SF_{SOFT\_SLOPE} = SOFT\_SLOPE \)

• Intercept for the dynamic add threshold
  \( SF_{ADD\_INTERCEPT} = ADD\_INTERCEPT \)

• Intercept for the dynamic drop threshold
  \( SF_{DROP\_INTERCEPT} = DROP\_INTERCEPT \)

• Private long code mask indicator: If the mobile station is using the private long code mask on the Serving Frequency, it shall set \( SF_{PRIVATE\_LCM} \) to ‘1’; otherwise, it shall set \( SF_{PRIVATE\_LCM} \) to ‘0’.

• Private long code mask: If the mobile station is using the private long code mask on the Serving Frequency, it shall set \( SF_{PVT\_LCM} \) to \( PVT\_LCM \).

• Public long code mask type: The mobile station shall set \( SF_{PLCM\_TYPE} \) to \( PLCM\_TYPE \). If \( PLCM\_TYPE \) equals ‘0001’, the mobile station shall set \( SF_{PLCM\_39} \) to \( PLCM\_39 \).

• Service negotiation type
  \( SF_{SERV\_NEG} = SERV\_NEG \)

• Service configuration:
  Store the current service configuration (service configuration record and non-negotiable service configuration record) in \( SF_{SERVICE\_CONFIG} \)

• Call Information:
  Store the list of current calls (Call Control instances, etc.) in \( SF_{CALLS} \)

• Message encryption mode: If message encryption is on, the mobile station shall set \( SF_{ENCRYPT\_MODE} \) to ‘1’; otherwise, the mobile station shall set \( SF_{ENCRYPT\_MODE} \) to ‘0’.
• Extended nominal power setting of the current cell
  (SF_NOM_PWR_EXTs = NOM_PWR_EXTs)

• Nominal power setting of the current cell
  (SF_NOM_PWRs = NOM_PWRs)

• Power control step
  (SF_PWR_CNTL_STEPs = PWR_CNTL_STEPs)

• Serving Frequency Active Set (SF Active Set = For each pilot in the current
  Active Set: (PILOT_PN, PWR_COMB_IND) )

• Serving Frequency Code Channel List
  (SF_CODE_CHAN_LISTs = CODE_CHAN_LISTs)

When the message takes effect, the mobile station shall perform the following actions:

• The mobile station shall send a Handoff Completion Message or an Extended
  Handoff Completion Message as specified in 2.6.6.2.5.2.

• Update the Active Set, Candidate Set, and Neighbor Set in accordance with the
  General Handoff Direction Message processing (see 2.6.6.2.6.1, 2.6.6.2.6.2, and
  2.6.6.2.6.3).

• The mobile station shall delete all pilots that are not listed in the Active Set from
  the Active Set of the Supplemental Channel for the Forward Supplemental
  Channel Assignment (if any). If these deleted pilots include all pilots in the
  Active Set of the Supplemental Channel, the mobile station shall cancel the
  Forward Supplemental Channel Assignment.

• Discontinue use of all Forward Traffic Channels associated with pilots not listed
  in the General Handoff Direction Message.

• If EXTRA_PARMS is equal to ‘1’, perform the following actions:
  − If FRAME_OFFSETr is not equal to FRAME_OFFSETs, change the frame
    offset on all of the code channels of the Forward Traffic Channel and of the
    Reverse Traffic Channel.
  − If RESET_L2r is equal to ‘1’, and RETURN_IF_HANDOFF_FAILs is equal to
    ‘0’, Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset
    the acknowledgment procedures, as specified in [4]. The mobile station shall
    reset the acknowledgment procedures immediately after the action time of
    the General Handoff Direction Message.
  − If RESET_FPCr is equal to ‘1’ and RETURN_IF_HANDOFF_FAILs is equal to
    ‘0’, initialize the Forward Traffic Channel power control counters, as
    specified in 2.6.4.1.1.1.
  − If SERV_NEG_TYPEr is equal to ‘1’, set SERV_NEGs to enabled; otherwise set
    SERV_NEGs to disabled.
Use the long code mask specified by the PRIVATE_LCM_r (see 2.3.12.3) as follows:

+ If PRIVATE_LCM_r equals '1', the mobile station shall use the Private Long Code Mask as specified in 2.3.6.
+ If PRIVATE_LCM_r equals '0', the mobile station shall use the Public Long Code Mask derived from PLCM_TYPE_s as specified in 2.3.6.

The mobile station shall indicate to the user the voice privacy mode status.

- Process the ENCRYPT_MODE field, as specified in 2.3.12.2.
- Perform the procedures as specified in 2.6.11.3.

• If EXTRA_PARMS is equal to '0', set the following variables to the values indicated:
  - Hard handoff traffic channel preamble count required before transmitting a Handoff Completion Message or an Extended Handoff Completion Message (NUM_PREAMBLE_S = '000')
  - Complete search flag (COMPLETE_SEARCH_S = '1')
  - CDMA band class for the Target Frequency (TF_CDMABAND_S = SF_CDMABAND_S)
  - Frequency assignment for the Target Frequency (TF_CDMACH_S = SF_CDMACH_S)

• Store the following parameters from the General Handoff Direction Message:
  - General Handoff Direction Message sequence number (HDM_SEQ_S = HDM_SEQ_r)
  - Forward power control subchannel relative gain (FPC_SUBCHAN_GAIN_S = FPC_SUBCHAN_GAIN_r).
  - If the mobile station uses FPC_SUBCHAN_GAIN_S, the mobile station shall perform the following:
    + If PC_ACTION_TIME_r is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAIN_S at the time specified by PC_ACTION_TIME_r.
    + If PC_ACTION_TIME is not received and the explicit action time is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAIN_S at the action time.
    + If neither PC_ACTION_TIME_r nor explicit action time is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAIN_S at the first 80ms boundary occurring at least 80ms after the end of the frame containing the last bit of the General Handoff Direction Message sent to the mobile station.
− Reverse Eighth Gating Mode (REV_FCH_GATING_MODEs = REV_FCH_GATING_MODEr).
− Reverse Power Control Delay if REV_PWR_CNTL_DELAY_INCLr is equal to ‘1’ (REV_PWR_CNTL_DELAYs = REV_PWR_CNTL_DELAYr).
− Concurrent services supported indicator (CS_SUPPORTEDs = CS_SUPPORTEDr).
− Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTEDs = FOR_PDCH_SUPPORTEDr).
− Pilot information request supported indicator (PILOT_INFO_REQ_SUPPORTEDs = PILOT_INFO_REQ_SUPPORTEDr).
− If SEARCH_INCLUDED is equal to ‘1’, store the following:
  + Search window size for the Active Set and Candidate Set (SRCH_WIN_As = SRCH_WIN_Ar)
  + Pilot detection threshold (T_ADDs = T_ADDr)
  + Pilot drop threshold (T_DROPs = T_DROPr)
  + Active Set versus Candidate Set comparison threshold (T_COMPs = T_Comp r)
  + Drop timer value (T_TDROPs = T_TDROPr)
  + Drop timer range value (T_TDROP_RANGEs = T_TDROP RANGEr) if T_TDROP_RANGE_INCLr is equal to ‘1’; otherwise, (T_TDROP_RANGEs = '0000')
  + Soft slope for the dynamic add and drop thresholds (SOFT_SLOPEs = SOFT_SLOPER)
  + Intercept for the dynamic add threshold (ADD_INTERCEPTs = ADD_INTERCEPTr)
  + Intercept for the dynamic drop threshold (DROP_INTERCEPTs = DROP_INTERCEPTr)
− If EXTRA_PARMS is equal to ‘1’, store the following:
  + Protocol revision level (P_REVs = P_REVr), and protocol revision level currently in use (P_REV_IN_USEs = min (P_REVs, MOB_P_REVp of the current band class))
  + If the mobile station supports packet data service options, the packet data services zone identifier (PACKET_ZONE_IDs = PACKET_ZONE_IDr)
  + Frame offset (FRAME_OFFSETs = FRAME_OFFSETr)
Acknowledgment procedures reset indicator
(If RETURN_IF_HANDOFF_FAILS is equal to ‘1’, set TF_RESET_L2s to
RESET_L2f)

+ Indicator to initialize the Forward Traffic Channel power control counters
(If RETURN_IF_HANDOFF_FAILS is equal to ‘1’, set TF_RESET_FPCs to
RESET_FPCf)

+ Nominal power setting of the target cell (NOM_PWRs = NOM_PWRr)
+ Extended nominal power setting of the target cell (If CDMABANDs =
‘00000’ or CDMABANDs = ‘00011’, then NOM_PWR_EXTs = ‘0’;
otherwise, NOM_PWR_EXTs = NOM_PWR_EXTr)

+ Hard handoff traffic channel preamble count required before
transmitting a Handoff Completion Message or an Extended Handoff
Completion Message (NUM_PREAMBLEs = NUM_PREAMBLEr)

+ CDMA band class for the Target Frequency
(TF_CDMABANDs = BAND_CLASSr and CDMABANDs = BAND_CLASSr)
+ Frequency assignment for the Target Frequency
(TF_CDMACHs = CDMA_FREQr and CDMACHs = CDMA_FREQr)

+ Complete search flag (COMPLETE_SEARCHs = COMPLETE_SEARCHr)
+ Periodic search flag (PERIODIC_SEARCHs = PERIODIC_SEARCHr)
+ Nominal code channel output power offset relative to the Reverse Pilot
Channel power (RLGAIN_TRAFFIC_PILOTs = RLGAIN_TRAFFIC_PILOTr)

− If EXTRA_PARMS is equal to ‘1’ and DEFAULT_RLAG is equal to ‘1’, the
mobile station shall set each entry of the Reverse Link Attribute Adjustment
Gain Table and Reverse Channel Adjustment Gain Table (see [2]) to 0.

− If REV_PARMS_INCLUDED is included and is equal to ‘1’, the mobile station
shall store the following:
+ Neighbor pilot strength measurement threshold offset (T_MULCHANs =
T_MULCHANr)
+ Reverse Supplemental Code Channel beginning of transmission
preamble length (BEGIN_PREAMBLEs = BEGIN_PREAMBLEr)
+ Reverse Supplemental Code Channel resumption of transmission
preamble length (RESUME_PREAMBLEs = RESUME_PREAMBLEr)

− For each pilot included in the message, the mobile station shall store the
following:
+ PILOT_PN, the pilot PN sequence offset index
+ PWR_COMB_IND, the power control symbol combining indicator
If USE_PWR_CNTL_STEP is equal to ‘1’ and PWR_CNTL_STEP_r corresponds to a power control step size supported by the mobile station (see [2]), then the mobile station shall set PWR_CNTL_STEP_s to PWR_CNTL_STEP_r.

- Set the pilot detection threshold for the Target Frequency and the Candidate Frequency:
  - Set TF_T_ADD_s to T_ADD_s.
  - If the Target Frequency is the same as the Candidate Frequency (TF_CDMABAND_s is equal to CF_CDMABAND_s and TF_CDMACH_s is equal to CF_CDMACH_s), set CF_T_ADD_s to T_ADD_s.

- If FOR_INCLUDED is included and is equal to ‘0’, the mobile station shall perform the following:
  - The mobile station shall update the Code Channel List, CODE_CHAN_LIST_s, as specified in 2.6.8.
  - If USE_FOR_HDM_SEQ_s is equal to ‘1’ and FOR_LINKED_HDM_SEQ_s is equal to HDM_SEQ_r (this indicates that there is pending Forward Supplemental Code Channel assignment information, received in a Supplemental Channel Assignment Message, linked to this General Handoff Direction Message), then the mobile station shall perform the following actions:
    + The mobile station shall set USE_FOR_HDM_SEQ_s to ‘0’.
    + If SCAM_FOR_ORDER_s is equal to ‘0’, the mobile station shall stop processing all Forward Supplemental Code Channels at the action time of the General Handoff Direction Message.
    + If SCAM_FOR_ORDER_s is equal to ‘1’, the mobile station shall start processing the Forward Supplemental Code Channels specified in CODE_CHAN_LIST_s at the action time of the General Handoff Direction Message, for a period of time determined by the following rules:
      o If SCAM_FOR_DURATION_MODE_s is equal to ‘1’, the mobile station shall continue processing the Forward Supplemental Code Channels for a period of (FOR_DURATION_s × 80) ms, until it receives a subsequent General Handoff Direction Message or a Supplemental Channel Assignment Message that specifies a different Forward Supplemental Code Channel assignment.
      o If SCAM_FOR_DURATION_MODE_s is equal to ‘0’, the mobile station shall continue processing the Forward Supplemental Code Channels until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental Code Channel assignment.
If USE_FOR_HDM_SEQs is equal to '0' or FOR_LINKED_HDM_SEQs is not equal to HDM_SEQr, and if the mobile station is currently processing Forward Supplemental Code Channels, it shall continue processing the Forward Supplemental Code Channels using the updated Code Channel List, CODE_CHAN_LISTs.

If NNSCR_INCLUDED field is included and set to '1' and SCR_INCLUDED field is either not included or included but set to '0', the mobile station shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 at the action time of this message. If SYNC_ID_INCLr is set to '1', the mobile station shall perform the following:

- The mobile station shall store the synchronization identifier received from the base station (SYNC_IDs = SYNC_IDr).

- The mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.

Otherwise, the mobile station shall set SYNC_IDs to NULL.

If FOR_INCLUDED is included and is equal to '1', then the mobile station shall process the Forward Supplemental Code Channel assignment information as follows:

- The mobile station shall set USE_FOR_HDM_SEQs to '0'.

- If FOR_START_TIMEs specifies a time which is after the action time of the General Handoff Direction Message, the mobile station shall cancel any pending Forward Supplemental Code Channel assignment and shall set FOR_START_TIMEs to NULL.

- The mobile station shall update the Code Channel List, CODE_CHAN_LISTs, in accordance with the value of FOR_SUP_CONFIG, as specified in 2.6.8.

- If FOR_SUP_CONFIG is equal to '00' or '10', the mobile station should stop processing Forward Supplemental Code Channels, if any, when the message takes effect.

- If FOR_SUP_CONFIG is equal to '01' or '11', the mobile station shall set PILOT_GATING_USE_RATE to '0' at the action time of the message and start processing the Forward Supplemental Code Channels in the updated Code Channel List, CODE_CHAN_LISTs, at the action time of the message, for a period of time determined by the following rules:

  + If USE_FOR_DURATON is equal to '1', the mobile station shall set FOR_DURATONs to FOR_DURATONr. The mobile station shall continue processing the Forward Supplemental Code Channels for a period of (FOR_DURATONs × 80) ms, until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental Code Channel assignment.
+ If USE_FOR_DURATION is equal to ‘0’, the mobile station shall continue
processing the Forward Supplemental Code Channels until it receives a
subsequent Supplemental Channel Assignment Message or a General
Handoff Direction Message that specifies a different Forward
Supplemental Code Channel assignment.

• If REV_INCLUDED is included and is equal to ‘0’, the mobile station shall
perform the following:
  – If USE_REV_HDM_SEQs is equal to ‘1’ and REV_LINKED_HDM_SEQs is
equal to HDM_SEQr (this indicates that there is pending Reverse
Supplemental Code Channel assignment information, received in a
Supplemental Channel Assignment Message, linked to this General Handoff
Direction Message), the mobile station shall perform the following actions:
    + If NUM_REV_CODESs is equal to ‘000’, the mobile station shall stop
      transmitting on all Reverse Supplemental Code Channels at the action
time of the message.
    + If NUM_REV_CODESs is not equal to ‘000’, the mobile station may start
      transmitting on NUM_REV_CODESs Reverse Supplemental Code
      Channels at the action time of the message, for a duration of time
determined by the following rules:
        o If SCAM_REV_DURATIONS_MODEs is equal to ‘1’, the mobile station
          may continue transmitting on the Reverse Supplemental Code
          Channels for a period of (REV_DURATIONSs × 80) ms, until it receives
          a subsequent General Handoff Direction Message or a Supplemental
          Channel Assignment Message that specifies a different Reverse
          Supplemental Code Channel assignment.
        o If SCAM_REV_DURATIONS_MODEs is equal to ‘0’, the mobile station
          may continue transmitting on the Reverse Supplemental Code
          Channels until it receives a subsequent General Handoff Direction
          Message or a Supplemental Channel Assignment Message that
          specifies a different Reverse Supplemental Code Channel
          assignment.
    + The mobile station shall set USE_REV_HDM_SEQs to ‘0’.
  – If USE_REV_HDM_SEQs is equal to ‘0’ or REV_LINKED_HDM_SEQs is not
    equal to HDM_SEQr, and if the previous Reverse Supplemental Code
    Channel assignment is still valid, the mobile station may continue to
    transmit on the Reverse Supplemental Code Channels according to the
    previously specified Reverse Supplemental Code Channel assignment.

• If REV_INCLUDED is included and is equal to ‘1’, then the mobile station shall
process the Reverse Supplemental Code Channel assignment information as
follows:
− The mobile station shall set REV_DTX_DURATIONS to REV_DTX_DURATIOR_r.

− The mobile station shall set USE_REV_HDM_SEQS to ‘0’.

− If REV_START_TIMEs specifies a time which is after the action time of the General Handoff Direction Message, the mobile station shall cancel any pending Reverse Supplemental Code Channel assignment and shall set REV_START_TIMEs to NULL.

− If CLEAR_RETRY_DELAY is equal to ‘1’, the mobile station shall cancel any previously indicated retry delay and shall set RETRY_DELAYs to 0; otherwise, the mobile station shall continue to honor any previously active retry delay stored in RETRY_DELAYs.

− The mobile station shall set NUM_REV_CODESs to NUM_REV_CODESr, and shall perform the following actions:

  + If NUM_REV_CODESs is equal to ‘000’, the mobile station shall stop transmitting on all Reverse Supplemental Code Channels at the action time of the message.

  + If NUM_REV_CODESs is not equal to ‘000’, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ at the action time of the message and may start transmitting on NUM_REV_CODESs Reverse Supplemental Code Channels at the action time of the message, for a duration of time determined by the following rules:

    o If USE_REV_DURATIONS_r is equal to ‘1’, the mobile station shall set REV_DURATIONS to REV_DURATIONS_r. The mobile station may continue transmitting on the Reverse Supplemental Code Channels for a period of (REV_DURATIONS_s × 80) ms, until it receives a subsequent General Handoff Direction Message or a Supplemental Channel Assignment Message that specifies a different Reverse Supplemental Code Channel assignment.

    o If USE_REV_DURATIONS is equal to ‘0’, the mobile station may continue to transmit on the Reverse Supplemental Code Channels until it receives a subsequent General Handoff Direction Message or a Supplemental Channel Assignment Message that specifies a different Reverse Supplemental Code Channel assignment.

− The mobile station shall store USE_T_ADD_ABORTr, the Reverse Supplemental Code Channel assignment T_ADD abort indicator, as USE_T_ADD_ABORTs.

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33 The CLEAR_RETRY_DELAY field received in General Handoff Direction Message does not affect the RETRY_DELAYs[RETRY_TYPE] values.
• The mobile station shall set IGNORE_SCAM\textsubscript{s} and IGNORE_ESCAM\textsubscript{s} to ‘0’.

• If PERIODIC_SEARCH\textsubscript{s} is equal to ‘0’ and a periodic search is in progress, the mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).

• Perform a soft or hard handoff depending on the following conditions:
  − If any of the following conditions is true, the mobile station shall perform a hard handoff:
    + EXTRA_PARMS is set to ‘1’ and either BAND\_CLASS\textsubscript{r} is not equal to SF\_CDMABAND\textsubscript{s}, CDMA\_FREQ\textsubscript{r} is not equal to SF\_CDMACH\textsubscript{s}, or FRAME\_OFFSET\textsubscript{r} is not equal to SF\_FRAME\_OFFSET\textsubscript{s}, or
    + The set of pilots specified by the message is disjoint from the Active Set prior to the action time of the message.
  − If the mobile station performs a hard handoff, it shall perform the following:
    + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the mobile station shall abort the procedure (see 2.6.6.2.12).
    + If a Candidate Frequency periodic search is in progress, the mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
    + The mobile station shall cancel the Forward Supplemental Channel assignment or the Reverse Supplemental Channel assignment (if any).
    + If RETURN\_IF\_HANDOFF\_FAIL\textsubscript{s} is equal to ‘0’, the mobile station shall perform actions specified in 2.6.6.2.8.1. If the message specifies more than one pilot, the mobile station shall also perform actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.
    + If RETURN\_IF\_HANDOFF\_FAIL\textsubscript{s} is equal to ‘1’, the mobile station shall perform actions specified in 2.6.6.2.8.2. If the message specifies more than one pilot, the mobile station shall also perform actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.
  − Otherwise, the mobile station shall perform a soft handoff as specified in 2.6.6.2.7.

10. Periodic Pilot Measurement Request Order: The mobile station shall perform the following:

• If the PPSMM timer is enabled, disable it.

• If ORDQ is equal to ‘11111111’, the mobile station shall send a Periodic Pilot Strength Measurement Message to the base station within T\textsubscript{56m} seconds.

• If ORDQ is not equal to ‘11111111’, the mobile station shall perform the following:
  − Set the MIN\_PILOT\_PWR\_THRESH\textsubscript{s} to MIN\_PILOT\_PWR\_THRESH\textsubscript{r} received from the Periodic Pilot Strength Measurement Request Order.
- Set the MIN_PILOT_EC_IO_THRESHs to MIN_PILOT_EC_IO_THRESHr received from the Periodic Pilot Strength Measurement Request Order.
- Set PPSMM_PERIODs equal to the larger value of ORDQ and the total length of time, in units of 80 ms, required by the mobile station to update the pilot strength measurement of each pilot in the Active Set and the Candidate Set.
- Perform the Periodic Serving Frequency Pilot Report Procedure as specified in 2.6.6.2.12.
  • If the mobile station sends the Periodic Pilot Strength Measurement Message and if INCL_SETPTTr is equal to ‘1’, the mobile station shall include outer loop Eb/Nt setpoint information corresponding to the physical channel specified by FPC_PRI_CHANs, and Supplemental Channel outer loop Eb/Nt setpoint information if one or more Supplemental Channels are assigned, in the Periodic Pilot Strength Measurement Message.

11. Universal Handoff Direction Message: The mobile station shall process the message as follows:

In addition to the requirements in this section, if the SCR_INCLUDED field is included in this message and is set to ‘1’, the mobile station shall also process this message in accordance with the requirements for the active service subfunction (see 2.6.4.1.2.2).

The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to the specified value if any of the following conditions is true, and shall not perform any other action described in this section for processing the Universal Handoff Direction Message:
  • The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000110’ (capability not supported), if the mobile station does not support the band class specified in the Universal Handoff Direction Message.
  • If the SCR_INCLUDED field is included in this message and is set to ‘1’, the mobile station shall perform the following:
    - The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to ‘00000111’ (message cannot be handled by the current mobile station configuration), if the mobile station does not support the service configuration specified in the Universal Handoff Direction Message.
    - The mobile station shall send a Mobile Station Reject Order (ORDQ = ‘00000111’) within T56m seconds, if the mobile station supports the service configuration specified but does not accept the service configuration specified in the Universal Handoff Direction Message.
• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000111’ (message cannot be handled by the current mobile station configuration), if the NNSCR_INCLUDED field is included and set to ‘1’ and the SCR_INCLUDED field is either not included or included but set to ‘0’, and the mobile station does not support the configuration specified in the non-negotiable service configuration information record in the *Universal Handoff Direction Message*.

• If the CC_INFO_INCL field is included in this message and is set to ‘1’, the mobile station shall perform the following for each of the NUM_CALLS_ASSIGN call assignments included in this message:
  
  − If there already exists or currently pending instantiation a Call Control instance identified by CON_REFr, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010010’ (a call control instance is already present with the specified identifier), with the CON_REF field of the order set to CON_REFr.
  
  − If RESPONSE_IND r equals ‘1’ and TAGr does not match any of the TAG values contained in the list TAG_OUTSTANDING_LIST, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010011’ (TAG received does not match TAG stored), with the TAG field of the order set to TAGr, and the CON_REF field of the order set to CON_REFr.

  − If the mobile station does not accept this call assignment, the mobile station shall send a *Mobile Station Reject Order* with ORDQ field set to ‘00010000’ (call assignment not accepted), with the CON_REF field of the order set to CON_REFr.

• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00001010’ (search set not specified), if the PERIODIC_SEARCH field is included in the *Universal Handoff Direction Message* and is set to ‘1’ and the Candidate Frequency Search Set is empty.

• The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to ‘00000011’ (message structure not acceptable), if the message specifies the Forward/Reverse Supplemental Channel assignment, the most significant bit of CH_INDr is equal to ‘0’, and CH_INDr is not equal to ‘000’.

• 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 are true:
  
  − any of the mobile station’s reverse supplemental channel configuration parameter for the corresponding Supplemental Channel is NULL, or

  − the message includes a Reverse Packet Data Channel assignment.
The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message cannot be handled by the current mobile station configuration), if the message includes a forward Supplemental Channel assignment and any of the mobile station's forward supplemental channel configuration parameters for the corresponding Supplemental Channel is NULL.

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00001101' (search period too short), if the PERIODIC_SEARCH field is included in the *Universal Handoff Direction Message* and is set to '1', and search_period is less than (max (fwd_time, rev_time) + T71m seconds), where

\[
\text{search\_period} = \text{time period corresponding to SEARCH\_PERIODs shown in Table 2.6.6.2.8.3.2-1,}
\]

\[
fwd\_time = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Forward Traffic Channel processing in order to tune to the CDMA Candidate Frequency, to search the Candidate Frequency Search Set, and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, } fudt \text{ time is the total time for all visits to the CDMA Candidate Frequency in a search period (see 2.6.6.2.8.3.2),}
\]

and

\[
\text{rev\_time} = \text{the mobile station’s estimate of the total length of time, in seconds, for which the mobile station will need to suspend its current Reverse Traffic Channel processing in order to tune to the CDMA Candidate Frequency, to search the Candidate Frequency Search Set, and to re-tune to the Serving Frequency; if the mobile station searches the Candidate Frequency Search Set in multiple visits, } rev\_time \text{ is the total time for all visits to the CDMA Candidate Frequency in a search period.}
\]

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00000111' (message cannot be handled by the current mobile station configuration), if CH_INDEX is equal to '000', and EXT_INDEX is not defined in Table 3.7.2.3.2.4-11.

The mobile station shall send a *Mobile Station Reject Order* with the ORDQ field set to '00011100' (PLCM_TYPE mismatch) if PLCM_TYPE equals '0010' and IMSI_O is derived from IMSI_T or if PLCM_TYPE 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_FAILS = RETURN_IF_HANDOFF_FAILr), otherwise the
mobile station shall set RETURN_IF_HANDOFF_FAILs to ‘0’.  
The mobile station shall set RETURN_IF_HANDOFF_FAILs to ‘0’ (disable return on failure) if any of the following conditions is true:

• If P_REV_IN_USEs 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_CLASSr is equal to CDMABANDs and CDMA_FREQr is equal to CDMACHs), and FRAME_OFFSETr is equal to FRAME_OFFSETs.

The mobile station shall store the following parameters from its current configuration:

• CDMA band class (SF_CDMABANDs = CDMABANDs)

• Frequency assignment (SF_CDMACHs = CDMACHs)

• Frame Offset (SF_FRAME_OFFSETs = FRAME_OFFSETs)

If RETURN_IF_HANDOFF_FAILs is equal to ‘1’, the mobile station shall also store the following parameters from its current configuration:

• Protocol revision level (SF_P_REVs = P_REVs)

• Protocol revision level in use on the Serving Frequency (SF_P_REV_IN_USEs = P_REV_IN_USEs)

• Search window size for the Active Set and Candidate Set (SF_SRCH_WIN_As = SRCH_WIN_As)

• Search window size for the Neighbor Set (SF_SRCH_WIN_Ns = SRCH_WIN_Ns),

• Search window size for the Remainder Set (SF_SRCH_WIN_Rs = SRCH_WIN_Rs)

• Pilot detection threshold (SF_T_ADDs = T_ADDs)

• Pilot drop threshold (SF_T_DROPs = T_DROPs)

• Active Set versus Candidate Set comparison threshold (SF_T_COMPs = T_COMPs)

• Drop timer value (SF_T_TDROPs = T_TDROPs)

• Drop timer range value (SF_T_TDROP_RANGEs = T_TDROP_RANGEs)

• Soft slope for the dynamic add and drop thresholds (SF_SOFT_SLOPEs = SOFT_SLOPEs)
• Intercept for the dynamic add threshold (SF_ADD_INTERCEPTs = ADD_INTERCEPTs)

• Intercept for the dynamic drop threshold (SF_DROP_INTERCEPTs = DROP_INTERCEPTs)

• Private long code mask indicator: If the mobile station is using the private long code mask on the Serving Frequency, it shall set SF_PRIVATE_LCMs to ‘1’; otherwise, it shall set SF_PRIVATE_LCMs to ‘0’.

• **Private long code mask:** If the mobile station is using the private long code mask on the Serving Frequency, it shall set SF_PVTLCM_42s to the PVTLCM_42.

• **Public long code mask type:** The mobile station shall set SF_PLCM_TYPEs to PLCM_TYPEs. If PLCM_TYPEs equals ‘0001’, the mobile station shall set SF_PLCM_39s to PLCM_39s.

• Service negotiation type (SF_SERV_NEGs = SERV_NEGs)

• Service configuration: Store the current service configuration (service configuration record and non-negotiable service configuration record) in SF_SERVICE_CONFIGs

• Call Information:
  Store the list of current calls (Call Control instances, etc.) in SF_CALLSs

• Message encryption mode: If message encryption is on, the mobile station shall set SF_ENCRYPT_MODEs to ‘1’; otherwise, the mobile station shall set SF_ENCRYPT_MODEs to ‘0’.

• Extended nominal power setting of the current cell (SF_NOM_PWR_EXTs = NOM_PWR_EXTs)

• Nominal power setting of the current cell (SF_NOM_PWRs = NOM_PWRs)

• Power control step (SF_PWR_CNTL_STEPs = PWR_CNTL_STEPs)

• Serving Frequency Active Set (SF Active Set = (For each pilot in the current Active Set: (PILOT_PN, PWR_COMB_IND) ) )

• Serving Frequency Code Channel List (SF_CODE_CHAN_LISTs = CODE_CHAN_LISTs)

If NNSCR_INCLUDED field is included and set to ‘1’ and SCR_INCLUDED field is either not included or included but set to ‘0’, the mobile station shall process the received Non-negotiable Service Configuration Record as specified in 2.6.4.1.13 at the action time of this message. If SYNC_ID_INCLr is set to ‘1’, the mobile station shall perform the following:

• The mobile station shall store (if included) the synchronization identifier received from the base station corresponding to this service configuration (SYNC_IDs = SYNC_IDr).

• The mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.
Otherwise, the mobile station shall set SYNC_IDs to NULL.

If SYNC_ID_INCL_r is set to ‘1’, NNSCR_INCLUDED field is not included or is included and set to ‘0’, and SCR_INCLUDED is not included or is included and set to ‘0’, the mobile station shall perform the following:

- The mobile station shall store the synchronization identifier received from the base station (SYNC_IDs = SYNC_ID_r).

- If the currently used service configuration has a corresponding SYNC_ID, the mobile station shall perform one of the following:
  + If the current SID (if SID_r is included in the message then the current SID is SID_r; otherwise, the current SID is SID_s) or current NID (if NID_r is included in the message then the current NID is NID_r; otherwise, the current NID is NID_s) is not equal to the stored SID or NID corresponding to the currently used service configuration, the mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.
  + Otherwise, the mobile station shall update the stored SYNC_ID value corresponding to the currently used service configuration with SYNC_ID_r.

- If the currently used service configuration does not have a corresponding SYNC_ID, the mobile station shall store the current service configuration as specified in 2.6.4.1.2.2.5.1 at the action time of this message.

When the message takes effect, the mobile station shall perform the following actions:

- The mobile station shall send a Handoff Completion Message or an Extended Handoff Completion Message as specified in 2.6.6.2.5.2.

- 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 as specified in 2.3.6.

- If PRIVATE_LCM equals ‘1’ and PLCM_TYPE_INCL equals ‘0’, the mobile station shall perform the following:
  + The mobile station shall use the private long code mask.

- If PRIVATE_LCM equals ‘1’ and PLCM_TYPE_INCL 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 to PLCM_TYPE; if PLCM_TYPE equals ‘0001’, the mobile station shall set PLCM_39 to PLCM_39.

- The mobile station shall indicate to the user the voice privacy mode status.

• If PARMS_INCL is equal to ‘1’, perform the following actions:
  – Set protocol revision level (P_REV = P_REV), and protocol revision level currently in use (P_REV_IN_USE = min (P_REV, MOB_P_REV of the current band class)).
  – If SERV_NEG_TYPE equals ‘1’, set SERV_NEG to enabled; otherwise set SERV_NEG to disabled.

• If EXTRA_PARMS is equal to ‘1’, perform the following actions:
  – If FRAME_OFFSET is not equal to FRAME_OFFSET, change the frame offset on all of the code channels of the Forward Traffic Channel and of the Reverse Traffic Channel.
  – If RESET_L2 is equal to ‘1’, and RETURN_IF_HANDOFF_FAIL is equal to ‘0’, Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset the acknowledgment procedures, as specified in [4]. The mobile station shall reset the acknowledgment procedures immediately after the action time of the Universal Handoff Direction Message.
If RESET_FPC is equal to ‘1’ and RETURN_IF_HANDOFF_FAIL is equal to ‘0’, initialize the Forward Traffic Channel power control counters, as specified in 2.6.4.1.1.1.

Use the long code mask specified by the PRIVATE_LCM (see 2.3.12.3) and indicate to the user the voice privacy mode status.

Process the ENCRYPT_MODE field, as specified in 2.3.12.2.

Perform the procedures as specified in 2.6.11.3.

If EXTRA_PARMS is equal to ‘0’, set the following variables to the values indicated:

- Hard handoff traffic channel preamble count required before transmitting a Handoff Completion Message or an Extended Handoff Completion Message (NUM_PREAMBLEs = ‘000’)
- Complete search flag (COMPLETE_SEARCHs = ‘1’)
- CDMA band class for the Target Frequency (TF_CDMABANDs = SF_CDMABANDs)
- Frequency assignment for the Target Frequency (TF_CDMACHs = SF_CDMACHs)

Store the following parameters from the Universal Handoff Direction Message:

- Universal Handoff Direction Message sequence number (HDM_SEQs = HDM_SEQr)
- Forward power control subchannel relative gain (FPC_SUBCHAN_GAINs = FPC_SUBCHAN_GAINr).

If the mobile station uses FPC_SUBCHAN_GAINs, the mobile station shall perform the following:

+ If PC_ACTION_TIMEr is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAINs at the time specified by PC_ACTION_TIMEr.

+ If PC_ACTION_TIME is not received and the explicit action time is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAINs at the action time.

+ If neither PC_ACTION_TIMEr nor explicit action time is received, the mobile station shall apply its usage of the FPC_SUBCHAN_GAINs at the first 80ms boundary occurring at least 80ms after the end of the frame containing the last bit of the Universal Handoff Direction Message sent to the mobile station.

- Reverse Eighth Gating Mode (REV_FCH_GATING_MODEs = REV_FCH_GATING_MODEr).
- Reverse Power Control Delay if REV_PWR_CNTL_DELAY_INCL is equal to ‘1’ (REV_PWR_CNTL_DELAY = REV_PWR_CNTL_DELAY).

- Concurrent services supported indicator (CS_SUPPORTED = CS_SUPPORTED).

- Maximum number of additional service reference identifiers allowed in origination (MAX_ADD_SERV_INSTANCE = MAX_ADD_SERV_INSTANCE), if included; otherwise, the mobile station shall set MAX_ADD_SERV_INSTANCE to 0.

- Control Hold Mode supported indicator (CHM_SUPPORTED = CHM_SUPPORTED) if included; otherwise, the mobile station shall perform the following:
  + If P_REV_IN_USE is less than 6, set CHM_SUPPORTED to ‘0’.
  + Otherwise, set CHM_SUPPORTED to ‘1’

- CDMA off time report supported indicator (CDMA_OFF_TIME_REP_SUP_IND = CDMA_OFF_TIME_REP_SUP_IND).

- If CDMA_OFF_TIME_REP_SUP_IND is equal to ‘1’, the mobile station shall store CDMA off time report threshold (CDMA_OFF_TIME_REP_THRESHOLD = CDMA_OFF_TIME_REP_THRESHOLD) in units specified by CDMA_OFF_TIME_REP_UNIT.

- Forward Packet Data Channel supported indicator (FOR_PDCH_SUPPORTED = FOR_PDCH_SUPPORTED).

- PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED = PDCH_CHM_SUPPORTED) if included; otherwise, set PDCH_CHM_SUPPORTED to ‘0’.

- Reverse Packet Data Channel supported indicator (REV_PDCH_SUPPORTED = REV_PDCH_SUPPORTED) if included; otherwise, set REV_PDCH_SUPPORTED to ‘0’.

- Short Data Burst supported indicator (SDB_SUPPORTED = SDB_SUPPORTED).

- PDCH Control Hold Mode supported indicator (PDCH_CHM_SUPPORTED = PDCH_CHM_SUPPORTED) if included; otherwise, set PDCH_CHM_SUPPORTED to ‘0’.

- Pilot information request supported indicator (PILOT_INFO_REQ_SUPPORTED = PILOT_INFO_REQ_SUPPORTED).

- Release to Idle State allowed indicator (RELEASE_TO_IDLE_IND = RELEASE_TO_IDLE_IND).

- If SEARCH_INCLUDED is equal to ‘1’, store the following:
Search window size for the Active Set and Candidate Set
(SRCH_WIN_A_s = SRCH_WIN_A_r)

Pilot detection threshold (T_ADD_s = T_ADD_r)

Pilot drop threshold (T_DROP_s = T_DROP_r)

Active Set versus Candidate Set comparison threshold
(T_COMP_s = T_COMP_r)

Drop timer value (T_TDROP_s = T_TDROP_r)

Drop timer range value (T_TDROP_RANGE_s = T_TDROP_RANGE_r) if
T_TDROP_RANGE_INCL_r is equal to ‘1’; otherwise,
(T_TDROP_RANGE_s = ‘0000’)

Soft slope for the dynamic add and drop thresholds
(SOFT_SLOPE_s = SOFT_SLOPE_r)

Intercept for the dynamic add threshold
(ADD_INTERCEPT_s = ADD_INTERCEPT_r)

Intercept for the dynamic drop threshold
(DROP_INTERCEPT_s = DROP_INTERCEPT_r)

– If EXTRA_PARMS is equal to ‘1’, store the following:

+ If the mobile station supports packet data service options, the packet
data services zone identifier (PACKET_ZONE_ID_s =
PACKET_ZONE_ID_r).

+ If the mobile station supports packet data service options and the
  PZ_HYST_ENABLED field is included, the mobile station shall store
  the packet zone hysteresis enabled indicator (PZ_HYST_ENABLED_s =
PZ_HYST_ENABLED_r); otherwise, the mobile station shall set
  PZ_HYST_ENABLED_s to ‘1’.

ii. If the mobile station supports packet data service options and the
  PZ_HYST_PARMS_INCL field is included, the mobile station shall
  perform the following:

+ If PZ_HYST_ENABLED field is included, the mobile station shall
  store the packet zone hysteresis enabled indicator
  (PZ_HYST_ENABLED_s = PZ_HYST_ENABLED_r); otherwise, the
  mobile station shall set PZ_HYST_ENABLED_s to ‘0’.

– If the PZ_HYST_LIST_LEN field is included, the mobile station shall
  store the packet zone hysteresis list length (PZ_HYST_LIST_LEN_s =
PZ_HYST_LIST_LEN_r); otherwise, the mobile station shall set
  PZ_HYST_LIST_LEN_s to 4.

– If the PZ_HYST_ACT_TIMER field is included, the mobile station shall
  store the packet zone hysteresis activation timer
  (PZ_HYST_ACT_TIMER_s = PZ_HYST_ACT_TIMER_r); otherwise, the
mobile station shall set PZ_HYST_ACT_TIMERs to **NULL30 seconds**.

If the **PZ_HYST_TIMER_MUL** field and the **PZ_HYST_TIMER_EXP** field are included, the mobile station shall store the packet zone hysteresis timer \( PZ\_HYST\_TIMERs = PZ\_HYST\_TIMER\_MULr \times 8 \times PZ\_HYST\_TIMER\_EXPr \); otherwise, the mobile station shall set **PZ_HYST_TIMERs** to **NULL60 seconds**.

+ Frame offset \( (FRAME\_OFFSETs = FRAME\_OFFSETr) \)
+ Acknowledgment procedures reset indicator
  (If **RETURN_IF_HANDOFF_FAIL**s is equal to ‘1’, set **TF\_RESET\_L2s** to **RESET\_L2r**)
+ Indicator to initialize the Forward Traffic Channel power control counters (If **RETURN_IF_HANDOFF_FAIL**s is equal to ‘1’, set **TF\_RESET\_FPCs** to **RESET\_FPCR**)
+ Nominal power setting of the target cell \( (NOM\_PWRs = NOM\_PWRr) \)
+ Extended nominal power setting of the target cell (If **CDMABAND**s = ‘00000’ or **CDMABAND**s = ‘00011’, then \( NOM\_PWR\_EXTs = ‘0’ \); otherwise, \( NOM\_PWR\_EXTs = NOM\_PWR\_EXTr \))
+ Hard handoff traffic channel preamble count required before transmitting a **Handoff Completion Message** or an **Extended Handoff Completion Message** \( (NUM\_PREAMBLEs = NUM\_PREAMBLEr) \)
+ **CDMA** band class for the Target Frequency
  \( (TF\_CDMABANDs = BAND\_CLASSr \text{ and } CDMABANDs = BAND\_CLASSr) \)
+ Frequency assignment for the Target Frequency
  \( (TF\_CDMACHs = CDMA\_FREQr \text{ and } CDMACHs = CDMA\_FREQr) \)
+ Complete search flag \( (COMPLETE\_SEARCHs = COMPLETE\_SEARCHr) \)
+ Periodic search flag \( (PERIODIC\_SEARCHs = PERIODIC\_SEARCHr) \)
+ Nominal code channel output power offset relative to the Reverse Pilot Channel power \( (RLGAIN\_TRAFFIC\_PILOTs = RLGAIN\_TRAFFIC\_PILOTr) \)

  - If **EXTRA_PARMS** is equal to ‘1’ and **DEFAULT_RLAG** is equal to ‘1’, the mobile station shall set each entry of the Reverse Link Attribute Adjustment Gain Table and Reverse Channel Adjustment Gain Table [see [2]] to 0.

  - If **USE_PWR_CNTL_STEP** is equal to ‘1’ and **PWR_CNTL_STEP**s corresponds to a power control step size supported by the mobile station [see [2]], then the mobile station shall set **PWR_CNTL_STEP**s to **PWR_CNTL_STEPr**.
- If PLCM_TYPE\textsubscript{INCL} equals ‘1’, the mobile station shall set PLCM\textsubscript{TYPE}s to PLCM\textsubscript{TYPE}\textsubscript{r}.

- If PLCM\textsubscript{TYPE}\textsubscript{r} is included and equals ‘0001’, the mobile station shall set PLCM\textsubscript{39}s to PLCM\textsubscript{39}\textsubscript{r}.

- If CLEAR_RETRY\_DELAY\textsubscript{r} is equal to ‘1’, the mobile station shall cancel any previously indicated retry delay and shall set RETRY\_DELAY\textsubscript{s}[RETRY\_TYPE] to 0, where RETRY\_TYPE is equal to ‘001’, ‘010’, or ‘011’, ‘100’, or ‘101’; otherwise, the mobile station shall continue to honor any previously active retry delay stored in RETRY\_DELAY\textsubscript{s}.

- If 3XFL\_1XRL\_INCL\textsubscript{r} is equal to ‘1’, the mobile station shall set 1XRL\_FREQ\_OFFSET\textsubscript{s} to 1XRL\_FREQ\_OFFSET\textsubscript{r}.

- If SCH\_INCL\textsubscript{r} is equal to ‘1’ and NUM\_FOR\_ASSIGN\textsubscript{r} is not equal to ‘00’, the mobile station shall store the following information for each occurrence of the record and process the Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:
  + FOR\_SCH\_START\_TIME\_INCL\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = FOR\_SCH\_START\_TIME\_INCL\textsubscript{r}
  + If FOR\_SCH\_START\_TIME\_INCL\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] is equal to ‘1’, set FOR\_SCH\_START\_TIME\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = FOR\_SCH\_START\_TIME\textsubscript{r}
  + FOR\_SCH\_DURATION\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = FOR\_SCH\_DURATION\textsubscript{r}
  + SCCL\_INDEX\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = SCCL\_INDEX\textsubscript{r}

- If SCH\_BCMC\_IND field is included the mobile station shall perform the following:
  + If SCH\_BCMC\_IND\textsubscript{r} equals ‘1’ and USE\_ADD\_PLCM\_FOR\_SCH\textsubscript{r} equals ‘1’, set corresponding SCH\_BCMC\_IND[FOR\_SCH\_ID\textsubscript{r}] to ‘1’; otherwise, set SCH\_BCMC\_IND[FOR\_SCH\_ID\textsubscript{r}] = ‘0’

- If SCH\_BCMC\_IND\textsubscript{r} is included and equals ‘1’ and ADD\_PLCM\_FOR\_SCH\_INCL\textsubscript{r} is included and is set to ‘1’, the mobile station shall store following fields:
  + Set ADD\_PLCM\_FOR\_SCH\_TYPE\textsubscript{s} to ADD\_PLCM\_FOR\_SCH\_TYPE\textsubscript{r}.
  + Set ADD\_PLCM\_FOR\_SCH\_35\textsubscript{9}s to ADD\_PLCM\_FOR\_SCH\_35\textsubscript{9}\textsubscript{r} if ADD\_PLCM\_FOR\_SCH\_TYPE\textsubscript{r} is equal to ‘1’.

- If SCH\_BCMC\_IND\textsubscript{r} is included and equals ‘1’, the mobile station shall store following fields:
  + USE\_ADD\_PLCM\_FOR\_SCH\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = USE\_ADD\_PLCM\_FOR\_SCH\textsubscript{r}
  + FSCH\_OUTERCODE\_INCL\textsubscript{s}[FOR\_SCH\_ID\textsubscript{r}] = FSCH\_OUTERCODE\_INCL\textsubscript{r}
If $\text{FSCH\_OUTERCODE\_INCL}_r$ equals ‘1’, the mobile station shall store the following fields:

- $\text{FSCH\_OUTERCODE\_RATE}s[\text{FOR\_SCH\_ID}_r] = \text{FSCH\_OUTERCODE\_RATE}_r$
- $\text{FSCH\_OUTERCODE\_OFFSET}s[\text{FOR\_SCH\_ID}_r] = \text{FSCH\_OUTERCODE\_OFFSET}_r$

- If $\text{SCH\_INCL}_r$ is equal to ‘1’ and $\text{NUM\_REV\_ASSIGN}_r$ is not equal to ‘00’, the mobile station shall store the following information for each occurrence of the record and process the Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:
  - $\text{REV\_SCH\_START\_TIME\_INCL}s[\text{REV\_SCH\_ID}_r] = \text{REV\_SCH\_START\_TIME\_INCL}_r$
  - If $\text{REV\_SCH\_START\_TIME\_INCL}s[\text{REV\_SCH\_ID}_r]$ is equal to ‘1’, set $\text{REV\_SCH\_START\_TIME}s[\text{REV\_SCH\_ID}_r] = \text{REV\_SCH\_START\_TIME}_r$
  - $\text{REV\_SCH\_DURATION}s[\text{REV\_SCH\_ID}_r] = \text{REV\_SCH\_DURATION}_r$
  - $\text{REV\_SCH\_NUM\_BITS\_IDX}s[\text{REV\_SCH\_ID}_r] = \text{REV\_SCH\_NUM\_BITS\_IDX}_r$

- The mobile station shall set $\text{BCMC\_ON\_TRAFFIC\_SUP}_s$ to $\text{BCMC\_ON\_TRAFFIC\_SUP}_r$. If $\text{BCMC\_ON\_TRAFFIC\_SUP}_r$ is set to ‘1’, the mobile station shall store $\text{AUTO\_REQ\_TRAF\_ALLOWED\_IND}_s = \text{AUTO\_REQ\_TRAF\_ALLOWED\_IND}_r$

- If $\text{SID\_INCL}_r$ is equal to ‘1’, the mobile station shall store the following:
  - System identification ($\text{SID}_s = \text{SID}_r$)
- If $\text{NID\_INCL}_r$ is equal to ‘1’, the mobile station shall store the following:
  - Network identification ($\text{NID}_s = \text{NID}_r$)
- If $\text{ENC\_SUPPORTED}_r$ is equal to ‘1’, the mobile station shall store:
  - Signaling encryption supported indicator ($\text{SIG\_ENCRYPT\_SUP}_s = \text{SIG\_ENCRYPT\_SUP}_r$)
  - User information encryption supported indicator ($\text{UI\_ENCRYPT\_SUP}_s = \text{UI\_ENCRYPT\_SUP}_r$)
- Sync ID supported indicator ($\text{USE\_SYNC\_ID}_s = \text{USE\_SYNC\_ID}_r$) if included.
- Channel configuration request allowed indicator ($\text{USE\_CH\_CFG\_RRM}_s = \text{USE\_CH\_CFG\_RRM}_r$) if included; otherwise, set $\text{USE\_CH\_CFG\_RRM}_s$ to ‘0’.

- If $\text{TX\_PWR\_LIMIT\_DEFAULT}_r$ is included and set to ‘0’, the mobile station shall perform the following:
+ If the mobile station is being assigned to operate in the 1915MHz–1920MHz block of the PCS band, the mobile station shall store the transmit power limit TX_PWR_LIMIT_s = (TX_PWR_LIMIT_r - 30dB);

+ Otherwise, the mobile station shall set TX_PWR_LIMIT_s to the limit defined in [11] for the target base station.

− If TX_PWR_LIMIT_DEFAULT_r is included and set to ‘1’, the mobile station shall store TX_PWR_LIMIT_s to the limit defined in [11] for the target base station.

− Permission for the mobile station to request QoS settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message (MOB_QOS_s = MOB_QOS_r) if included.

− The mobile station initiated position location determination supported indicator (MS_INIT_POS_LOC_SUP_IND_s = MS_INIT_POS_LOC_SUP_IND_r).

− If CH_IND_r is equal to ‘101’, the mobile station shall perform the following:
  + The mobile station shall set CH_IND_s = ‘01’.

  + If SCH_INCL_r is equal to ‘1’ and NUM_FOR_SCH is not equal to ‘00000’, for all the NUM_FOR_SCH occurrences, the mobile station shall perform the following:
    o The mobile station shall determine, N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the number of information bits per Forward Supplemental Channel frame identified by FOR_SCH_ID and corresponding to the index SCCL_INDEX according to the following rules:
      ◦ If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘000’, then:
        – If USE_FLEX_NUM_BITS_s is equal to ‘0’ or if USE_FLEX_NUM_BITS_s is equal to ‘1’ and FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘0000’, then the mobile station shall set the number of information bits per frame, N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and number of CRC bits per frame, FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], according to Table 3.7.3.3.2.37-2 using FOR_SCH_NUM_BITS_IDX_r as the index to the table.
- If USE_FLEX_NUM_BITSₙ is equal to ‘1’ and
  FₛCHₙBIT_TABLE_IDₙₚ[FOR_SCH_IDᵣ] is not equal to
  ‘0000’, then the mobile station shall set the number of
  CRC bits per frame,
  FₛCH_CRC_LEN_SETₙₚ[FOR_SCH_IDᵣ][SCCL_INDEXᵣ],
  using Table 3.7.5.20-1 and
  CRC_LEN_IDXₙₛ[FₛCHₙBIT_TABLE_IDₙₚ[FOR_SCH_IDᵣ]][Fₙₚ OR_SCH_NUM_BITS_IDXᵣ] as the index to the table.
  The mobile station shall also set the number of
  information bits per frame corresponding to
  SCCL_INDEXᵣ,
  Nₙ_FSCH_BITS_SETₙₛ[FOR_SCH_IDᵣ][SCCL_INDEXᵣ], to
  NUMBITSₙₛ[FₛCHₙBIT_TABLE_IDₙₛ[FOR_SCH_IDᵣ]][FOR_SCH_NUM_BITS_IDXᵣ].

◊ If FₛCH_VAR_TABLE_IDₛₚ[FOR_SCH_IDᵣ] is not equal to ‘000’,
then:

- The mobile station shall set
  Nₙ_FSCH_BITS_IDX_SETₛₚ[FOR_SCH_IDᵣ], the set of indices
  to the number of information bits per frame as follows:
    + If FOR_SCH_NUM_BITS_IDXᵣ is equal to ‘0000’, then
      Nₙ_FSCH_BITS_IDX_SETₛₚ[FOR_SCH_IDᵣ] = {
        FOR_SCH_NUM_BITS_IDXᵣ },
    + otherwise the mobile station shall set (initialize)
      Nₙ_FSCH_BITS_IDX_SETₛₚ[FOR_SCH_IDᵣ] =
      {FOR_SCH_NUM_BITS_IDXᵣ} and for i=1, ..., 
      FOR_SCH_NUM_BITS_IDXᵣ the mobile station shall
      add FOR_SCH_NUM_BITS_IDXᵣ -
      VAR_FSCH_RATE_OFFSETₛₚₚ[FOR_SCH_IDᵣ][FOR_SCH_NUM_BITS_IDXᵣ][i] to the set specified by
      Nₙ_FSCH_BITS_IDX_SETₛₚ[FOR_SCH_IDᵣ]

- If USE_FLEX_NUM_BITSₙ is equal to ‘0’ or if
  USE_FLEX_NUM_BITSₙ is equal to ‘1’ and
  FₛCHₙBIT_TABLE_IDₙₛₚ[FOR_SCH_IDᵣ] is equal to ‘0000’,
then the mobile station shall set
Nₙ_FSCH_BITS_SETₛₚ[FOR_SCH_IDᵣ][SCCL_INDEXᵣ], the
set of number of information bits per frame as follows.
The ℓᵣ member of the set
Nₙ_FSCH_BITS_SETₛₚ[FOR_SCH_IDᵣ][SCCL_INDEXᵣ] is
obtained using Table 3.7.3.3.2.37-2 and the ℓᵣ member of
the set Nₙ_FSCH_BITS_IDX_SETₛₚ[FOR_SCH_IDᵣ] as the
index to the table.
If \( \text{USE}_\text{FLEX}_\text{NUM}_\text{BITS}_s \) is equal to '1' and \( \text{FSCH}_\text{NBIT}_\text{TABLE}_\text{ID}_s[\text{FOR}_\text{SCH}_\text{ID}_r] \) is not equal to '0000', then

\[
+ \text{ the mobile station shall set } \\
\quad N_{\text{FSCH}_\text{BITS}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][\text{SCCL}_\text{INDEX}_r], \\
\quad \text{the set of number of information bits per frame as follows.} \\
\quad \text{The } i^{th} \text{ member of the set} \\
\quad N_{\text{FSCH}_\text{BITS}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][\text{SCCL}_\text{INDEX}_r] \text{ is equal to} \\
\quad \text{NUM}_\text{BITS}_s[\text{FSCH}_\text{NBIT}_\text{TABLE}_\text{ID}_s[\text{FOR}_\text{SCH}_\text{ID}_r]] \\
\quad [N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][i]], \text{where} \\
\quad N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][i] \text{ denotes the} \\
\quad i^{th} \text{ member of the set} \\
\quad N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r] \text{ and,}
\]

\[
+ \text{ the mobile station shall set } \\
\quad \text{FSCH}_\text{CRC}_\text{LEN}_\text{SET}_s[\text{FOR}_\text{SCH}_\text{ID}_r][\text{SCCL}_\text{INDEX}_r], \\
\quad \text{the set of number CRC bits per frame as follows.} \\
\quad \text{The } i^{th} \text{ member of the set} \\
\quad \text{FSCH}_\text{CRC}_\text{LEN}_\text{SET}_s[\text{FOR}_\text{SCH}_\text{ID}_r][\text{SCCL}_\text{INDEX}_r] \text{ using Table 3.7.5.20-1 and} \\
\quad \text{CRC}_\text{LEN}_\text{IDX}_s[\text{FSCH}_\text{NBIT}_\text{TABLE}_\text{ID}_s[\text{FOR}_\text{SCH}_\text{ID}_r] \\
\quad ||[N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][i]] \text{ as the} \\
\quad \text{index to the table, where} \\
\quad N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r][i] \text{ denotes the} \\
\quad i^{th} \text{ member of the set} \\
\quad N_{\text{FSCH}_\text{BITS}_\text{IDX}_\text{SET}_s}[\text{FOR}_\text{SCH}_\text{ID}_r].
\]

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+ \text{ If } \text{SCH}_\text{INCL}_r \text{ is equal to ‘1’ and } \text{NUM}_\text{REV}_\text{SCH} \text{ is not equal to} \\
\quad \text{‘00000’, for all the } \text{NUM}_\text{REV}_\text{SCH} \text{ occurrences, the mobile station} \\
\quad \text{shall perform the following:} \\
\quad \text{o Set } \text{REV}_\text{SCH}_\text{NUM}_\text{BITS}_\text{IDX}_s[\text{REV}_\text{SCH}_\text{ID}_r] \text{ to} \\
\quad \quad \text{REV}_\text{SCH}_\text{NUM}_\text{BITS}_\text{IDX}_r. \\
\quad \text{o Set } \text{REV}_\text{WALSH}_\text{IDX}_s[\text{REV}_\text{SCH}_\text{ID}_r][\text{REV}_\text{SCH}_\text{NUM}_\text{BITS}_\text{IDX}_s] \\
\quad \quad \text{to } \text{REV}_\text{WALSH}_\text{ID}_r.
\]

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+ \text{ For each member of the Active Set included in the message, the} \\
\quad \text{mobile station shall perform the following:} \\
\quad \text{o Set } \text{PILOT}_\text{PN} \text{ to } \text{PILOT}_\text{PN}_r. \\
\quad \text{o If } \text{SRCH}_\text{OFFSET}_\text{INCL}_r \text{ equals ‘1’, set the } \text{SRCH}_\text{OFFSET} \text{ field of} \\
\quad \text{PILOT}_\text{REC} \text{ to } \text{SRCH}_\text{OFFSET}_r; \text{ otherwise, set the } \text{SRCH}_\text{OFFSET} \\
\quad \text{field of } \text{PILOT}_\text{REC} \text{ to ‘000’.} \\
\quad \text{o Set } \text{ADD}_\text{PILOT}_\text{REC}_\text{INCL} \text{ to } \text{ADD}_\text{PILOT}_\text{REC}_\text{INCL}_r.
\]
If ADD_PILOT_REC_INCL\textsubscript{r} equals ‘1’, the mobile station shall also perform the following:

- Set the PILOT\_REC\_TYPE field of PILOT\_REC to PILOT\_REC\_TYPE\textsubscript{r}.
- If PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘000’, the mobile station shall set the TD\_POWER\_LEVEL field of PILOT\_REC to TD\_POWER\_LEVEL\textsubscript{r} and set the TD\_MODE field of NGHBR\_PILOT\_REC to TD\_MODE\textsubscript{r}.
- If PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘001’, the mobile station shall:
  - Set the AUX\_PILOT\_QOF field of PILOT\_REC to QOF\textsubscript{r}.
  - Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_PILOT\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.
- If PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘010’, the mobile station shall:
  - Set the AUX\_PILOT\_TD\_QOF field of PILOT\_REC to QOF\textsubscript{r}.
  - Set the AUX\_PILOT\_WALSH\_CODE field of PILOT\_REC to AUX\_WALSH\textsubscript{r} with the Walsh Code length specified by WALSH\_LENGTH\textsubscript{r}.
  - Set the AUX\_TD\_POWER\_LEVEL field of PILOT\_REC to AUX\_TD\_POWER\_LEVEL\textsubscript{r}.
  - Set the TD\_MODE field of PILOT\_REC to TD\_MODE\textsubscript{r}.
- If PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘011’, the mobile station shall:
  - Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to SR3\_PRIMARY\_PILOT\textsubscript{r}.
  - Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to SR3\_PILOT\_POWER1\textsubscript{r}.
  - Set the SR3\_PILOT\_POWER2 field of PILOT\_REC to SR3\_PILOT\_POWER2\textsubscript{r}.
- If PILOT\_REC\_TYPE\textsubscript{r} is equal to ‘100’, the mobile station shall:
  - Set the SR3\_PRIMARY\_PILOT field of PILOT\_REC to SR3\_PRIMARY\_PILOT\textsubscript{r}.
  - Set the SR3\_PILOT\_POWER1 field of PILOT\_REC to SR3\_PILOT\_POWER1\textsubscript{r}.
Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.

Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

Store PWR_COMB_IND, CODE_CHAN_FCH and QOF_MASK_ID_FCH.

If SCH_INCLr is equal to ‘1’ and NUM_SCH is equal to ‘00000’, the mobile station shall delete the corresponding pilot from the all entries of the corresponding Supplemental Channel.

If SCH_INCLr is equal to ‘1’ and NUM_SCH is not equal to ‘00000’, for each Supplemental Channel included in this record, the mobile station shall:

◊ If PILOT_INCL is equal to ‘0’, then the mobile station shall delete the corresponding pilot from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.

◊ If PILOT_INCL is equal to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set PILOT_PNs [FOR_SCH_IDr][SCCL_INDEXr][i] to PILOT_PNr, QOF_IDs[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_Mask_ID_SCHr, and FOR_SCH_CC_INDEXs[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHr.
◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to
   ‘1’, then for each Supplemental Channel included in this
   record, the mobile station shall set
   CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to
   CCSH_ENCODER_TYPEr.

◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to
   ‘0’, then for each Supplemental Channel included in this
   record, the mobile station shall set
   CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to
   ‘0’ (default Turbo Encoder type).

◊ The mobile station shall delete all pilots that are not included
   in the list specified by the NUM_PILOTS field from the Active
   Set of Supplemental Channel for the corresponding
   SCCL_INDEXr.

+ If CCSH_INCLUDED is equal to ‘1’, the mobile station shall perform
  the following:
  
  o If CCSH_ENCODER_ACTION_TIME r is received, then the mobile
    station shall set CCSH_ENCODER_ACTION_TIMEs to
    CCSH_ENCODER_ACTION_TIMEr, and the mobile station shall
    apply each CCSH_ENCODER_TYPEs at the time specified by
    CCSH_ENCODER_ACTION_TIMEr.

  o If CCSH_ENCODER_ACTION_TIME r is not received, the mobile
    station shall apply each CCSH_ENCODER_TYPEs at the action
    time of the message.

+ If 3X_FCH_INFO_INCL r equals ‘1’, for each included member of the
  Active Set, the mobile station store the following:
  
  o If 3X_FCH_LOW_INCL r equals ‘1’, set the
    QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_LOWr
    and the CODE_CHAN_FCH_LOW field to
    CODE_CHAN_FCH_LOWr. Otherwise, set the
    QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCHr and the
    CODE_CHAN_FCH_LOW to CODE_CHAN_FCHr.

  o If 3X_FCH_HIGH_INCL r equals ‘1’, set the
    QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH_HIGHr
    and the CODE_CHAN_FCH_HIGH field to
    CODE_CHAN_FCH_HIGHr. Otherwise, set the
    QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCHr and the
    CODE_CHAN_FCH_HIGH to CODE_CHAN_FCHr.

  o If 3X_SCH_INFO_INCL r equals ‘1’, for each Supplemental
    Channel included, the mobile station store the following:
◊ If 3X_SCH_LOW_INCLr equals ‘1’, set the QOF_ID_SCH_LOWs
  [FOR_SCH_IDr][SCCL_INDEXr][i] to
  QOF_MASK_ID_SCH_LOWr and the
  FOR_SCH_CC_INDEX_LOW[FOR_SCH_IDr][SCCL_INDEXr][i]
  field to CODE_CHAN_SCH_LOWr. Otherwise, set
  QOF_ID_SCH_LOWs[FOR_SCH_IDr][SCCL_INDEXr][i] to
  QOF_MASK_ID_SCHr, and
  FOR_SCH_CC_INDEX_LOWs[FOR_SCH_IDr][SCCL_INDEXr][i]
  to CODE_CHAN_SCHr.

◊ If 3X_SCH_HIGH_INCLr equals ‘1’, set the
  QOF_ID_SCH_HIGHs [FOR_SCH_IDr][SCCL_INDEXr][i] to
  QOF_MASK_ID_SCH_HIGHr and the
  FOR_SCH_CC_INDEX_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i]
  field to CODE_CHAN_SCH_HIGHr. Otherwise, set
  QOF_ID_SCH_HIGHs[FOR_SCH_IDr][SCCL_INDEXr][i] to
  QOF_MASK_ID_SCHr, and
  FOR_SCH_CC_INDEX_HIGHs[FOR_SCH_IDr][SCCL_INDEXr][i]
  to CODE_CHAN_SCHr.

+ The mobile station shall delete all pilots that are not listed in the
  NUM_PILOTS field from the Active Set.

+ The mobile station shall delete all pilots that are not listed in the
  Active Set from the Active Set of the Supplemental Channel for the
  Forward Supplemental Channel Assignment (if any). If these deleted
  pilots include all pilots in the Active Set of the Supplemental
  Channel, the mobile station shall cancel the Forward Supplemental
  Channel Assignment.

– If CH_IND r is equal to ‘010’ or ‘110’, the mobile station shall perform the
  following:

  + The mobile station shall set CH_IND s = ‘10’.

+ If SCH_INCL r is equal to ‘1’ and NUM_FOR_SCH is not equal to
  ‘00000’, for all the NUM_FOR_SCH occurrences, the mobile station
  shall perform the following:

  o The mobile station shall determine,
    N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr], the number
    of information bits per Forward Supplemental Channel frame
    identified by FOR_SCH_ID and corresponding to the index
    SCCL_INDEX according to the following rules:

  ◊ If FSCH_VAR_TABLE_IDs[FOR_SCH_IDr] is equal to ‘000’,
  then:
– If USE_FLEX_NUM_BITS_s is equal to ‘0’ or if
  USE_FLEX_NUM_BITS_s is equal to ‘1’ and
  FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘0000’,
then the mobile station shall set the number of
information bits per frame,
N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r] and
number of CRC bits per frame,
FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
according to Table 3.7.3.2.37-2 using
FOR_SCH_NUM_BITS_IDX_r as the index to the table.

– If USE_FLEX_NUM_BITS_s is equal to ‘1’ and
  FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r] is not equal to
  ‘0000’, then the mobile station shall set the number of
  CRC bits per frame,
  FSCH_CRC_LEN_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r],
  using Table 3.7.5.20-1 and
  CRC_LEN_IDX_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]][FOR_SCH_NUM_BITS_ID_s] as the index to the table.
The mobile station shall also set the number of
information bits per frame corresponding to
SCCL_INDEX_r,
N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], to
NUM_BITS_s[FSCH_NBIT_TABLE_ID_s[FOR_SCH_ID_r]][FOR_SCH_NUM_BITS_ID_s].

◊ If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is not equal to ‘000’,
then:

  – The mobile station shall set
    N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r], the set of indices
    to the number of information bits per frame as follows:
    + If FOR_SCH_NUM_BITS_IDX_r is equal to ‘0000’, then
      N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] = {
        FOR_SCH_NUM_BITS_IDX_r },
    + otherwise the mobile station shall set (initialize)
      N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r] =
      {FOR_SCH_NUM_BITS_IDX_r} and for i=1, ..., FOR_SCH_NUM_BITS_IDX_r the mobile station shall
      add FOR_SCH_NUM_BITS_IDX_r - 
      VAR_FSCH_RATE_OFFSET_s[FOR_SCH_ID_r][FOR_SCH_NUM_BITS_IDX_r][i] to the set specified by
      N_FSCH_BITS_IDX_SET_s[FOR_SCH_ID_r]
If USE_FLEX_NUM_BITS is equal to ‘0’ or if
USE_FLEX_NUM_BITS is equal to ‘1’ and
FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr] is equal to ‘0000’,
then the mobile station shall set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCC_INDEXr], the
set of number of information bits per frame as follows.
The \( i \)\(^{th} \) member of the set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCC_INDEXr] is
obtained using Table 3.7.3.3.2.37-2 and the \( i \)\(^{th} \) member of
the set N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr] as the
index to the table.

If USE_FLEX_NUM_BITS is equal to ‘1’ and
FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr] is not equal to
‘0000’, then

+ the mobile station shall set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCC_INDEXr],
the set of number of information bits per frame as
follows.
The \( i \)\(^{th} \) member of the set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCC_INDEXr] is
equal to
NUM_BITSs[FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr]]
[N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i]],
where
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i] denotes the
\( i \)\(^{th} \) member of the set
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr] and,

+ the mobile station shall set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCC_INDEXr],
the set of number CRC bits per frame as follows.
The \( i \)\(^{th} \) member of the set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCC_INDEXr]
using Table 3.7.5.20-1 and
CRC_LEN_IDXs[FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr]
[N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i]] as the
index to the table, where
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i] denotes the
\( i \)\(^{th} \) member of the set
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr].

If SCH_INCLr is equal to ‘1’ and NUM_REV_SCH is not equal to
‘00000’, for all the NUM_REV_SCH occurrences, the mobile station
shall perform the following:

o Set REV_SCH_NUM_BITS_IDs[REV_SCH_IDr] to
REV_SCH_NUM_BITS_IDXr.
ο Set REV_WALSH_IDs [REV_SCH_IDr][REV_SCH_NUM_BITS_IDXs] to REV_WALSH_IDr.

+ For each member of the Active Set included in the message, the mobile station shall perform the followings:
  o Set PILOT_PN to PILOT_PNr.
  o If SRCH_OFFSET_INCLr equals ‘1’, set the SRCH_OFFSET field of PILOT_REC to SRCH_OFFSETr; otherwise, set the SRCH_OFFSET field of PILOT_REC to ‘000’.
  o Set ADD_PILOT_REC_INCL to ADD_PILOT_REC_INCLr.
  o If ADD_PILOT_REC_INCLr equals ‘1’, the mobile station shall also perform the following:
    ◊ Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPEr.
    ◊ If PILOT_REC_TYPEr is equal to ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELr and set the TD_MODE field of PILOT_REC to TD_MODEr.
    ◊ If PILOT_REC_TYPEr is equal to ‘001’, the mobile station shall:
      – Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
      – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
    ◊ If PILOT_REC_TYPEr is equal to ‘010’, the mobile station shall:
      – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOFr.
      – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
      – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVELr.
    ◊ If PILOT_REC_TYPEr is equal to ‘011’, the mobile station shall:
      – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTr.
      – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOTPOWER1r.
– Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

◊ If PILOT_REC_TYPEr is equal to ‘100’, the mobile station shall:

– Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTr.

– Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1r.

– Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

– Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.

– Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

– If ADD_INFO_INCL1r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1r with the Walsh Code length specified by WALSH_LENGTH1r; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

– If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

o Store PWR_COMB_IND, CODE_CHAN_DCCH and QOF_MASK_ID_DCCH.

o If SCH_INCLr is equal to ‘1’ and NUM_SCH is equal to ‘00000’, the mobile station shall delete the corresponding pilot from all entries of the corresponding Supplemental Channel.

o If SCH_INCLr is equal to ‘1’ and NUM_SCH is not equal to ‘00000’, the mobile station shall:
◊ If PILOT_INCL is equal to ‘0’, then the mobile station shall delete the corresponding pilot from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.

◊ If PILOT_INCL is equal to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set PILOT_PNs[FOR_SCH_IDr][SCCL_INDEXs][i] to PILOT_PNr, QOF_IDs[FOR_SCH_IDr][SCCL_INDEXs][i] to QOF_MASK_ID_SCHr, and FOR_SCH_CC_INDEXs[FOR_SCH_IDs][SCCL_INDEXs][i] to CODE_CHAN_SCHr.

◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to CCSH_ENCODER_TYPEr.

◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘0’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to ‘0’ (default Turbo Encoder type).

◊ The mobile station shall delete all pilots that are not included in the list specified by the NUM_PILOTS field from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.

+ If CCSH_INCLUDED is equal to ‘1’, the mobile station shall perform the following:

  o If CCSH_ENCODER_ACTION_TIME r is received, then the mobile station shall set CCSH_ENCODER_ACTION_TIME s to CCSH_ENCODER_ACTION_TIME r, and the mobile station shall apply each CCSH_ENCODER_TYPE s at the time specified by CCSH_ENCODER_ACTION_TIME r.

  o If CCSH_ENCODER_ACTION_TIME r is not received, the mobile station shall apply each CCSH_ENCODER_TYPE s at the action time of the message.

+ If 3X_DCCH_INFO_INCL r equals ‘1’, for each included member of the Active Set, the mobile station store the following:

  o If 3X_DCCH_LOW_INCL r equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW r, and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOW r. Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH r and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH r.
If 3X_DCCH_HIGH_INCLr equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGHr and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGHr. Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCHr and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCHr.

If 3X_SCH_INFO_INCLr equals ‘1’, for each Supplemental Channel included, the mobile station store the following:

- If 3X_SCH_LOW_INCLr equals ‘1’, set QOF_ID_SCH_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCH_LOWr and FOR_SCH_CC_INDEX_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] field to CODE_CHAN_SCH_LOWr. Otherwise, set QOF_ID_SCH_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCHr, and FOR_SCH_CC_INDEX_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHr.

- If 3X_SCH_HIGH_INCLr equals ‘1’, set QOF_ID_SCH_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCH_HIGHr and the FOR_SCH_CC_INDEX_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] field to CODE_CHAN_SCH_HIGHr. Otherwise, set QOF_ID_SCH_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCHr, and FOR_SCH_CC_INDEX_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHr.

The mobile station shall set FUNDICATED_BCMC_INDs to FUNDICATED_BCMC_INDr.

If FUNDICATED_BCMC_INDr equals ‘1’, for each included member of the Active Set, the mobile station shall store the following:

- Set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr.
- Set FOR_CPCSCHs to FOR_CPCSCHr.

The mobile station shall delete all pilots that are not listed in the NUM_PILOTS field from the Active Set.

The mobile station shall delete all pilots that are not listed in the Active Set from the Active Set of the Supplemental Channel for the Forward Supplemental Channel Assignment (if any). If these deleted pilots include all pilots in the Active Set of the Supplemental Channel, the mobile station shall cancel the Forward Supplemental Channel Assignment.
– If CH_IND<sub>r</sub> is equal to ‘111’, the mobile station shall perform the
following:
  + The mobile station shall set CH_IND<sub>s</sub> = ‘11’.
  + If SCH_INCL<sub>r</sub> is equal to ‘1’ and NUM_FOR_SCH is not equal to
‘00000’, for all the NUM_FOR_SCH occurrences, the mobile station
shall perform the following:
    o The mobile station shall determine,
      N_FSCH_BITS_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][SCCL_INDEX<sub>r</sub>], the number
of information bits per Forward Supplemental Channel frame
identified by FOR_SCH_ID and corresponding to the index
SCCL_INDEX according to the following rules:
      ◊ If FSCH_VAR_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is equal to ‘000’,
then:
        – If USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘0’ or if
          USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘1’ and
          FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is equal to ‘0000’,
          then the mobile station shall set the number of
          information bits per frame,
          N_FSCH_BITS_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][SCCL_INDEX<sub>r</sub>] and
          number of CRC bits per frame,
          FSCH_CRC_LEN_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][SCCL_INDEX<sub>r</sub>],
          according to Table 3.7.3.2.37-2 using
          FOR_SCH_NUM_BITS_IDX<sub>r</sub> as the index to the table.
        – If USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘1’ and
          FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is not equal to
‘0000’, then the mobile station shall set the number of
          CRC bits per frame,
          FSCH_CRC_LEN_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][SCCL_INDEX<sub>r</sub>],
          using Table 3.7.5.20-1 and
          CRC_LEN_IDX<sub>s</sub>[FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][FOR_SCH_NUM_BITS_IDX<sub>r</sub>]] as the index to the table.
      The mobile station shall also set the number of
      information bits per frame corresponding to
      SCCL_INDEX<sub>r</sub>,
      N_FSCH_BITS_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][SCCL_INDEX<sub>r</sub>], to
      NUM_BITS<sub>s</sub>[FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>][FOR_SCH_NUM_BITS_IDX<sub>r</sub>]].
      ◊ If FSCH_VAR_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is not equal to
‘000’, then:
        – The mobile station shall set
          N_FSCH_BITS_IDX_SET<sub>s</sub>[FOR_SCH_ID<sub>r</sub>], the set of indices
to the number of information bits per frame as follows:
+ If FOR_SCH_NUM_BITS_IDX<sub>r</sub> is equal to ‘0000’, then
N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>]</sub> = {
FOR_SCH_NUM_BITS_IDX<sub>r</sub>},

+ otherwise the mobile station shall set (initialize)
N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>]</sub> = 
\{FOR_SCH_NUM_BITS_IDX<sub>r</sub>\} and for i=1, ..., 
FOR_SCH_NUM_BITS_IDX<sub>r</sub> the mobile station shall 
add  FOR_SCH_NUM_BITS_IDX<sub>r</sub> - 
VAR_FSCH_RATE_OFFSETs[FOR_SCH_ID<sub>r</sub>][FOR_SCH_
NUM_BITS_IDX<sub>r</sub>][i] to the set specified by 
N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>]</sub>

– If USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘0’ or if
USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘1’ and
FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is equal to ‘0000’,
then the mobile station shall set
N_FSCH_BITS_SET<sub>[SCCL_INDEX<sub>r</sub>][FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>]</sub>, the 
set of number of information bits per frame as follows.
The \(i^{th}\) member of the set 
N_FSCH_BITS_SET<sub>[SCCL_INDEX<sub>r</sub>][FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>]</sub> is 
obtained using Table 3.7.3.2.37-2 and the \(i^{th}\) member of 
the set N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>]</sub> as the 
index to the table.

– If USE_FLEX_NUM_BITS<sub>s</sub> is equal to ‘1’ and
FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>] is not equal to 
‘0000’, then
+ the mobile station shall set
N_FSCH_BITS_SET<sub>[SCCL_INDEX<sub>r</sub>][FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>]</sub>, the 
set of number of information bits per frame as 
follows.
The \(i^{th}\) member of the set 
N_FSCH_BITS_SET<sub>[SCCL_INDEX<sub>r</sub>][FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>]</sub> is 
equal to 
NUM_BITS<sub>s</sub>[FSCH_NBIT_TABLE_ID<sub>s</sub>[FOR_SCH_ID<sub>r</sub>]]
\[N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>][i][FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>]</sub>\], where 
N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>][FOR_SCH_ID<sub>r</sub>][i] denotes the 
\(i^{th}\) member of the set 
N_FSCH_BITS_IDX_SET<sub>[FOR_SCH_ID<sub>r</sub>]</sub> and,
the mobile station shall set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCCL_INDEXr],
the set of number CRC bits per frame as follows.
The \( i^n \) member of the set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCCL_INDEXr]
using Table 3.7.5.20-1 and
CRC_LEN_IDXs[FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr]
|||N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i]] as the
index to the table, where
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i] denotes the
\( i^n \) member of the set
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr].

+ If SCH_INCLr is equal to ‘1’ and NUM_REV_SCH is not equal to
‘00000’, for all the NUM_REV_SCH occurrences, the mobile station
shall perform the following:
- Set REV_SCH_NUM_BITSIDXs[REV_SCH_IDr] to
  REV_SCH_NUM_BITSIDXr.
- Set REV_WALSH_IDs[REV_SCH_IDr][REV_SCH_NUM_BITSIDXs]
to REV_WALSH_IDr.

+ For each member in the Active Set included in the message, the
mobile station shall perform the followings:
- Set PILOT_PN to PILOT_PNr.
- If SRCH_OFFSET_INCLr equals ‘1’, set the SRCH_OFFSET field of
  PILOT_REC to SRCH_OFFSETr; otherwise, set the SRCH_OFFSET
  field of PILOT_REC to ‘000’.
- Set ADD_PILOT_REC_INCL to ADD_PILOT_REC_INCLr.
- If ADD_PILOT_REC_INCLr equals ‘1’, the mobile station shall also
  perform the following:
    ◊ Set the PILOT_REC_TYPE field of PILOT_REC to
      PILOT_REC_TYPEr.
    ◊ If PILOT_REC_TYPEr is equal to ‘000’, the mobile station shall
      set the TD_POWER_LEVEL field of PILOT_REC to
      TD_POWER_LEVELr and set the TD_MODE field of
      PILOT_REC to TD_MODEr.
    ◊ If PILOT_REC_TYPEr is equal to ‘001’, the mobile station
      shall:
      - Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
      - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to
        AUX_PILOT_WALSHr with the Walsh Code length specified
        by WALSH_LENGTHr.
◊ If PILOT_REC_TYPE_r is equal to ‘010’, the mobile station shall:
  – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOF_r.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.
  – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVEL_r.
  – Set the TD_MODE field of PILOT_REC to TD_MODE_r.

◊ If PILOT_REC_TYPE_r is equal to ‘011’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.

◊ If PILOT_REC_TYPE_r is equal to ‘100’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOT_r.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1_r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2_r.
  – Set the AUX_PILOT_QOF field of PILOT_REC to QOF_r.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSH_r with the Walsh Code length specified by WALSH_LENGTH_r.
  – If ADD_INFO_INCL1_r is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh Code length specified by WALSH_LENGTH1_r; otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF_r and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1_r with the Walsh Code length specified by WALSH_LENGTH1_r.
If ADD_INFO_INCL2r is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2r and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2r with the Walsh Code length specified by WALSH_LENGTH2r; otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOFr and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

- Store PWR_COMB_IND, CODE_CHAN_FCH, QOF_MASK_ID_FCH, CODE_CHAN_DCCH and QOF_MASK_ID_DCCH.
- If SCH_INCLr is equal to ‘1’ and NUM_SCH is equal to ‘00000’, the mobile station shall delete the corresponding pilot from all entries of the corresponding Supplemental Channel.
- If SCH_INCLr is equal to ‘1’ and NUM_SCH is not equal to ‘00000’, the mobile station shall:
  - If PILOT_INCL is equal to ‘0’, then the mobile station shall delete the corresponding pilot from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.
  - If PILOT_INCL is equal to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set PILOT_PNs[FOR_SCH_IDr][SCCL_INDEXr][i] to PILOT_PNr, QOF_IDs[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCHr, and FOR_SCH_CC_INDEXs[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHr.
  - If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to CCSH_ENCODER_TYPEr.
  - If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘0’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to ‘0’ (default Turbo Encoder type).
  - The mobile station shall delete all pilots that are not included in the list specified by the NUM_PILOTS field from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.
- If CCSH_INCLUDED is equal to ‘1’, the mobile station shall perform the following:
If CCSH_ENCODER_ACTION_TIME \( r \) is received, then the mobile station shall set CCSH_ENCODER_ACTION_TIME \( r \) to CCSH_ENCODER_ACTION_TIME \( r \), and the mobile station shall apply each CCSH_ENCODER_TYPE \( r \) at the time specified by CCSH_ENCODER_ACTION_TIME \( r \).

If CCSH_ENCODER_ACTION_TIME \( r \) is not received, the mobile station shall apply each CCSH_ENCODER_TYPE \( r \) at the action time of the message.

+ If 3X_FCH_INFO_INCL \( r \) equals ‘1’, for each included member of the Active Set, the mobile station store the following:

  o If 3X_FCH_LOW_INCL \( r \) equals ‘1’, set the QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH_LOW \( r \) and the CODE_CHAN_FCH_LOW field to CODE_CHAN_FCH_LOW \( r \). Otherwise, set the QOF_MASK_ID_FCH_LOW field to QOF_MASK_ID_FCH \( r \) and the CODE_CHAN_FCH_LOW to CODE_CHAN_FCH \( r \).

  o If 3X_FCH_HIGH_INCL \( r \) equals ‘1’, set the QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH_HIGH \( r \) and the CODE_CHAN_FCH_HIGH field to CODE_CHAN_FCH_HIGH \( r \). Otherwise, set the QOF_MASK_ID_FCH_HIGH field to QOF_MASK_ID_FCH \( r \) and the CODE_CHAN_FCH_HIGH to CODE_CHAN_FCH \( r \).

+ If 3X_DCCH_INFO_INCL \( r \) equals ‘1’, for each included member of the Active Set, the mobile station store the following:

  o If 3X_DCCH_LOW_INCL \( r \) equals ‘1’, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_DCCH_LOW \( r \) and the CODE_CHAN_DCCH_LOW field to CODE_CHAN_DCCH_LOW \( r \). Otherwise, set the QOF_MASK_ID_DCCH_LOW field to QOF_MASK_ID_FCH \( r \) and the CODE_CHAN_DCCH_LOW to CODE_CHAN_FCH \( r \).

  o If 3X_DCCH_HIGH_INCL \( r \) equals ‘1’, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_DCCH_HIGH \( r \) and the CODE_CHAN_DCCH_HIGH field to CODE_CHAN_DCCH_HIGH \( r \). Otherwise, set the QOF_MASK_ID_DCCH_HIGH field to QOF_MASK_ID_FCH \( r \) and the CODE_CHAN_DCCH_HIGH to CODE_CHAN_FCH \( r \).

+ If 3X_FCH_INFO_INCL \( r \) or 3X_DCCH_INFO_INCL \( r \) equals ‘1’, for each included member of the Active Set, the mobile station store the following:

  o If 3X_SCH_INFO_INCL \( r \) equals ‘1’, for each Supplemental Channel included, the mobile station store the following:
◊ If 3X_SCH_LOW_INCLr equals ‘1’, set
QOF_ID_SCH_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to
QOF_MASK_ID_SCH_LOWr and the
FOR_SCH_CC_INDEX_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] field to CODE_CHAN_SCH_LOWr. Otherwise, set
QOF_ID_SCH_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to
QOF_MASK_ID_SCHR, and
FOR_SCH_CC_INDEX_LOW[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHR.

◊ If 3X_SCH_HIGH_INCLr equals ‘1’, set
QOF_ID_SCH_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to
QOF_MASK_ID_SCH_HIGHr and the
FOR_SCH_CC_INDEX_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] field to CODE_CHAN_SCH_HIGHr. Otherwise, set
QOF_ID_SCH_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to
QOF_MASK_ID_SCHR, and
FOR_SCH_CC_INDEX_HIGH[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHR.

+ The mobile station shall set FUNDICATED_BCMC_INDs to FUNDICATED_BCMC_INDr.
+ If FUNDICATED_BCMC_INDr equals ‘1’, the mobile station shall store the following:
  o Set REV_FCH_ASSIGNEDs to REV_FCH_ASSIGNEDr.
+ If FUNDICATED_BCMC_INDr equals ‘1’, the mobile station shall set FCH_BCMC_IND to ‘1’; otherwise, the mobile station shall set FCH_BCMC_IND to ‘0’.
+ If FUNDICATED_BCMC_INDr equals ‘1’ and FOR_CPCCH_INFO_INCLr is included and is set to ‘1’, for each included member of the Active Set, the mobile station shall store the following:
  o Set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr.
  o Set FOR_CPCSCHs to FOR_CPCSCHr.
+ If FUNDICATED_BCMC_INDr equals ‘1’ and ADD_PLCM_FOR_FCH_INCLr is included and is set to ‘1’, the mobile station shall store the following:
  o Set ADD_PLCM_FOR_FCH_TYPEs to ADD_PLCM_FOR_FCH_TYPEr.
  o Set ADD_PLCM_FOR_FCH_39s to ADD_PLCM_FOR_FCH_39r if ADD_PLCM_FOR_FCH_TYPEr is equal to ‘1’.
+ The mobile station shall delete all pilots that are not listed in the NUM_PILOTS field from the Active Set.
+ The mobile station shall delete all pilots that are not listed in the Active Set from the Active Set of the Supplemental Channel for the Forward Supplemental Channel Assignment (if any). If these deleted pilots include all pilots in the Active Set of the Supplemental Channel, the mobile station shall cancel the Forward Supplemental Channel Assignment.

- If CH_IND_r is equal to ‘000’, the mobile station shall perform the following:

  + If this message assigns currently there is a Forward Packet Data Channel or Reverse Packet Data Channel which was not assigned prior to the action time of this message assignment, Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = HANDOFF) to the MAC layer; otherwise, Layer 3 shall send SIG-HandoffPDCH.Indication (handoff_type = ASSIGN) to the MAC layer.

  + If the message includes a Reverse Packet Data Channel assignment, the mobile station shall cancel the Reverse Supplemental Channel assignment, if any, at the action time of the message.

  + The mobile station shall set CH_IND_s to ‘000’.

  + The mobile station shall set EXT_CH_IND_s to EXT_CH_IND_r.

  + If PDCH_CONTROL_HOLD_r is equal to ‘0’ and PILOT_GATING_USE_RATE is equal to ‘1’, the mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall start the continuous reverse pilot at the specified action time of the message and, if a F-PDCH is assigned, the mobile station shall start the continuous R-CQICH as defined in [3].

  + If PDCH_CONTROL_HOLD_r is equal to ‘1’, the mobile station may perform the following:

    o Set PILOT_GATING_USE_RATE equal to ‘1’ and start the reverse pilot gating and Reverse CQI Channel gating at PILOT_GATING_RATE_s at the action time of the message.

    o The mobile station shall cancel the forward and reverse supplemental channel assignment, if any.

  + The mobile station shall set FULL_CI_FEEDBACK_IND_s to FULL_CI_FEEDBACK_IND_r.
+ If EXT_CH_IND equals '01000', the mobile station shall set FOR_CPCCH_RATE to FOR_CPCCH_RATE_r, and FOR_CPCCH_UPDATE_RATE to FOR_CPCCH_UPDATE_RATE_r; otherwise, the mobile station shall set FOR_CPCCH_RATE to '00', and FOR_CPCCH_UPDATE_RATE to '00'.

+ The mobile station shall set REV_CQICH_FRAME_OFFSET to REV_CQICH_FRAME_OFFSET_r.

+ The mobile station shall set REV_CQICH_REPS to REV_CQICH_REPS_r.

+ The mobile station shall set REV_ACKCH_REPS to REV_ACKCH_REPS_r.

+ If SCH_INCL_r is equal to ‘1’, and EXT_CH_IND_r signals the allocation of a F-FCH or a F-DCCH, and NUM_FOR_SCH is not equal to ‘00000’, for all the NUM_FOR_SCH occurrences, the mobile station shall perform the following:

  o The mobile station shall determine, N_FSCH_BITS_SETs[FOR_SCH_ID][SCCL_INDEX_r], the number of information bits per Forward Supplemental Channel frame identified by FOR_SCH_ID and corresponding to the index SCCL_INDEX according to the following rules:

    ◊ If FSCH_VAR_TABLE_IDs[FOR_SCH_ID_r] is equal to '00', then:

      – If USE_FLEX_NUM_BITS_s is equal to '0' or if USE_FLEX_NUM_BITS_s is equal to '1' and FSCH_NBIT_TABLE_IDs[FOR_SCH_ID_r] is equal to '0000', then the mobile station shall set the number of information bits per frame, N_FSCH_BITS_SETs[FOR_SCH_ID][SCCL_INDEX_r] and number of CRC bits per frame, FSCH_CRC_LEN_SETs[FOR_SCH_ID][SCCL_INDEX_r], according to Table 3.7.3.3.2.37-2 using FOR_SCH_NUM_BITS_IDX_r as the index to the table.
If USE_FLEX_NUM_BITS is equal to '1' and
FSCH_NBIT_TABLE_IDs[FOR_SCH_ID] is not equal to
'0000', then the mobile station shall set the number of
CRC bits per frame,
FSCH_CRC_LEN_SETs[FOR_SCH_ID][SCCL_INDEX],
using Table 3.7.5.20-1 and
CRC_LEN_IDXs[FSCH_NBIT_TABLE_IDs[FOR_SCH_ID]][FOR_SCH_NUM_BITS_IDX] as the index to the table.
The mobile station shall also set the number of
information bits per frame corresponding to
SCCL_INDEX,
N_FSCH_BITS_SETs[FOR_SCH_ID][SCCL_INDEX],
NUM_BITSs[FSCH_NBIT_TABLE_IDs[FOR_SCH_ID]][FOR_SCH_NUM_BITS_IDX].

◊ If FSCH_VAR_TABLE_IDs[FOR_SCH_ID] is not equal to '000',
then:

– The mobile station shall set
N_FSCH_BITS_IDX_SETs[FOR_SCH_ID], the set of indices
to the number of information bits per frame as follows:
  + If FOR_SCH_NUM_BITS_IDX is equal to '0000', then
    N_FSCH_BITS_IDX_SETs[FOR_SCH_ID] = {
      FOR_SCH_NUM_BITS_IDX},
  + otherwise, the mobile station shall set (initialize)
    N_FSCH_BITS_IDX_SETs[FOR_SCH_ID] =
    {FOR_SCH_NUM_BITS_IDX} and for i=1, ..., FOR_SCH_NUM_BITS_IDX
    add FOR_SCH_NUM_BITS_IDX -
    VAR_FSCH_RATE_OFFSETs[FOR_SCH_ID][FOR_SCH_NUM_BITS_IDX][i]
to the set specified by
    N_FSCH_BITS_IDX_SETs[FOR_SCH_ID].

– If USE_FLEX_NUM_BITS is equal to '0' or if
USE_FLEX_NUM_BITS is equal to '1' and
FSCH_NBIT_TABLE_IDs[FOR_SCH_ID] is equal to '0000',
then the mobile station shall set
N_FSCH_BITS_SETs[FOR_SCH_ID][SCCL_INDEX], the
set of number of information bits per frame as follows.
The i-th member of the set
N_FSCH_BITS_SETs[FOR_SCH_ID][SCCL_INDEX] is
obtained using Table 3.7.3.3.2.37-2 and the i-th member of
the set N_FSCH_BITS_IDX_SETs[FOR_SCH_ID] as the
index to the table.
– If USE_FLEX_NUM_BITS s is equal to ‘1’ and
FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr] is not equal to
‘0000’, then

+ the mobile station shall set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr],
the set of number of information bits per frame as
follows.
The i
th member of the set
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr] is
equal to
NUM_BITSs[FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr]]
[N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i]], where
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i] denotes the
i
th member of the set
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr] and,

+ the mobile station shall set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCCL_INDEXr],
the set of number CRC bits per frame as follows.
The i
th member of the set
FSCH_CRC_LEN_SETs[FOR_SCH_IDr][SCCL_INDEXr] using Table 3.7.5.20-1 and
CRC_LEN_IDXs[FSCH_NBIT_TABLE_IDs[FOR_SCH_IDr]]
[N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i]] as the
index to the table, where
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr][i] denotes the
i
th member of the set
N_FSCH_BITS_IDX_SETs[FOR_SCH_IDr].

+ If SCH_INCLr is equal to ‘1’ and NUM_REV_SCH is not equal to
‘00000’, for all the NUM_REV_SCH occurrences, the mobile station
shall perform the following:

  o Set REV_SCH_NUM_BITS_IDXs[REV_SCH_IDr] to
    REV_SCH_NUM_BITS_IDXr.

  o Set REV_WALSH_IDs [REV_SCH_IDr][REV_SCH_NUM_BITS_IDXs] to
    REV_WALSH_IDr.

+ If FOR_PDCH_RLGAIN_INCLr is included and equal to ‘1’, the mobile
station shall set RLGAIN_ACKCH_PILOTs to RLGAIN_ACKCH_PILOTr,
and RLGAIN_CQICH_PILOTs to RLGAIN_CQICH_PILOTr.

+ If FOR_PDCH_PARMS_INCLr is equal to ‘1’, the mobile station shall
set NUM_SOFT_SWITCHING_FRAMESs to
NUM_SOFT_SWITCHING_FRAMESr + 1, and
NUM_SOFTER_SWITCHING_FRAMESs to
NUM_SOFTER_SWITCHING_FRAMESr + 1.
+ If CHM_SWITCHING_PARMS_INCLr is included and equal to ‘1’, the mobile station shall set NUM_SOFT_SWITCHING.FRAMES.CHM to NUM_SOFT_SWITCHING.FRAMES.CHMr + 1, and NUM_SOFTER_SWITCHING.FRAMES.CHMs to NUM_SOFTER_SWITCHING.FRAMES.CHMr + 1.

+ If CHM_SWITCHING_PARMS_INCLr is included and equal to ‘0’, the mobile station shall set NUM_SOFT_SWITCHING.FRAMES.CHMs to NUM_SOFT_SWITCHING.FRAMES.CHMr + 1, and NUM_SOFTER_SWITCHING.FRAMES.CHMs to NUM_SOFTER_SWITCHING.FRAMES.CHMr + 1.

+ If FOR_PDCH_PARMS_INCLr is equal to ‘1’, the mobile station shall set NUM_SOFT_SWITCHING_SLOTSs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTSr.

+ If FOR_PDCH_PARMS_INCLr is equal to ‘1’, the mobile station shall set NUM_SOFTER_SWITCHING_SLOTSs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTSr.

+ If CHM_SWITCHING_PARMS_INCLr is included and equal to ‘1’, the mobile station shall:
  o Set NUM_SOFT_SWITCHING_SLOTS.CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTS.CHMr.
  o Set NUM_SOFTER_SWITCHING_SLOTS.CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTS.CHMr.

+ If CHM_SWITCHING_PARMS_INCLr is included and equal to ‘0’, the mobile station shall:
  o Set NUM_SOFT_SWITCHING_SLOTS.CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFT_SWITCHING_SLOTSr.
  o Set NUM_SOFTER_SWITCHING_SLOTS.CHMs according to Table 3.7.2.3.2.21-9 based on the value of NUM_SOFTER_SWITCHING_SLOTSr.

+ If FOR_PDCH_PARMS_INCLr is equal to ‘1’, the mobile station shall set PDCH_SOFT_SWITCHING_DELAYs to PDCH_SOFT_SWITCHING_DELAYr + 1, and PDCH_SOFTER_SWITCHING_DELAYs to PDCH_SOFTER_SWITCHING_DELAYr + 1.
+ If FOR_PDCH_PARMS_INCL<sub>r</sub> is equal to ‘1’, and
FOR_PDCH_COMMON_PARMS<sub>r</sub> is equal to ‘1’, the mobile station
shall store the following parameters that are common to all pilots in
the Active Set:
  o The mobile station shall set FOR_PDCH_COMMON_PARMS<sub>s</sub> to
    ‘1’.
  o The mobile station shall set WALSH_TABLE_ID<sub>s</sub> to
    WALSH_TABLE_ID<sub>r</sub>.
  o The mobile station shall set NUM_PDCCH<sub>s</sub> to NUM_PDCCH<sub>r</sub>.
  o The mobile station shall set FOR_PDCCH_WALSH<sub>s[i]</sub> to the i<sup>th</sup>
    occurrence of FOR_PDCCH_WALSH<sub>r</sub>.
  o The mobile station shall set TX_DISABLED_TIMER<sub>s</sub> to
    TX_DISABLED_TIMER<sub>r</sub>.

+ If FOR_PDCH_PARMS_INCL<sub>r</sub> is equal to ‘0’, and
FOR_PDCH_COMMON_PARMS<sub>s</sub> is equal to ‘0’, the mobile station
shall send a Mobile Station Reject Order with ORDQ equal to
‘00000011’ (message structure not acceptable) and remain in the
current state.

+ If EXT_CH_IND<sub>r</sub> signals the allocation of a R-PDCH, the mobile
station shall:
  o Set FOR_GCH_ASSIGNED<sub>s</sub> to FOR_GCH_ASSIGNED<sub>r</sub>.
  o Set FOR_RCCH_ASSIGNED<sub>s</sub> to FOR_RCCH_ASSIGNED<sub>r</sub>.
  o If FOR_RCCH_ASSIGNED<sub>s</sub> is equal to ‘1’, the mobile station shall:
    ◊ Set FOR_RCCH_DRC_MODE<sub>s</sub> to FOR_RCCH_DRC_MODE<sub>r</sub>.
    ◊ Set FOR_RCCH_REPETITION<sub>s</sub> to FOR_RCCH_REPETITION<sub>r</sub>.
    ◊ Set FOR_RCCH_UPDATE_RATE<sub>s</sub> to
      FOR_RCCH_UPDATE_RATE<sub>r</sub>.
  o If FOR_ACKCH_ASSIGNED<sub>r</sub> is equal to ‘1’, the mobile station
    shall set FOR_ACKCH_MODE<sub>s</sub> to FOR_ACKCH_MODE<sub>r</sub>.
  o If FOR_ACKCH_COMB_SEL<sub>r</sub> is included, the mobile station shall
    set FOR_ACKCH_COMB_SEL<sub>s</sub> to FOR_ACKCH_COMB_SEL<sub>r</sub>; otherwise, the mobile station shall set FOR_ACKCH_COMB_SEL<sub>s</sub>
    to ‘0’.
  o If REV_PDCH_RLGAIN_INCL<sub>r</sub> is included and equal to ‘1’, the
    mobile station shall perform the following:
    ◊ The mobile station shall set RLGAIN_SPICH_PILOT<sub>s</sub> to
      RLGAIN_SPICH_PILOT<sub>r</sub>.
The mobile station shall set RLGAIN_REQCH_PILOT to RLGAIN_REQCH_PILOTr.

The mobile station shall set RLGAIN_PDCCH_PILOT to RLGAIN_PDCCH_PILOTr.

- If REV_PDCH_PARMS_1_INCL is included and equal to ‘1’, the mobile station shall perform the following:
  - The mobile station shall set REV_PDCH_TABLE_SEL to REV_PDCH_TABLE_SELr.
  - The mobile station shall set REV_PDCH_MAX_AUTO_TPR to REV_PDCH_MAX_AUTO_TPRr.

+ Otherwise, the mobile station shall:
  - Set FOR_GCH_ASSIGNED to NULL.
  - Set FOR_RCCH_ASSIGNED to NULL.

+ For each member of the Active Set included in the message, the mobile station shall perform the following:
  - Set PILOT_PN to PILOT_PNr.
  - If SRCH_OFFSET_INCL equals ‘1’, set the SRCH_OFFSET field of PILOT_REC to SRCH_OFFSETr; otherwise, set the SRCH_OFFSET field of PILOT_REC to ‘000’.
  - Set ADD_PILOT_REC_INCL to ADD_PILOT_REC_INCLr.
    - If ADD_PILOT_REC_INCLr equals ‘1’, the mobile station shall also perform the following:
      - Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPEr.
      - If PILOT_REC_TYPEr is equal to ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELr and set the TD_MODE field of NGHBR_PILOT_REC to TD_MODEr.
      - If PILOT_REC_TYPEr is equal to ‘001’, the mobile station shall:
        - Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
        - Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
    - If PILOT_REC_TYPEr is equal to ‘010’, the mobile station shall:
      - Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOFr.
– Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
– Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVELr.
– Set the TD_MODE field of PILOT_REC to TD_MODEr.

ο Set FOR_PDCH_INCLs to FOR_PDCH_INCLr.

ο If FOR_PDCH_INCLr is equal to ‘1’, the mobile station shall perform the following:
  ◊ If FOR_PDCH_PARMS_INCLr is equal to ‘1’, and FOR_PDCH_COMMON_PARMSr is equal to ‘0’, the mobile station shall store the following parameters:
    – The mobile station shall set FOR_PDCH_COMMON_PARMSs to ‘0’.
    – The mobile station shall set WALSH_TABLE_IDs to WALSH_TABLE_IDr.
    – The mobile station shall set NUM_PDCCHs to NUM_PDCCHr.
    – The mobile station shall set FOR_PDCCH_WALSHs[i] to the i\textsuperscript{th} occurrence of FOR_PDCCH_WALSHr.
  ◊ The mobile station shall set MAC_IDs to MAC_IDr.
  ◊ The mobile station shall set REV_CQICH_COVERs to REV_CQICH_COVERr.
  ◊ If EXT_CH_INDr signals the allocation of a F-CPCCH, the mobile station shall set FOR_CPCCH_WALSHs to FOR_CPCCH_WALSHr, and FOR_CPCSCHs to FOR_CPCSCHr.
    ◊ If EXT_CH_INDr equals ‘01000’, the mobile station shall set FOR_CPCCH_RATEs to FOR_CPCCH_RATEr.
  ◊ The mobile station shall store FOR_PDCCH_WALSHs[i] to the i\textsuperscript{th} occurrence of FOR_PDCCH_WALSHr.

ο The mobile station shall set PWR_COMB_INDs to PWR_COMB_INDr.

ο If PDCH_GROUP_IND_INCLr is equal to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs as follows:
  ◊ If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
    – The mobile station shall set PDCH_GROUP_IDENTIFIERs to ‘000’;
Otherwise, the mobile station shall perform the following:

- If PDCH_GROUP_IND_r is set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned; otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the value one greater than that of the previous pilot in the list that has a F-PDCH assigned.

Otherwise, the mobile station shall perform the following:

- If this is the first pilot in the list that has a F-PDCH assignment, the mobile station shall perform the following:
  - The mobile station shall set PDCH_GROUP_IDENTIFIERs to ‘000’;

- Otherwise, the mobile station shall perform the following:
  - If F-PDCH is assigned for this pilot, the mobile station shall perform the following:
    + If PWR_COMB_IND_r is set to ‘1’, and there are no pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
    + If PWR_COMB_IND_r is set to ‘1’, and all pilots between this pilot and the previous pilot in the list that has a F-PDCH assigned have PWR_COMB_IND set to ‘1’, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the same value as that of the previous pilot in the list that has a F-PDCH assigned.
    + Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to the value one greater than that of the previous pilot in the list.

- Otherwise, the mobile station shall set PDCH_GROUP_IDENTIFIERs to NULL.

If EXT_CH_IND_r signals the allocation of a F-FCH, the mobile station shall set CODE_CHAN_FCHs to CODE_CHAN_FCH_r, and QOF_MASK_ID_FCHs to QOF_MASK_ID_FCH_r.

If EXT_CH_IND_r signals the allocation of a F-DCCH, the mobile station shall set CODE_CHAN_DCCHs to CODE_CHAN_DCCH_r, and QOF_MASK_ID_DCCHs to QOF_MASK_ID_DCCH_r.
If EXT_CH_INDr signals the allocation of a F-DCCH, the mobile station shall set CODE_CHAN_DCCHs to CODE_CHAN_DCCHr, and QOF_MASK_ID_DCCHs to QOF_MASK_ID_DCCHr.

If FOR_PDCH_INCLr is equal to ‘1’, EXT_CH_INDr signals the allocation of a R-PDCH, and if FOR_ACKCH_ASSIGNEDr is equal to ‘1’, the mobile station shall set FOR_ACKCH_WALSH_INDEXs to FOR_ACKCH_WALSH_INDEXr, and FOR_ACKSCH_INDEXs to FOR_ACKSCH_INDEXr.

If FOR_RCCH_INCLr is included and set to ‘1’, the mobile station shall do the following:

◊ set FOR_RCCH_WALSH_INDEXs to FOR_RCCH_WALSH_INDEXr.

◊ set FOR_RCSCH_INDEXs to FOR_RCSCH_INDEXr.

If FOR_PDCH_INCLr is equal to ‘1’, and if FOR_GCH_ASSIGNEDr is included and set to ‘1’, the mobile station shall perform the following;

◊ set NUM_FOR_GCHs to NUM_FOR_GCHRr, and

◊ for each of the NUM_FOR_GCHs occurrences of FOR_GCH_WALSH_INDEXr, the mobile station shall set FOR_GCH_WALSH_INDEXs[j] to FOR_GCH_WALSH_INDEXr[j].

Otherwise, the mobile station shall perform the following:

◊ set NUM_FOR_GCHs to 0, and

◊ set FOR_GCH_WALSH_INDEXs to NULL.

If SCH_INCLr is equal to ‘1’ and NUM_SCH is equal to ‘00000’, the mobile station shall delete the corresponding pilot from the all entries of the corresponding Supplemental Channel.

If SCH_INCLr is equal to ‘1’ and NUM_SCH is not equal to ‘00000’, for each Supplemental Channel included in this record, the mobile station shall:

◊ If PILOT_INCL is equal to ‘0’, then the mobile station shall delete the corresponding pilot from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.

◊ If PILOT_INCL is equal to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set PILOT_PNs[FOR_SCH_IDr][SCCL_INDEXr][i] to PILOT_PNr, QOF_IDs[FOR_SCH_IDr][SCCL_INDEXr][i] to QOF_MASK_ID_SCHR, and FOR_SCH_CC_INDEXs[FOR_SCH_IDr][SCCL_INDEXr][i] to CODE_CHAN_SCHR.
◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘1’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to CCSH_ENCODER_TYPEr.

◊ If PILOT_INCL is equal to ‘1’ and CCSH_INCLUDED is set to ‘0’, then for each Supplemental Channel included in this record, the mobile station shall set CCSH_ENCODER_TYPEs[FOR_SCH_IDr][SCCL_INDEXr][i] to ‘0’ (default Turbo Encoder type).

◊ The mobile station shall delete all pilots that are not included in the list specified by the NUM_PILOTS field from the Active Set of Supplemental Channel for the corresponding SCCL_INDEXr.

+ If CCSH_INCLUDED is equal to ‘1’, the mobile station shall perform the following:

  o If CCSH_ENCODER_ACTION_TIMEr is received, then the mobile station shall set CCSH_ENCODER_ACTIONTIMEs to CCSH_ENCODER_ACTIONTIMEr, and the mobile station shall apply each CCSH_ENCODER_TYPEs at the time specified by CCSH_ENCODER_ACTIONTIMEr.

  o If CCSH_ENCODER_ACTIONTIMEr is not received, the mobile station shall apply each CCSH_ENCODER_TYPEs at the action time of the message.

+ The mobile station shall set FUNDICATED_BCMC_INDs to FUNDICATED_BCMC_INDr. If FUNDICATED_BCMC_INDr equals ‘1’ and the EXT_CH_INDr signals the allocation of a F-FCH, the mobile station shall set FCH_BCMC_IND to ‘1’; otherwise, the mobile station shall set FCH_BCMC_IND to ‘0’.

+ If FUNDICATED_BCMC_INDr equals ‘1’ and ADD_PLCM_FOR_FCH_INCLr is included and is set to ‘1’, the mobile station shall store the following:

  o Set ADD_PLCM_FOR_FCH_TYPEs to ADD_PLCM_FOR_FCH_TYPEr.

  o Set ADD_PLCM_FOR_FCH_39s to ADD_PLCM_FOR_FCH_39r if ADD_PLCM_FOR_FCH_TYPEr is equal to ‘1’.

+ The mobile station shall delete all pilots that are not listed in the NUM_PILOTS field from the Active Set.
+ The mobile station shall delete all pilots that are not listed in the
  Active Set from the Active Set of the Supplemental Channel for the
  Forward Supplemental Channel Assignment (if any). If these deleted
  pilots include all pilots in the Active Set of the Supplemental
  Channel, the mobile station shall cancel the Forward Supplemental
  Channel Assignment.

- If the CH_IND_{r} is set to ‘111’ and FUNDICATED_BCMC_IND_{r} equals ‘1’, the
  mobile station shall change the R-FCH assignment as specified in
  REV_FCH_ASSIGNED_{r}, at the specified action time.

- If the most significant bit of CH_IND_{r} is set to ‘1’ and
  PILOT_GATING_USE_RATE is equal to ‘1’, the mobile station shall set
  PILOT_GATING_USE_RATE to ‘0’ and shall start the continuous reverse pilot
  at the specified action time. If the most significant bit of CH_IND_{r} is set to
  ‘0’, CH_IND_{r} is not equal to ‘000’, and PILOT_GATING_USE_RATE is equal to
  ‘0’, the mobile station shall perform the following:
    - The mobile station shall set PILOT_GATING_USE_RATE to ‘1’ and shall
      start the reverse pilot gating at the specified action time.
    - If the Fundamental Channel is also being released, the mobile station
      shall store the configuration used for the Fundamental Channel.
    - The mobile station shall cancel the forward and reverse supplemental
      channel assignment, if any.

- The mobile station shall set IGNORE_ESCAM_{s} and IGNORE_SCAM_{s} to ‘0’.

- Set the pilot detection threshold for the Target Frequency and the Candidate
  Frequency:
    - Set TF_T_ADD_{s} to T_ADD_{s}.
    - If the Target Frequency is the same as the Candidate Frequency
      (TF_CDMABAND_{s} is equal to CF_CDMABAND_{s} and TF_CDMACH_{s} is
      equal to CF_CDMACH_{s}), set CF_T_ADD_{s} to T_ADD_{s}.

- If PERIODIC_SEARCH_{s} is equal to ‘0’ and a periodic search is in progress,
  the mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and
  2.6.6.2.10.4).

- The mobile station shall determine its roaming status (see 2.6.5.3). The
  mobile station should indicate to the user whether the mobile station is
  roaming.

- Perform a soft or hard handoff depending on the following conditions:
  - If any of the following conditions is true, the mobile station shall perform a
    hard handoff:
      + EXTRA_PARMS is set to ‘1’ and either BAND_CLASS_{r} is not equal to
        SF_CDMABAND_{s}, CDMA_FREQ_{r} is not equal to SF_CDMACH_{s}, or
        FRAME_OFFSET_{r} is not equal to SF_FRAME_OFFSET_{s}, or
+ The set of pilots specified by the message is disjoint from the Active Set prior to the action time of the message.

– If the mobile station performs a hard handoff, it shall perform the following:
  + If a Periodic Serving Frequency Pilot Report Procedure is in progress, the mobile station shall abort the procedure (see 2.6.6.2.12).
  + If a Candidate Frequency periodic search is in progress, the mobile station shall abort the periodic search (see 2.6.6.2.8.3.4 and 2.6.6.2.10.4).
  + If a Forward Supplemental Channel assignment or a Reverse Supplemental Channel assignment is in progress, the mobile station shall abort it.

+ The mobile station shall cancel any outstanding Forward Supplemental Channel assignment or Reverse Supplemental Channel assignment that is not specified by this message.

+ The mobile station shall cancel the current Forward Supplemental Channel assignment or the Reverse Supplemental Channel assignment, if it is in progress. If the message does not specify another Forward Supplemental Channel assignment or Reverse Supplemental Channel assignment, the mobile station shall cancel the outstanding Forward Supplemental Channel assignment, if any.
  + If RETURN_IF_HANDOFF_FAILs is equal to ‘0’, the mobile station shall perform actions specified in 2.6.6.2.8.1. If the message specifies more than one pilot, the mobile station shall also perform actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.
  + If RETURN_IF_HANDOFF_FAILs is equal to ‘1’, the mobile station shall perform actions specified in 2.6.6.2.8.2. If the message specifies more than one pilot, the mobile station shall also perform actions specified in 2.6.6.2.7.1 and 2.6.6.2.7.2.

– Otherwise, the mobile station shall perform a soft handoff as specified in 2.6.6.2.7.

12. **Mobile Assisted Burst Operation Parameters Message**: The mobile station shall process this message as follows:

- The mobile station shall set ORDER_FLAGs to ORDER_FLAGr.
- If ORDER_FLAGr is equal to ‘1’, the mobile station shall perform the following:
  – The mobile station shall set PS_MIN_DELTA_s to PS_MIN_DELTA_r + 1.
  – The mobile station shall set ORDER_INTERVALs to ORDER_INTERVAL_r.
• If ORDER_FLAG\_r is equal to ‘0’, the mobile station shall perform the following:
  – The mobile station shall set PS\_MIN\_DELTA\_s to 0.
  – The mobile station shall set ORDER\_INTERVAL\_s to 0.
• The mobile station shall set PERIODIC\_FLAG\_s to PERIODIC\_FLAG\_r.
• If PERIODIC\_FLAG\_r is equal to ‘1’, the mobile station shall perform the following:
  – The mobile station shall set NUM\_PILOTS\_s to NUM\_PILOTS\_r.
  – The mobile station shall set PERIODIC\_INTERVAL\_s to PERIODIC\_INTERVAL\_r.
• If PERIODIC\_FLAG\_r is equal to ‘0’, the mobile station shall perform the following:
  – The mobile station shall set NUM\_PILOTS\_s to 0.
  – The mobile station shall set PERIODIC\_INTERVAL\_s to 0.
• The mobile station shall set THRESHOLD\_FLAG\_s to THRESHOLD\_FLAG\_r.
• If THRESHOLD\_FLAG\_r is equal to ‘1’, the mobile station shall perform the following:
  – The mobile station shall set PS\_FLOOR\_LOW\_s to PS\_FLOOR\_LOW\_r.
  – The mobile station shall set PS\_FLOOR\_HIGH\_s to PS\_FLOOR\_HIGH\_r.
  – The mobile station shall set PS\_CEILING\_LOW\_s to PS\_CEILING\_LOW\_r.
  – The mobile station shall set PS\_CEILING\_HIGH\_s to PS\_CEILING\_HIGH\_r.
• If THRESHOLD\_FLAG\_r is equal to ‘0’, the mobile station shall perform the following:
  – The mobile station shall set PS\_FLOOR\_LOW\_s to ‘0’.
  – The mobile station shall set PS\_FLOOR\_HIGH\_s to ‘0’.
  – 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_DURATIONr, Reverse Supplemental Channel Discontinuous Transmission Duration, as REV_SCH_DTX_DURATIONS at the action time of the message.

• The mobile station shall store the unit for START_TIME_UNITs = START_TIME_UNITr.

• The mobile station shall store USE_T_ADD_ABORTr, Reverse Supplemental Channel assignment T_ADD abort indicator, as USE_T_ADD_ABORTS.

• If IGNORE_ESCAMs is equal to ‘1’ and SCRM_SEQ_NUMr is not present or is present and is not equal to SCRM_SEQ_NUMs, then the mobile station shall not process the remaining Reverse Supplemental Channel assignment information in this message.

• If IGNORE_ESCAMs is equal to ‘1’ and SCRM_SEQ_NUMr is present and is equal to SCRM_SEQ_NUMs, then the mobile station shall set IGNORE_ESCAMs to ‘0’.
• If ADD_INFO_INCL\_r is equal to ‘1’, the message includes a Supplemental Channel assignment (that is, NUM\_FOR\_SCH\_r is not equal to ‘00’ and/or NUM\_REV\_SCH\_r is not equal to ‘00’), and PILOT\_GATING\_USE\_RATE is equal to ‘1’, the mobile station shall process the following information of the Extended Supplemental Channel Assignment Message as follows:

  – The mobile station shall set FPC\_PRI\_CHAN\_s = FPC\_PRI\_CHAN\_r at the action time of the message.

• If REV\_CFG\_INCLUDED is equal to ‘1’, for all the (NUM\_REV\_CFG\_RECS + 1) occurrences of the reverse configuration record, the mobile station shall store the REV\_WALSH\_ID matrix as follows:

  – REV\_WALSH\_ID\_s\[REV\_SCH\_ID\_r\][REV\_SCH\_NUM\_BITS\_IDX\_r] = REV\_WALSH\_ID\_r

• If NUM\_REV\_SCH\_r is not equal to ‘00’, then the mobile station shall store the following information for each occurrence of the record and process the Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:

  – REV\_SCH\_START\_TIME\_INCL\_s\[REV\_SCH\_ID\_r\] = REV\_SCH\_START\_TIME\_INCL\_r

  – If REV\_SCH\_START\_TIME\_INCL\_s\[REV\_SCH\_ID\_r\] is set to ‘1’, set REV\_SCH\_START\_TIME\_s\[REV\_SCH\_ID\_r\] = REV\_SCH\_START\_TIME\_r

  – REV\_SCH\_DURATION\_s\[REV\_SCH\_ID\_r\] = REV\_SCH\_DURATION\_r

  – REV\_SCH\_NUM\_BITS\_IDX\_s\[REV\_SCH\_ID\_r\] = REV\_SCH\_NUM\_BITS\_IDX\_r

• If NUM\_FOR\_SCH\_r is not equal to ‘00’, then the mobile station shall store the following information for each occurrence of the record and process the Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:

  – FOR\_SCH\_START\_TIME\_INCL\_s\[FOR\_SCH\_ID\_r\] = FOR\_SCH\_START\_TIME\_INCL\_r

  – If FOR\_SCH\_START\_TIME\_INCL\_s\[FOR\_SCH\_ID\_r\] is set to ‘1’, set FOR\_SCH\_START\_TIME\_s\[FOR\_SCH\_ID\_r\] = FOR\_SCH\_START\_TIME\_r

  – FOR\_SCH\_DURATION\_s\[FOR\_SCH\_ID\_r\] = FOR\_SCH\_DURATION\_r

  – FOR\_SCH\_FER\_REP\_s\[FOR\_SCH\_ID\_r\] = FOR\_SCH\_FER\_REP\_r

  – SCCL\_INDEX\_s\[FOR\_SCH\_ID\_r\] = SCCL\_INDEX\_r

  – If SCH\_BCMCM\_IND field is included the mobile station shall perform the following:

    + If SCH\_BCMCM\_IND\_r equals ‘1’ and USE\_ADD\_PLCM\_FOR\_SCH\_r equals ‘1’, set corresponding SCH\_BCMCM\_IND\[FOR\_SCH\_ID\_r\] to ‘1’;

    otherwise, set SCH\_BCMCM\_IND\[FOR\_SCH\_ID\_r\] = ‘0’.

  – If SCH\_BCMCM\_IND\_r is included and equals ‘1’ and ADD\_PLCM\_FOR\_SCH\_INCL\_r is included and is set to ‘1’, the mobile station shall store following fields:
+ Set ADD_PLCM_FOR_SCH_TYPE_s to ADD_PLCM_FOR_SCH_TYPE_r.
+ Set ADD_PLCM_FOR_SCH_359_s to ADD_PLCM_FOR_SCH_359_r if
ADD_PLCM_FOR_SCH_TYPE_r is equal to ‘1’.

– If SCH_BCMC_IND_r is included and equals ‘1’, the mobile station shall
store following fields:

+ USE_ADD_PLCM_FOR_SCH_s[FOR_SCH_ID_r] = USE_ADD_PLCM_FOR_SCH_r
+ FSCH_OUTERCODE_INCL_s[FOR_SCH_ID_r] = FSCH_OUTERCODE_INCL_r

+ If FSCH_OUTERCODE_INCL_r equals ‘1’, the mobile station shall store
following fields:

  o FSCH_OUTERCODE_RATE_s[FOR_SCH_ID_r] = FSCH_OUTERCODE_RATE_r
  o FSCH_OUTERCODE_OFFSET_s[FOR_SCH_ID_r] = FSCH_OUTERCODE_OFFSET_r

• If FOR_CFG_INCLUDED is equal to ‘1’, the mobile station shall perform the
following:

  – Set FOR_SCH_FER_REP_s to FOR_SCH_FER_REP_r.

  – If FOR_SCH_FER_REP_r is equal to ‘0’, set SCH_TOT_FRAMES_s and
SCH_BAD_FRAMES_s to 0.

  – Store NUM_FOR_CFG_RECS occurrences of Forward Supplemental
Channel Configuration associated with the identification of Forward
Supplemental Channel.

• For each record of the Forward Supplemental Channel Code list the mobile
station shall store the Forward Supplemental Channel Code list associated
with the FOR_SCH_ID_r as follows:

  – NUM_SUP_SHO_s[FOR_SCH_ID_r][SCCL_INDEX_r] = NUM_SUP_SHO_r.

  – The mobile station shall determine,
N_FSCH_BITS_SET_s[FOR_SCH_ID_r][SCCL_INDEX_r], the number of
information bits per Forward Supplemental Channel frame identified by
FOR_SCH_ID and corresponding to the index SCCL_INDEX according to
the following rules:

  + If FSCH_VAR_TABLE_ID_s[FOR_SCH_ID_r] is equal to ‘000’, then:
o 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_SCH_ID][FOR_SCH_IDr] is equal to '0000', then
the mobile station shall set the number of information bits per
frame, N_FSCH_BITS_SET[FOR_SCH_ID][SCCL_INDEXr] and
number of CRC bits per frame,
FSCH_CRC_LEN_SET[FOR_SCH_ID][SCCL_INDEXr], according
to Table 3.7.3.3.2.37-2 using FOR_SCH_NUM_BITS_IDXr as the
index to the table.

o If USE_FLEX_NUM_BITS is equal to '1' and
FSCH_NBIT_TABLE_ID[FOR_SCH_ID][FOR_SCH_IDr] is not equal to '0000',
then the mobile station shall set the number of CRC bits per
frame, FSCH_CRC_LEN_SET[FOR_SCH_ID][SCCL_INDEXr],
using Table 3.7.5.20-1 and
CRC_LEN_IDX[FSCH_NBIT_TABLE_ID[FOR_SCH_ID][FOR_SCH_IDr]] as the index to the table.
The mobile station shall also set the number of information bits
per frame corresponding to SCCL_INDEXr,
N_FSCH_BITS_SET[FOR_SCH_ID][SCCL_INDEXr], to
NUM_BITS[FSCH_NBIT_TABLE_ID][FOR_SCH_ID][FOR_SCH_NUM
UM_BITS_IDXr].

+ If FSCH_VAR_TABLE_ID[FOR_SCH_ID] is not equal to '000', then:
  o The mobile station shall set
N_FSCH_BITS_IDX_SET[FOR_SCH_ID], the set of indices to the
number of information bits per frame as follows:
    ◊ If FOR_SCH_NUM_BITS_IDXr is equal to '0000', then
      N_FSCH_BITS_IDX_SET[FOR_SCH_IDr] = {
        FOR_SCH_NUM_BITS_IDXr },
    ◊ otherwise the mobile station shall set (initialize)
      N_FSCH_BITS_IDX_SET[FOR_SCH_IDr] =
      {FOR_SCH_NUM_BITS_IDXr} and for i=1, ..., FOR_SCH_NUM_BITS_IDXr the mobile station shall add
      FOR_SCH_NUM_BITS_IDXr -
      VAR_FSCH_RATE_OFFSET[FOR_SCH_IDr][FOR_SCH_NUM BITS_IDXr][i] to the set specified by
      N_FSCH_BITS_IDX_SET[FOR_SCH_IDr]
If USE_FLEX_NUM_BITS\_s is equal to '0' or if USE_FLEX_NUM_BITS\_s is equal to '1' and FSCH\_NBIT\_TABLE\_ID\_s[FOR\_SCH\_ID\_r] is equal to '0000', then the mobile station shall set N\_FSCH\_BITS\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r], the set of number of information bits per frame as follows.

The \(i\)th member of the set N\_FSCH\_BITS\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r] is obtained using Table 3.7.3.2.37-2 and the \(i\)th member of the set N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r] as the index to the table.

If USE_FLEX_NUM_BITS\_s is equal to '1' and FSCH\_NBIT\_TABLE\_ID\_s[FOR\_SCH\_ID\_r] is not equal to '0000', then the mobile station shall set N\_FSCH\_BITS\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r], the set of number of information bits per frame as follows.

The \(i\)th member of the set N\_FSCH\_BITS\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r] is equal to NUM\_BITS\_s[FSCH\_NBIT\_TABLE\_ID\_s[FOR\_SCH\_ID\_r]][N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r][i]], where N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r][i] denotes the \(i\)th member of the set N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r] and,

the mobile station shall set FSCH\_CRC\_LEN\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r], the set of number CRC bits per frame as follows.

The \(i\)th member of the set FSCH\_CRC\_LEN\_SET\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r] using Table 3.7.5.20-1 and CRC\_LEN\_IDX\_s[FSCH\_NBIT\_TABLE\_ID\_s[FOR\_SCH\_ID\_r]][N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r][i]] as the index to the table, where N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r][i] denotes the \(i\)th member of the set N\_FSCH\_BITS\_IDX\_SET\_s[FOR\_SCH\_ID\_r].

For the \(i\)th record of the Forward Supplemental Channel Active Set (for all values of i between 1 and NUM\_SUP\_SHO+1) specified in this message, the mobile station shall store the following entries corresponding to the SCCL\_INDEX\_r as follows:

+ PILOT\_PN\_s[FOR\_SCH\_ID\_r][SCCL\_INDEX\_r][i] = PILOT\_PN\_r,

+ Set the ADD_PIL\_REC\_INCL field to ADD_PIL\_REC\_INCL\_r. If ADD_PIL\_REC\_INCL\_r equals ‘1’, the mobile station shall store the following:
Set the PILOT_REC_TYPE field of PILOT_REC to PILOT_REC_TYPEr.

If PILOT_REC_TYPEr equals ‘000’, the mobile station shall set the TD_POWER_LEVEL field of PILOT_REC to TD_POWER_LEVELr and set the TD_MODE field of PILOT_REC to TD_MODEr.

If PILOT_REC_TYPEr is equal to ‘001’, the mobile station shall:
  – Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.

If NGHBR_PILOT_REC_TYPEr is equal to ‘010’, the mobile station shall:
  – Set the AUX_PILOT_TD_QOF field of PILOT_REC to QOFr.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
  – Set the AUX_TD_POWER_LEVEL field of PILOT_REC to AUX_TD_POWER_LEVELr.
  – Set the TD_MODE field of NGHBR_PILOT_REC to TD_MODEr.

If PILOT_REC_TYPEr is equal to ‘011’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTr.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.

If PILOT_REC_TYPEr is equal to ‘100’, the mobile station shall:
  – Set the SR3_PRIMARY_PILOT field of PILOT_REC to SR3_PRIMARY_PILOTr.
  – Set the SR3_PILOT_POWER1 field of PILOT_REC to SR3_PILOT_POWER1r.
  – Set the SR3_PILOT_POWER2 field of PILOT_REC to SR3_PILOT_POWER2r.
  – Set the AUX_PILOT_QOF field of PILOT_REC to QOFr.
  – Set the AUX_PILOT_WALSH_CODE field of PILOT_REC to AUX_PILOT_WALSHr with the Walsh Code length specified by WALSH_LENGTHr.
– If ADD_INFO_INCL1\(r\) is equal to ‘1’, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF1\(r\) and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH1\(r\) with the Walsh Code length specified by WALSH_LENGTH1\(r\).

– Otherwise, set the AUX_PILOT_QOF1 field of PILOT_REC to QOF\(r\) and set the AUX_PILOT_WALSH_CODE1 field of PILOT_REC to AUX_PILOT_WALSH\(r\) with the Walsh Code length specified by WALSH_LENGTH\(r\).

– If ADD_INFO_INCL2\(r\) is equal to ‘1’, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF2\(r\) and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH2\(r\) with the Walsh Code length specified by WALSH_LENGTH2\(r\).

– Otherwise, set the AUX_PILOT_QOF2 field of PILOT_REC to QOF\(r\) and set the AUX_PILOT_WALSH_CODE2 field of PILOT_REC to AUX_PILOT_WALSH\(r\) with the Walsh Code length specified by WALSH_LENGTH\(r\).

\[+\text{QOF\_MASK\_ID\_SCH}_s[[\text{FOR\_SCH\_ID}_r][\text{SCCL\_INDEX}_r][i]=19\text{QOF\_MASK\_ID\_SCH}_r,\]

\[+\text{FOR\_SCH\_CC\_INDEX}_s[[\text{FOR\_SCH\_ID}_r][\text{SCCL\_INDEX}_r][i]=20\text{CODE\_CHAN\_SCH}_r.\]

+ If the mobile station supports Code Combining Soft Handoff, and CCSH_INCLUDED is set to ‘1’, set CCSH_ENCODER_TYPE\(s[[\text{FOR\_SCH\_ID}_r][\text{SCCL\_INDEX}_r][i]=21\text{CCSH\_ENCODER\_TYPE}_r.\]

+ If the mobile station supports Code Combining Soft Handoff, and CCSH_INCLUDED is set to ‘0’, set CCSH_ENCODER_TYPE\(s[[\text{FOR\_SCH\_ID}_r][\text{SCCL\_INDEX}_r][i]=0\text{ (default Turbo Encoder type)}\]

• The mobile station may soft-combine the Forward Supplemental Channel frames received on the Forward Supplemental Channels in the same Forward Supplemental Channel Active Set.

• If the mobile station supports any Radio Configuration greater than 2, the mobile station shall perform the following:
  – If FPC_INCL\(r\) is equal to ‘1’, the mobile station shall:
    + Set FPC_MODE_SCH\(s\) to FPC_MODE_SCH\(r\).
  – If FPC_INCL is equal to ‘1’ and FPC_MODE_SCH is equal to ‘001’, ‘010’, ‘101’, or ‘110’, the mobile station shall:
    + Set FPC_SEC_CHAN\(s\) to FPC_SEC_CHAN\(r\).
+ Set FPC_BCMC_CHAN_s to FPC_BCMC_CHAN_r.

- If NUM_SUP_r is included and not equal to ‘00’, for each Supplemental Channel included in the message, the mobile station shall:
  + Set SCH_ID_s to SCH_ID_r.
  + Set FPC_SCH_FER_s to FPC_SCH_FER_r.
  + Set FPC_SCH_INIT_SETPT_s as follows:
    o If FPC_SCH_INIT_SETPT_OP_r is set to ‘0’, set FPC_SCH_INIT_SETPT_s to FPC_SCH_INIT_SETPT_r.
    o If FPC_SCH_INIT_SETPT_OP_r is set to ‘1’:
      ◊ If FPC_PRI_CHAN_r is equal to ‘0’, set FPC_SCH_INIT_SETPT_s to (FPC_FCH_CURR_SETPT_s + FPC_SCH_INIT_SETPT_r).
      ◊ Otherwise, set FPC_SCH_INIT_SETPT_s to (FPC_DCCH_CURR_SETPT_s + FPC_SCH_INIT_SETPT_r).
  + Set FPC_SCH_MIN_SETPT_s to FPC_SCH_MIN_SETPT_r.
  + Set FPC_SCH_MAX_SETPT_s to FPC_SCH_MAX_SETPT_r.

- If FPC_THRESH_SCH_INCL is included and equal to ‘1’, the mobile station shall set FPC_SETPT_THRESH_SCH_s to SETPT_THRESH_SCH_r.

• If RPC_INCL is equal to ‘1’, the mobile station shall set RLGAIN_SCH_PILOT_s to RLGAIN_SCH_PILOT_r.

• If NUM_3X_CFG_r is not equal to ‘00’, the mobile station shall store the Forward 3X Supplemental Channel Configuration associated with the identification of Forward Supplemental Channel (NUM_3X_CFG_s = NUM_3X_CFG_r).

• For each 3X SCH record included in this message, the mobile station shall update the Forward Supplemental Channel Code list associated with the FOR_SCH_ID_r as follows:
  - For the i_th record of the Forward Supplemental Channel Active Set (for all values of i between 1 and NUM_SUP_SHO+1) specified in this message, the mobile station shall store the following three entries corresponding to the SCCL_INDEX_r as follows:
    + If 3X_SCH_LOW_INCL_r equals ‘1’, set QOF_MASK_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i] to QOF_MASK_ID_SCH_LOW_r and FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i] to CODE_CHAN_SCH_LOW_r. Otherwise, set QOF_MASK_ID_SCH_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i] to QOF_MASK_ID_SCH[FOR_SCH_ID_r][SCCL_INDEX_r][i] and FOR_SCH_CC_INDEX_LOW[FOR_SCH_ID_r][SCCL_INDEX_r][i] to CODE_CHAN_SCH[FOR_SCH_ID_r][SCCL_INDEX_r][i].
+ If $3X_{\text{SCH \_ HIGH \_ INCL}}$ equals ‘1’, set

$$QOF \_ MASK \_ ID \_ SCH \_ HIGH[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$

and

$$QOF \_ MASK \_ ID \_ SCH \_ HIGH_r$$

and

$$\text{FOR \_ SCH \_ CC \_ INDEX \_ HIGH}[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$

and

$$\text{CODE \_ CHAN \_ SCH \_ HIGH}_r$$. Otherwise, set

$$QOF \_ MASK \_ ID \_ SCH \_ HIGH[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$

and

$$QOF \_ MASK \_ ID \_ SCH[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$

and

$$\text{FOR \_ SCH \_ CC \_ INDEX \_ HIGH}[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$

and

$$\text{CODE \_ CHAN \_ SCH}[\text{FOR \_ SCH \_ ID}_r][\text{SCCL \_ INDEX}_r][i]$$.

- If PILOT\_GATING\_USE\_RATE is set to ‘1’ and if NUM\_REV\_SCH$_r$ or NUM\_FOR\_SCH$_r$ is not equal to ‘00’, the mobile station shall perform the following:

  – The mobile station shall set PILOT\_GATING\_USE\_RATE to ‘0’ and shall start the continuous reverse pilot at the specified action time and, if a F-PDCH is assigned, the mobile station shall start the continuous R-CQICH as defined in [3].

  – If a F-PDCH is not assigned and the Fundamental Channel was previously established prior to transitioning to the Control Hold Mode, the mobile station shall start processing F-FCH and start transmitting on R-FCH at the action time of the message. The mobile station shall establish the Fundamental Channel with the same configuration as previously used.

- If FOR\_SCH\_CC\_INCL$_r$ equals ‘1’, the mobile station shall store the NUM\_FOR\_SCH$_r$ occurrences of the Forward Supplemental Channel channel configuration records as follows:

  – The mobile station shall store the Forward Supplemental Channel Identification ($\text{FOR \_ SCH \_ ID}[\text{FOR \_ SCH \_ ID}_r][s] = \text{FOR \_ SCH \_ ID}_r$).

  – The mobile station shall store the Forward Supplemental Channel Multiplex Option ($\text{FOR \_ SCH \_ MUX}[\text{FOR \_ SCH \_ ID}_r][s] = \text{FOR \_ SCH \_ MUX}_r$).

  – The mobile station shall store the Forward Supplemental Channel Radio Configuration ($\text{FOR \_ SCH \_ RC}[\text{FOR \_ SCH \_ ID}_r][s] = \text{SCH \_ RC}_r$).

  - The mobile station shall store the Forward Supplemental Channel Coding Type ($\text{FOR \_ SCH \_ CODING}[\text{FOR \_ SCH \_ ID}_r][s] = \text{CODING}_r$).

- If FRAME\_40\_USED$_r$ and FRAME\_80\_USED$_r$ are both equal to ‘0’, the mobile station shall set FOR\_SCH\_FRAME\_LENGTH$_s[\text{FOR \_ SCH \_ ID}_r]$ to ‘00’ (i.e., 20 ms frame length).

- If FRAME\_40\_USED$_r$ is equal to ‘1’, the mobile station shall set FOR\_SCH\_FRAME\_LENGTH$_s[\text{FOR \_ SCH \_ ID}_r]$ to ‘01’ (i.e., 40 ms frame length).
If FRAME_80_USEDr is equal to '1', the mobile station shall set FOR_SCH_FRAME_LENGTHs[FOR_SCH_IDr] to '10' (i.e., 80 ms frame length).

- F_MAX_RATEIDXs[FOR_SCH_IDr] = MAX_RATEr.

If REV_SCH_CC_INCLr equals ‘1’, the mobile station shall store the NUM_REV_SCHr occurrences of the Reverse Supplemental Channel channel configuration records as follows:

- The mobile station shall store the Reverse Supplemental Channel Identification (REV_SCH_ID[REV_SCH_IDr]s = REV_SCH_IDr).
- The mobile station shall store the Reverse Supplemental Channel Multiplex Option (REV_SCH_MUX[REV_SCH_IDr]s = REV_SCH_MUXr).
- The mobile station shall store the Reverse Supplemental Channel Radio Configuration (REV_SCH_RC[REV_SCH_IDr]s = SCH_RCr).
- The mobile station shall store the Reverse Supplemental Channel Coding Type (REV_SCH_CODING[REV_SCH_IDr]s = CODINGr).

- If FRAME_40_USEDr and FRAME_80_USEDr are both equal to '0', the mobile station shall set REV_SCH_FRAME_LENGTHs[REV_SCH_IDr] to '00' (i.e., 20 ms frame length).
- If FRAME_40_USEDr is equal to '1', the mobile station shall set REV_SCH_FRAME_LENGTHs[REV_SCH_IDr] to '01' (i.e., 40 ms frame length).
- If FRAME_80_USEDr is equal to '1', the mobile station shall set REV_SCH_FRAME_LENGTHs[REV_SCH_IDr] to '10' (i.e., 80 ms frame length).
  - R_MAX_RATEIDXs[REV_SCH_IDr] = MAX_RATEr.

14. Forward Supplemental Channel Assignment Mini Message: The mobile station shall process this message as follows:

The mobile station shall send a Mobile Station Reject Order with the ORDQ field set to '00000111' (message can not be handled by the current mobile station configuration), if any of the mobile station’s forward supplemental channel configuration parameters for the corresponding Supplemental Channel is NULL.

Otherwise, the mobile station shall store the following information and process the Forward Supplemental Burst as specified in 2.6.6.2.5.1.1:

- Set FOR_SCH_START_TIME_INCLs[FOR_SCH_IDr] to ‘1’
- FOR_SCH_START_TIMES[FOR_SCH_IDr] = FOR_SCH_START_TIMEr
- FOR_SCH_DURATIONss[FOR_SCH_IDr] = FOR_SCH_DURATIONr
- SCCL_INDEXs[FOR_SCH_IDr] = SCCL_INDEXr
• If PILOT_GATING_USE_RATE is set to ‘1’, the mobile station shall perform
the following:
  – The mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall
    start the continuous reverse pilot at the specified action time and, if a F-
    PDCH is assigned, the mobile station shall start the continuous R-
    CQICH as defined in [3].
  – If a F-PDCH is not assigned and the Fundamental Channel was
    previously established prior to transitioning to the Control Hold Mode, the
    mobile station shall start processing F-FCH and start transmitting on R-
    FCH at the action time of the message. The mobile station shall establish
    the Fundamental Channel with the same configuration as previously
    used.

15. Reverse Supplemental Channel Assignment Mini Message: The mobile station shall
process this message as follows:
The mobile station shall send a Mobile Station Reject Order with the ORDQ field
set to ‘00000111’ (message can not be handled by the current mobile station
configuration), if any of the mobile station’s reverse supplemental channel
configuration parameters for the corresponding Supplemental Channel is NULL,
or if the Reverse Packet Data Channel is assigned.

If IGNORE_ESCAM_s is equal to ‘1’, the mobile station shall not process the
Reverse Supplemental Channel assignment information in this message.
Otherwise, the mobile station shall store the following information and process
the Reverse Supplemental Burst as specified in 2.6.6.2.5.1.2:
• Set REV_SCH_START_TIME_INCL_s[REV_SCH_ID_r] to ‘1’
• REV_SCH_START_TIME_s[REV_SCH_ID_r] = REV_SCH_START_TIME_r
• REV_SCH_DURATION_s[REV_SCH_ID_r] = REV_SCH_DURATION_r
• REV_SCH_NUM_BITS_IDX_s[REV_SCH_ID_r] = REV_SCH_NUM_BITS_IDX_r
• If PILOT_GATING_USE_RATE is set to ‘1’, the mobile station shall perform
the following:
  – The mobile station shall set PILOT_GATING_USE_RATE to ‘0’ and shall
    start the continuous reverse pilot at the specified action time and, if a F-
    PDCH is assigned, the mobile station shall start the continuous R-
    CQICH as defined in [3].
  – If a F-PDCH is not assigned and the Fundamental Channel was
    previously established prior to transitioning to the Control Hold Mode, the
    mobile station shall start processing F-FCH and start transmitting on R-
    FCH at the action time of the message. The mobile station shall establish
    the Fundamental Channel with the same configuration as previously
    used.
2.6.6.2.5.1.1 Processing of the Forward Supplemental Burst Assignment

A Forward Supplemental Assignment specifies the explicit start time identified by
FOR_SCH_START_TIME or the implicit start time (if FOR_SCH_START_TIME_INCL is set to
‘0’), FOR_SCH_DURATION, and SCCL_INDEX of a forward burst assignment. The time
interval of duration is specified by FOR_SCH_DURATION (see Table 3.7.3.3.2.37-3) and
starts at the time specified by the explicit start time FOR_SCH_START_TIME or the implicit
start time (if FOR_SCH_START_TIME_INCL is set to ‘0’). This time interval for a Forward
Supplemental Assignment is called the Forward Supplemental Assignment Interval. A
value of FOR_SCH_DURATION equal to ‘1111’ indicates infinite duration. The variable
SCCL_INDEXs[FOR_SCH_ID] specifies the rate, QOF index and the Active Set for the
Forward Supplemental Channel identified by FOR_SCH_ID for a given Forward
Supplemental Assignment. A value of FOR_SCH_DURATION equal to '0000' indicates that
the mobile station should stop processing the forward Supplemental Channels at the
explicit start time specified by FOR_SCH_START_TIME or the implicit start time (if
FOR_SCH_START_TIME_INCL is set to ‘0’). The implicit start time is the time occurring no
later than the first 80 ms boundary (relative to System Time) which occurs at least 80 ms
after the end of the frame containing the last bit of the Extended Supplemental Channel
Assignment Message or the action time of the Universal Handoff Direction Message.

If the mobile station receives an Extended Supplemental Channel Assignment Message with
FOR_SCH_CC_INCL set to ‘1’, the mobile station shall begin to use the Forward
Supplemental Channel configuration specified by this message at the start time of this
Forward Supplemental Assignment.

For each Forward Supplemental Assignment the mobile station shall determine the start
time for processing forward supplemental channel as the time for which the following
equation holds:

\[\lfloor t/(\text{START\_TIME\_UNITs}+1)\rfloor - \text{FOR\_SCH\_START\_TIME}_r \mod 32 = 0,\]

where \(t\) is the System Time in units of 20 ms.

Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Forward Supplemental
Assignment is received while the mobile station is processing the forward supplemental
channel according to a previously received assignment. Two cases are displayed in Figure
2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the start time of the
second assignment and Case b) where the first assignment ends before the second one
starts.
a) "Assignment 1" extends beyond the start time for "Assignment 2"

b) "Assignment 1" ends prior to the start time of "Assignment 2"

Figure 2.6.6.2.5.1.1-1. New Supplemental Channel Assignment Received while a Previous Supplemental Channel Assignment is in Progress

Figure 2.6.6.2.5.1.1-2 shows an example scenario in which the mobile station receives a second Forward Supplemental Assignment before it starts processing the supplemental channel according to the first assignment. In this case, the second assignment simply replaces the first assignment.

Figure 2.6.6.2.5.1.1-2. New Supplemental Channel Assignment Received before a Previous Supplemental Channel Assignment starts

The mobile station shall set FPC_MODEs to FPC_MODE_SCHs at the FOR_SCH_START_TIMEs of the forward Supplemental Channel assignment. The mobile station shall set FPC_MODEs to FPC_MODE_NO_SCHs at the end of the forward Supplemental Channel assignment.
For each Forward Supplemental Channel assignment corresponding to each Forward Supplemental Channel (identified by FOR_SCH_ID), the mobile station should perform the following:

- If FOR_SCH_DURATIONs[FOR_SCH_ID] is not equal to ‘0000’, then
  - If the mobile station is currently processing the Forward Supplemental Channel identified by FOR_SCH_ID, then the mobile station should continue processing the Forward Supplemental Channel identified by FOR_SCH_ID according to the Forward Supplemental Assignment previously received for the Forward Supplemental Channel identified by FOR_SCH_ID up to the time specified by the FOR_SCH_START_TIMEs[FOR_SCH_ID] [i.e., the mobile station should stop processing the forward supplemental channel identified by FOR_SCH_ID at either the time specified by the start time of the new assignment, or at the time the previously received assignment ends, whichever time is earlier].
  - At the time specified by FOR_SCH_START_TIMEs[FOR_SCH_ID], the mobile station should start processing the Forward Supplemental Channel identified by FOR_SCH_ID for a duration of time specified by FOR_SCH_DURATION[FOR_SCH_ID]s with FOR_SCH_MUXs[FOR_SCH_IDr], FOR_SCH_RCs[FOR_SCH_IDr], FOR_SCH_CODINGs[FOR_SCH_IDr], FOR_SCH_FRAME_LENGTHs[FOR_SCH_IDr], the QOF index, the Supplemental Channel Active Set indexed by SCCL_INDEXs[FOR_SCH_ID], and number of information bits per frame (or set of number of bits per frame if FSCH_VAR_TABLE_IDs[FOR_SCH_IDr] is not equal to ‘000’) specified by N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr].

If the set of number of bits per frame, N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr], has more than one member and F_INC_RATE_ALLOWEDs is equal to ‘0’, then the following rule applies for the duration of this assignment:

+ Once the mobile station determines the forward Supplemental Channel number of bits per frame, the number of bits per frame in the subsequent Forward Supplemental Channel frames may be any member of the set N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr] which is smaller or equal to the number of bits in the current frame.

- Otherwise, if the mobile station is not currently processing the Forward Supplemental Channel identified by FOR_SCH_ID, then at the time specified by FOR_SCH_START_TIMEs[FOR_SCH_ID], the mobile station should start processing the Forward Supplemental Channel identified by FOR_SCH_ID for a duration of time specified by FOR_SCH_DURATIONs[FOR_SCH_ID] with the QOF index, the Supplemental Channel Active Set indexed by SCCL_INDEXs[FOR_SCH_ID], and number of bits per frame (or set of number of information bits per frame if FSCH_VAR_TABLE_IDs[FOR_SCH_IDr] is not equal to ‘000’) specified by N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr].
If the set of number of bits per frame, 
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr] and 
F_INC_RATE_ALLOWEDs is equal to ‘0’, has more than one member, then the 
following rule applies for the duration of this assignment:

+ Once the mobile station determines the forward Supplemental Channel 
number of bits per frame, the number of bits per frame in the subsequent 
Forward Supplemental Channel frames may be any member of the set 
N_FSCH_BITS_SETs[FOR_SCH_IDr][SCCL_INDEXr] which is smaller or equal 
to the number of bits in the current frame.

• If FOR_SCH_DURATIONs[FOR_SCH_ID] is equal to ‘0000’, the mobile station should 
perform the following:
  – If the mobile station is currently processing the Forward Supplemental Channel 
identified by FOR_SCH_ID, then the mobile station should continue processing 
the Forward Supplemental Channel identified by FOR_SCH_ID according to the 
Forward Supplemental Assignment previously received for the Forward 
Supplemental Channel identified by FOR_SCH_ID up to the time specified by 
the implicit start time (FOR_SCH_START_TIME_INCLs is set to ‘0’) or the 
explicit start time (FOR_SCH_START_TIME_INCLs is set to ‘1’) (i.e., the mobile 
station should stop processing the forward supplemental channel identified by 
FOR_SCH_ID at the time specified by the implicit start time or the explicit start 
time, or at the time the previously received assignment ends, whichever time is 
earlier). The mobile station should cancel the pending Forward Supplemental 
Channel assignment if any.
  + If FOR_SCH_START_TIME_INCLs is equal to ‘1’, the mobile station should 
stop processing the Forward Supplemental Channel identified by 
FOR_SCH_ID at the time specified by 
FOR_SCH_START_TIMEs[FOR_SCH_ID].
  + If FOR_SCH_START_TIME_INCLs is equal to ‘0’, the mobile station should 
stop processing the Forward Supplemental Channel identified by 
FOR_SCH_ID no later than the first 80 ms boundary (relative to System 
Time) occurring at least 80 ms after the end of the frame containing the last 
bite of the Extended Supplemental Channel Assignment Message or the action 
time of the Universal Handoff Direction Message.
  – Otherwise, if the mobile station is not currently processing the Forward 
Supplemental Channel identified by FOR_SCH_ID, the mobile station should 
cancel the pending Forward Supplemental Channel assignment if any.

2.6.6.2.5.1.2 Processing of the Reverse Supplemental Burst Assignment

A Reverse Supplemental Assignment specifies the explicit start time identified by 
REV_SCH_START_TIME or the implicit start time (if REV_SCH_START_TIME_INCL is set to 
‘0’), REV_SCH_DURATION, and REV_SCH_NUM_BITS_IDX of a reverse burst assignment. 
The time interval of duration is specified by REV_SCH_DURATION (see Table 3.7.3.3.2.37- 
3) and starts at the time specified by the explicit start time REV_SCH_START_TIME or the
implicit start time (if REV_SCH_START_TIME_INCL is set to ‘0’). This time interval for a
Reverse Supplemental Assignment is called the reverse supplemental assignment interval.
A value of REV_SCH_DURATION equal to '1111' indicates infinite duration. A value of
REV_SCH_DURATION equal to '0000' indicates that the mobile station should stop
transmitting the reverse Supplemental Channels at the explicit start time specified by
REV_SCH_START_TIME or the implicit start time (if REV_SCH_START_TIME_INCL is set to
'0'). The implicit start time is the time occurring no later than the first 80 ms boundary
(relative to System Time) which occurs at least 80 ms after the end of the frame containing
the last bit of the Extended Supplemental Channel Assignment Message or the action time of
the Universal Handoff Direction Message.

If the mobile station receives an Extended Supplemental Channel Assignment Message with
REV_SCH_CC_INCL set to ‘1’, the mobile station shall begin to use the Reverse
Supplemental Channel configuration specified by this message at the start time of this
Reverse Supplemental Assignment.

For each Reverse Supplemental Assignment the mobile station shall determine the start
time for processing reverse supplemental channel as the time for which the following
equation holds:

\[
\lfloor \frac{t}{(START\_TIME\_UNITs+1)} \rfloor - REV\_SCH\_START\_TIME_r \mod 32 = 0,
\]

where t is the System Time in units of 20 ms.

Figure 2.6.6.2.5.1.1-1 illustrates the scenario in which a second Reverse Supplemental
Assignment is received while the mobile station is transmitting on the reverse
supplemental channel according to a previously received assignment. Two cases are
displayed in Figure 2.6.6.2.5.1.1-1: Case a) where the first assignment extends beyond the
start time of the second assignment and Case b) where the first assignment ends before the
second one starts.

Figure 2.6.6.2.5.1.1-2 shows an example scenario in which the mobile station receives a
second Reverse Supplemental Assignment before it starts transmitting on the supplemental
channel according to the first assignment. In this case, the second assignment simply
replaces the first assignment.

For each Reverse Supplemental Channel assignment corresponding to each Reverse
Supplemental Channel (identified by REV_SCH_ID), the mobile station shall perform the
following:

- The mobile station shall determine, \(N_{RSCH\_BITS_s[REV\_SCH\_ID_r]}\), the number of
  information bits per Reverse Supplemental Channel frame identified by
  REV_SCH_ID according to the following rules:
    - If RSCH_VAR_TABLE_ID_s[REV_SCH_ID_r] is equal to ‘000’, then:
+ If $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '0' or if $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '1' and $\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]$ is equal to '0000', then the mobile station shall set the number of information bits per frame, $\text{N\_RSCH\_BITS\_SET}[\text{REV\_SCH\_ID}]$, and number of CRC bits per frame, $\text{RSCH\_CRC\_LEN\_SET}[\text{REV\_SCH\_ID}]$, according to Table 3.7.3.3.2.37-2 using $\text{REV\_SCH\_NUM\_BITS\_IDX}_r$ as the index to the table.

+ If $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '1' and $\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]$ is not equal to '0000', then the mobile station shall set the number of CRC bits per frame, $\text{RSCH\_CRC\_LEN\_SET}[\text{REV\_SCH\_ID}]$, according to Table 3.7.5.20-1 using $\text{CRC\_LEN\_IDX}_r[\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]][\text{REV\_SCH\_NUM\_BITS\_IDX}_r]$ as the index to the table. The mobile station shall also set the number of information bits per frame, $\text{N\_SCH\_BITS\_SET}[\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]][\text{REV\_SCH\_NUM\_BITS\_IDX}_r]$.

– If $\text{RSCH\_VAR\_TABLE\_ID}[\text{REV\_SCH\_ID}]$ is not equal to '000', then:

  + The mobile station shall set $\text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}]$, the set of indices to the number of information bits per frame as follows:

    o If $\text{REV\_SCH\_NUM\_BITS\_IDX}_r$ is equal to '0000', then
      \[
      \text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}] = \{ \text{REV\_SCH\_NUM\_BITS\_IDX}_r \},
      \]
    o otherwise, the mobile station shall set (initialize)
      \[
      \text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}] = \{ \text{REV\_SCH\_NUM\_BITS\_IDX}_r \}
      \]
      and for $i=1, \ldots$, $\text{REV\_SCH\_NUM\_BITS\_IDX}_r$ the mobile station shall add $\text{REV\_SCH\_NUM\_BITS\_IDX}_r - \text{VAR\_RSCH\_RATE\_OFFSET}[\text{REV\_SCH\_ID}][\text{REV\_SCH\_NUM\_BITS\_IDX}_r][i]$ to the set specified by $\text{N\_RSCH\_BITS\_IDX\_SET}[\text{FOR\_SCH\_ID}]$.

  + If $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '0' or if $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '1' and $\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]$ is equal to '0000', then the mobile station shall determine $\text{N\_RSCH\_BITS\_SET}[\text{REV\_SCH\_ID}]$, the set of number of information bits per frame as follows. The $i^{th}$ member of the set $\text{N\_RSCH\_BITS\_SET}[\text{REV\_SCH\_ID}]$ is obtained using Table 3.7.3.3.2.37-1 and the $i^{th}$ member of the set $\text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}]$ as the index to the table.

  + If $\text{USE\_FLEX\_NUM\_BITS}$ is equal to '1' and $\text{RSCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]$ is not equal to '0000', then

    o the mobile station shall set $\text{N\_RSCH\_BITS\_SET}[\text{REV\_SCH\_ID}]$, the set of number of information bits per frame as follows.
    The $i^{th}$ member of the set $\text{N\_RSCH\_BITS\_SET}[\text{REV\_SCH\_ID}]$ is equal to $\text{NUM\_BITS}[\text{SCH\_NBIT\_TABLE\_ID}[\text{REV\_SCH\_ID}]][\text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}][i]]$, where $\text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}][i]$ denotes the $i^{th}$ member of the set $\text{N\_RSCH\_BITS\_IDX\_SET}[\text{REV\_SCH\_ID}]$.  

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the mobile station shall set RSCH_CRC_LEN_SETs[REV_SCH_IDr], the set of number of information bits per frame as follows. The \(i\)th member of the set RSCH_CRC_LEN_IDX_SETs[REV_SCH_IDr] is equal to
\[
\text{CRC_LEN_IDXS}[\text{RSCH_NBIT_TABLE_IDs}[\text{REV_SCH_IDr}][\text{N_RSCH_BITS_IDX_SETs}[\text{REV_SCH_IDr}][i]],
\]
where\(\text{N_RSCH_BITS_IDX_SETs}[\text{REV_SCH_IDr}][i]\) denotes the \(i\)th member of the set N_RSCH_BITS_IDX_SETs[REV_SCH_IDr].

- If REV_SCH_DURATIONs[REV_SCH_ID] is not equal to ‘0000’, then
  - If the mobile station is currently transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID, then the mobile station may continue transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID with the Walsh cover specified by REV_WALSH_IDs[REV_SCH_ID][REV_SCH_NUM_BITS_IDX[REV_SCH_IDr]]
  according to the current Reverse Supplemental Assignment for the Reverse Supplemental Channel identified by REV_SCH_ID up to the time specified by the REV_SCH_START_TIMEs[REV_SCH_IDr] (i.e., the mobile station shall stop transmitting on the reverse supplemental channel identified by REV_SCH_ID at either the time specified by the start time of the new assignment, or at the time the previously received assignment ends, whichever time is earlier).

At the time specified by REV_SCH_START_TIMEs[REV_SCH_IDr], the mobile station may start transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID with REV_SCH_MUXs[REV_SCH_IDr], REV_SCH_RCs[REV_SCH_IDr], REV_SCH_CODINGs[REV_SCH_IDr], REV_SCH_FRAME_LENGTHs[REV_SCH_IDr], the Walsh cover specified by REV_WALSH_IDs[REV_SCH_ID][REV_SCH_NUM_BITS_IDXs[REV_SCH_IDr]] and number of bits per frame (or set of number of information bits per frame if RSCH_VAR_TABLE_IDs[REV_SCH_ID] is not equal to ‘000’) specified by N_RSCH_BITS_SETs[REV_SCH_IDr].

If the set of number of bits per frame, N_RSCH_BITS_SETs[REV_SCH_IDr], has more than one member and R_INC_RATE_ALLOWEDs is equal to ‘0’, then the following rule applies for the duration of this assignment:

+ Once the mobile station transmits \(n\) number of bits per Reverse Supplemental Channel specifies by REV_SCH_ID, where \(n\) is a member of the set N_RSCH_BITS_SETs[REV_SCH_IDr], the mobile station shall not transmit at a rate higher than the one specifies by \(n\) information bits per frame for the duration of the assignment.
– If the mobile station is not currently transmitting on the Reverse Supplemental Channel identified by REV_SCH_IDᵣ, then at the time specified by REV_SCH_START_TIMEₛ[REV_SCH_IDᵣ], the mobile station may start transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID with the Walsh cover specified by REV_WALSH_IDₛ[REV_SCH_ID][REV_SCH_NUM_BITS_IDXₛ[REV_SCH_IDᵣ]] and number of bits per frame (or set of number of information bits per frame if RSCH_VAR_TABLE_IDₛ[REV_SCH_IDᵣ] is not equal to ‘000’) specified by N_RSCH_BITS_SETₛ[REV_SCH_IDᵣ]. If the set of number of bits per frame, N_RSCH_BITS_SETₛ[REV_SCH_IDᵣ], has more than one member and R_INC_RATE_ALLOWEDₛ is equal to ‘0’, then the following rule applies for the duration of this assignment:

+ Once the mobile station transmits \( n \) number of bits per Reverse Supplemental Channel specifies by REV_SCH_ID, where \( n \) is a member of the set N_RSCH_BITS_SETₛ[REV_SCH_IDᵣ], the mobile station shall not transmit at a rate higher than the one specifies by \( n \) information bits per frame for the duration of the assignment.

• If REV_SCH_DURATIONₛ[REV_SCH_IDᵣ] is equal to ‘0000’, the mobile station shall perform the followings:

– If the mobile station is currently transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID, then the mobile station may continue transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID with the Walsh cover specified by REV_WALSH_IDₛ[REV_SCH_ID][REV_SCH_NUM_BITS_IDXₛ[REV_SCH_IDᵣ]] according to the current Reverse Supplemental Assignment for the Reverse Supplemental Channel identified by REV_SCH_ID up to the time specified by the implicit start time (if REV_SCH_START_TIME_INCLₛ is equal to ‘1’) or the explicit start time (if REV_SCH_START_TIME_INCLₛ is equal to ‘1’) (i.e., the mobile station shall stop transmitting on the reverse supplemental channel identified by REV_SCH_ID at the implicit start time or the explicit start time, or at the time the previously received assignment ends, whichever time is earlier). The mobile station shall cancel the pending Reverse Supplemental Channel assignment if any.

+ If REV_SCH_START_TIME_INCLₛ is equal to ‘1’, the mobile station shall stop transmitting on the Reverse Supplemental Channel identified by REV_SCH_IDᵣ at the time specified by REV_SCH_START_TIMEₛ[REV_SCH_IDᵣ].

+ If REV_SCH_START_TIME_INCLₛ is equal to ‘0’, the mobile station shall stop transmitting on the Reverse Supplemental Channel identified by REV_SCH_IDᵣ no later than the first 80 ms boundary (relative to System Time) occurring at least 80 ms after the end of the frame containing the last bit of the Extended Supplemental Channel Assignment Message or the action time of the Universal Handoff Direction Message.
Otherwise, if the mobile is not currently transmitting on the Reverse Supplemental Channel identified by REV_SCH_ID, the mobile station shall cancel the pending Forward Supplemental Channel assignment if any.

- If REV_SCH_DTX_DURATIONs is not equal to ‘1111’, the mobile station shall perform the following:
  - The mobile station shall maintain a REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_IDr] counter counting discontinuous transmission time in units of 20 ms as follows:
    - The mobile station shall reset the REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_IDr] counter to 0:
      - For each Reverse Supplemental Channel assignment corresponding to REV_SCH_IDr, at action time specified by the REV_SCH_START_TIMEr field for that assignment, if included; otherwise at the action time of the message of the message.
      - Each time the mobile station resumes transmission on Reverse Supplemental Channel after discontinued operation on the Reverse Supplemental Channel.
    - The mobile station shall increment the REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_IDr] counter by one at each 20ms interval for which the mobile station is not transmitting on the Reverse Supplemental Channel during the Reverse Supplemental Channel duration.
  - If the REV_SCH_DTX_TRANSMISSION_COUNTER[REV_SCH_IDr] counter value exceeds REV_SCH_DTX_DURATIONs (i.e., the mobile station discontinues transmission on the Reverse Supplemental Channel for more than the duration specified by REV_SCH_DTX_DURATIONs), the mobile station shall perform the following:
    - The mobile station shall not resume transmission on the Reverse Supplemental Channel corresponding to REV_SCH_IDr.
    - The mobile station shall send an indication to each affected service instance indicating that the mobile station has terminated transmission on the supplemental channel corresponding to REV_SCH_IDr due to expiration of the discontinued transmission period.

2.6.6.2.5.2 Processing of Reverse Traffic Channel Handoff Messages

The mobile station sends the following messages on the Reverse Traffic Channel in support of handoff when its transmitter is enabled, following the receipt of a forward dedicated channel acquired indication from Layer 2 (see [4]):

1. Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message: The mobile station shall send an autonomous Pilot Strength Measurement Message if P_REV_IN_USEs is less than seven or Extended Pilot Strength Measurement Message if P_REV_IN_USEs is equal to or greater than seven in assured mode. The mobile station shall send either Pilot Strength Measurement
Message or Extended Pilot Strength Measurement Message containing measurements consistent with the event whenever any of the following events occur:

- $P_{REV\_IN\_USE}s$ is less than or equal to three or $SOFT\_SLOPEs$ is equal to ‘000000’ and the strength of a Neighbor Set or Remaining Set pilot is found to be above $T_{ADD}s$.

- $P_{REV\_IN\_USE}s$ is greater than three, $SOFT\_SLOPEs$ 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:

$$
10 \times \log_{10} PS > \frac{SOFT\_SLOPE_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{ADD\_INTERCEPT_s}{2}
$$

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, $SOFT\_SLOPEs$ 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:

$$
10 \times \log_{10} PS > \max(\frac{SOFT\_SLOPE_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{ADD\_INTERCEPT_s}{2}, -\frac{T\_ADD_i}{2})
$$

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 $SOFT\_SLOPEs$ is equal to ‘000000’, the strength of a Candidate Set pilot exceeds the strength of an Active Set pilot by $T\_COMP_s \times 0.5$ 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, $SOFT\_SLOPEs$ is not equal to ‘000000’, and the strength of a Candidate Set pilot exceeds the strength of an Active Set pilot by $T\_COMP_s \times 0.5$ dB and satisfies the following inequality:

$$
10 \times \log_{10} PS > \frac{SOFT\_SLOPE_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{ADD\_INTERCEPT_s}{2}
$$

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 Message, General Handoff Direction Message, or Universal Handoff Direction Message was received.

2. Handoff Completion Message or Extended Handoff Completion Message: The mobile station shall send a Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is less than seven or an Extended Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is equal to or greater than seven in assured mode as follows:

• If the handoff message (Extended Handoff Direction Message, General Handoff Direction Message or Universal Handoff Direction Message) specifies a soft handoff, the mobile station shall send the Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is less than seven or an Extended Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is equal to or greater than seven within \( T_{56d} \) seconds after the action time of the received handoff message.

• If the handoff message (Extended Handoff Direction Message, General Handoff Direction Message or Universal Handoff Direction Message) specifies a hard handoff without return on failure (see 2.6.6.2.8.1), the mobile station shall send the Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is less than seven or an Extended Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is equal to or greater than seven within \( T_{73d} \) seconds after the action time of the received handoff message.

• If the handoff message (General Handoff Direction Message or Universal Handoff Direction Message) specifies a hard handoff with return on failure (see 2.6.6.2.8.2), the mobile station shall send the Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is less than seven or an Extended Handoff Completion Message if \( P_{REV\_IN\_USE_s} \) is equal to or greater than seven within \( T_{56d} \) seconds after mobile station declares the handoff to be successful (see 2.6.6.2.8.2).

3. Candidate Frequency Search Report Message: The mobile station shall send a Candidate Frequency Search Report Message in assured mode, whenever any of the following events occur:

• RETURN_IF_HANDOFF_FAIL\_S is equal to ‘1’, and a handoff attempt is unsuccessful (see 2.6.6.2.8.2). In this case, the mobile station shall send a Candidate Frequency Search Report Message within \( T_{56d} \) seconds after completing a search of all pilots in the Candidate Frequency Search Set and resuming the use of the Serving Frequency Active Set (see 2.6.6.2.8.2.1).
• RETURN_IF_HANDOFF_FAIL is equal to ‘1’, an inter-frequency handoff attempt is unsuccessful (see 2.6.6.2.8.2), and PERIODIC_SEARCH is equal to ‘1’. In this case, the mobile station shall send a Candidate Frequency Search Report Message in a search period if the conditions specified in 2.6.6.2.8.3.2 are met.

• The mobile station receives a Candidate Frequency Search Request Message or a Candidate Frequency Search Control Message with SEARCH_TYPE set to ‘01’. If none of the conditions requiring the mobile station to send a Mobile Station Reject Order is true (see 2.6.6.2.5.1), the mobile station shall send a Candidate Frequency Search Report Message, as described in 2.6.6.2.8.3.1 and 2.6.6.2.10.1.

• The mobile station receives a Candidate Frequency Search Request Message or Candidate Frequency Search Control Message with SEARCH_TYPE set to ‘11’, SEARCH_MODE is equal to ‘0000’ and the Candidate Frequency Search Set is not empty. If none of the conditions requiring the mobile station to send a Mobile Station Reject Order is true (see 2.6.6.2.5.1), the mobile station shall send a Candidate Frequency Search Report Message in a search period if the conditions specified in 2.6.6.2.8.3.2 are met.

• The mobile station receives a Candidate Frequency Search Request Message or Candidate Frequency Search Control Message with SEARCH_TYPE set to ‘11’, SEARCH_MODE is equal to ‘0001’ and the Candidate Frequency Analog Search Set is not empty. If none of the conditions requiring the mobile station to send a Mobile Station Reject Order is true (see 2.6.6.2.5.1), the mobile station shall send a Candidate Frequency Search Report Message in a search period if the conditions specified in 2.6.6.2.10.2 are met.

4. Periodic Pilot Strength Measurement Message: The mobile station shall send a Periodic Pilot Strength Measurement Message in unassured mode, as specified in 2.6.6.2.5.1 and 2.6.6.2.12.

5. Pilot Strength Measurement Mini Message: If the mobile station supports the Mobile Assisted Burst operation capability, the mobile station shall send this message while processing any Supplemental Channel, according to the following:

• The mobile station shall transmit a Pilot Strength Measurement Mini Message for a pilot $p$ in the Active Set on the r-dsch logical channel whenever all of the following conditions are true:
  – ORDER_FLAG is equal to ‘1’.
  – The pilot $p$ in the Active Set has a received signal strength that is greater than the signal strength of another pilot in the Active Set by PS_MIN_DELTA, in units of 0.5 dB, at the current time and has been for ORDER_INTERVAL most recent successive 20 ms frame intervals since this pilot was last reported in a rank order based Pilot Strength Measurement Mini Message.
  – The rank order of pilot $p$ has changed.
• If PERIODIC_FLAG is equal to ‘1’, the mobile station shall transmit a Pilot Strength Measurement Mini Message within PERIODIC_INTERVAL, 20 ms frame intervals on the r-dsch for each of the n pilots in the Active Set with the largest signal strengths, where \( n = \min(\text{NUM_PILOTS}, \text{the number of pilots in the Active Set}) \), whenever the following condition is true:
  – The mobile station has not transmitted another Pilot Strength Measurement Mini Message for the corresponding pilot during the last PERIODIC_INTERVAL, 20 ms frame intervals.

• If THRESHOLD_FLAG is equal to ‘1’, the mobile station shall transmit a Pilot Strength Measurement Mini Message for pilot \( p \) on the r-dsch logical channel whenever all of the following conditions are true:
  – The mobile station has not transmitted a previous Pilot Strength Measurement Mini Message for pilot \( p \) within the most recent THRESHOLD_INTERVAL, 20 ms frames intervals.
  – Pilot \( p \) is in the Active Set.
  – The signal strength of pilot \( p \) is greater than PS_CEILING_High and the signal strength of pilot \( p \) was less than or equal to PS_CEILING_LOW at any time since the mobile station last sent a Pilot Strength Measurement Mini Message for pilot \( p \); or the signal strength of pilot \( p \) is less than PS_FLOOR_LOW and the signal strength for pilot \( p \) was greater than or equal to PS_FLOOR_HIGH at any time since the last time that the mobile station sent a Pilot Strength Measurement Mini Message for pilot \( p \).

2.6.6.2.6 Set Maintenance

2.6.6.2.6.1 Maintenance of the Active Set
The mobile station shall support a maximum Active Set size of \( N_{6m} \) pilots. The mobile station shall track the pilot strengths of all pilots in the Active Set.

When the mobile station is first assigned Forward Traffic Channels, the mobile station shall initialize the Active Set to contain the pilots associated with the assigned Forward Traffic Channels. When the mobile station processes an Extended Handoff Direction Message, a General Handoff Direction Message or Universal Handoff Direction Message, then at the action time of the message the mobile station shall replace the pilots in the Active Set with the pilots listed in the message.

If the call rescue allowed timer is enabled, then the mobile station shall autonomously add one or more Candidate Set pilots whose strength exceeds \( T_{ADD} \) to the Active Set, beginning with the strongest, provided that:
  • the NGHBR_RESQ_CONFIGURED field of the NGHBR_REC for the corresponding pilot is equal to ‘1’, and
  • the resulting Active Set size does not exceed \( N_{6m} \) pilots.

When autonomously adding Rescue Channel pilots to the Active Set, the mobile station
may autonomously drop one or more of the existing pilots in the Active Set, beginning with
the weakest, to allow for adding pilots when the Active Set is full.

2.6.6.2.6.2 Maintenance of the Candidate Set
The mobile station shall support a maximum Candidate Set size of $N_{7m}$ pilots.

When the mobile station is first assigned a Forward Traffic Channel, the mobile station
shall initialize the Candidate Set to contain no pilots. The mobile station shall adjust the
Candidate Set whenever any of the following events occur:

- If the mobile station detects that the strength of a Neighbor Set pilot or a Remaining
  Set pilot exceeds $T_{ADD_s}$, the mobile station shall add the pilot to the Candidate
  Set.

- If the mobile station processes an *Extended Handoff Direction Message*, a *General
  Handoff Direction Message* or a *Universal Handoff Direction Message* which does not
  list a pilot in the current Active Set, and the handoff drop timer corresponding to
  that pilot has not expired at the action time of the message, the mobile station shall
  add the pilot to the Candidate Set at the action time of the message.

- If the mobile station autonomously drops an existing pilot in the Active Set (see
  2.6.6.2.6.1), and the handoff drop timer corresponding to that pilot has not expired,
  the mobile station shall add the pilot to the Candidate Set.

- If $P_{REV\_IN\_USE_s}$ is greater than three, and $SOFT\_SLOPE_s$ is not equal to ‘000000’,
  the mobile station shall perform the following:
  - If the mobile station processes a *General Handoff Direction Message* or a
    *Universal Handoff Direction Message* which does not list a pilot in the current
    Active Set, the handoff drop timer corresponding to that pilot has expired at the
    action time of the message, and that pilot is found to be above $T_{DROP_s}$, the
    mobile station shall add the pilot to the Candidate Set at the action time of the
    message.
  - If the mobile station autonomously drops an existing pilot in the Active Set (see
    2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and
    that pilot is found to be above $T_{DROP_s}$, the mobile station shall add the pilot to
    the Candidate Set.

- If the mobile station processes an *Extended Handoff Direction Message*, a *General
  Handoff Direction Message* or *Universal Handoff Direction Message*, which lists a
  pilot in the current Candidate Set, the mobile station shall delete the pilot from the
  Candidate Set at the action time of the message.

- If the handoff drop timer corresponding to a Candidate Set pilot expires, the mobile
  station shall delete the pilot from the Candidate Set.

- If the mobile station autonomously adds a Candidate Set pilot to the Active Set (see
  2.6.6.2.6.1), the mobile station shall delete the pilot from the Candidate Set.
• If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate Set size exceeds \( N_{7m} \), the mobile station shall delete from the Candidate Set the pilot whose handoff drop timer is closest to expiration. If more than one such pilot exists, the mobile station shall delete one such pilot that has the lowest strength. If no pilot in the Candidate Set has an enabled handoff drop timer, the mobile station shall delete from the Candidate Set the pilot that has the lowest strength.

2.6.6.2.6.3 Maintenance of the Neighbor Set

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

When the mobile station is first assigned a Forward Traffic Channel, the mobile station shall initialize the Neighbor Set to contain all the pilots specified in the most recently received Neighbor List Message, Extended Neighbor List Message or General Neighbor List Message.

The mobile station shall maintain a counter, \( AGES \), for each pilot in the Neighbor Set. The mobile station shall initialize this counter to zero when it moves the pilot from the Active Set or the Candidate Set to the Neighbor Set. The mobile station shall initialize this counter to NGHBR_MAX_AGEs when it moves the pilot from the Remaining Set to the Neighbor Set. The mobile station shall increment AGES for each pilot in the Neighbor Set upon receipt of a Neighbor List Update Message or an Extended Neighbor List Update Message. When the mobile station is first assigned to a Forward Traffic Channel, the mobile station shall set AGES for each pilot in the Neighbor Set to NGHBR_MAX_AGEs.

The mobile station shall adjust the Neighbor Set whenever any of the following events occur:

• If the mobile station receives a Neighbor List Update Message or an Extended Neighbor List Update Message, it shall perform the following:
  – Increment AGES for each pilot in the Neighbor Set.
  – Delete from the Neighbor Set all pilots whose AGES exceeds NGHBR_MAX_AGEs.
  – Add to the Neighbor Set each pilot named in the message, if it is not already a pilot of the Active Set, Candidate Set, or Neighbor Set. If the mobile station can store in the Neighbor Set only \( k \) additional pilots, and more than \( k \) new pilots were sent in the Neighbor List Update Message or the Extended Neighbor List Update Message, the mobile station shall store the first \( k \) new pilots listed in the message.

• If the handoff drop timer of a pilot in the Candidate Set expires, the mobile station shall add the pilot to the Neighbor Set.

• If \( P_{REV\_IN\_USE} \) is less than or equal to three or \( SOFT\_SLOPE \) is equal to ‘000000’, the mobile station shall perform the following:
– If the mobile station processes an Extended Handoff Direction Message, a General Handoff Direction Message, or a Universal Handoff Direction Message in which a pilot in the Active Set is not listed, and the handoff drop timer corresponding to the pilot has expired, the mobile station shall add the pilot to the Neighbor Set.

– If the mobile station autonomously drops an existing pilot in the Active Set (see 2.6.6.2.6.1) and the handoff drop timer corresponding to the pilot has expired, the mobile station shall add the pilot to the Neighbor Set.

• If $P_{REV\_IN\_USEs}$ is greater than three, and $SOFT\_SLOPEs$ is not equal to ‘000000’, the mobile station shall perform the following:

  – If the mobile station processes an Extended Handoff Direction Message, a General Handoff Direction Message, or a Universal Handoff Direction Message which does not list a pilot in the current Active Set, the handoff drop timer corresponding to that pilot has expired, and that pilot is found to be below $T_{DROPs}$, the mobile station shall add the pilot to the Neighbor Set.

  – If the mobile station autonomously drops an existing pilot in the Active Set (see 2.6.6.2.6.1), the handoff drop timer corresponding to that pilot has expired, and that pilot is found to be below $T_{DROPs}$, the mobile station shall add the pilot to the Neighbor Set.

• If the mobile station adds a pilot to the Candidate Set, and the resulting Candidate Set size exceeds the size supported by the mobile station, the mobile station shall add the deleted Candidate Set pilot to the Neighbor Set (see 2.6.6.2.6.2).

• If the mobile station detects that the strength of a Neighbor Set pilot exceeds $T_{ADDs}$, the mobile station shall delete the pilot from the Neighbor Set.

• If the mobile station processes an Extended Handoff Direction Message, a General Handoff Direction Message or a Universal Handoff Direction Message which lists a pilot in the current Neighbor Set, the mobile station shall delete the pilot from the Neighbor Set.

• If the mobile station adds a pilot to the Neighbor Set, and the resulting Neighbor Set size exceeds the size supported by the mobile station, the mobile station shall delete from the Neighbor Set the pilot whose $AGEs$ is the largest. If more than one such pilot exists, the mobile station shall delete one such pilot that has the lowest strength.

2.6.6.2.7 Soft Handoff

2.6.6.2.7.1 Forward Traffic Channel Processing

All Forward Traffic Channels associated with pilots in the Active Set of the mobile station carry identical modulation symbols with the exception of the power control subchannel (see [2]).
When the Active Set contains more than one pilot, the mobile station should provide
diversity combining of the associated Forward Traffic Channels. The mobile station shall
provide for differential propagation delays from zero to at least 150 μs.

2.6.6.2.7.2 Reverse Traffic Channel Power Control During Soft Handoff

The Extended Handoff Direction Message, a General Handoff Direction Message or a
Universal Handoff Direction Message identifies sets of Forward Fundamental Channels or
Forward Dedicated Control Channels that carry identical closed loop power control
subchannels. A set consists of one or more Forward Fundamental Channels or Forward
Dedicated Control Channels with identical power control information.

The Universal Handoff Direction Message identifies sets of Forward Common Power Control
Channels that carry identical closed loop power control subchannels. A set consists of one
or more Forward Common Power Control Channels with identical power control
information.

Each Rescue Channel that has been autonomously promoted to the Active Set as part of
Call Rescue Soft Handoff (see 2.6.6.2.13) shall form its own set. The mobile station shall
not diversity combine the closed loop power control subchannel of any Rescue Channel
with any other Forward Fundamental Channel until directed otherwise by an Extended
Handoff Direction Message, General Handoff Direction Message, or Universal Handoff
Direction Message.

In each power control group containing valid power control bits (see [2]), the mobile station
should provide diversity combining of the identical closed loop power control subchannels
and shall obtain at most one power control bit from each set of identical closed loop power
control subchannels. The mobile station should only combine reliable power control bits
(see [11]) as follows:

- If the reliable power control bits obtained from all sets are equal to ‘0’, the mobile
  station shall increase its power as specified in [2].
- If the reliable power control bit obtained from any set is equal to ‘1’, the mobile
  station shall decrease its power as specified in [2].

2.6.6.2.7.3 Starting Periodic Search following Soft Handoff

If the PERIODIC SEARCHs is equal to ‘1’, a periodic search is not already in progress, and
the Frequency Assignment after handoff is different from the Candidate Frequency
(CDMABANDs is not equal to CF_CDMABANDs or CDMACHs is not equal to
CF_CDMACHs), the mobile station shall perform the following:

- The mobile station shall set ALIGN_TIMING_USEDs to ‘0’ and SEARCH_OFFSETs to
  ‘000000’.
- The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

2.6.6.2.8 CDMA-to-CDMA Hard Handoff

The base station directs the mobile station to perform a CDMA-to-CDMA hard handoff by
sending an Extended Handoff Direction Message, a General Handoff Direction Message or a
Universal Handoff Direction Message in which the mobile station is transitioned between disjoint sets of base stations, different Frequency Assignments, or different frame offsets. If RETURN_IF_HANDOFF_FAILs is equal to ‘0’, the mobile station performs the actions described in 2.6.6.2.8.1. If RETURN_IF_HANDOFF_FAILs is equal to ‘1’, the mobile station performs the actions described in 2.6.6.2.8.2.

2.6.6.2.8.1 Hard Handoff without Return on Failure

At the action time specified in the Extended Handoff Direction Message, the General Handoff Direction Message or Universal Handoff Direction Message the mobile station shall disable its transmitter, reset the fade timer specified in 2.6.4.1.8, suspend incrementing TOT_FRAMESs, BAD_FRAMESs, DCCH_TOT_FRAMESs, and DCCH_BAD_FRAMESs if applicable as specified in 2.6.4.1.1, and tune to the assigned Forward Traffic Channel. The mobile station shall perform acquisition of the pilots in the new Active Set.

If a periodic Serving Frequency pilot report procedure is in progress, the mobile station shall abort it (see 2.6.6.2.12).

The mobile station shall begin monitoring the assigned Forward Traffic Channel within the time specified below:

- If the Extended Handoff Direction Message, General Handoff Direction Message or Universal Handoff Direction Message specifies a CDMA Frequency Assignment different from the Serving Frequency and an Active Set containing pilots with pilot PN sequence offsets identical to those of the pilots in the Serving Frequency Active Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T60m seconds after the action time.

- If the Extended Handoff Direction Message, General Handoff Direction Message or Universal Handoff Direction Message specifies a CDMA Frequency Assignment different from the Serving Frequency and an Active Set containing a pilot with pilot PN sequence offset not equal to that of any pilot in the Serving Frequency Active Set, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T61m seconds after the action time.

- If the Extended Handoff Direction Message, General Handoff Direction Message or Universal Handoff Direction Message specifies a CDMA-to-CDMA hard handoff without changing the CDMA Frequency Assignment, the mobile station shall begin monitoring the assigned Forward Traffic Channel within T62m seconds after the action time.

If the Target Frequency is the same as the Candidate Frequency (TF_CDMABANDs is equal to CF_CDMABANDs, and TF_CDMACHs is equal to CF_CDMACHs) and is different from the Serving Frequency (TF_CDMABANDs is not equal to SF_CDMABANDs, or TF_CDMACHs is not equal to SF_CDMACHs), the mobile station shall perform the following:

- If applicable, the mobile station shall replace its Neighbor Set with its Candidate Frequency Neighbor Set, excluding the pilots in its Active Set. When the mobile station adds a pilot from its Candidate Frequency Neighbor Set to its Active Set, it shall maintain SEARCH_PRIORITYs, SRCH_WIN_NGHBRS, and SRCH_OFFSET_NGHBRS associated with the pilot.
• The mobile station shall set PILOT_INCs to CF_PILOT_INCs, SRCH_WIN_Ns to CF_SRCH_WIN_Ns, and SRCH_WIN_Rs to CF_SRCH_WIN_Rs.

• The mobile station shall set SEARCH_PRIORITY_INCLs to CF_SEARCH_PRIORITY_INCLs, SRCH_OFFSET_INCLs to CF_SRCH_OFFSET_INCLs, and SRCH_WIN_NGHBR_INCLs to CF_SRCH_WIN_NGHBR_INCLs.

If a F-CPCCH is not assigned, the mobile station shall perform the following:

• After the action time, upon receiving a period of \((N_{11m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs on the assigned Forward Traffic Channel, the mobile station shall re-enable its transmitter. The mobile station shall transmit the Traffic Channel Preamble, as described in [2], followed by a Handoff Completion Message or Extended Handoff Completion Message.

• After the action time, upon receiving a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, the mobile station shall resume incrementing TOT_FRAMESs, BAD_FRAMESs, DCCH_TOT_FRAMESs, and DCCH_BAD_FRAMESs if applicable as specified in 2.6.4.1.1.

If a F-CPPCH-CPCCH is assigned, the mobile station shall perform the following:

• After the action time, upon receiving a period of \((N_{19m} \times 1.25)\) ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile station, the mobile station shall re-enable its transmitter. The mobile station shall transmit the Traffic Channel Preamble, as described in [2], followed by an or Extended Handoff Completion Message. The mobile station shall also transmit the Reverse Channel Quality Indicator Channel as described in [2] and [3].

If the PERIODIC SEARCHs is equal to ‘1’, a periodic search is not already in progress, and the Frequency Assignment after handoff is different from the Candidate Frequency (CDMABANDs is not equal to CF_CDMABANDs or CDMACHs is not equal to CF_CDMACHs), the mobile station shall perform the following:

• The mobile station shall set ALIGN_TIMING_USEDs to ‘0’ and SEARCH_OFFSETs to ‘000000’.

• The mobile station shall start a periodic search as described in 2.6.6.2.8.3.2.

2.6.6.2.8.2 Hard Handoff with Return on Failure

At the action time specified in the General Handoff Direction Message or Universal Handoff Direction Message, the mobile station shall perform the following:

• The mobile station shall stop processing the Forward Fundamental Channel, the Forward Dedicated Control Channel, the Forward Supplemental Code Channels (if any), and the Forward Supplemental Channels (if any).

• The mobile station shall stop transmitting on the Reverse Fundamental Channel, on the Reverse Dedicated Control Channel, and on the Reverse Supplemental Code Channels (if any), and on the Reverse Supplemental Channels (if any).
• The mobile station shall disable the fade timer (see 2.6.4.1.8) and the handoff drop timers corresponding to the Serving Frequency Active Set and Candidate Set (see 2.6.6.2.3), and shall suspend incrementing TOT_FRAMES, BAD_FRAMES, DCCH_TOT_FRAMESs, and DCCH_BAD_FRAMESs 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]).

• If the Serving Frequency is different from the Target Frequency (SF_CDMACHs is not equal to TF_CDMACHs or SF_CDMABANDs is not equal to TF_CDMABANDs), the mobile station shall set CDMACHs to TF_CDMACHs and CDMABANDs to TF_CDMABANDs, and shall tune to the Target Frequency.

The mobile station shall not change its time reference (see [2]) until the handoff is successfully completed (as described later in this section) or the mobile station resumes using the Serving Frequency Active Set (as described in 2.6.6.2.8.2.1).

The mobile station shall maintain a handoff timer. The mobile station shall set the expiration time for the handoff timer to \((0.08 \times TF\_WAIT\_TIMEs)\) seconds and enable the timer at the action time of the General Handoff Direction Message or Universal Handoff Direction Message.

The mobile station shall perform the following actions:

• If the Target Frequency is different from the Serving Frequency (TF_CDMABANDs is not equal to SF_CDMABANDs, or TF_CDMACHs is not equal to SF_CDMACHs), the mobile station shall measure the mean input power on the Target Frequency \((target\_freq\_pwr, \text{in dBm/1.23 MHz})\) and may use target\_freq\_pwr along with the measurement of the average input power on the Serving Frequency \((avg\_serving\_freq\_pwr, \text{in dBm/1.23 MHz})\) in the handoff procedure. The mobile station may declare the handoff attempt to be unsuccessful if all of the following conditions are true:
  – DIFF_RX_PWR_THRESHs is not equal to '00000',
  – the mobile station has been measuring the received power on the Serving Frequency for at least the last \(N_{12m}\) frames, and
  – \((target\_freq\_pwr - avg\_serving\_freq\_pwr)\) is less than \((-30 + 2 \times DIFF\_RX\_PWR\_THRESHs)\) dB.

If the mobile station declares the handoff attempt to be unsuccessful, it shall restore the configuration to what it was before the handoff attempt (see 2.6.6.2.5.1) and send a Candidate Frequency Search Report Message as described in 2.6.6.2.8.2.1.

• The mobile station shall measure \(E_c/I_0\) for each pilot in the Active Set using the procedures specified in 2.6.6.2.2, if any of the following conditions is true:
  – the Target Frequency is the same as the Serving Frequency (TF_CDMABANDs is equal to SF_CDMABANDs, and TF_CDMACHs is equal to SF_CDMACHs),
the mobile station does not use the power measurements in the handoff procedure,
DIFF_RX_PWR_THRESHs is equal to ‘00000’,
the mobile station has not been measuring the received power on the Serving Frequency for at least the last $N_{12m}$ frames, or
$(target\_freq\_pwr - avg\_servng\_freq\_pwr)$ is not less than $(-30 + 2 \times DIFF\_RX\_PWR\_THRESHs)$ dB.

If the mobile station measures $E_c/I_0$ for pilots in the Active Set, it shall compare the sum of the measured $E_c/I_0$ for all pilots with the minimum total pilot $E_c/I_0$ threshold ($MIN\_TOTAL\_PILOT\_EC\_I0s$).

- If $MIN\_TOTAL\_PILOT\_EC\_I0s$ is not equal to ‘00000’, and $(-20 \times \log_{10} (E_c/I_0)_{total})$ is greater than $MIN\_TOTAL\_PILOT\_EC\_I0s$, where $(E_c/I_0)_{total}$ is the sum of the measured $E_c/I_0$ for the pilots in the Active Set, the mobile station shall declare the handoff attempt to be unsuccessful, and shall perform the following:
  + If $COMPLETE\_SEARCHs$ is equal to ‘1’, and the Target Frequency is the same as the Candidate Frequency ($TF\_CDMABANDs$ is equal to $CF\_CDMABANDs$, and $TF\_CDMACHs$ is equal to $CF\_CDMACHs$) and is different from the Serving Frequency ($TF\_CDMABANDs$ is not equal to $SF\_CDMABANDs$, or $TF\_CDMACHs$ is not equal to $SF\_CDMACHs$), the mobile station shall measure the strength of each pilot in its Candidate Frequency Search Set using the procedures specified in 2.6.6.2.2; otherwise, the mobile station shall end the search.
  + The mobile station shall then restore its configuration to what it was before the handoff attempt (see 2.6.6.2.5.1) and send a Candidate Frequency Search Report Message as described in 2.6.6.2.8.2.1.
- If $MIN\_TOTAL\_PILOT\_EC\_I0s$ is equal to ‘00000’, or $(-20 \times \log_{10} (E_c/I_0)_{total})$ is not less than $MIN\_TOTAL\_PILOT\_EC\_I0s$, where $(E_c/I_0)_{total}$ is the sum of the measured $E_c/I_0$ for the pilots in the Active Set, the mobile station shall attempt to demodulate the Forward Traffic Channel(s). If the Active Set contains more than one pilot, the mobile station shall perform the actions specified in 2.6.6.2.7. If the Target Frequency is the same as the Candidate Frequency ($TF\_CDMABANDs$ is equal to $CF\_CDMABANDs$, and $TF\_CDMACHs$ is equal to $CF\_CDMACHs$), and is different from the Serving Frequency ($TF\_CDMABANDs$ is not equal to $SF\_CDMABANDs$, or $TF\_CDMACHs$ is not equal to $SF\_CDMACHs$), the mobile station shall measure the strength of each pilot in its Candidate Frequency Search Set using the procedures specified in 2.6.6.2.2, and the mobile station shall wait for the first of the following events to occur:
  + If the handoff timer expires, the mobile station shall declare the handoff attempt to be unsuccessful, and perform the following:
If COMPLETE_SEARCHs is equal to ‘1’, and if the Target Frequency is the same as the Candidate Frequency (TF_CDMABANDs is equal to CF_CDMABANDs, and TF_CDMACHs is equal to CF_CDMACHs) and is different from the Serving Frequency (TF_CDMABANDs is not equal to SF_CDMABANDs, or TF_CDMACHs is not equal to SF_CDMACHs), and the mobile station has not completed the search of all pilots in its Candidate Frequency Search Set, then it shall complete the search, i.e., it shall obtain at least one measurement of the strength of each pilot in its Candidate Frequency Search Set, using the search procedures specified in 2.6.6.2.8.3.

Otherwise, the mobile station shall end the search.

The mobile station shall then restore its configuration to what it was before the handoff attempt (see 2.6.6.2.5.1) and send a Candidate Frequency Search Report Message as described in 2.6.6.2.8.2.1.

If a F-CPCCH is not assigned, and the mobile station receives a period of \((N_{11m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs, or if a F-CPCCH is assigned, and the mobile station receives a period of \((N_{19m} \times 1.25)\) ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile station, then, the mobile station shall declare the handoff attempt to be successful, and perform the following:

- The mobile station shall disable the handoff timer.
- If TF_RESET_L2s is equal to ‘1’, Layer 3 shall send a L2-Supervision.Request primitive to Layer 2 to reset the acknowledgment procedures as specified in [4].
- If TF_RESET_FPCs is equal to ‘1’, the mobile station shall initialize the Forward Traffic Channel power control counters as specified in 2.6.4.1.1.

If the Target Frequency is the same as the Candidate Frequency (TF_CDMABANDs is equal to CF_CDMABANDs, and TF_CDMACHs is equal to CF_CDMACHs) and is different from the Serving Frequency (TF_CDMABANDs is not equal to SF_CDMABANDs, or TF_CDMACHs is not equal to SF_CDMACHs), the mobile station shall perform the following:

- If applicable, the mobile station shall replace its Neighbor Set with its Candidate Frequency Neighbor Set, excluding the pilots in its Active Set. When the mobile station adds a pilot from its Candidate Frequency Neighbor Set to its Active Set, it shall maintain SEARCH_PRIORITYs, SRCH_WIN_NGHBRs, and SRCH_OFFSET_NGHBRs associated with the pilot.
The mobile station shall set PILOT_INCs to CF_PILOT_INCs,
SRCH_WIN_Ns to CF_SRCH_WIN_Ns, and SRCH_WIN_Rs to
CF_SRCH_WIN_Rs.

The mobile station shall set SEARCH_PRIORITY_INCLs to
CF_SEARCH_PRIORITY_INCLs, SRCH_OFFSET_INCLs to
CF_SRCH_OFFSET_INCLs, and SRCH_WIN_NGHBR_INCLs to
CF_SRCH_WIN_NGHBR_INCLs.

The mobile station shall re-enable its transmitter and shall re-enable the
fade timer (see 2.6.4.1.8) and reset it for T5m seconds. Then, the mobile
station shall transmit the Traffic Channel Preamble, as described in [2],
followed by a Handoff Completion Message if P_REV_IN_USEs is less than
seven or an Extended Handoff Completion Message if P_REV_IN_USEs is
equal to or greater than seven.

If a F-CPCCH is not assigned, after starting the handoff timer, upon
receiving the first period of (N3m × 20) ms with sufficient signal quality
on the physical channel corresponding to FPC_PRI_CHANs, the mobile
station shall resume incrementing TOT_FRAMESs, BAD_FRAMESs,
DCCH_TOT_FRAMESs, and DCCH_BAD_FRAMESs if applicable as
specified in 2.6.4.1.1.

If the Target Frequency is same as the Candidate Frequency
(TF_CDMABANDs is equal to CF_CDMABANDs and TF_CDMACHs is
equal to CF_CDMACHs), then the mobile station shall set
PERIODIC_SEARCHs to ‘0’.

If PERIODIC_SEARCHs is equal to ‘1’, the mobile station shall perform
the following:

The mobile station shall set ALIGN_TIMING_USEDs to ‘0’ and
SEARCH_OFFSETs to ‘000000’.

The mobile station shall start a periodic search as described in
2.6.6.2.8.3.2.

The mobile station shall maintain its pilot sets using the procedures
described in 2.6.6.2.6.

2.6.6.2.8.2.1 Restoring the Configuration

If the mobile station declares a handoff attempt to be unsuccessful (see 2.6.6.2.8.2), it shall
perform the following actions:

• If the handoff timer is enabled, the mobile station shall disable it.

• The mobile station shall restore the following parameters:
  – Message encryption mode: If SF_ENCRYPT_MODEs is equal to ‘0’, the mobile
    station shall turn off message encryption; otherwise, it shall turn on message
    encryption.
– Service configuration: The mobile station shall use the service configuration stored in SF_SERVICE_CONFIGs to process Forward and Reverse Traffic Channel frames.
– The mobile station shall restore the list of calls stored in SF_CALLSs.
– Protocol revision level (P_REVs = SF_P_REVs)
– Protocol revision level in use on the serving frequency (P_REV_IN_USEs = SF_P_REV_IN_USEs)
– Service negotiation type (SERV_NEGs = SF_SERV_NEGs)
  - Private long code mask: If SF_PRIVATE_LCMs is set to ‘1’ then the mobile station shall set PVTLCM_42 to SF_PVTLCM_42s.
  - Long code mask: If SF_PRIVATE_LCMs is equal to ‘1’, the mobile station shall use the private long code mask; otherwise, it shall use the public long code mask derived from SF_PLCM_TYPEs and SF_PLCM_39s (if any).
– Search window size for the Active Set and Candidate Set (SRCH_WIN_As = SF_SRCH_WIN_As)
– Search window size for the Neighbor Set (SRCH_WIN_Ns = SF_SRCH_WIN_Ns)
– Search window size for the Remaining Set (SRCH_WIN_Rs = SF_SRCH_WIN_Rs)
– Pilot detection threshold (T_ADDs = SF_T_ADDs)
– Pilot drop threshold (T_DROPs = SF_T_DROPs)
– Soft slope for the dynamic add and drop threshold (SOFT_SLOPEs = SF_SOFT_SLOPEs)
– Intercept for the dynamic add threshold (ADD_INTERCEPTs = SF_ADD_INTERCEPTs)
– Intercept for the dynamic drop threshold (DROP_INTERCEPTs = SF_DROP_INTERCEPTs)
– Active Set versus Candidate Set comparison threshold (T_COMPs = SF_T_COMPs)
– Drop timer value (T_TDROPs = SF_T_TDROPs)
– Drop timer range value (T_TDROP_RANGEs = SF_T_TDROP_RANGEs)
– Frame offset (FRAME_OFFSETs = SF_FRAME_OFFSETs)
– Nominal power setting (NOM_PWRs = SF_NOM_PWRs)
– Extended nominal power setting (NOM_PWR_EXTs = SF_NOM_PWR_EXTs)
– Power control step (PWR_CNTL_STEPs = SF_PWR_CNTL_STEPs)
– CDMA band class (CDMABANDs = SF_CDMABANDs)
- Frequency assignment (CDMACHs = SF_CDMACHs)
- Active Set (For each pilot in the Serving Frequency Active Set: (PILOT_REC, PWR_COMB_IND))
- Code channel list (CODE_CHAN_LISTs = SF_CODE_CHAN_LISTs)

• The mobile station shall tune to the Serving Frequency and resume using the Serving Frequency Active Set as follows:
  - If the mobile station was processing the Forward Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Fundamental Channel. If the mobile station was transmitting on the Reverse Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Fundamental Channel.
  - If the mobile station was processing the Forward Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Dedicated Control Channel. If the mobile station was transmitting on the Reverse Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Dedicated Control Channel.
  - The mobile station shall not resume transmitting on the Reverse Supplemental Code Channels and Reverse Supplemental Channels (if any). The mobile station shall not process on the Forward Supplemental Code Channels and Forward Supplemental Channels (if any).
  - When the mobile station resumes transmission on the Reverse Traffic Channel, it shall use the following rules to re-enable its transmitter:
    + If the interval between the time that the mobile station disables its transmitter and the time that it resumes using the Serving Frequency Active Set is equal to or greater than \((N_{2m} \times 20)\) ms, then:
      - \textcircled{o} If a F-CPCCH is not assigned, the mobile station shall wait to receive a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs before it re-enables its transmitter.
      - \textcircled{o} If a F-CPCCH is assigned, the mobile station shall wait to receive a period of \((N_{17m} \times 1.25)\) ms with sufficient signal quality on the Forward Common Power Control Subchannels assigned to this mobile station before it re-enables its transmitter.
Otherwise, after the mobile station tunes to the Serving Frequency, the mobile station shall re-enable its transmitter no later than $N_3m \times 20$ ms if a F-CPCCH is not assigned, and no later than $(N_{17m} \times 1.25)$ ms if a F-CPCCH is assigned. The mobile station should re-enable its transmitter earlier.

After the mobile station re-enables its transmitter, the mean output power shall be as specified in [2] for a step change in input power. If the mobile station re-enables its transmitter earlier than $(N_3m \times 20)$ ms if a F-CPCCH is not assigned, or earlier than $(N_{17m} \times 1.25)$ ms if a F-CPCCH is assigned, after it tunes to the Serving Frequency, the initial mean output power shall be as specified in [2], where the initial mean input power estimate is either:

- within 6 dB of the actual mean input power, or
- equal to the mean input power before the mobile station tuned to the Target Frequency.

- The mobile station shall enable the fade timer and the handoff drop timers corresponding to the pilots in its Active Set and Candidate Set. The mobile station shall resume incrementing $TOT_{FRAMES}$, $BAD_{FRAMES}$, $DCCH_{TOT_{FRAMES}}$, and $DCCH_{BAD_{FRAMES}}$ if applicable as specified in 2.6.4.1.1.

- The mobile station shall send a Candidate Frequency Search Report Message within $T_{56m}$ seconds of declaring the handoff attempt to be unsuccessful. The mobile station shall report the contents of the Candidate Frequency Search Report Message as follows:
  - The mobile station shall report the two components of the Target Frequency in the CDMA_FREQ and BAND_CLASS fields.
  - The mobile station shall report the received power on the Target Frequency and on the Serving Frequency in the CF_TOTAL_RX_PWR and SF_TOTAL_RX_PWR fields, respectively.
  - For each pilot in the Target Frequency Active Set that measures above $TF_{T\_ADD}$, the mobile station shall report its phase and strength in the fields $PILOT\_PN\_PHASE$ and $PILOT\_STRENGTH$, respectively.
  - If the Target Frequency is the same as the Candidate Frequency ($TF_{CDMABAND}$ is equal to $CF_{CDMABAND}$, and $TF_{CDMAC}$ is equal to $CF_{CDMAC}$), and is different from the Serving Frequency ($TF_{CDMABAND}$ is not equal to $SF_{CDMABAND}$ or $TF_{CDMAC}$ is not equal to $SF_{CDMAC}$), the mobile station shall also report the strength of each pilot in the Candidate Frequency Search Set that measures above $CF_{T\_ADD}$.
  - If the Serving Frequency is the same as the Candidate Frequency ($SF_{CDMABAND}$ is equal to $CF_{CDMABAND}$ and $SF_{CDMAC}$ is equal to $CF_{CDMAC}$), then the mobile station shall set PERIODIC_SEARCH to ‘0’.
  - If PERIODIC_SEARCH is equal to ‘1’ and the Candidate Frequency Search Set is not empty, the mobile station shall perform the following:
2.6.6.2.8.3 Search of Pilots on the CDMA Candidate Frequency

If SEARCH_MODEs is equal to '0000', the mobile station shall perform the following: If PERIODIC_SEARCHs is equal to '0', the mobile station shall search the Candidate Frequency Search Set once, as described in 2.6.6.2.8.3.1; otherwise, the mobile station shall search the Candidate Frequency Search Set periodically, as described in 2.6.6.2.8.3.2.

2.6.6.2.8.3.1 CDMA Candidate Frequency Single Search

The mobile station does a single search of the Candidate Frequency Search Set by performing the following actions at the action time of the Candidate Frequency Search Control Message or the Candidate Frequency Search Request Message that started the search:

- If ALIGN_TIMING_USEDs is set to '0', the mobile station shall measure the strength of all pilots in the Candidate Frequency Search Set in one or more visits to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

- If ALIGN_TIMING_USEDs is set to '1', the mobile station shall measure the strength of all pilots in the Candidate Frequency Search Set in one or more scheduled visits (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

The mobile station shall schedule visits to the Candidate Frequency only at 
$$((0.00125 \times SEARCH_OFFSETs) + k \times (SEARCH_TIME_RESOLUTIONs \times inter\_visit\_time))$$ seconds after the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that started the search, where

$$k = \text{an integer between 0 and max_num_visits, inclusive, where}$$

max_num_visits is the value of MAX_NUM_VISITS field of the last Candidate Frequency Search Response Message sent by the mobile station,

$$\text{and}$$

$$inter\_visit\_time = \text{the value of the INTER\_VISIT\_TIME field of the last Candidate Frequency Search Response Message sent by the mobile station.}$$

- The mobile station shall complete the measurements and send a Candidate Frequency Search Report Message within $$((0.00125 \times SEARCH_OFFSETs) + freshness\_interval)$$ seconds after the action time of the Candidate Frequency Search Control Message, or the Candidate Frequency Search Request Message, where

freshness_interval is determined as follows:
– If the value of the TOTAL_OFF_TIME_FWD field or of the TOTAL_OFF_TIME_REV field of the last Candidate Frequency Search Response Message sent by the mobile station to the base station is greater than or equal to \( \left\lceil \frac{(T70m - T71m)}{\text{SEARCH_TIME_RESOLUTION}} \right\rceil \), then

\[
freshness\_interval = (\max (fwd\_time, rev\_time) + T71m) \text{ seconds},
\]

where

\[
fwd\_time = \text{SEARCH}\_\text{TIME}\_\text{RESOLUTION} \times (\text{value of the TOTAL_OFF_TIME_FWD field of the last Candidate Frequency Search Response Message sent by the mobile station}),
\]

\[
\text{and}
\]

\[
rev\_time = \text{SEARCH}\_\text{TIME}\_\text{RESOLUTION} \times (\text{value of the TOTAL_OFF_TIME_REV field of the last Candidate Frequency Search Response Message sent by the mobile station}).
\]

– Otherwise,

\[
freshness\_interval = T70m \text{ seconds}.
\]

The mobile station shall set the fields of the Candidate Frequency Search Report Message as follows:

– The mobile station shall report the two components of the Candidate Frequency in the CDMA_FREQ and BAND_CLASS fields.

– The mobile station shall report the received power on the Candidate Frequency and on the Serving Frequency in the CF_TOTAL_RX_PWR and SF_TOTAL_RX_PWR fields, respectively.

– For each pilot in the Candidate Frequency Search Set that measures above CF_T_ADD, the mobile station shall report its phase and strength in the fields PILOT_PN_PHASE and PILOT_STRENGTH, respectively.

2.6.6.2.8.3.2 Candidate Frequency Periodic Search

When the mobile station performs a periodic search, it periodically searches the Candidate Frequency Search Set and reports the results to the base station in the Candidate Frequency Search Report Message, as described in this section. The mobile station may measure all pilots in the Candidate Frequency Search Set in one visit to the Candidate Frequency, or it may visit the Candidate Frequency several times in a search period, each time measuring all or some of the pilots in the Candidate Frequency Search Set, as described in 2.6.6.2.8.3.3.

If SF_TOTAL_EC_THRESH is not equal to ‘11111’, while tuned to the Serving Frequency (specified by CDMACH and CDMABAND), the mobile station shall measure the total received power spectral density, in mW/1.23 MHz, on the Serving Frequency at least once every 20 ms frame. The mobile station shall maintain the average of the spectral density \( \text{spec}\_\text{density} \) over the last \( N_{12m} \) frames.
(In the following, \((E_c/I_o)_{total}\) is the total \(E_c/I_o\) of the pilots in the Active Set, measured as specified in 2.6.6.2.2, and total_ec is defined as \((10 \times \log_{10} ((E_c/I_o)_{total} \times \text{spec\_density}))\).

The mobile station shall maintain a periodic search timer as follows:

- When the mobile station starts a periodic search, it shall set the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIODs and shall enable the timer.
  - If the periodic search is started by a Candidate Frequency Search Request Message or a Candidate Frequency Search Control Message, then the mobile station shall start the periodic search \((0.00125 \times \text{SEARCH\_OFFSETs})\) seconds after the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that started the search.
  - If the periodic search is started following successful or unsuccessful handoff attempt, the mobile station shall start the periodic search:
    + Upon sending the Handoff Completion Message or Extended Handoff Completion Message, in the case that the handoff was successful.
    + Upon sending the Candidate Frequency Search Report Message, in the case that the handoff was unsuccessful.

- When the periodic search timer expires, the mobile station shall reset the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIODs and shall re-enable the timer.

- If ALIGN\_TIMING\_USEDs is set to ‘0’, SF\_TOTAL\_EC\_THRESHs is not equal to ‘11111’ and SF\_TOTAL\_EC\_IO\_THRESHs is equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  - Disable the periodic search timer if total_ec is not less than \((-120 + 2 \times \text{SF\_TOTAL\_EC\_THRESHs})\).
  - Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIODs, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and
    + total_ec is less than \((-120 + 2 \times \text{SF\_TOTAL\_EC\_THRESHs})\).

- If ALIGN\_TIMING\_USEDs is set to ‘0’, SF\_TOTAL\_EC\_THRESHs is equal to ‘11111’ and SF\_TOTAL\_EC\_IO\_THRESHs is not equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  - Disable the periodic search timer if \((-20 \times \log_{10} (E_c/I_o)_{total})\) is not greater than \(\text{SF\_TOTAL\_EC\_IO\_THRESHs}\).
  - Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIODs, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and

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+ (-20 × \log_{10} (Ec/Io)_{total}) \text{ is greater than SF\_TOTAL\_EC\_IO\_THRESHs.}

• If ALIGN\_TIMING\_USED is set to ‘0’, SF\_TOTAL\_EC\_THRESH is not equal to ‘11111’ and SF\_TOTAL\_EC\_IO\_THRESH is not equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  – Disable the periodic search timer if the following conditions are true:
    + total\_ec \text{ is not less than } (-120 + 2 \times \text{SF\_TOTAL\_EC\_THRESH}), \text{ and}
    + (-20 × \log_{10} (Ec/Io)_{total}) \text{ is not greater than SF\_TOTAL\_EC\_IO\_THRESHs.}
  – Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIODs, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and
    + total\_ec \text{ is less than } (-120 + 2 \times \text{SF\_TOTAL\_EC\_THRESH}), \text{ or } (-20 × \log_{10} (Ec/Io)_{total}) \text{ is greater than SF\_TOTAL\_EC\_IO\_THRESHs.}

• The mobile station shall maintain the periodic search timer independent of the total Ec and the total Ec/Io of the pilots in the Serving Frequency Active Set, if any of the following conditions is true:
  – ALIGN\_TIMING\_USED is set to ‘1, or
  – SF\_TOTAL\_EC\_THRESH is equal to ‘11111’ and SF\_TOTAL\_EC\_IO\_THRESH is equal to ‘11111’.

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<th>SEARCH_PERIODs</th>
<th>Search Period (seconds)</th>
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</tr>
<tr>
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<td>15</td>
<td>200</td>
</tr>
</tbody>
</table>

Table 2.6.6.2.8.3.2-1. Search Period Values

If the periodic search timer is enabled, the mobile station shall perform the following actions before the timer expires:
• If ALIGN_TIMING_USED is set to '0', the mobile station shall measure the strength of all pilots in the Candidate Frequency Search Set at least once in one or more visits to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

• If ALIGN_TIMING_USED is set to '1', the mobile station shall measure the strength of all pilots in the Candidate Frequency Search Set in one or more scheduled visits (see below) to the Candidate Frequency, as described in 2.6.6.2.8.3.3.

The mobile station shall schedule visits to the Candidate Frequency only at

\[ ((0.00125 \times \text{SEARCH_OFFSET}) + k \times (\text{SEARCH_TIME_RESOLUTION} \times \text{inter_visit_time})) \text{ seconds after the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that started the search, where} \]

\[ k = \text{an integer between 0 and max_num_visits, inclusive, where max_num_visits is the value of MAX_NUM_VISITS field of the last Candidate Frequency Search Response Message sent by the mobile station,} \]

and

\[ \text{inter_visit_time} = \text{the value of the INTER_VISIT_TIME field of the last Candidate Frequency Search Response Message sent by the mobile station.} \]

- The mobile station shall abort a scheduled visit to the Candidate Frequency if at the scheduled time, one or both of the following conditions hold:

  + SF_TOTAL_EC_THRESH is not equal to '11111' and total_ec is not less than (-120 + 2 \times SF_TOTAL_EC_THRESH), or
  
  + SF_TOTAL_EC_IO_THRESH is not equal to '11111' and \((-20 \times \log_{10}(\text{Ec/Io})_{\text{total}}) \) is not greater than SF_TOTAL_EC_IO_THRESH.

- If the mobile station aborts a scheduled visit during a search period, it may abort all remaining scheduled visits in that search period.

• The mobile station shall send a Candidate Frequency Search Report Message if MIN_TOTAL_PILOT_EC_IO is equal to '00000' or if \((-20 \times \log_{10}(\text{Ec/Io})_{\text{total}}) \) is less than or equal to MIN_TOTAL_PILOT_EC_IO, where \((\text{Ec/Io})_{\text{total}} \) is the sum of \(\text{Ec/Io} \) for all those pilots that measure above CF_T_ADD in the current search period.

The mobile station shall report the contents of the Candidate Frequency Search Report Message as follows:

- The mobile station shall report the two components of the Candidate Frequency in the CDMA_FREQ and BAND_CLASS fields.

- The mobile station shall report the received power on the Candidate Frequency and on the Serving Frequency in the CF_TOTAL_RX_PWR and SF_TOTAL_RX_PWR fields, respectively.

- For each pilot in the Candidate Frequency Search Set that measures above CF_T_ADD, the mobile station shall report its phase and strength in the fields PILOT_PN_PHASE and PILOT_STRENGTH, respectively.
• The mobile station shall ensure that the strength measurement for all pilots in the
Candidate Frequency Search Set were obtained within freshness_interval before the
Candidate Frequency Search Report Message is sent, where freshness_interval is
determined as follows:

– If the value of the TOTAL_OFF_TIME_FWD field or of the TOTAL_OFF_TIME_REV
field of the last Candidate Frequency Search Response Message sent by the
mobile station to the base station is greater than or equal to
\[\left\lfloor\frac{(T_{70m} - T_{71m})}{\text{SEARCH\_TIME\_RESOLUTIONs}}\right\rfloor,\]
then
\[\text{freshness\_interval} = (\max (fwd\_time, \text{rev\_time}) + T_{71m}) \text{ seconds},\]

where
\[fwd\_time = \text{SEARCH\_TIME\_RESOLUTIONs} \times (\text{value of the TOTAL\_OFF\_TIME_FWD field of the last Candidate Frequency Search Response Message sent by the mobile station}),\]

and
\[\text{rev\_time} = \text{SEARCH\_TIME\_RESOLUTIONs} \times (\text{value of the TOTAL\_OFF\_TIME_REV field of the last Candidate Frequency Search Response Message sent by the mobile station}).\]

– Otherwise,
\[\text{freshness\_interval} = T_{70m} \text{ seconds}.\]

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 with the measurement of the mean input power on the Serving Frequency (avg_serving_freq_pwr, in dBm / 1.23 MHz) in the search procedure as follows:
  – If DIFF_RX_PWR_THRESH$_{s}$ is not equal to ‘00000’, and (cand_freq_pwr - avg_serving_freq_pwr) is less than (-30 + 2 × DIFF_RX_PWR_THRESH$_{s}$) dB, the mobile station may terminate the search for pilots in the current visit to the Candidate Frequency.
  – If DIFF_RX_PWR_THRESH$_{s}$ is equal to ‘00000’, the mobile station does not use the power measurements in the search procedure, or (cand_freq_pwr - avg_serving_freq_pwr) is not less than (-30 + 2 × DIFF_RX_PWR_THRESH$_{s}$) dB, the mobile station shall measure $E_{c}/I_{o}$ for all or some of the pilots in its Candidate Frequency Search Set, using the search procedures specified in 2.6.6.2.2.

• The mobile station shall restore the following parameters:
  – Pilot detection threshold (T_ADD$_{s}$ = SF_T_ADD$_{s}$)
  – CDMA band class (CDMABAND$_{s}$ = SF_CDMABAND$_{s}$)
  – Frequency assignment (CDMACH$_{s}$ = SF_CDMACH$_{s}$)
The mobile station shall tune to the Serving Frequency and shall resume using the Serving Frequency Active Set as follows:

- If the mobile station was processing the Forward Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Fundamental Channel. If the mobile station was transmitting on the Reverse Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Fundamental Channel.

- If the mobile station was processing the Forward Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Dedicated Control Channel. If the mobile station was transmitting on the Reverse Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Dedicated Control Channel.

- If the Forward Supplemental Code Channels and Forward Supplemental Channels assignment has not expired, the mobile station shall resume processing the Forward Supplemental Code Channels and Forward Supplemental Channels (if any). If the Reverse Supplemental Code Channel and Reverse Supplemental Channels assignment has not expired, the mobile station may resume transmitting on the Reverse Supplemental Code Channels and Reverse Supplemental Channels (if any).

- When the mobile station resumes transmission on the Reverse Traffic Channel, it shall use the following rules to re-enable its transmitter:
  + If the interval between the time that the mobile station disables its transmitter and the time that it resumes using the Serving Frequency Active Set is equal to or greater than \((N_{2m} \times 20)\) ms, then the mobile station shall wait to receive a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs before it re-enables its transmitter.
  + Otherwise, the mobile station shall re-enable its transmitter no later than \(N_{3m} \times 20\) ms after the mobile station tunes to the Serving Frequency. The mobile station should re-enable its transmitter earlier. After the mobile station re-enables its transmitter, the mean output power shall be as specified in 2.1.2.4.1 for a step change in input power. If the mobile station re-enables its transmitter earlier than \(N_{3m} \times 20\) ms after it tunes to the Serving Frequency, the initial mean output power shall be as specified in [2], where the initial mean input power estimate is either:
    - within 6 dB of the actual mean input power, or
    - equal to the mean input power before the mobile station tuned to the Target Frequency.
• The mobile station shall enable the fade timer and the handoff drop timers corresponding to the pilots in its Active Set and Candidate Set. The mobile station shall resume incrementing TOT_FRAMESs, BAD_FRAMESs, DCCH_TOT_FRAMESs, DCCH_BAD_FRAMESs, SCH_TOT_FRAMESs, and SCH_BAD_FRAMESs if applicable as specified in 2.6.4.1.8.

2.6.6.2.8.3.4 Aborting CDMA Candidate Frequency Periodic Search
When the mobile station aborts a periodic search, it shall perform the following:
• The mobile station shall cancel any remaining visits to the Candidate Frequency in the current search period, and shall not send a Candidate Frequency Search Report Message for the current search period.
• The mobile station shall disable the periodic search timer.

2.6.6.2.9 CDMA-to-Analog Handoff
The base station directs the mobile station to perform a CDMA-to-Analog handoff by sending an Analog Handoff Direction Message. If the mobile station has narrow analog capability, the base station may direct the handoff to a narrow analog channel.
If the mobile station supports analog operation in the requested band class, the mobile station shall set DTXs to '00' and store the following parameters from the Analog Handoff Direction Message.
• System identification (SID_s = SID_r)
• Voice mobile station attenuation code (VMAC_s = VMAC_r)
• Analog voice channel number (ANALOG_CHAN_s = ANALOG_CHAN_r)
• SAT color code (SCC_s = SCC_r)
• Message encryption mode indicator (MEM_s = MEM_r)
• Analog voice channel type (AN_CHAN_TYPE_s = AN_CHAN_TYPE_r)
• Digital supervisory audio color code (DSCC_s = DSCC_MSB \times 4 + SCC_r)
If the mobile station does not support analog operation in the requested band class, the mobile station shall discard the message and send a Mobile Station Reject Order with the ORDQ field set to '00000110' (capability not supported by the mobile station).
At the action time specified by the Analog Handoff Direction Message (see 2.6.4.1.5), the mobile station shall disable its transmitter. The mobile station shall enable its transmitter on the wide analog voice channel or optional narrow analog voice channel within T_{63m} seconds after the action time.

2.6.6.2.10 Search of Analog Frequencies
If SEARCH_MODE_s is equal to '0001', and the mobile station supports analog searching, the mobile station shall perform the following: If PERIODIC_SEARCH_s is equal to '0', the mobile station shall search the Candidate Analog Frequency Search Set once, as described
in 2.6.6.2.10.1; otherwise, the mobile station shall search the Candidate Frequency Analog
Search Set periodically, as described in 2.6.6.2.10.2.

2.6.6.2.10.1 Analog Frequencies Single Search

The mobile station does a single search of the Candidate Frequency Analog Search Set by
performing the following actions at the action time of the Candidate Frequency Search
Control Message or the Candidate Frequency Search Request Message that started the
search:

- If ALIGN_TIMING_USED is set to ‘0’, the mobile station shall measure the strength
  of all analog frequencies in the Candidate Frequency Analog Search Set in one or
  more visits away from the Serving Frequency, as described in 2.6.6.2.10.3.
- If ALIGN_TIMING_USED is set to ‘1’, the mobile station shall measure the strength
  of analog frequencies in the Candidate Frequency Analog Search Set in one or more
  scheduled visits (see below) away from the Serving Frequency, as described in
  2.6.6.2.10.3.

The mobile station shall schedule visits away from the Serving Frequency only at
\((0.00125 \times \text{SEARCH_OFFSET}) + k \times (\text{SEARCH_TIME_RESOLUTION} \times \text{interVisitTime})\) seconds after the action time of the Candidate Frequency Search
Request Message or the Candidate Frequency Search Control Message that started
the search, where

\[ k = \text{an integer between 0 and } \text{max_num_visits}, \text{ inclusive}, \text{ where} \]

\[ \text{max_num_visits} \text{ is the value of } \text{MAX_NUM_VISITS field of the} \]

\[ \text{last Candidate Frequency Search Response Message sent by the} \]

\[ \text{mobile station}, \]

and

\[ \text{interVisitTime} = \text{the value of the INTER_VISIT_TIME field of the last Candidate} \]

\[ \text{Frequency Search Response Message sent by the mobile station}. \]

- The mobile station shall complete the measurements and send a Candidate
  Frequency Search Report Message within \((0.00125 \times \text{SEARCH_OFFSET}) + \)
  freshness_interval seconds after the action time of the Candidate Frequency Search
  Control Message or the Candidate Frequency Search Request Message, where
  freshness_interval is determined as follows:

  - If the value of the TOTAL_OFF_TIME_FWD field or of the TOTAL_OFF_TIME_REV
    field of the last Candidate Frequency Search Response Message sent by the
    mobile station to the base station is greater than or equal to \(\lceil (T70m - T71m)/\)
    \(\text{SEARCH_TIME_RESOLUTION}\rceil\), then

  \[ \text{freshness_interval} = (\max (\text{fwd_time, rev_time}) + T71m) \text{ seconds}, \]

  where

  \[ \text{fwd_time} = \text{SEARCH_TIME_RESOLUTION} \times (\text{value of the} \]

  \[ \text{TOTAL_OFF_TIME_FWD field of the last Candidate Frequency} \]

  \[ \text{Search Response Message sent by the mobile station}), \]

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and

\[
rev\textunderscore time = \text{SEARCH\textunderscore TIME\textunderscore RESOLUTION}_{s} \times \text{(value of the TOTAL\textunderscore OFF\textunderscore TIME\textunderscore REV field of the last Candidate Frequency Search Response Message sent by the mobile station)}.
\]

– Otherwise,

\[
freshness\textunderscore interval = T_{70m} \text{ seconds}.
\]

2.6.6.2.10.2 Analog Frequencies Periodic Search

When the mobile station performs a periodic search, it periodically searches the Candidate Frequency Analog Search Set, and reports the results to the base station in the Candidate Frequency Search Report Message, as described in this section. The mobile station may measure all analog frequencies in the Candidate Frequency Analog Search Set in one visit away from the Serving Frequency, or it may make multiple visits in a search period, each time measuring all or some of the analog frequencies in the Candidate Frequency Analog Search Set, as described in 2.6.6.2.10.3.

If SF\_TOTAL\_EC\_THRESH is not equal to ‘11111’, while tuned to the Serving Frequency (specified by CDMACH\textsubscript{s} and CDMABAND\textsubscript{s}), the mobile station shall measure the total received power spectral density, in mW/1.23 MHz, on the Serving Frequency at least once every 20 ms frame. The mobile station shall maintain the average of the spectral density \(\text{spec\textunderscore density}\) over the last \(N_{12m}\) frames.

(In the following, \(E_c/I_o\)\textsubscript{total} is the total \(E_c/I_o\) of the pilots in the Active Set, measured as specified in 2.6.6.2.2, and \(total\textunderscore ec\) is defined as \(10 \times \log_{10} ((E_c/I_o\textsubscript{total} \times \text{spec\textunderscore density}))\).)

The mobile station shall maintain a periodic search timer as follows:

• When the mobile station starts a periodic search, it shall set the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIOD\textsubscript{s} and shall enable the timer.

  – If the periodic search is started by a Candidate Frequency Search Request Message or a Candidate Frequency Search Control Message, then the mobile station shall begin the periodic search \(0.00125 \times \text{SEARCH\_OFFSET}_{s}\) seconds after the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that started the search.

  – If the periodic search is started following successful or unsuccessful handoff attempt, the mobile station shall start the periodic search:

    + Upon sending the Handoff Completion Message or Extended Handoff Completion Message, in the case that the handoff was successful.

    + Upon sending the Candidate Frequency Search Report Message, in the case that the handoff was unsuccessful.

• When the periodic search timer expires, the mobile station shall reset the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH\_PERIOD\textsubscript{s} and shall re-enable the timer.
• If ALIGN_TIMING_USED is set to ‘0’, SF_TOTAL_EC_THRESH is not equal to ‘11111’ and SF_TOTAL_EC_IO_THRESH is equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  – Disable the periodic search timer if total_ec is not less than (-120 + 2 × SF_TOTAL_EC_THRESH).
  – Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and
    + total_ec is less than (-120 + 2 × SF_TOTAL_EC_THRESH).

• If ALIGN_TIMING_USED is set to ‘0’, SF_TOTAL_EC_THRESH is equal to ‘11111’ and SF_TOTAL_EC_IO_THRESH is not equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  – Disable the periodic search timer if (-20 × log10 (Ec/Io)total) is not greater than SF_TOTAL_EC_IO_THRESH.
  – Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and
    + (-20 × log10 (Ec/Io)total) is greater than SF_TOTAL_EC_IO_THRESH.

• If ALIGN_TIMING_USED is set to ‘0’, SF_TOTAL_EC_THRESH is not equal to ‘11111’ and SF_TOTAL_EC_IO_THRESH is not equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  – Disable the periodic search timer if the following conditions are true:
    + total_ec is not less than (-120 + 2 × SF_TOTAL_EC_THRESH), and
    + (-20 × log10 (Ec/Io)total) is not greater than SF_TOTAL_EC_IO_THRESH.
  – Reset the expiration time of the periodic search timer to the value in Table 2.6.6.2.8.3.2-1 corresponding to SEARCH_PERIOD, and re-enable the timer if the following conditions are true:
    + the periodic search timer is disabled, and
    + total_ec is less than (-120 + 2 × SF_TOTAL_EC_THRESH), or
    + (-20 × log10 (Ec/Io)total) is greater than SF_TOTAL_EC_IO_THRESH.

• The mobile station shall maintain the periodic search timer independent of the total Ec and the total Ec/Io of the pilots in the Serving Frequency Active Set, if any of the following conditions is true:
  – ALIGN_TIMING_USED is set to ‘1’, or
  – SF_TOTAL_EC_THRESH is equal to ‘11111’ and SF_TOTAL_EC_IO_THRESH is equal to ‘11111’.

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If the periodic search timer is enabled, the mobile station shall perform the following actions before the timer expires:

- If ALIGN_TIMING_USED is set to ‘0’, the mobile station shall measure the strength of all analog frequencies in the Candidate Frequency Analog Search Set at least once in one or more visits away from the Serving Frequency, as described in 2.6.6.2.10.3.

- If ALIGN_TIMING_USED is set to ‘1’, the mobile station shall measure the strength of analog frequencies in the Candidate Frequency Analog Search Set in one or more scheduled visits (see below) away from the Serving Frequency, as described in 2.6.6.2.10.3.

The mobile station shall schedule visits away from the Serving Frequency only at

\[(0.00125 \times \text{SEARCH_OFFSET}) + k \times (\text{SEARCH_TIME_RESOLUTION} \times \text{inter_visit_time})\] seconds after the action time of the Candidate Frequency Search Request Message or the Candidate Frequency Search Control Message that started the search, where

\[k = \text{an integer between 0 and max_num_visits, inclusive, where max_num_visits is the value of MAX_NUM_VISITS field of the last Candidate Frequency Search Response Message sent by the mobile station,}\]

and

\[\text{inter_visit_time} = \text{the value of the INTER_VISIT_TIME field of the last Candidate Frequency Search Response Message sent by the mobile station.}\]

- The mobile station shall abort a scheduled visit away from the Serving Frequency if at the scheduled time, one or both of the following conditions hold:
  - SF_TOTAL_EC_THRESH is not equal to ‘11111’ and total_ec is not less than (-120 + 2 \times SF_TOTAL_EC_THRESH), or
  - SF_TOTAL_EC_IO_THRESH is not equal to ‘11111’ and (-20 \times \log_{10}(\text{Ec/Io}_\text{total}) is not greater than SF_TOTAL_EC_IO_THRESH.

- If the mobile station aborts a scheduled visit during a search period, it may abort all remaining scheduled visits in that search period.

- The mobile station shall set the fields of the Candidate Frequency Search Report Message as follows: The mobile station shall report the received power on the Serving Frequency in the TOTAL_RX_PWR_SF field. For each frequency in the Candidate Frequency Analog Search Set, the mobile station shall report its frequency and strength in the fields ANALOG_FREQ and SIGNAL_STRENGTH, respectively.

- The mobile station shall ensure that the strength measurements for all analog frequencies in the Candidate Frequency Analog Search Set were obtained within freshness_interval before the Candidate Frequency Search Report Message is sent, where freshness_interval is determined as follows:
– If the value of the TOTAL_OFF_TIME_FWD field or of the TOTAL_OFF_TIME_REV field of the last Candidate Frequency Search Response Message sent by the mobile station to the base station is greater than or equal to \(\left\lfloor \frac{(T70m - T71m)}{\text{SEARCH_TIME_RESOLUTIONs}} \right\rfloor\), then

\[
freshness\_interval = (\max(fwd\_time, rev\_time) + T71m) \text{ seconds},
\]

where

\[
fwd\_time = \text{SEARCH_TIME_RESOLUTIONs} \times (\text{value of the TOTAL_OFF_TIME_FWD field of the last Candidate Frequency Search Response Message sent by the mobile station}),
\]

and

\[
rev\_time = \text{SEARCH_TIME_RESOLUTIONs} \times (\text{value of the TOTAL_OFF_TIME_REV field of the last Candidate Frequency Search Response Message sent by the mobile station}).
\]

– Otherwise,

\[
freshness\_interval = T70m \text{ seconds}.
\]

2.6.6.2.10.3 Analog Frequency Measurements

The mobile station measures the strength of all analog frequencies in the Candidate Frequency Analog Search Set in one or more visits away from the Serving Frequency. The mobile station shall perform the following actions during each visit away from the Serving Frequency to measure analog frequency signal 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 Reverse Fundamental Channel.

• If the mobile station is processing the Forward Dedicated Control Channel, the mobile station shall stop processing Forward Dedicated Control Channel. If the mobile station is transmitting on the Reverse Dedicated Control Channel, the mobile station shall stop transmitting on 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_FRAMESs, BAD_FRAMESs, DCCH_TOT_FRAMESs, DCCH_BAD_FRAMESs, SCH_TOT_FRAMESs, SCH_BAD_FRAMESs, and SCH_BAD_FRAMESs 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 tune to one of the analog frequencies in the Candidate Frequency Analog Search Set, and shall measure the mean input power on the analog frequency.

• The mobile station may tune to other frequencies in the Candidate Frequency Analog Search Set and make power measurements during this visit away from the Serving 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 tune to the Serving Frequency and resume using the Serving Frequency Active Set as follows:
  – If the mobile station was processing the Forward Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Fundamental Channel. If the mobile station was transmitting on the Reverse Fundamental Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Fundamental Channel.
  – If the mobile station was processing the Forward Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume processing the Forward Dedicated Control Channel. If the mobile station was transmitting on the Reverse Dedicated Control Channel prior to tuning to the Candidate Frequency, the mobile station shall resume transmitting on the Reverse Dedicated Control Channel.
  – If the Forward Supplemental Code Channels or Forward Supplemental Channels assignment has not expired, the mobile station shall resume processing the Forward Supplemental Code Channels or Forward Supplemental Channels respectively (if any).
  – If the Reverse Supplemental Code Channel or Reverse Supplemental Channels assignment has not expired, the mobile station may resume transmitting on the Reverse Supplemental Code Channels or Reverse Supplemental Channels respectively (if any).
  – When the mobile station resumes transmission on the Reverse Traffic Channel, it shall use the following rules to re-enable its transmitter:
    + If the interval between the time that the mobile station disables its transmitter and the time that it resumes using the Serving Frequency Active Set is equal to or greater than \((N_{2m} \times 20)\) ms, then the mobile station shall wait to receive a period of \((N_{3m} \times 20)\) ms with sufficient signal quality on the physical channel corresponding to FPC_PRI_CHANs before it re-enables its transmitter.
Otherwise, the mobile station shall re-enable its transmitter no later than \(N_{3m} \times 20 \text{ ms}\) after the mobile station tunes to the Serving Frequency. The mobile station should re-enable its transmitter earlier. After the mobile station re-enables its transmitter, the mean output power shall be as specified in [2] for a step change in input power. If the mobile station re-enables its transmitter earlier than \(N_{3m} \times 20 \text{ ms}\) after it tunes to the Serving Frequency, the initial mean output power shall be as specified in [2], where the initial mean input power estimate is either:

- within 6 dB of the actual mean input power, or
- equal to the mean input power before the mobile station tuned to the Target Frequency.

- The mobile station shall enable the fade timer and the handoff drop timers corresponding to the pilots in its Active Set and Candidate Set. The mobile station shall resume incrementing \(\text{TOT\_FRAMES_s, BAD\_FRAMES_s, DCCH\_TOT\_FRAMES_s, DCCH\_BAD\_FRAMES_s, SCH\_TOT\_FRAMES_s, and SCH\_BAD\_FRAMES_s}\) if applicable as specified in 2.6.4.1.1.

2.6.6.2.10.4 Aborting Analog Frequencies Periodic Search

When the mobile station aborts a periodic search, it shall perform the following:

- The mobile station shall cancel any remaining visits away from the Serving Frequency in the current search period and shall not send a Candidate Frequency Search Report Message for the current search period.

- The mobile station shall disable the periodic search timer.

2.6.6.2.11 Processing of Reverse Supplemental Code Channels and Reverse Supplemental Channels

Reverse Supplemental Code Channels are not supported for \(P_{REV\_IN\_USE}\) greater than or equal to nine.

If \(USE_{T\_ADD\_ABORT}\) is set to ‘1’, and the strength of a Neighbor Set or Remaining Set pilot is found to be above \(T_{ADD}\), then the mobile station shall terminate any active transmission on Reverse Supplemental Code Channels or Reverse Supplemental Channels at the end of the current 20 ms frame. The mobile station shall perform the following:

- Any previously active Reverse Supplemental Code Channel or Reverse Supplemental Channel assignment shall be considered implicitly terminated.

- If active transmission on Reverse Supplemental Code Channels is terminated, the mobile station shall set \(NUM\_REV\_CODES_s\) to ‘000’ and shall set \(IGNORE\_SCAM_s\) to ‘1’.

- If active transmission on Reverse Supplemental Channels is terminated, the mobile station shall set \(IGNORE\_ESCAM_s\) to ‘1’.

- The mobile station shall set \(SCRM\_SEQ\_NUM_s\) to \((SCRM\_SEQ\_NUM_s + 1) \mod 16\).
• The mobile station shall transmit a *Supplemental Channel Request Message* with
  USE_SCRM_SEQ_NUM set to ‘1’, SCRM_SEQ_NUM set to SCRM_SEQ_NUMs, and
  SIZE_OF_REQ_BLOB set to ‘0000’.

2.6.6.2.12 Periodic Serving Frequency Pilot Report Procedure

While the mobile station is tuned to the Serving Frequency (specified by CDMACH_s and
CDMABAND_d), the mobile station shall measure the total received power spectral density,
in mW/1.23 MHz, on the Serving Frequency at least once every 20 ms frame. The mobile
station shall maintain the average value of the total received power spectral density,
*spec_density*, over the last N_{12m} frames. The mobile station shall maintain the PPSMM
timer as follows:

• When the mobile station starts a Periodic Serving Frequency Pilot Report Procedure,
it shall set the PPSMM timer to PPSMM_PERIOD_s × 0.08 seconds and shall enable
the timer.

• When the PPSMM timer expires, the mobile station shall send a *Periodic Pilot
Strength Measurement Message* (2.6.6.2.5.2) to the base station, reset the PPSMM
timer to PPSMM_PERIOD_s × 0.08 seconds and shall re-enable the timer.

• When the mobile station receives an *Extended Handoff Direction Message*, a *General
Handoff Direction Message* or a *Universal Handoff Direction Message* directing the
mobile station to perform a hard handoff (see 2.6.6.2.5.1), it shall abort the Periodic
Serving Frequency Pilot Report Procedure and disable the PPSMM timer if it is
enabled.

• If MIN_PILOT_PWR_THRESH_s is not equal to ‘11111’ and
MIN_PILOT_EC_IO_THRESH_s is equal to ‘11111’, the mobile station shall perform
the following actions once per frame:
  – Disable the PPSMM timer if the received total energy per PN chip, E_c, of the
    pilots in the Active Set is not less than (-120 + 2 × MIN_PILOT_PWR_THRESH_s),
    where the value of E_c is computed as 10 × log_{10} (PS × *spec_density*) and PS is
    the total E_c/I_o of the pilots in the Active Set measured as specified in 2.6.6.2.2.
  – Reset the expiration time of the PPSMM timer to PPSMM_PERIOD_s × 0.08
    seconds and re-enable the timer if the following conditions are true:
    o the PPSMM timer is disabled, and
    o the received total energy per PN chip, E_c, of the pilots in the Active Set is
      less than (-120 + 2 × MIN_PILOT_PWR_THRESH_s).

• If MIN_PILOT_PWR_THRESH_s is equal to ‘11111’ and MIN_PILOT_EC_IO_THRESH_s
is not equal to ‘11111’, the mobile station shall perform the following actions once
per frame:
  – Disable the PPSMM timer if the total pilot strength of the pilots in the Active Set,
    PS, satisfies the condition that (-20 × log_{10}(PS)) is not greater than
    MIN_PILOT_EC_IO_THRESH_s.
– Reset the expiration time of the PPSMM timer to PPSMM_PERIOD x 0.08 seconds and re-enable the timer if the following conditions are true:
  o the PPSMM timer is disabled, and
  o the total pilot strength of the pilots in the Active Set, PS, satisfies the condition that (-20 x \log_{10}(PS)) is greater than MIN_PILOT_EC_IO_THRESHs.

• If MIN_PILOT_PWR_THRESHs is not equal to ‘11111’ and MIN_PILOT_EC_IO_THRESHs is not equal to ‘11111’, the mobile station shall perform the following actions once per frame:
  – Disable the PPSMM timer if the following conditions are true:
    o the received total energy per PN chip, Ec, of the pilots in the Active Set is not less than (-120 + 2 x MIN_PILOT_PWR_THRESHs), and
    o the total pilot strength of the pilots in the Active Set, PS, satisfies the condition that (-20 x \log_{10}(PS)) is not greater than MIN_PILOT_EC_IO_THRESHs.

  – Reset the expiration time of the PPSMM timer to PPSMM_PERIOD x 0.08 seconds and re-enable the timer if the following conditions are true:
    o the PPSMM timer is disabled, and
    o the received total energy per PN chip, Ec, of the pilots in the Active Set is not less than (-120 + 2 x MIN_PILOT_PWR_THRESHs), or the total pilot strength of the pilots in the Active Set, PS, satisfies the condition that (-20 x \log_{10}(PS)) is greater than MIN_PILOT_EC_IO_THRESHs.

• If MIN_PILOT_PWR_THRESHs is equal to ‘11111’ and MIN_PILOT_EC_IO_THRESHs is equal to ‘11111’, the mobile station shall maintain the PPSMM timer independent of the received power and the total Ec/Io of the pilots.

2.6.6.2.13 Call Rescue Soft Handoff

This section presents an overview and mobile station requirements for the support of call rescue soft handoff while the mobile station is in the Mobile Station Control on the Traffic Channel State.

2.6.6.2.13.1 Overview

Support for the call rescue feature is mandatory for the mobile station. The mobile station initiates call rescue soft handoff after disabling its transmitter due to:

• insufficient signal quality on the Forward Traffic Channel (see 2.6.4.1.8)

• an acknowledgment failure.

In order for a pilot to be autonomously added to the Active Set, it must be a valid soft handoff candidate on the mobile station’s neighbor list, and must also support a Rescue Channel. A Rescue Channel is a Fundamental Channel that is used for call rescue soft handoff, and has a pre-allocated Walsh Code that is provided to the mobile station as part of the General Neighbor List Message, Universal Neighbor List Message, and Extended
Neighbor List Update Message.

If the mobile station is eligible to attempt call rescue soft handoff, then it re-enables its transmitter and monitors the Rescue Channel (as well as the other Traffic Channels in the Active Set) for good frames. Once good frames are received, then the call continues normally.

Three timers are used as part of call rescue soft handoff: the rescue delay timer, the rescue allowed timer, and the rescue attempt timer.

2.6.6.2.13.2 Requirements

If the rescue delay timer expires and the interval specified by RESQ_MIN_PERIOD has elapsed since the last successful call rescue, then the mobile station shall enable the rescue allowed timer with an initial value of (RESQ_ALLOWED_TIME × 80) ms.

While the rescue allowed timer is enabled, if the mobile station is able to promote any new pilots to the Active Set (see 2.6.6.2.6.1), then the mobile station shall perform the following:

- disable the rescue allowed timer,
- update the service configuration as specified in 2.6.6.2.13.3.
- cancel any current and pending Forward or Reverse Supplemental Channel assignments.
- re-enable its transmitter at the last closed-loop power level plus RESQ_POWER_DELTA,
- enable the rescue attempt timer with an initial value of (RESQ_ATTEMPT_TIME × 40) ms.
- transmit the Traffic Channel preamble followed by a Extended Pilot Strength Measurement Message, where the length of the Traffic Channel preamble is determined as follows:
  - If operating in Radio Configuration 1 or 2, the length of the Traffic Channel preamble is given by RESQ_NUM_PREAMBLE_RC1_RC2 × 20ms.
  - If operating in Radio Configuration greater than 2, the length of the Traffic Channel preamble is given by the duration corresponding to \( \text{RESQ_NUM_PREAMBLE} \times 1.25\text{ms} \).

If the rescue allowed timer expires, then the mobile station shall not autonomously promote any new pilots to the Active Set.

While the rescue attempt timer is enabled, the mobile station shall not perform the Forward or Reverse Traffic Channel power control procedures specified in 2.6.4.1.1 and 2.6.6.2.7.2, respectively.

If the rescue attempt timer expires, then the mobile station shall disable its transmitter.
2.6.6.2.13.3 Service Configuration Update Due to Call Rescue

The mobile station shall set CH_INDs to ‘01’.

The mobile station shall replace the current Logical-to-Physical Mapping with the default Logical-to-Physical Mapping as specified in Table 2.6.4.2-1, where:

- requirement 1 is as follows: The SR_ID field shall be set to the SR_ID corresponding to the services mapped to the Fundamental Channel, and
- requirements 2 and 3 are as follows: the PHYSICAL_RESOURCE field shall be set to ‘0000’.

The mobile station shall replace the current Service Configuration information record with a new Service Configuration information record created as follows:

- The mobile station shall delete all Service Option Connection Records corresponding to an SR_ID that is not listed in the Call Rescue Logical-to-Physical Mapping created above and the Layer 3 shall terminate the corresponding call control instance (currently existing or pending instantiation).
- The mobile station shall identify the Call Control instance corresponding to the first service option connection listed in this newly created Service Configuration information record by the NULL identifier.

The mobile station shall set SYNC_IDs to NULL.

2.6.6.3 Typical Message Exchanges During Handoffs

The following examples illustrate typical message exchanges between the mobile station and the base station during handoff. Refer to Annex B for examples of call processing during handoff.

Figure 2.6.6.3-1 shows an example of the messages exchanged between the mobile station and the base station during a typical handoff process if P_REV_IN_USEs is less than or equal to three or SOFT_SLOPEs is equal to ‘000000’.

Figure 2.6.6.3-2 shows an example of the messages exchanged between the mobile station and the base station during a typical handoff process if P_REV_IN_USEs is greater than three and SOFT_SLOPEs is not equal to ‘000000’.

Figure 2.6.6.3-3 illustrates the messaging triggered by a pilot of the Candidate Set as its strength gradually rises above the strength of each pilot of the Active Set if P_REV_IN_USEs is less than or equal to three, or SOFT_SLOPEs is equal to ‘000000’. Note that the mobile station reports that a Candidate Set pilot is stronger than an Active Set pilot only if the difference between their respective strengths is at least T_COMP × 0.5 dB.

Figure 2.6.6.3-4 illustrates the messaging triggered by a pilot of the Candidate Set as its strength gradually rises above the strength of each pilot of the Active Set if P_REV_IN_USEs is greater than three and SOFT_SLOPEs is not equal to ‘000000’. Note that the mobile station reports that a Candidate Set pilot is stronger than an Active Set pilot only if the difference between their respective strengths is at least T_COMP × 0.5 dB and Pilot P₀ strength exceeds \([(SOFT_SLOPE/8) \times 10 \times \log_{10}(PS₁ + PS₂) + ADD_INTERCEPT/2]\).
Figure 2.6.6.3-1. Handoff Threshold Example if \( P_{REV\_IN\_USE_s} \) is Less Than or Equal to Three, or \( SOFT\_SLOPE_s \) is Equal to ‘000000’
1. Pilot P₂ strength exceeds $T_{ADD}$. Mobile station transfers the pilot to the Candidate Set.
2. Pilot P₂ strength exceeds $[(\text{SOFT\_SLOPE/8}) \times 10 \times \log_{10}(PS₁) + \text{ADD\_INTERCEPT}/2]$. Mobile station sends a Pilot Strength Measurement Message.
3. Mobile station receives an Extended Handoff Direction Message, a General Handoff Direction Message or a Universal Handoff Direction Message, transfers the pilot P₂ to the Active Set, and sends a Handoff Completion Message.
4. Pilot P₁ strength drops below $[(\text{SOFT\_SLOPE/8}) \times 10 \times \log_{10}(PS₂) + \text{DROP\_INTERCEPT}/2]$. Mobile station starts the handoff drop timer.
6. Mobile station receives an Extended Handoff Direction Message, a General Handoff Direction Message or a Universal Handoff Direction Message, transfers the pilot P₁ to the Candidate Set and sends a Handoff Completion Message.
7. Pilot P₁ strength drops below $T_{DROP}$. Mobile station starts the handoff drop timer.
8. Handoff drop timer expires. Mobile station moves the pilot P₁ from the Candidate Set to the Neighbor Set.

**Figure 2.6.6.3-2. Handoff Threshold Example if P_{REV\_IN\_USE}s is Greater Than Three, and SOFT\_SLOPEs is Not Equal to ‘000000’**
Candidate Set: Pilot P0
Active Set: Pilots P1, P2

$t_0$ – *Pilot Strength Measurement Message* sent, $P_0 > T_{ADD}$

$t_1$ – *Pilot Strength Measurement Message* sent, $P_0 > P_1 + T_{COMP} \times 0.5$ dB

$t_2$ – *Pilot Strength Measurement Message* sent, $P_0 > P_2 + T_{COMP} \times 0.5$ dB

**Figure 2.6.6.3-3. Pilot Strength Measurements Triggered by a Candidate Pilot if**

*P_REV_IN_USE* = 3 or *SOFT_SLOPE* = ‘000000’
Candidate Set: Pilot P₀
Active Set: Pilots P₁, P₂

\[ t₀ \text{ - Pilot Strength Measurement Message not sent because} \]
\[ [10 \times \log_{10}(PS₀)] < [(\text{SOFT\_SLOPE}/8) \times 10 \times \log_{10}(PS₁ + PS₂) + \text{ADD\_INTERCEPT}/2] \]

\[ t₁ \text{ - Pilot Strength Measurement Message not sent because} \]
\[ P₀ > [P₁ + \text{T\_COMP} \times 0.5 \text{ dB}] \text{ but} \]
\[ [10 \times \log_{10}(PS₀)] < [(\text{SOFT\_SLOPE}/8) \times 10 \times \log_{10}(PS₁ + PS₂) + \text{ADD\_INTERCEPT}/2] \]

\[ t₁' \text{ - Pilot Strength Measurement Message sent because} \]
\[ [10 \times \log_{10}(PS₀)] > [(\text{SOFT\_SLOPE}/8) \times 10 \times \log_{10}(PS₁ + PS₂) + \text{ADD\_INTERCEPT}/2] \]

\[ t₂ \text{ - Pilot Strength Measurement Message sent because} \]
\[ P₀ > [P₂ + \text{T\_COMP} \times 0.5 \text{ dB}] \text{ and} \]
\[ [10 \times \log_{10}(PS₀)] > [(\text{SOFT\_SLOPE}/8) \times 10 \times \log_{10}(PS₁ + PS₂) + \text{ADD\_INTERCEPT}/2] \]

**Figure 2.6.6.3-4. Pilot Strength Measurements Triggered by a Candidate Pilot if**

\[ P\_REV\_IN\_USEₜ > 3 \text{ and SOFT\_SLOPEₜ is Not Equal to'000000'} \]
2.6.7 Hash Functions and Randomization

2.6.7.1 Hash Function

Certain procedures require a uniform distribution of mobile stations among \( N \) resources. The following function returns an integer, using as arguments the mobile station’s IMSI, the number of resources \( N \), and a modifier DECORR. The modifier serves to decorrelate the values obtained for the various applications from the same mobile station.

HASH_KEY shall be equal to the 32 least significant bits of \((\text{IMSI}_O \cdot S1 + 2^{24} \times \text{IMSI}_O \cdot S2)\).

Define:

- Word \( L \) to be bits 0-15 of HASH_KEY
- Word \( H \) to be bits 16-31 of HASH_KEY

where bit 0 is the least significant bit of HASH_KEY.

For determining CDMA Band, CDMA Channel Number, Paging Channel Number, Forward Common Control Channel Number, Quick Paging Channel Number, and Paging Slot Number, the hash value is computed as follows:

\[
R = \left\lfloor \frac{N \times ((40503 \times (L \oplus H \oplus \text{DECORR})) \mod 2^{16})}{2^{16}} \right\rfloor.
\]

For determining a mobile station’s assigned paging indicator bit positions, the hash value is computed as follows:

\[
R_1 = \left\lfloor \frac{N \times ((40503 \times (L \oplus H \oplus \text{DECORR}_1)) \mod 2^{16})}{2^{16}} \right\rfloor.
\]

and

\[
R_2 = \left(1 - \left\lfloor \frac{2 \times R_1}{N+4} \right\rfloor \right) \times (N+4)/2 + \left\lfloor \frac{2 \times R_1}{N+4} \right\rfloor \times ((N+4)/2 - 4) \times (40503 \times (L \oplus H \oplus \text{DECORR}_2)) \mod 2^{16}/2^{16} + N + 4 + \left\lfloor \frac{2 \times R_1}{N+4} \right\rfloor \times ((N+4)/2) \] for Quick Paging Channel indicator rate of 4800 bps, or

\[
R_2 = \left(1 - \left\lfloor \frac{2 \times R_1}{N+8} \right\rfloor \right) \times (N+8)/2 + \left\lfloor \frac{2 \times R_1}{N+8} \right\rfloor \times ((N+8)/2 - 8) \times (40503 \times (L \oplus H \oplus \text{DECORR}_2)) \mod 2^{16}/2^{16} + N + 8 + \left\lfloor \frac{2 \times R_1}{N+8} \right\rfloor \times ((N+8)/2) \] for Quick Paging Channel indicator rate of 9600 bps.

The mobile station shall choose the range \( N \) and the modifiers DECORR, DECORR\(_1\), and DECORR\(_2\) according to the application as shown in Table 2.6.7.1-1. In the table, HASH_KEY [0...11] denotes the 12 least significant bits of HASH_KEY.

---

34 This formula is adapted from Knuth, Donald N., *The Art of Computer Programming*, 2 volumes, (Reading, MA, Addison-Wesley, 1998).
### Table 2.6.7.1-1. Hash Function Modifier

<table>
<thead>
<tr>
<th>Application</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CDMA Band Number</strong></td>
<td></td>
</tr>
<tr>
<td>Number of band entries</td>
<td></td>
</tr>
<tr>
<td><strong>CDMA Channel Number</strong></td>
<td></td>
</tr>
<tr>
<td>Number of channel entries in last CDMA Channel List Message or the number of qualified channels in the last Extended CDMA Channel List Message</td>
<td></td>
</tr>
<tr>
<td><strong>Paging Channel Number</strong></td>
<td></td>
</tr>
<tr>
<td>PAGE_CHANs from System Parameters Message (up to 7)</td>
<td></td>
</tr>
<tr>
<td><strong>Quick Paging Channel Number</strong></td>
<td></td>
</tr>
<tr>
<td>NUM_QPCHs from Extended System Parameters Message or MC-RR Parameters Message (up to 3)</td>
<td></td>
</tr>
<tr>
<td><strong>Paging Slot Number</strong></td>
<td></td>
</tr>
<tr>
<td>2048</td>
<td></td>
</tr>
<tr>
<td><strong>Paging Indicator Positions</strong></td>
<td></td>
</tr>
<tr>
<td>376 (for 9600 bps), 188 (for 4800 bps)</td>
<td></td>
</tr>
<tr>
<td><strong>Forward Common Control Channel Number</strong></td>
<td></td>
</tr>
<tr>
<td>NUM_FCCCHs from MC-RR Parameters Message (up to 7)</td>
<td></td>
</tr>
<tr>
<td>DECORR</td>
<td>Return Value</td>
</tr>
<tr>
<td>$2 \times \text{HASH_KEY [0...11]}$</td>
<td>$R + 1$</td>
</tr>
<tr>
<td>0</td>
<td>$R + 1$</td>
</tr>
<tr>
<td>$2 \times \text{HASH_KEY [0...11]}$</td>
<td>$R + 1$</td>
</tr>
<tr>
<td>$6 \times \text{HASH_KEY[0...11]}$</td>
<td>$R$</td>
</tr>
<tr>
<td>DECORR$_1 = [t / 64] \mod 2^{16}$, DECORR$_2 = [t / 64 + 1] \mod 2^{16}$, where t is the System Time in 20ms frames, relative to the beginning of the assigned Quick Paging Channel slot.</td>
<td>$R_1$ and $R_2$</td>
</tr>
</tbody>
</table>

#### 2.6.7.2 Pseudorandom Number Generator

Where pseudorandom numbers are needed, a linear congruential generator shall be used. The mobile station shall implement the linear congruential generator defined by:

$$z_n = a \times z_{n-1} \mod m$$
where \( a = 7^5 = 16807 \) and \( m = 2^{31} - 1 = 2147483647 \). \( z_n \) is the output of the generator.\(^{35}\)

During the *Mobile Station Initialization State*, the mobile station shall seed its generator with

\[
z_0 = (\text{ESN} \oplus \text{RANDOM\_TIME}) \mod m
\]

where RANDOM\_TIME shall be the least-significant 32-bits of SYS\_TIMEs stored from the

*Sync Channel Message*. If the initial value so produced is found to be zero, it shall be

replaced with one. The mobile station shall compute a new \( z_n \) for each subsequent use.

The mobile station shall use the value \( u_n = z_n / m \) for those applications that require a

binary fraction \( u_n, 0 < u_n < 1 \).

The mobile station shall use the value \( k_n = \lfloor N \times z_n / m \rfloor \) for those applications that require

a small integer \( k_n, 0 \leq k_n \leq N - 1 \).

### 2.6.8 CODE\_CHAN\_LISTs Maintenance

The CODE\_CHAN\_LISTs is a descriptive structure used to manage the Forward

Fundamental Channel and Forward Supplemental Code Channels, if any, associated with

the mobile station’s Active Set. Associated with each member of the mobile station’s Active

Set, there is an ordered array of code channels. The first entry of the ordered array

specifies the Forward Fundamental Channel associated with the pilot and the subsequent

entries, if any, specify the Forward Supplemental Code Channels associated with the pilot.

The CODE\_CHAN\_LISTs is the collection of ordered arrays of code channels for each

member of the mobile station’s Active Set. The \( i \)th entry in every array (of code channels

associated with a member of the Active Set) corresponds to the \( i \)th code channel.

The mobile station shall maintain the CODE\_CHAN\_LISTs as follows:

- When the mobile station is first assigned a Forward Fundamental Channel, it shall

  initialize the CODE\_CHAN\_LISTs to contain the Forward Fundamental Channel for

  each member of the Active Set.

- When the mobile station processes the *Extended Handoff Direction Message*, the

  mobile station shall update the CODE\_CHAN\_LISTs as follows:

  - For each pilot listed in the *Extended Handoff Direction Message* which does not

    have a corresponding code channel in the CODE\_CHAN\_LISTs, the mobile

    station shall add the code channel, CODE\_CHAN, of that pilot to the

    CODE\_CHAN\_LISTs, as the Forward Fundamental Channel for the pilot.

  - The mobile station shall delete all information in the CODE\_CHAN\_LISTs

    associated with a pilot that is not included in the *Extended Handoff Direction

    Message*.

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\(^{35}\) 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.
• When the mobile station processes the General Handoff Direction Message, the mobile station shall update the CODE_CHAN_LISTs to contain the Forward Fundamental Channel associated with each pilot included in the General Handoff Direction Message. The first code channel occurrence associated with each pilot included in the General Handoff Direction Message corresponds to the Forward Fundamental Channel. The mobile station shall perform the following:

  − If FOR_SUP_CONFIGr is included and FOR_SUP_CONFIGr is equal to '10' or '11', the mobile station shall perform the following actions:
    + For each pilot listed in the General Handoff Direction Message, the mobile station shall set the Forward Supplemental Code Channels (associated with the pilot) in the CODE_CHAN_LISTs to the Forward Supplemental Code Channels specified in the General Handoff Direction Message.
    + The mobile station shall delete all information in the CODE_CHAN_LISTs associated with a pilot that is not included in the General Handoff Direction Message.

  − If FOR_SUP_CONFIGr is equal to '00' or '01' or if FOR_SUP_CONFIGr is not included in the General Handoff Direction Message, the mobile station shall not update Supplemental Code Channels associated with the pilots included in the General Handoff Direction Message. The mobile station shall perform the following actions:
    + For each pilot listed in the General Handoff Direction Message which does not have a corresponding code channel in the CODE_CHAN_LISTs, the mobile station shall add the code channel, CODE_CHAN, of that pilot to the CODE_CHAN_LISTs, as the Forward Fundamental Channel for the pilot.
    + The mobile station shall delete all information in the CODE_CHAN_LISTs associated with a pilot that is not included in the General Handoff Direction Message.

• When the mobile station processes the Supplemental Channel Assignment Message it shall follow the following rules:

  − If FOR_SUP_CONFIGr is equal to '10' or '11', the mobile station shall update the Forward Supplemental Code Channels for each pilot in the Active Set.
  − If the pilot is not listed in the Supplemental Channel Assignment Message, the mobile station shall delete all occurrences of Forward Supplemental Code Channels associated with the pilot from the Code Channel List.
  − If a pilot is listed in the Supplemental Channel Assignment Message, then the mobile station shall set the Forward Supplemental Code Channels (associated with the pilot) in the CODE_CHAN_LISTs to the Forward Supplemental Code Channels specified in the Supplemental Channel Assignment Message.
  − If FOR_SUP_CONFIGr is equal to '00' or '01', the mobile station shall not update Supplemental Code Channels associated with the pilots included in the Supplemental Channel Assignment Message.
This section presents an overview and mobile station requirements for the support of CDMA Tiered services while the mobile station is in the Mobile Station Idle State and in the Mobile Station Control on the Traffic Channel State.

2.6.9.1 Overview

2.6.9.1.1 Definition

The mobile station may support Tiered Services based upon User Zones. Tiered Services provide the user custom services and special features based upon the mobile station location. Tiered Services also provides private network support. Important to the operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones by which the base station offers custom services based upon the mobile station location.

User Zones are associated with a set of features and services, plus a geographic area in which the User Zone features/services are made available to the customers that have subscribed to that User Zone. The boundary of the User Zone Geographic area may be established based on the coverage area of a public or private base station or it may be established independent of RF topology.

User Zones may be supported by the public system on the same frequency as the serving base station, or they may be supported on a private system operating on a different frequency.

2.6.9.1.2 Types of User Zones

User Zones may be of two basic types:

- **Broadcast User Zones**: Broadcast User Zones are identified to the mobile station using the Paging Channel or the Primary Broadcast Control Channel. In this case, the base station broadcasts on the Paging Channel or the Primary Broadcast Control Channel messages identifying the User Zones that fall within the coverage area of the particular cell/sector. Mobile stations, as part of their monitoring of the Paging Channel or the Primary Broadcast Control Channel, will identify the presence of a particular User Zone.

- **Mobile Specific User Zones**: Mobile Specific User Zones are not broadcast by the base station. The mobile station may use other overhead message parameters and compare them with internally stored User Zone parameters to identify the presence of a particular User Zone. These parameters may include: SID, NID, BASE_ID, BASE_LAT, and BASE_LONG.

**Broadcast User Zones** allow for permanent as well as temporary subscription. Temporary subscription provides User Zone features and capabilities to users who are not subscribed to the User Zone. In this case, a mobile station, upon entering a new coverage area, may detect the presence of a User Zone that it presently does not subscribe to, but one that supports temporary subscription. The mobile station then queries the network to obtain the User Zone parameters. Once these parameters are received, the mobile station offers to the user via the mobile station user interface, the option of subscribing to the particular User Zone.
User Zone.

Some User Zones may require active registration (Active User Zones) upon the mobile station’s entry to immediately trigger a change in a feature(s). For others, the implicit registration at call setup is sufficient (Passive User Zones). Active User Zones are used where inbound features change as a result of being in the User Zone. During the Mobile Station Idle State, a mobile stations needs to register to update the User Zone ID whenever the User Zone that the mobile station is entering and/or leaving is of the Active type.

A mobile station that supports User Zone services may store a list of User Zones, where each User Zone is identified by a User Zone ID (UZID). Associated with each stored User Zone, the mobile station may also store a number of determinant parameters used for identifying User Zones.

2.6.9.2 Requirements

If the mobile station supports User Zone services, it shall maintain and update UZIDs according the following rule:

If the mobile station selects a User Zone supported by the base station, the mobile station shall set UZIDs to the User Zone Identifier associated with the User Zone; otherwise, the mobile station shall set UZIDs to ‘0000000000000000’. The precise process for determining how to select a User Zone that is supported by the base station is left to the mobile station manufacturer.

If the mobile station does not support User Zone services, the mobile station shall set UZIDs to ‘0000000000000000’.

The mobile station may search pilots of private neighbor base stations on other frequencies and band classes as identified in the Private Neighbor List Message. Search performance criteria are defined [11].

2.6.9.2.1 User Zone Operation in the Mobile Station Idle State:

When a mobile station performs an idle handoff, it selects User Zones based on internally stored parameters and information broadcast on the Paging Channel or on the Primary Broadcast Control Channel as described in 2.6.9.1.

After the mobile station performs idle handoff, if the mobile station determines that a change from one Broadcast User Zone to another Broadcast User Zone is required, the mobile station shall not update UZIDs, UZ_EXIT_IN_USEs and shall not perform User Zone registration until the pilot strength of the currently serving base station exceeds that of the base station corresponding to the old User Zone by the value of UZ_EXIT_IN_USEs.

If the mobile station determines that it needs to change User Zone, and if the difference between the pilot strengths exceeds UZ_EXIT_IN_USEs, then the mobile station shall perform the following:

• Perform User Zone registration.
• Update UZIDs.
• Set UZ_EXIT_IN_USE to UZ_EXIT_RCVDs.

The mobile station may also implement other means to avoid the premature exiting of a User Zone due to rapid changes in signal strength. The exact implementation of such techniques is left to mobile station implementation.

If the mobile station is in the Mobile Station Idle State and it receives a User Zone Reject Message the mobile station shall perform the following:

• Set REJECT_ACTION_INDI to REJECT_ACTION_INDIr.

• If UZID_ASSIGN_INCLr = 0, the mobile station shall set UZIDs to ‘0000000000000000’, otherwise; the mobile station shall set UZIDs to ASSIGN_UZIDr.

If the mobile station is in the Mobile Station Idle State and it selects an active User Zone, then the mobile station shall perform User Zone registration (see 2.6.5.1.10) by entering the System Access State with a registration indication.

The mobile station should provide the user with a User Zone indication corresponding to the User Zone in service each time UZIDs is updated.

2.6.9.2.2 User Zone Operation in the Mobile Station Control on the Traffic Channel State

If the mobile station is in the Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State and if it determines that the User Zone has changed, it shall update UZIDs and send a User Zone Update Request Message to the base station.

If the mobile station is in the Traffic Channel Substate or Release Substate of the Mobile Station Control on the Traffic Channel State and it receives a User Zone Update Message, then the mobile station shall update UZIDs and set it equal to UZIDr.

If the mobile station is in the Traffic Channel Substate or Release Substate of the Mobile Station Control on the Traffic Channel State and it receives a User Zone Reject Message, then the mobile station shall perform the following:

• Set REJECT_ACTION_INDI to REJECT_ACTION_INDIr.

• If UZID_ASSIGN_INCLr = 0, the mobile station shall set UZIDs to ‘0’, otherwise; the mobile station shall set UZIDs to ASSIGN_UZIDr.

The mobile station should provide the user with a User Zone indication corresponding to the User Zone in service each time UZIDs is updated.

2.6.10 Call Control Processing

As illustrated in Figure 2.6.10-1, the Call Control consists of the following states:

• Waiting for Order Substate - In this substate, the Call Control instance waits for an Alert With Information Message or an Extended Alert With Information Message.

• Waiting for Mobile Station Answer Substate - In this substate, the Call Control instance waits for the user to answer the call.
• **Conversation Substate** - In this substate, the parties involved in this call communicate.

• **Call Release Substate** - In this substate, the Call Control instance waits for the call to be disconnected.
*If SIGNAL_TYPE is equal to '01' or '10' or if the Signal Information Record is not included.

Note: Not all state transitions are shown.

Figure 2.6.10-1. Call Control
The following messages are processed by the Call Control:

- *Alert With Information Message*
- *Extended Alert with Information Message:*
- *Flash With Information Message*
- *Extended Flash With Information Message*
- *Send Burst DTMF Message*
- *Origination Continuation Message*

The following orders are processed by the Call Control:

- *Continuous DTMF Tone Order*
- *Maintenance Order*
- *Connect Order*

Upon instantiation, the Call Control instance shall perform the following:

- If this Call Control instance is instantiated with a ‘restore indication’, the Call Control instance shall enter the *Conversation Substate.*
- If the call is mobile station terminated, and BYPASS_ALERT_ANSWER₈ is ‘1’, the Call Control instance shall perform the following:
  - The Call Control instance shall enter the *Conversation Substate.*
  - The mobile station shall not connect the audio input, e.g., the microphone of the mobile station, to the reverse link without the knowledge of the user.
- If the call is mobile station terminated and BYPASS_ALERT_ANSWER₈ is ‘0’, the Call Control instance shall enter the *Waiting for Order Substate.*
- If the call is mobile station originated, the Call Control instance shall enter the *Conversation Substate.*

2.6.10.1 Alerting

2.6.10.1.1 Waiting for Order Substate

In this substate, the Call Control instance waits for an *Alert With Information Message* or an *Extended Alert With Information Message.*

Upon entering the *Waiting for Order Substate*, the Call Control instance shall set the substate timer for Tₛ₂₅₅₆ seconds.
While in the *Waiting for Order Substate*, the Call Control instance shall perform the following:

- If the substate timer expires, the Call Control instance shall send a “substate timer expired indication” to the Layer 3 and shall enter the *Call Release Substate*.

- If the Call Control instance receives a “reset waiting for order substate timer indication” from the Layer 3, the Call Control instance shall reset the substate timer for $T_{52m}$ seconds.

- If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the *Call Release Substate*.

- If the Call Control instance receives an indication that the user has originated an emergency call (see 2.6.4.3), the mobile station shall send a *Flash With Information Message* or an *Extended Flash With Information Message* in assured mode with a Global Emergency Call Information Record (see 2.7.4.31), as follows:

  - If this Call Control instance is identified by NULL, the mobile station shall send either a *Flash With Information Message* or an *Extended Flash With Information Message* (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an *Extended Flash With Information Message*, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance receives a message from the Layer 3 which is included in the following list and every message field value is within its permissible range, the Call Control instance shall process the message as described below and in accordance with the message’s action time (see 2.6.4.1.5).

  1. *Alert With Information Message*: If the message contains a Signal information record, the mobile station should alert the user in accordance with the Signal information record; otherwise, the mobile station should use standard alert as defined in 3.7.5.5. The Call Control instance shall enter the *Waiting for Mobile Station Answer Substate* (see 2.6.10.1.2).

  2. *Extended Alert with Information Message*: If the message contains a Signal information record, the mobile station should alert the user in accordance with the Signal information record; otherwise, the mobile station should use standard alert as defined in 3.7.5.5. The Call Control instance shall enter the *Waiting for Mobile Station Answer Substate* (see 2.6.10.1.2).

  3. *Maintenance Order*: The Call Control instance shall enter the *Waiting for Mobile Station Answer Substate*. 
• If the Call Control instance receives a message that is not included in the above list, cannot be processed, or requires a capability which is not supported, the Call Control instance shall discard the message and send a ‘message rejected indication’ to the Layer 3, with the reject reason indicated except when the following condition applies.

- If the Call Control instance fails to meet the criteria solely due to receipt of the Extended Record Type – International information record, the information record shall be discarded and the message shall be processed in accordance with the above procedures specified for the applicable message.

2.6.10.1.2 Waiting for Mobile Station Answer Substate

In this substate, the Call Control instance waits for the user to answer the mobile station terminated call or to invoke special treatment.

Upon entering the Waiting for Mobile Station Answer Substate, the Call Control instance shall set the substate timer for T53m seconds.

While in the Waiting for Mobile Station Answer Substate, the Call Control instance shall perform the following:

• If the substate timer expires, the Call Control instance shall send a “substate timer expired indication” to the Layer 3 and shall enter the Call Release Substate.

• If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the Call Release Substate.

• If the Call Control instance is directed by the user to answer the call, the mobile station shall send a Connect Order in assured mode:

  - If P_REV_IN_USE_s is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON_REF_INCL field of the message to ‘1’ and the CON_REF field of the message to the connection reference of the service option connection corresponding to this call.

The Call Control instance shall enter the Conversation Substate.
• If the Call Control instance is directed by the user to forward the incoming call, the mobile station shall send a *Flash With Information Message* or an *Extended Flash With Information Message* in assured mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding with a pre-registered number, as follows:

- If P_REV_IN_USEs is less than seven, the mobile station shall send a *Flash With Information Message*.

- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a *Flash With Information Message* or an *Extended Flash With Information Message* (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an *Extended Flash With Information Message*, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

• If the Call Control instance is directed by user to forward the incoming call to a number stored in the mobile station, the mobile station shall send a *Flash With Information Message* or an *Extended Flash With Information Message* in assured mode with a *Keypad Facility* information record (see 2.7.4.2) or the *Extended Keypad Facility* information record (see 2.7.4.35) with the CHARi field set to the following:

- a pre-programmed feature code which indicates User Selective Call Forwarding to a number stored in the mobile station as the first digits in the field and

- the forwarding to number immediately following the pre-programmed feature code.

The mobile station shall send the message as follows:

- If P_REV_IN_USEs is less than seven, the mobile station shall send a *Flash With Information Message*. 
- If P_REV_IN_USE is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to forward the incoming call to network-based voice mail, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding to voice mail, as follows:

  - If P_REV_IN_USE is less than seven, the mobile station shall send a Flash With Information Message.

  - If P_REV_IN_USE is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to activate answer holding, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode requiring confirmation of delivery with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates Answer Holding:

  - If P_REV_IN_USE is less than seven, the mobile station shall send a Flash With Information Message.
- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

After receiving confirmation of delivery of the Flash With Information Message or the Extended Flash With Information Message, the mobile station shall send a Connect Order in assured mode:

- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON_REF_INCL field of the message to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

The Call Control instance shall enter the Conversation Substate.

- If the Call Control instance receives an indication that the user has originated an emergency call (see 2.6.4.3), the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Global Emergency Call Information Record (see 2.7.4.31), as follows:

- If this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance receives a message from Layer 3 which is included in the following list and every message field value is within its permissible range, the Call Control instance shall process the message as described below and in accordance with the message’s action time (see 2.6.4.1.5).

1. Alert With Information Message: The Call Control instance shall reset the
substate timer for T53m seconds. If this message does not contain a Signal
information record, the mobile station should use standard alert as defined in
3.7.5.5.

2. **Extended Alert With Information Message:** The Call Control instance shall reset
the substate timer for T53m seconds. If this message does not contain a Signal
information record, the mobile station should use standard alert as defined in
3.7.5.5.

3. **Maintenance Order:** The mobile station shall reset the substate timer for T53m
seconds.

- If the Call Control instance receives a message that is not included in the above list,
cannot be processed, or requires a capability which is not supported, the Call
Control instance shall discard the message and send a ‘message rejected indication’
to the Layer 3, with the reject reason indicated **except when the following condition
applies.**

- **If the Call Control instance fails to meet the criteria solely due to receipt of the
  Extended Record Type – International information record, the information record
  shall be discarded and the message shall be processed in accordance with the
  above procedures specified for the applicable message.**

2.6.10.2 Conversation Substate

While in the **Conversation Substate**, the Call Control instance shall perform the following:

- If the Call Control instance receives a “release indication” from the Layer 3, the Call
  Control instance shall enter the **Call Release Substate.**

- The mobile station shall send an **Origination Continuation Message** in assured mode,
  within T54m seconds after the Call Control instance entering the **Conversation
  Substate** if any of the following conditions occur:

  - The mobile station originated the call, and did not send all the dialed digits in
    the **Origination Message.**

  - There is more than one calling party number associated with the mobile station.

  - A calling party subaddress is used in the call.

  - A called party subaddress is used in the call.
If more than one calling party number is associated with the mobile station, the mobile station shall include the calling party number being used in the calling party number information record in the \textit{Origination Continuation Message}. If only one calling party number is associated with the mobile station, the mobile station shall not include the calling party number information record in the \textit{Origination Continuation Message}. If a calling party subaddress is used, the mobile station shall include the calling party subaddress information record in the \textit{Origination Continuation Message}; otherwise, the mobile station shall omit the calling party subaddress information record. If a called party subaddress is used, the mobile station shall include the called party subaddress information record in the \textit{Origination Continuation Message}; otherwise, the mobile station shall omit the called party subaddress information record.

- If the Call Control instance is directed by the user to issue a flash, the mobile station shall build a \textit{Flash With Information Message} or an \textit{Extended Flash With Information Message} with the collected digits or characters contained in a Keypad Facility information record, if needed, and shall send the message in assured mode, as follows:

  - If P\_REV\_IN\_USE is less than seven, the mobile station shall send a \textit{Flash With Information Message}.

  - If P\_REV\_IN\_USE is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a \textit{Flash With Information Message} or an \textit{Extended Flash With Information Message} (with either the CON\_REF\_INCL field of the message set to ‘0’ or the CON\_REF\_INCL field set to ‘1’ and the CON\_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an \textit{Extended Flash With Information Message}, with the CON\_REF\_INCL field of the message set to ‘1’ and the CON\_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to forward the incoming call, the mobile station shall send a \textit{Flash With Information Message} or an \textit{Extended Flash With Information Message} in assured mode with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding with a pre-registered number, as follows:

  - If P\_REV\_IN\_USE is less than seven, the mobile station shall send a \textit{Flash With Information Message}.  

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If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to forward the incoming call to a number stored in the mobile station, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to the following:
  - a pre-programmed feature code which indicates User Selective Call Forwarding to a number stored in the mobile station as the first digits in the field and
  - the forwarding to number immediately following the pre-programmed feature code.

The mobile station shall send the message as follows:

- If P_REV_IN_USEs is less than seven, the mobile station shall send a Flash With Information Message.

- If P_REV_IN_USEs is equal to or greater than seven and if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call). Otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to forward the incoming call to network-based voice mail, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates User Selective Call Forwarding to voice mail, as follows:
- If P_REV_IN_USEs is less than seven, the mobile station shall send a Flash With Information Message.

- If P_REV_IN_USEs is equal to or greater than seven and if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call). Otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to activate answer holding, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode requiring confirmation of delivery with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates Answer Holding, as follows:

  - If P_REV_IN_USEs is less than seven, the mobile station shall send a Flash With Information Message.

  - If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall perform the following: if this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If answer holding is activated and the Call Control instance is directed by the user to deactivate answer holding, the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Keypad Facility information record (see 2.7.4.2) or the Extended Keypad Facility information record (see 2.7.4.35) with the CHARi field set to a pre-programmed feature code which indicates Answer Holding, as follows:

  - If P_REV_IN_USEs is less than seven, the mobile station shall send a Flash With Information Message.
- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall
perform the following: if this Call Control instance is identified by NULL, the
mobile station shall send either a Flash With Information Message or an
Extended Flash With Information Message (with either the CON_REF_INCL field
of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF
field set to the connection reference of the service option connection
Corresponding to this call); otherwise, the mobile station shall send an Extended
Flash With Information Message, with the CON_REF_INCL field of the message
set to ‘1’ and the CON_REF field of the message set to the connection reference
of the service option connection corresponding to this call.

- If the Call Control instance is directed by the user to send burst DTMF digits, the
mobile station shall build the Send Burst DTMF Message with the dialed digits and
shall send the message in assured mode requiring confirmation of delivery.

- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall
perform the following: If this Call Control instance is identified by NULL, the
mobile station shall set the CON_REF_INCL field of the message to ‘0’;
otherwise, the mobile station shall set the CON_REF_INCL field of the message
to ‘1’ and the CON_REF field of the message to the connection reference of the
service option connection corresponding to this call.

The mobile station sending multiple Send Burst DTMF Messages shall preserve
relative ordering of these messages (see [4]). The mobile station should attempt to
preserve the user timing as much as possible, using recommended values of
DTMF_ON_LENGTH (see Table 2.7.2.3.2.7-1) and DTMF_OFF_LENGTH (see Table
2.7.2.3.2.7-2).

- If the Call Control instance is directed by the user to send a continuous DTMF digit,
the mobile station shall build the Continuous DTMF Tone Order with the dialed digit
and shall send the order in assured mode requiring confirmation of delivery, as
follows:

- If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall
perform the following: If this Call Control instance is identified by NULL, the
mobile station shall either set the CON_REF_INCL field of the message to ‘0’ or
set the CON_REF_INCL field to ‘1’ and set the CON_REF field to the connection
reference of the service option connection corresponding to this call; otherwise,
the mobile station shall set the CON_REF_INCL field of the message to ‘1’ and
the CON_REF field of the message to the connection reference of the service
option connection corresponding to this call.

When the Call Control instance is directed by the user to cease sending the
continuous DTMF digit, the mobile station shall send the Continuous DTMF Tone
Order (ORDQ = ‘11111111’) in assured mode requiring confirmation of delivery, as
follows:
- If \( P_{REV\_IN\_USE} \) is equal to or greater than seven, the mobile station shall perform the following: If this Call Control instance is identified by NULL, the mobile station shall either set the CON_REF_INCL field of the message to '0' or set the CON_REF_INCL field to '1' and set the CON_REF field to the connection reference of the service option connection corresponding to this call; otherwise, the mobile station shall set the CON_REF_INCL field of the message to '1' and the CON_REF field of the message to the connection reference of the service option connection corresponding to this call.

The mobile station sending multiple Continuous DTMF Tone Orders shall preserve relative ordering of these messages (see [2]). The mobile station shall send the Continuous DTMF Tone Order with the ORDQ set to ‘11111111’ indicating the completion of the current continuous DTMF digit before sending the Continuous DTMF Tone Order for another digit or the Send Burst DTMF Message.

- If the Call Control instance is directed by the user to disconnect the call, the Call Control instance shall send a ‘call release request’ to the Layer 3 and shall enter the Call Release Substate.

- If the Call Control instance receives an indication that this packet data service instance has been inactivated, the Call Control instance shall send a “call inactive indication” to the Layer 3 and shall enter the Call Release Substate.

- If the Call Control instance receives an indication that the user has originated an emergency call (see 2.6.4.3), the mobile station shall send a Flash With Information Message or an Extended Flash With Information Message in assured mode with a Global Emergency Call Information Record (see 2.7.4.31), as follows:

  - If this Call Control instance is identified by NULL, the mobile station shall send either a Flash With Information Message or an Extended Flash With Information Message (with either the CON_REF_INCL field of the message set to ‘0’ or the CON_REF_INCL field set to ‘1’ and the CON_REF field set to the connection reference of the service option connection corresponding to this call); otherwise, the mobile station shall send an Extended Flash With Information Message, with the CON_REF_INCL field of the message set to ‘1’ and the CON_REF field of the message set to the connection reference of the service option connection corresponding to this call.

- If the Call Control instance receives a message from the Layer 3 which is included in the following list and every message field value is within its permissible range, the Call Control instance shall process the message as described below and in accordance with the message’s action time (see 2.6.4.1.5).

  1. Alert With Information Message: If the message contains a Signal information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a Signal information record, the Call Control instance shall enter the Waiting For Mobile Station Answer Substate. The mobile station should alert the
user in accordance with the Signal information record. If this message does not
contain a Signal information record, the mobile station should use standard
alert as defined in 3.7.5.5.

2. **Continuous DTMF Tone Order**

3. **Extended Alert With Information Message**: If the message contains a Signal
information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the
message does not contain a Signal information record, the Call Control instance
shall enter the *Waiting For Mobile Station Answer Substate*. The mobile station
should alert the user in accordance with the Signal information record. If this
message does not contain a Signal information record, the mobile station should
use standard alert as defined in 3.7.5.5.

4. **Flash With Information Message**

5. **Extended Flash With Information Message**

6. **Maintenance Order**: The Call Control instance shall enter the *Waiting for Mobile
Station Answer Substate*.

7. **Send Burst DTMF Message**: 

- If the Call Control instance receives a message that is not included in the above list,
cannot be processed, or requires a capability which is not supported, the Call
Control instance shall discard the message and send a ‘message rejected indication’
to the Layer 3, with the reject reason indicated except when the following condition
applies.

   - If the Call Control instance fails to meet the criteria solely due to receipt of the
 Extended Record Type – International information record, the information record
 shall be discarded and the message shall be processed in accordance with the
 above procedures specified for the applicable message.

2.6.10.3 Call Release Substate

In this substate, the Call Control instance waits for the call to be released.

While in the *Call Release Substate*, the Call Control instance shall perform the following:

- If the Call Control instance receives a message from the Layer 3 which is included
in the following list and every message field value is within its permissible range,
the Call Control instance shall process the message as described below and in
accordance with the message’s action time (see 2.6.4.1.5).

1. **Alert With Information Message**: The Call Control instance shall send an “enter
traffic channel substate indication” to the Layer 3 and shall enter the *Waiting for
Mobile Station Answer Substate*. If this message does not contain a Signal
information record, the mobile station should use standard alert as defined in 3.7.5.5.

2. **Extended Alert With Information Message:** The Call Control instance shall send a “enter traffic channel substate indication” to Layer 3 and shall enter the *Waiting for Mobile Station Answer Substate*. If this message does not contain a Signal information record, the mobile station should use standard alert as defined in 3.7.5.5.

- If the Call Control instance receives a message that is not included in the above list, cannot be processed, or requires a capability which is not supported, the Call Control instance shall discard the message and send a ‘message rejected indication’ to the Layer 3, with the reject reason indicated *except when the following condition applies.*

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### 2.6.11 Common Procedures for Extended Encryption and Message Integrity

This section describes the common procedures for the messages used for extended encryption and message integrity.

#### 2.6.11.1 Registration Accepted Order

The mobile station shall perform the following procedures in the order listed below.

- If ORDQ<sub>r</sub> is equal to ‘00000101’, the mobile station shall set ROAM_INDI<sub>s</sub> to ROAM_INDI<sub>r</sub> and should display the roaming condition.

- If ORDQ<sub>r</sub> is equal to ‘00000111’, the mobile station shall perform the following:
  - Set ROAM_INDI<sub>s</sub> to ROAM_INDI<sub>r</sub> and the mobile station should display the roaming condition.
  - Set C_SIG_ENCRYPT_MODE<sub>s</sub> to C_SIG_ENCRYPT_MODE<sub>r</sub>.
  - If ENC_KEY_SIZE<sub>r</sub> is included, the mobile station shall set ENC_KEY_SIZE<sub>s</sub> to ENC_KEY_SIZE<sub>r</sub>.
  - If MSG_INTEGRITY_SUP<sub>s</sub> is equal to ‘0’ and C_SIG_ENCRYPT_MODE<sub>r</sub> is not equal to ‘000’, the mobile station shall perform the following:
    - Set TX_EXT_SSEQ<sub>0</sub>[0][KEY_ID], TX_EXT_SSEQ<sub>0</sub>[1][KEY_ID], RX_EXT_SSEQ<sub>0</sub>[0][KEY_ID], and RX_EXT_SSEQ<sub>0</sub>[1][KEY_ID] to \(1 + 256 \times \) NEW_SSEQ_H included in the *Registration Message.*
+ Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the *most recently generated* CMEAKEY is associated with the AUTHR of the Registration Message).

+ Set ENC_KEY[KEY_ID] to the 128-bit pattern.

+ Set INT_KEY[KEY_ID] to the 128-bit pattern.

− If MSG_INTEGRITY_SUPs is equal to ‘1, the mobile station shall perform the following:

− If CHANGE KEYSr is equal to ‘0’, the mobile station shall set RESTORE_KEY to ‘0’.

− If CHANGE KEYSr is equal to ‘1’, the mobile station shall perform the following:

  o Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).

  o Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times \text{NEW\_SSEQ\_H}$ included in the Registration Message.

  o If KEY_ID is equal to ‘00’ or ‘01’, the mobile station shall perform the following:

    ◊ Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the *most recently generated* CMEAKEY associated with the AUTHR of the Registration Message).

    ◊ Set ENC_KEY[KEY_ID] to the 128-bit pattern.

    ◊ Set INT_KEY[KEY_ID] to the 128-bit pattern.

    ◊ Set LAST_2G_KEY_IDs to KEY_ID.

  o If KEY_ID is equal to ‘10’ or ‘11’, the mobile station shall perform the following:

    ◊ Set ENC_KEY[KEY_ID] to the CK generated by AKA.

    ◊ Set INT_KEY[KEY_ID] to the IK generated by AKA.

    ◊ Set LAST_3G_KEY_IDs to KEY_ID.

  ◊ If the mobile station supports R-UIM, then the mobile shall set USE_UAKs to USE_UAKr; otherwise, the mobile station shall perform the following:

    − Set USE_UAKs to ‘0’.

    − If USE_UAKr is equal to ‘1’, then the mobile station shall send a Mobile Station Reject Order with ORDQ equal to ‘00010100’ (UAK not supported).

  ◊ Set RESTORE_KEY to ‘0’.

  ◊ Send a *Security Mode Completion Order*.
Disable the key setup timer if it is running.

Perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZE, as described in 2.3.12.5.3.

+ Set INTEGRITY_MODE_s to the SDU_INTEGRITY_ALGO provided by the LAC Layer (see [4]).

+ Disable the key setup timer.

+ Send a Security Mode Completion Order.

− If ENC_KEY_SIZE_r is included and not set to reserved value and if current key strength is greater than the desired key strength specified by ENC_KEY_SIZE_r according to table 3.7.4.5-2, mobile station shall perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if KEY_ID is equal to ‘00’ or ‘01’ and is 128 bit if KEY_ID is equal to ‘10’ or ‘11’.

2.6.11.2 Extended Channel Assignment Message

The mobile station shall perform the following procedures in the order listed below.

• If P_REV_IN_USE_s is less than 10, or MSG_INTEGRITY_SUP_s is equal to ‘0’, the mobile station shall perform the following:
  − If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to ENC_KEY_SIZE_r.

  − If C_SIG_ENCRYPT_MODE_r is included, the mobile station shall set C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.

  − If D_SIG_ENCRYPT_MODE_r is included, the mobile station shall perform the following:
    + If D_SIG_ENCRYPT_MODE_r is equal to ‘000’, the mobile station shall set D_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_s; otherwise, the mobile station shall perform the following:
      o Set D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r
Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the most recently generated CMEAKEY associated with the AUTHR of the Origination Message or Page Response Message) and set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$ NEW_SSEQ_H included in the Origination Message or Page Response Message$^{36}$.

- Set ENC_KEY[KEY_ID] to the 128-bit pattern.
- Set INT_KEY[KEY_ID] to the 128-bit pattern.

- If C_SIG_ENCRYPT_MODE_r is included, the mobile station shall set C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.

- If P_REV_IN_USE_s is equal to or greater than 10 and MSG_INTEGRITY_SUP_s is equal to ‘1’, the mobile station shall perform the following:
  - If the LAC Layer indicates that the message does not contain a valid MACI, the mobile station shall set D_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_s;
  - otherwise, the mobile station shall perform the following:
    + Set D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r.
    + If C_SIG_ENCRYPT_MODE_s is included, the mobile station shall set C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.
    + If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to ENC_KEY_SIZE_r.
    + If MSG_INTEGRITY_INFO_r is set to ‘1’, the mobile station shall perform the following:
      - If CHANGE_KEYS_r is equal to ‘0’, the mobile station shall set RESTORE_KEY to ‘0’.
      - If CHANGE_KEYS_r is equal to ‘1’, the mobile station shall perform the following:
        ◊ Set KEY_ID to SDU_KEY_ID provided by the LAC Layer (see [4]).
        ◊ Set TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][KEY_ID] to $1 + 256 \times$ NEW_SSEQ_H included in the Origination Message or Page Response Message.
        ◊ If KEY_ID is equal to ‘00’ or ‘01’, the mobile station shall perform the following:

$^{36}$ If the mobile station is in the Mobile Station Origination Attempt Substate, the NEW_SSEQ_H field shall be the one included in the Origination Message. If the mobile station is in the Page Response Substate, the NEW_SSEQ_H field shall be the one included in the Page Response Message.
− Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the most recently generated CMEAKEY associated with the AUTHR of the Origination Message or Page Response Message).

− Set ENC_KEY[KEY_ID] to the 128-bit pattern.
− Set INT_KEY[KEY_ID] to the 128-bit pattern.
− Set LAST_2G_KEY_IDs to KEY_ID.

◊ If KEY_ID is equal to ‘10’ or ‘11’, the mobile station shall perform the following:
  − Set ENC_KEY[KEY_ID] to the CK generated by AKA.
  − Set INT_KEY[KEY_ID] to the IK generated by AKA.
  − Set LAST_3G_KEY_IDs to KEY_ID

− If the mobile station supports R-UIM, then the mobile shall set USE_UAKs to USE_UAKr; otherwise, the mobile station shall perform the following:
  + Set USE_UAKs to ‘0’.
  + If USE_UAKr is equal to ‘1’, then the mobile station shall send a Mobile Station Reject Order with ORDQ equal to ‘00010100’ (UAK not supported).

◊ Set RESTORE_KEY to ‘0’.
◊ Send a Security Mode Completion Order.
◊ Disable the key setup timer if it is running.
◊ Perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZEr as described in 2.3.12.5.3.

o Set INTEGRITY_MODEs to the SDU_INTEGRITY_ALGO delivered by the LAC Layer.

o—Disable the key setup timer.

o—Send a Security Mode Completion Order.

• If ENC_KEY_SIZEr is included and not set to reserved value and if current key strength is greater than the desired key strength specified by ENC_KEY_SIZEr according to table 3.7.4.5-2, mobile station shall perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZEr as described in 2.3.12.5.4. The current key strength is 64 bit if KEY_ID is equal to ‘00’ or ‘01’ and is 128 bit if KEY_ID is equal to ‘10’ or ‘11’.

2.6.11.3 General Handoff Direction Message and Universal Handoff Direction Message

The mobile station shall perform the following procedures in the order listed below at the
action time of the message.

- If D_SIG_ENCRYPT_MODE_r is included, the mobile station shall set D_SIG_ENCRYPT_MODE_s to D_SIG_ENCRYPT_MODE_r.
- If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to ENC_KEY_SIZE_r.
- If REGISTER_IN_IDLE_r is included, the mobile station shall set REGISTER_IN_IDLE_s to REGISTER_IN_IDLE_r.
- If MSG_INTEGRITY_SUP_r is included, the mobile station shall set MSG_INTEGRITY_SUP_s to MSG_INTEGRITY_SUP_r.
- If GEN_2G_KEY_r is included and is set to ‘1’, the mobile station shall perform the following in the order listed below:
  - Perform the CDMA_3G_2G_Conversion procedure 2G key generation as defined in [3744] for 3G to 2G one-way roaming to generate a new CMEAKEY from CK.
  - Perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZE_r as described in 2.3.12.5.3.
  - Set TX_EXT_SSEQ[0][‘00’] to TX_EXT_SSEQ[0][KEY_ID], TX_EXT_SSEQ[1][‘00’] to TX_EXT_SSEQ[1][KEY_ID], RX_EXT_SSEQ[0][‘00’] to RX_EXT_SSEQ[0][KEY_ID], and RX_EXT_SSEQ[1][‘00’] to RX_EXT_SSEQ[1][KEY_ID].
  - Form a 128-bit pattern by concatenating the resultant CMEAKEY with a copy of itself.
  - Store the 128-bit pattern in ENC_KEY[‘00’] and INT_KEY[‘00’].
  - Set KEY_ID and LAST_2G_KEY_ID_s to ‘00’.
- If ENC_KEY_SIZE_r is included and not set to reserved value and if current key strength is greater than the desired key strength specified by ENC_KEY_SIZE_r according to table 3.7.4.5-2, mobile station shall perform the key strength reduction algorithm procedures to reduce the key strength of ENC_KEY[KEY_ID] according to ENC_KEY_SIZE_r as described in 2.3.12.5.4. The current key strength is 64 bit if KEY_ID is equal to ‘00’ or ‘01’ and is 128 bit if KEY_ID is equal to ‘10’ or ‘11’.

The mobile station shall perform the following procedures in the order listed below.

- Set C_SIG_ENCRYPT_MODE_s to C_SIG_ENCRYPT_MODE_r.
- If ENC_KEY_SIZE_r is included, the mobile station shall set ENC_KEY_SIZE_s to ENC_KEY_SIZE_r.
• If `MSG_INTEGRITY_SUP` is equal to ‘0’, `C_SIG_ENCRYPT_MODE` is not equal to ‘000’ and the mobile sent a `Security Mode Request Message` with the `NEW_SSEQ_H_INCL` field equal to ‘1’ prior to receiving this message when `C_SIG_ENCRYPT_MODE` was not equal to ‘000’, the mobile station shall perform the following:
  - Set `TX_EXT_SSEQ[0][KEY_ID]`, `TX_EXT_SSEQ[1][KEY_ID]`,
    `RX_EXT_SSEQ[0][KEY_ID]`, and `RX_EXT_SSEQ[1][KEY_ID]` to `1 + 256 × NEW_SSEQ_H` included in the `Security Mode Request Message`.

• If `MSG_INTEGRITY_SUP` is equal to ‘1’ and `MSG_INTEGRITY_INFO` is equal to ‘1’, the mobile station shall perform the following:
  - If `CHANGE_KEYS` is equal to ‘0’, the mobile station shall set `RESTORE_KEY` to ‘0’.
  - If `CHANGE_KEYS` is equal to ‘1’, the mobile station shall perform the following:
    + Set `KEY_ID` to `SDU_KEY_ID` provided by the LAC Layer (see [4]).
    + If `KEY_ID` is equal to ‘00’ or ‘01’, the mobile station shall perform the following:
      o Set `TX_EXT_SSEQ[0][KEY_ID]`, `TX_EXT_SSEQ[1][KEY_ID]`,
        `RX_EXT_SSEQ[0][KEY_ID]`, and `RX_EXT_SSEQ[1][KEY_ID]` to `1 + 256 × NEW_SSEQ_H` included in the `Security Mode Request Origination Message` or `Page Response Message`.
      o Form a 128-bit pattern by concatenating the CMEAKEY with a copy of itself (the `most recently generated` CMEAKEY associated with the AUTHR of the `Registration Message`, `Origination Message`, `Page Response Message` or the CMEAKEY associated with the AUTHU generated during Unique Challenge-Response procedure as described in 2.3.12.1.4).
      o Set `ENC_KEY[KEY_ID]` to the 128-bit pattern.
      o Set `INT_KEY[KEY_ID]` to the 128-bit pattern.
      o Set `LAST_2G_KEY_ID` to `KEY_ID`.
    + If `KEY_ID` is equal to ‘10’ or ‘11’, the mobile station shall perform the following:
      o Set `TX_EXT_SSEQ[0][KEY_ID]`, `TX_EXT_SSEQ[1][KEY_ID]`,
        `RX_EXT_SSEQ[0][KEY_ID]`, and `RX_EXT_SSEQ[1][KEY_ID]` to `1 + 256 × NEW_SSEQ_H` included in the `Authentication Response Message` or `Security Mode Request Message`.
      o Set `ENC_KEY[KEY_ID]` to the CK generated by AKA.
      o Set `INT_KEY[KEY_ID]` to the IK generated by AKA.
      o Set `LAST_3G_KEY_ID` to `KEY_ID`. 
If the mobile station supports R-UIM, then the mobile station shall set USE_UAK\_S to USE_UAK\_R; otherwise, the mobile station shall perform the following:

- Set USE_UAK\_S to ‘0’.
- If USE_UAK\_R is equal to ‘1’, then the mobile station shall send a Mobile Station Reject Order with ORDQ equal to ‘00010100’ (UAK not supported).
- Set RESTORE\_KEY to ‘0’.
- Perform the key strength reduction algorithm procedures to reduce the key strength of ENC\_KEY\_KEY\_ID according to ENC\_KEY\_SIZE\_R as described in 2.3.12.5.3.
- Send a Security Mode Completion Order.
- Disable the key setup timer if it is running.
- Set INTEGRITY\_MODE\_S to the SDU\_INTEGRITY\_ALGO delivered by the LAC Layer.
- Send a Security Mode Completion Order.
- If ENC\_KEY\_SIZE\_R is included and not set to reserved value and if current key strength is greater than the desired key strength specified by ENC\_KEY\_SIZE\_R according to table 3.7.4.5-2, mobile station shall perform the key strength reduction algorithm procedures to reduce the key strength of ENC\_KEY\_KEY\_ID according to ENC\_KEY\_SIZE\_R as described in 2.3.12.5.4. The current key strength is 64 bit if 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 field in the Security Mode
Request Message; otherwise, the mobile station shall select a 24-bit number and
deliver this number to the LAC Layer along with the Security Mode Request Message.
The mobile station shall set REG_SECURITY_RESYNC to YES and enter the System
Determination Substate with an encryption/message integrity failure indication if either of
the following conditions are true:
• The mobile station chooses not to perform resynchronization procedure as described
above.
• The mobile station still cannot decrypt message or validate the MACI of message
from the base station after successfully receiving and processing Security Mode
Command Message in response to Security Mode Request Message sent by mobile
station in resynchronization procedure as specified in 2.6.11.4 or 2.6.4.1.14.

2.6.12 Common Procedures for Processing f-csch Messages

This section describes the common procedures for processing messages received on the f-
csch.

37 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.
2.6.12.1 Fast Call Setup Order

The mobile station shall perform the following procedures in the order listed below:

- If RER_MODE_ENABLED is included and equal to '1', and the mobile station supports operation in the radio environment reporting mode, the mobile station shall set RER_MODE_ENABLED to YES, RER_COUNT to 0, and shall perform the following:
  - The mobile station shall disable the radio environment report timer, if enabled.
  - The mobile station shall store the following:
    + Maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in radio environment reporting mode (RER_MAX_NUM_MSG = infinity, if RER_MAX_NUM_MSG_IDX is equal to '111'; otherwise, RER_MAX_NUM_MSG = 2^{RER_MAX_NUM_MSG_IDX}).
    + Maximum number of pilots to maintain in RER_PILOT_LIST (MAX_RER_PILOT_LIST_SIZE = MAX_RER_PILOT_LIST_SIZE).
    + System identification for radio environment reporting mode (RER_SID = SIDs).
    + Network identification for radio environment reporting mode (RER_NID = NIDs).
  - The initial radio environment report pilot list (RER_PILOT_LIST) is generated as follows:
    + If ORDQ is equal to '00000001' and the size of the current RER_PILOT_LIST is greater than MAX_RER_PILOT_LIST_SIZE, the mobile station shall remove all but the first MAX_RER_PILOT_LIST_SIZE pilots from RER_PILOT.List.
    + Otherwise, the initial RER_PILOT_LIST is generated according to the procedures specified in [4].
  - The mobile station shall enable the radio environment report timer with an initial value of infinity if RER_TIME is equal to '111'; otherwise, the mobile station shall enable the radio environment report timer with an initial value of 2^{RER_TIME} seconds if RER_TIME_UNIT is equal to '00', or 2^{RER_TIME} minutes if RER_TIME_UNIT is equal to '01', or 2^{RER_TIME} hours if RER_TIME_UNIT is equal to '10'.
- If RER_MODE_ENABLED is included and equal to '0', and RER_MODE_ENABLED is equal to YES, the mobile station shall perform the following:
  - The mobile station shall disable the radio environment report timer and set RER_MODE_ENABLED to NO.
  - If TKZ_MODE_PENDING is equal to YES, then the mobile station shall set TKZ_MODE_PENDING to NO.
If TKZ_MODE_ENABLED is included and equal to ‘1’, and the mobile station supports tracking zone reporting, the mobile station shall set TKZ_COUNT to 0 and perform the following:

- The mobile station shall disable the tracking zone update timer, if enabled.
- The mobile station shall store the following:
  + Tracking zone list length (TKZ_LIST_LEN_s = TKZ_LIST_LEN_r).
  + Tracking zone timer (TKZ TIMER_s = TKZ TIMER_r).
  + Maximum number of Radio Environment Messages that the mobile station is permitted to transmit while in tracking zone mode (TKZ_MAX_NUM_MSG_s = infinity, if TKZ_MAX_NUM_MSG_IDX_r is equal to ‘111’; otherwise, TKZ_MAX_NUM_MSG_s = 2^TKZ_MAX_NUM_MSG_IDX_r).
  + System identification for tracking zone mode (TKZ_SID_s = SID_s).
  + Network identification for tracking zone mode (TKZ_NID_s = NID_s).
  + Tracking zone update period (TKZ_UPDATE_PRD_s = TKZ_UPDATE_PRD_r).

- If RER_MODE_ENABLED is equal to NO, the mobile station shall set TKZ_MODE_ENABLED to YES; otherwise, the mobile station shall set TKZ_MODE_PENDING to YES.

- If TKZ_MODE_ENABLED is equal to YES, the mobile station shall perform the following:
  + Initialize the tracking zone list (TKZ_LIST) to contain TKZ_IDs.
  + Enable the tracking zone update timer with an initial value of infinity if TKZ_UPDATE_PRD_s is equal to ‘1111’; otherwise, the mobile station shall enable the tracking zone update timer with an initial value of 2^TKZ_UPDATE_PRD_s + 6 seconds.

- If TKZ_MODE_ENABLED is included and equal to ‘0’, and TKZ_MODE_ENABLED is equal to YES, the mobile station shall disable the tracking zone update timer and set TKZ_MODE_ENABLED to NO.

If ORDQ_r is equal to ‘00000000’ (base station request for mobile station to operate in a fast call setup mode), the mobile station shall respond with a Fast Call Setup Order (ORDQ = ‘00000001’) as follows:

- If RSC_MODE_SUPPORTED is equal to ‘1’ and the mobile station accepts operation in the reduced slot cycle mode, the mobile station shall set the RSC_MODE_IND field to ‘1’ and perform the following:
  - Set RSC_MODE_ENABLED to YES.
  - Set the RSC_END_TIME_UNIT and RSC_END_TIME_VALUE fields as specified in 2.7.3.6, and store the system time specified by these fields as RSC_END_TIME. The value of RSC_END_TIME shall be no later than the system time specified by
MAX_RSC_END_TIME_UNIT and MAX_RSC_END_TIME_VALUE.

- Set the RSCI field as specified in 2.7.3.6 and store it as RSCI_s; if RSCI_s is equal to ‘0111’, set SLOTTED_s to NO.

- Set IGNORE_QPCH_s to IGNORE_QPCH_r.

Otherwise, the mobile station shall set the RSC_MODE_IND field to ‘0’.

Otherwise, the mobile station shall set the RSC_MODE_IND field to ‘0’.

If ORDQ_r is equal to ‘00000001’ (base station response to mobile station’s request to operate in a fast call setup mode), the mobile station shall perform the following:

- If RSC_MODE_SUPPORTED_r is equal to ‘1’, the mobile station shall perform the following:
  - Set RSC_END_TIME to the earlier of the current value of RSC_END_TIME, and the system time specified by MAX_RSC_END_TIME_UNIT_r and MAX_RSC_END_TIME_VALUE_r.
  - Set IGNORE_QPCH_s to IGNORE_QPCH_r.

- If RSC_MODE_SUPPORTED_r is equal to ‘0’, the mobile station shall set RSC_MODE_ENABLED to NO and set SLOTTED_s to YES.

2.6.13 Mobile Station BCMC Operation

This section specifies the mobile station requirements for monitoring BCMC flows. If the mobile station supports BCMC, the requirements in this section apply in addition to all other requirements in the Mobile Station Idle State, System Access State, and Mobile Station Control on the Traffic Channel State.

The operations performed by a mobile station that supports BCMC are as follows:

- Procedures for commencing reception of a BCMC flow while in Mobile Station Idle State or System Access State (see 2.6.13.1)

- Procedures while monitoring a Forward Supplemental Channel in Mobile Station Idle State or System Access State (see 2.6.13.2)

- Procedures for BCMC registration while in Mobile Station Idle State or System Access State (see 2.6.13.3)

- Procedures for Idle Handoff while Monitoring Forward Supplemental Channel while in Mobile Station Idle State or System Access State (see 2.6.13.4)

- Procedures for stopping reception of a BCMC flow while in Mobile Station Idle State or System Access State (see 2.6.13.5)

- Procedures for processing BCMC Service Parameters Message Updates while in Mobile Station Idle State or System Access State (see 2.6.13.6)

- Procedures for Browsing BCMC flows while in Mobile Station Idle State or System Access State (see 2.6.13.7)
• Procedures for BCMC Operation while in Mobile Station Control on the Traffic
  Channel State (see 2.6.13.8)
• Procedures for computation of Authorization Signature (see 2.6.13.9)
• Procedures for generating public long code mask for F-SCH Mobile Station Idle State
  or System Access State (see 2.6.13.10)

The following primitives can be received by Layer 3 from the BCMC Service Layer:

• **BCMC-Monitor.Request(BCMC_FLOW_ID, priority)** - to request Layer 3 to commence
  monitoring the specified BCMC flow, where
  – **BCMC_FLOW_ID** identifies the BCMC flow to monitor.
  – **priority** is to be used when current BCMC flow(s) and the new BCMC flow cannot
    both be accommodated.

• **BCMC-Browse.Request** - to request Layer 3 to report all BCMC flows currently
  available.

• **BCMC-Stop-Monitor.Request(BCMC_FLOW_ID)** - to request Layer 3 to stop monitoring
  the specified BCMC flow, where
  – **BCMC_FLOW_ID** identifies the BCMC flow to stop monitoring.

The following primitives can be sent by Layer 3 to the BCMC Service Layer:

• **BCMC-Monitor.Response(BCMC_FLOW_ID, result, cause, reason_ind)** – response to
  the BCMC Service Layer for a request to monitor a BCMC flow or due to mobility,
  where
  – **BCMC_FLOW_ID** identifies the requested BCMC flow.
  – **result** indicates the result of the request and can be one of following:
    + SUCCESS indicates the request was successful
    + FAILURE indicates the request was unsuccessful
  – **cause** indicates the reason for failure when the request was unsuccessful and
    can be one of the following
    + FLOW_NOT_AVAILABLE which indicates the requested BCMC flow is not
      available in this base station
    + CANNOT.Accommodate which indicates the requested BCMC flow cannot
      be monitored due to monitoring other higher priority BCMC flow(s)
    + UNSUPPORTED_BEARER_CONFIG which indicates that the requested

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38 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.
BCMC flow cannot be monitored due to a physical channel capability mismatch

+ FLOW_NOT_TRANSMITTED which indicates that the requested BCMC flow is not being transmitted by this base station although it is configured for transmission.

+ FLOW_TRANSMITTED_IN_IDLE which indicates that the requested BCMC flow is being transmitted by this base station in idle state.

+ CALL_RELEASED which indicates that the call was released.

- reason_ind is included when the request is unsuccessful and can be one of the following

  + CURRENT_SYS to indicate it occurred in current system
  + MOBILITY to indicate it occurred due to idle handoff

• BCMC-Browse.Response(result, {BCMC_FLOW_IDs}) - response to the BCMC Service Layer for a request to browse for BCMC flows, where

  - result indicates the result of the request and can be one of following:

    + SUCCESS indicates current sector is configured to transmit one or more BCMC flows and this list of BCMC flows is passed as {BCMC_FLOW_IDs}
    + FAILURE indicates current sector is not configured to transmit any BCMC flows.

The following primitives are sent by Layer 3 to Multiplex sublayer:

• BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID) - to request the Multiplex sublayer to start delivering the data blocks corresponding to the specified BCMC flow, where

  - FSCH_ID identifies the physical channel on which this BCMC flow is being carried
  - BSR_ID identifies the BCMC Service Reference Identifier being used by this BCMC flow on this physical channel

• BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID) - to request the Multiplex sublayer to stop delivering the data blocks corresponding to the specified BCMC flow, where

  - FSCH_ID identifies the physical channel on which this BCMC flow is being carried
  - BSR_ID identifies the BCMC Service Reference Identifier being used by this BCMC flow on this physical channel

If the mobile station is currently not monitoring a BCMC flow, the mobile station shall perform the following:

• If Layer 3 receives a BCMC-Monitor.Request(BCMC_FLOW_ID, priority) from the BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to commence reception of the BCMC flow.
• If Layer 3 receives a **BCMC-Browse.Request** from the BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.7 to determine which BCMC flows are currently available.

2.6.13.1 Procedures for commencing reception of a BCMC Flow

If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow (see 2.6.13), the mobile station shall perform the following procedures in the order specified:

• If **SENDING_BSPMs** equals ‘0’, Layer 3 shall send a **BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)** to the BCMC Service Layer and shall not perform the remaining procedures in this section.

• If the stored **BCMC Service Parameters Message**-parameters do not include this BCMC_FLOW_ID (See section 2.6.13.11) and **FULL_BSPM_INDs** = ‘0’, the mobile station shall monitor the overhead channel to receive the **BCMC Service Parameters Message** as specified in 2.6.2.2.18 until its stored **BCMC Service Parameters Message** parameters include this BCMC_FLOW_ID, or until **FULL_BSPM_INDs** = ‘1’

• The mobile station shall perform the following:
  - If **FLOW_INFO_ON_OTHER_FREQ** equals ‘1’, the mobile station shall perform the following:
    + If **BCMC_FLOW_LIST[i].FREQ_CHG_REG_REQUIREDs** equals ‘1’, the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate change in the frequency where the mobile station will reside to receive the **BCMC Service Parameters Message**.

    + The mobile station shall tune to the **frequency specified by BSPM_CDMA_FREQ and BSPM_BAND_CLASS**; the mobile station should tune to the new frequency only after performing BCMC registration specified above (if any). If **FREQ_CHG_REG_TIMERs** is not equal to NULL and the **BCMC** frequency registration timer for the previous frequency is not enabled or has expired, the mobile station shall start the **BCMC** frequency registration timer for the previous frequency with a value of **FREQ_CHG_REG_TIMERs**.

    + The mobile station shall monitor the overhead channel to receive the **BCMC Service Parameters Message**-as specified in 2.6.2.2.18, and shall perform the following:

      o If **SENDING_BSPMs** equals ‘0’, Layer 3 shall send a **BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)** to the BCMC Service Layer and shall not perform the remaining procedures in this section.
Otherwise, the mobile station shall perform the remaining procedures in this section.

- If the stored BCMC Service Parameters Message parameters do not include this BCMC_FLOW_ID (See section 2.6.13.11) and AUTO_REQ_ALLOWED_INDs equals '0', Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS) to the BCMC Service Layer and shall not perform the remaining procedures in this section.

- If the BCMC Service Parameters Message includes the BCMC flow indicated by BCMC_FLOW_ID, BCMC_FLOW_ON_IND corresponding to this BCMC flow equals '1', and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals '1', the mobile station shall either perform Mobile Station Origination Operation as specified in 2.6.2.5 to request this flow in the Mobile Station Control on the Traffic Channel State or monitor the flow in the Mobile Station Idle State as specified in 2.6.13.25.

- If the stored BCMC Service Parameters Message does not include this BCMC_FLOW_ID (See section 2.6.13.11), AUTO_REQ_ALLOWED_INDs equals '1', and BCMC_ON_TRAFFIC_SUPs equals '1'; or the BCMC Service Parameters Message includes the BCMC flow indicated by BCMC_FLOW_ID, BCMC_FLOW_ON_IND corresponding to this BCMC flow equals '0', and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals '1', the mobile station shall perform the following:
  + The mobile station shall perform Mobile Station Origination Operation as specified in 2.6.2.5 to request transmission of this BCMC flow. The mobile station shall include the BCMC_FLOW_ID (See section 2.6.13.11) in the Origination Message.

- If the stored BCMC Service Parameters Message -parameters do not include this BCMC_FLOW_ID (See section 2.6.13.11), AUTO_REQ_ALLOWED_INDs equals '1', and BCMC_ON_TRAFFIC_SUPs equals '0'; or the stored BCMC Service Parameters Message -parameters include the BCMC flow indicated by BCMC_FLOW_ID, BCMC_FLOW_ON_IND corresponding to this BCMC flow equals '0', and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals '0', the mobile station shall perform the following:
  + The mobile station shall send a Registration Message perform BCMC registration procedures as specified in 2.6.13.3 to request transmission of this BCMC flow. Upon receiving conformation of delivery of the Registration Message, the mobile station shall enable the BCMC wait timer with a value of BSPM_WAIT_TIME seconds and shall wait for an updated BCMC Service Parameters Message.

  + If the BCMC wait timer expires, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_TRANSMITTED, reason_ind = CURRENT_SYS) to the BCMC Service Layer, and shall not perform the remaining procedures in this
If the mobile station receives a *BCMC Order* from the base station prior to the expiration of the BCMC wait timer, the mobile station shall perform the following:

- If `CLEAR_ALL_RETRY_DELAYr` equals ‘1’, the mobile station shall delete the currently stored BCMC Retry Delay List.
- If `CLEAR_RETRY_DELAYr` equals ‘1’, the mobile station shall delete the entry in the `BCMC_RETRY_DELAY_LISTs[i]` corresponding to `BCMC_FLOW_ID` (See section 2.6.13.11) in this message.
- If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0000’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer, and shall not perform the remaining procedures in this section for the corresponding `BCMC_FLOW_ID`.
- If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0001’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_TRANSMITTED, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer, and shall not perform the remaining procedures in this section for the corresponding `BCMC_FLOW_ID`.
- If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0011’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = AUTHORIZATION_FAILURE, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
- If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0100’, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = RETRY_LATER, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
- If `ALL_BCMC_REASONr` or `BCMC_REASONr` equals ‘0101’, the mobile station shall perform the following:
  - Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = RETRY_LATER, reason_ind = CURRENT_SYS)` for each of the corresponding `BCMC_FLOW_ID` to the BCMC Service Layer.
  - For each of the corresponding `BCMC_FLOW_ID`, if there is a `BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID` which is same as
BCMC_FLOW_ID (See section 2.6.13.11), the mobile station shall set
BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY to current system
time plus ALL_BCMC_RETRY_DELAY \div BCMC_RETRY_DELAY; otherwise, Layer 3 shall add new BCMC_RETRY_DELAY_LISTs[i] to
the BCMC Retry Delay List and shall set
BCMC_RETRY_DELAY_LISTs[i].BCMC_FLOW_ID to BCMC_FLOW_ID,
BCMC_RETRY_DELAY_LISTs[i].RETRY_DELAY to current system
time plus ALL_BCMC_RETRY_DELAY \div BCMC_RETRY_DELAY.

◊ The mobile station shall not perform the remaining procedures in
this section for the corresponding BCMC_FLOW_ID.

• If the BCMC flow corresponding to this BCMC_FLOW_ID (See section
2.6.13.11) is included in the stored BCMC Service Parameters Message
parameters and BCMC_FLOW_ON_IND corresponding to this BCMC flow
changes to ‘1’ prior to the expiration of the BCMC wait timer, the mobile
station shall disable the BCMC wait timer and perform the remaining
procedures in this section.

• The mobile station shall determine the Forward Supplemental Channel
 corresponding to this BCMC_FLOW_ID from BCMC_FLOW_LISTs. If the BCMC flow
 corresponding to this BCMC_FLOW_ID is configured for transmission in the mobile
 station’s hash-to-frequency, the mobile station shall choose the mobile station’s
 hash-to-frequency; otherwise, the mobile station shall use the hash algorithm
 specified in 2.6.7.1 and the number of CDMA channels on which this
 BCMC_FLOW_ID is configured for transmission to choose the frequency to monitor.

The mobile station shall perform the following:

– The mobile station shall determine the Band Class (FSCH_BAND_CLASS) and
 the CDMA channel (FSCH_FREQ) corresponding to the selected Forward
 Supplemental Channel from FBSCH_LISTs. If FSCH_BAND_CLASS is not equal
to CDMA_BANDs or FSCH_FREQ is not equal to CDMACHs and the mobile
 station is currently monitoring one or more BCMC flows in the current
 frequency that have a higher priority than the requested BCMC flow, Layer 3
 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause=
 CANNOT_ACCOMMODATE, reason_ind = CURRENT_SYS) to the BCMC Service
 Layer, and shall not perform the remaining procedures in this section.

– If the mobile station will not be able to monitor the Forward Supplemental
 Channel on which the BCMC flow is being transmitted due to a capability
 mismatch, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result
 = FAILURE, cause = UNSUPPORTED_BEARER_CONFIG, reason_ind =
 CURRENT_SYS) to the BCMC Service Layer, and shall not perform the
 remaining procedures in this section.

• If FSCH_BAND_CLASS is not equal to CDMA_BANDs or FSCH_FREQ is not equal to
 CDMACHs, the mobile station shall perform the following:

– If BCMC_FLOW_LISTs[i].FREQ_CHG_REG_REQUIREDs equals ‘1’, the mobile
 station shall perform BCMC registration procedures as specified in 2.6.13.3 to
indicate change in the frequency where the mobile station will reside while monitoring this BCMC flow.

- The mobile station shall tune to FSCH_FREQ in FSCH_BAND_CLASS; the mobile station should tune to the new frequency only after performing BCMC registration specified above (if any). If FREQ_CHG_REG_TIMERs is not equal to NULL and the BCMC frequency registration timer for the previous frequency is not enabled or has expired, the mobile station shall start the BCMC frequency registration timer for the previous frequency with a value of FREQ_CHG_REG_TIMERs.

- For each BCMC flow in current frequency that can no longer be monitored in new frequency, the mobile station shall perform the following:
  + Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = CANNOT_ACcomMODATE, reason_ind = CURRENT_SYS) to the BCMC Service Layer.
  + Layer 3 shall send a BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in BCMC_FLOW_LISTs corresponding to this BCMC_FLOW_ID.

  • The mobile station shall set the Forward Supplemental Channel parameters as given in FBSCH_LISTs and shall start to monitor the Forward Supplemental Channel.
  • The mobile station shall send a BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in BCMC_FLOW_LISTs corresponding to the logical-to-physical mapping selected for this BCMC_FLOW_ID.
  • The mobile station shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=SUCCESS) to the BCMC Service Layer.
  • The mobile station shall perform the procedures as specified in 2.6.13.2 while monitoring the Forward Supplemental Channel.

2.6.13.2 Procedures while monitoring an Forward Supplemental Channel

While monitoring a Forward Supplemental Channel, the mobile station shall perform the following:

  • The mobile station shall determine the hash-to frequency based on received CDMA Channel List Message or the Extended CDMA Channel List Message but shall not tune to the hash-to frequency. If BCMC_FLOW_LISTs[FREQ_CHG_REG_REQUIREDs] equals ‘1’ and the mobile station determines that the hash-to-frequency has changed and the mobile station currently resides in the previous hash-to-frequency, the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate current frequency.
• If the mobile station performs an idle handoff (see 2.6.2.1.4), the mobile station shall perform the procedures as specified in 2.6.13.4. If the idle handoff results in the mobile station residing in a frequency other than the frequency prior to the idle handoff, the mobile station shall perform the following:

  - If BCMC_FLOW_LIST[i].FREQ_CHG_REG_REQUIRED equals ‘1’, the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate change in the frequency where the mobile station will reside while monitoring this BCMC flow. If FREQ_CHG_REG_TIMER is not equal to NULL and the BCMC frequency registration timer for the previous frequency is not enabled or is enabled and has not expired, the mobile station shall start the BCMC frequency registration timer for the previous frequency with a value of FREQ_CHG_REG_TIMER.

• If the BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG is equal to ‘1’ for any BCMC flow being monitored by the mobile station, then the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 if any of the following conditions are true:

  - The mobile station determines that BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG was set to ‘0’ since the last time the mobile station initiated registration procedures due to BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG.

  - The mobile station cannot determine that BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG was not set to ‘0’ since the last time the mobile station initiated registration procedures due to BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG.

• If Layer 3 receives a BCMC-Stop-Monitor.Request(BCMC_FLOW_ID) from the BCMC Service Layer, Layer 3 shall stop monitoring this BCMC flow as specified in 2.6.13.5.

• If Layer 3 receives a BCMC-Monitor.Request(BCMC_FLOW_ID, priority) from the BCMC Service Layer, Layer 3 shall perform the procedures specified in 2.6.13.1 to commence reception of the BCMC flow.

• If the mobile station determines that the content of the BCMC Service Parameters Message has changed, Layer 3 shall perform the procedures as specified in 2.6.13.6.

  - If the BCMC frequency registration timer for the frequency where the mobile station is currently residing expires, the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate current frequency.

2.6.13.3 Procedures for BCMC Registration

If the mobile station is to perform BCMC registration due to the REGISTRATION_REQ_FLAG indicator being set, the mobile station shall perform the following:
• If this is the first time BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG is set to ‘1’ for this BCMC flow received after an idle handoff, the mobile station shall perform a BCMC registration immediately.

• Otherwise, if the BCMC registration required timer \(\text{RegistrationRequiredTimer}\) is not enabled, the mobile station shall perform the following:
  
  – Enable the BCMC registration required timer \(\text{RegistrationRequiredTimer}\) with the initial value set to a pseudorandom value between 0 and \(\text{REGISTRATION_REQ_TIMER_MAX}\).
  
  – Subsequently, if the BCMC_FLOW_LIST[i].REGISTRATION_REQ_FLAG for all BCMC flows being monitored by the mobile station are equal to ‘0’, the mobile station shall disable the BCMC registration required timer \(\text{RegistrationRequiredTimer}\).
  
  – Otherwise, when the BCMC registration required timer \(\text{RegistrationRequiredTimer}\) expires, the mobile station shall perform a BCMC registration.

If the mobile station is to perform BCMC registration due to a frequency change, layer 3 shall perform the following:

• If the BCMC frequency registration timer for this target frequency is enabled and has not expired, the mobile station shall not perform the remaining procedures in this section.

• Otherwise, the mobile station shall enter the System Access State with a registration indication.

2.6.13.4 Procedures for Idle Handoff while Monitoring Forward Supplemental Channel

While monitoring a Forward Supplemental Channel, if the conditions for performing an idle handoff are detected (see 2.6.2.1.4), the mobile station shall perform an idle handoff as specified in this section.

When the mobile station performs an idle handoff the BCMC registration required timer \(\text{RegistrationRequiredTimer}\) shall be disabled.

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 new base station is listed in BCMC_FLOW_LISTs[\text{i}].LPM_INFO[j].NGHBR_INFO[k]
record of the current base station, the mobile station shall use the corresponding 3-bit
NGHBR_BCMC_CONFIG field to determine the actions required to monitor the Forward
Supplemental Channel of the new base station. If the new base station is not listed in
BCMC_FLOW_LISTs[\text{i}].LPM_INFO[j].NGHBR_INFO[k] record for the current base station, the
mobile station shall determine the actions required to monitor the Forward Supplemental
Channel of the new base station using the same procedure as for a pilot in
BCMC_FLOW_LISTs[\text{i}].LPM_INFO[j].NGHBR_INFO[k] record with the
NGHBR_BCMC_CONFIG field set to ‘000’.

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 has not received parameters for the Primary Broadcast
  Control Channel of the neighbor base station from the BCMC System
  ParametersMessage, 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.
  - Upon entering the Mobile Station Idle State of the new system, the mobile
    station shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
  - The mobile station shall not perform any of the remaining procedures in this
    section.

If the NGHBR_CONFIG field is ‘011’, the mobile station shall perform the following:

- Enter the System Determination Substate of the Mobile Station Initialization State
  with a new system indication (see 2.6.1.1)
- Upon entering the Mobile Station Idle State of the new system, the mobile station
  shall resume monitoring the BCMC flow(s) as specified in 2.6.13.6.
- The mobile station shall not perform any of the remaining procedures in this
  section.

If the NGHBR_BCMC_CONFIG field is ‘000’ or ‘011’, the mobile station shall perform the
following:

- The mobile station shall perform idle handoff according to the procedures in 2.6.2.1.4.1 just as if the mobile station is currently not monitoring a Forward Supplemental Channel.
- Upon completing the idle handoff, the mobile station shall resume monitoring the BCMC flow as specified in 2.6.13.6.

If the NGHBR_BCMC_CONFIG field is ‘001’ or ‘010’, the mobile station shall perform the following:

- If the mobile station has monitored the Paging Channel before the idle handoff, or the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff and NGHBR_CONFIG field is set to ‘001’, the mobile station shall perform the following:
  - The mobile station shall set ACC_MSG_SEQs and CURR_ACC_MSG_SEQ to NULL and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Paging Channel.
  - If the stored information for any of the Paging Channels on the associated NGHBR_FSCH_FREQ of the new base station is current, the mobile station shall perform the following:
    + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Paging Channel number in the range 1 to PAGE_CHANs, where PAGE_CHANs is the value stored for the Paging Channel whose stored information is current. The mobile station shall store the new Paging Channel number as PAGECHs. The mobile station shall perform the following:
      - If the mobile station has not stored configuration parameters for the new Paging Channel, or if the stored parameters are not current (see 2.6.2.2), the mobile station shall set CONFIG_MSG_SEQs, SYS_PAR_MSG_SEQs, NGHBR_LST_MSG_SEQs, EXT_NGHBR_LST_MSG_SEQs, GEN_NGHBR_LST_MSG_SEQs, CHAN_LST_MSG_SEQs, EXT_SYS_PAR_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, PRI_NGHBR_LST_MSG_SEQs, and EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, and GLOB_SERV_REDIR_MSG_SEQs to NULL.
      - If the stored information for the new Paging Channel is current, the mobile station shall set CONFIG_MSG_SEQs to the stored information for the new Paging Channel and set NGHBR_REC_LIST, FBSCH_LISTs, and BCMC_FLOW_LISTs to the stored information for the new Paging Channel.
    + If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff, the mobile station shall set PRATs = ‘00’.
+ If CDMACH is not equal to NGHBR_FSCH_FREQ, the mobile station shall set CDMACH to NGHBR_FSCH_FREQ and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Paging Channel and the Forward Supplemental Channel of the new base station.

− If none of the Paging Channel stored information on the associated NGHBR_FSCH_FREQ of the new base station are current, the mobile station shall perform the following:
  + The mobile station shall set CONFIG_MSG_SEQ, SYS_PAR_MSG_SEQ, NGHBR_LST_MSG_SEQ, EXT_NGHBR_LST_MSG_SEQ, GEN_NGHBR_LST_MSG_SEQ, CHAN_LST_MSG_SEQ, EXT_SYS_PAR_MSG_SEQ, GLOB_SERV_REDIR_MSG_SEQ, EXT_GLOB_SERV_REDIR_MSG_SEQ, EXT_CHAN_LST_MSG_SEQ, USER_ZONE_ID_MSG_SEQ, and PRI_NGHBR_LST_MSG_SEQ to NULL.
  + If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff, the mobile station shall set PRATs = ‘00’.
  + The mobile station shall set PAGE_CHAN to ‘1’ and PAGECH to the Primary Paging Channel. If CDMACH is not equal to NGHBR_FSCH_FREQ, the mobile station shall set CDMACH to NGHBR_FSCH_FREQ and tune to the new CDMA Channel. The mobile station shall begin monitoring the Primary Paging Channel and Forward Supplemental Channel of the new base station.
  − If PACAs is equal to enabled, the mobile station shall enter the Update Overhead Information Substate of the System Access State (see 2.6.3) with an origination indication within T33m seconds to re-originate the PACA call using the new base station.

• If the mobile station has monitored the Forward Common Control Channel/Primary Broadcast Control Channel before the idle handoff or if the mobile station has monitored the Paging Channel before the idle handoff and selected a neighbor base station for idle handoff which supports Primary Broadcast Control Channel and the mobile station has received parameters for the Primary Broadcast Control Channel of the neighbor base station from the BCMC System Parameters Message, the mobile station shall perform the following:
  − The mobile station shall set ACC_MSG_SEQ and CURR_ACC_MSG_SEQ to NULL and shall set PILOT_PNs to the pilot offset index of the base station transmitting the new Forward Common Control Channel/Primary Broadcast Control Channel.
  − If the stored information for any of the Forward Common Control Channels and Primary Broadcast Control Channel on the associated NGHBR_FSCH_FREQ of the new base station is current, the mobile station shall perform the following:
    + The mobile station shall use the hash algorithm specified in 2.6.7.1 to select a new Forward Common Control Channel number in the range 1 to
NUM_FCCCHs, where NUM_FCCCHs is the stored value. The mobile station shall store the new Forward Common Control Channel number as FCCCH_IDs. The mobile station shall perform the following:

- If the mobile station has not stored configuration parameters for the new Forward Common Control Channel and Primary Broadcast Control Channel, or if the stored parameters are not current (see 2.6.2.2), the mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

- If the stored information for the new Forward Common Control Channel and Primary Broadcast Control Channel is current, the mobile station shall set CONFIG_MSG_SEQs to the stored information for the new Forward Common Control Channel and Primary Broadcast Control Channel and set NGHBR_REC_LIST to the stored information for the new Forward Common Control Channel and Primary Broadcast Control Channel.

  + If CDMACHs is not equal to NGHBR_FSCH_FREQ, the mobile station shall set CDMACHs to NGHBR_FSCH_FREQ and tune to the new CDMA Channel. The mobile station shall begin monitoring the new Forward Common Control Channel/Primary Broadcast Control Channel and the Forward Supplemental Channel of the new base station.

  - If none of the Forward Common Control Channel and Primary Broadcast Control Channel stored information on the associated NGHBR_FSCH_FREQ of the new base station are current, the mobile station shall perform the following:

    + The mobile station shall set the mobile station shall set CONFIG_MSG_SEQs, A41_SYS_PAR_MSG_SEQs, UNI_NGHBR_LST_MSG_SEQs, MC_RR_PAR_MSG_SEQs, EXT_GLOB_SERV_REDIR_MSG_SEQs, EXT_CHAN_LST_MSG_SEQs, USER_ZONE_ID_MSG_SEQs, and PRI_NGHBR_LST_MSG_SEQs to NULL.

    + If CDMACHs is not equal to NGHBR_FSCH_FREQ, the mobile station shall set CDMACHs to NGHBR_FSCH_FREQ and tune to the new CDMA Channel. The mobile station shall begin monitoring the Primary Broadcast Control Channel of the new base station, using the same rate, code rate, and code channel. The mobile station shall begin monitoring the Forward Supplemental Channel of the new base station.

  - If PACA is equal to enabled, the mobile station shall enter the *Update Overhead Information Substate* of the *System Access State* (see 2.6.3) with an origination indication within T33m seconds to re-originate the PACA call using the new base station.
2.6.13.5 Procedures for stopping reception of a BCMC Flow

If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow given by BCMC_FLOW_ID, the mobile station perform the following:

• Layer 3 shall send a BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in BCMC_FLOW_LISTs corresponding to this BCMC_FLOW_ID.

• If this is the only BCMC flow being monitored on this Forward Supplemental Channel, the mobile station shall stop monitoring this Forward Supplemental Channel.

• If this is the only BCMC flow being monitored on this frequency, the mobile station shall return to the hash-to frequency as follows:
  
  − If the mobile station is currently monitoring the Paging Channel, the mobile station shall monitor the CDMA Channel List Message or Extended CDMA Channel List Message to determine the hash-to frequency as specified in 2.6.2.2.4 and 2.6.2.2.12.1 respectively.

  − − If the mobile station is currently monitoring the Primary Broadcast Control Channel/Forward Common Control Channel, the mobile station shall monitor the Extended CDMA Channel List Message to determine the hash-to frequency as specified in 2.6.2.2.12.2.

  − − − If this results in the mobile station residing in a frequency other than the frequency prior to stopping BCMC flow reception, the mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate change in the frequency.

2.6.13.6 Procedures for Handling BCMC Service Parameters Message Updates

If the mobile station determines that the contents of the BCMC Service Parameters Message has changed or that the BCMC Service Parameters Message is not being transmitted anymore, the mobile station shall perform the following:

• If SENDING_BSPMs equals ‘0’, the mobile station shall perform the following:

  − For each BCMC flow currently being monitored, Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = FLOW_NOT_AVAILABLE, reason_ind) to the BCMC Service Layer, where reason_ind is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise.

  − For each BCMC flow currently being monitored, Layer 3 shall send a BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in the previous BCMC_FLOW_LIST corresponding to this BCMC_FLOW_ID.

  − The mobile station shall not perform the remaining procedures in this section.
• For each BCMC flow that the mobile station is currently monitoring, if the mobile station determines that the base station is not transmitting this BCMC flow anymore, the mobile station shall perform the following:

  – Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause=FLOW_NOT_AVAILABLE, reason_ind)` to the BCMC Service Layer, where `reason_ind` is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise, and shall stop monitoring this BCMC flow as specified in 2.6.13.5.

• For each BCMC flow that the mobile station is currently monitoring, if the mobile station determines that this BCMC flow is being transmitted on a different Forward Supplemental Channel than currently transmitted, the mobile station shall perform the following:

  – If more than one BCMC flows that the mobile station is currently monitoring are still available, then the mobile station shall choose the frequency based on the BCMC flow with the highest priority; if the BCMC flow is configured for transmission in the mobile station’s hash-to-frequency, the mobile station shall choose the mobile station’s hash-to-frequency; otherwise, the mobile station shall use the hash algorithm specified in 2.6.7.1 and the number of CDMA channels on which this BCMC_FLOW_ID is configured for transmission to choose the frequency to monitor.

  – Layer 3 shall send a `BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID)` to the multiplex sublayer where `FSCH_ID` and `BSR_ID` are the values in the previous BCMC_FLOW_LIST corresponding to this BCMC_FLOW_ID.

  – The mobile station shall determine the band class (FSCH_BAND_CLASS) and CDMA channel (FSCH_FREQ) corresponding to the selected Forward Supplemental Channel from FBSCH_LISTs. If FSCH_BAND_CLASS is not equal to CDMA_BANDs or FSCH_FREQ is not equal to CDMACHs and the mobile station is currently monitoring one or more BCMC flows in the current frequency that have a higher priority than this BCMC flow, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = CANNOT_ACCOMMODATE, reason_ind)` to the BCMC Service Layer, where `reason_ind` is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise, and shall not perform the remaining procedures in this section.

  – If the mobile station will not be able to monitor the Forward Supplemental Channel on which the BCMC flow is being transmitted due to a capability mismatch, Layer 3 shall send a `BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = UNSUPPORTED_BEARER_CONFIG, reason_ind)` to the BCMC Service Layer, where `reason_ind` is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise, and shall not perform the remaining procedures in this section for this BCMC flow.

  – If FSCH_BAND_CLASS is not equal to CDMA_BANDs or FSCH_FREQ is not equal to CDMACHs, the mobile station shall perform the following:

    + If `BCMC_FLOW_LISTs[i].FREQ_CHG_REG_REQUIRED` equals ‘1’, the
mobile station shall perform BCMC registration procedures as specified in 2.6.13.3 to indicate change in the frequency where the mobile station will reside while monitoring this BCMC flow.

+ The mobile station shall tune to FSCH_FREQ in FSCH_BAND_CLASS; the mobile station should tune to the new frequency only after performing BCMC registration (if any) specified above. If FREQ_CHAN_REG_TIMERs is not equal to NULL and the BCMC frequency registration timer for the previous frequency is not enabled or is enabled and has not expired, the mobile station shall start the BCMC frequency registration timer for the previous frequency with a value of FREQ_CHAN_REG_TIMERs.

+ For each BCMC flow in current frequency that can no longer be monitored in new frequency, the mobile station shall perform the following:
  o Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause= CANNOT_ACCOMMODATE, reason_ind) to the BCMC Service Layer, where reason_ind is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise.
  o Layer 3 shall send a BMAC-Stop-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in BCMC_FLOW_LISTs corresponding to this BCMC_FLOW_ID.

– The mobile station shall set the Forward Supplemental Channel parameters as given in FBSCH_LISTs and shall start to monitor the Forward Supplemental Channel.

– The mobile station shall send a BMAC-Start-Deliver.Request(FSCH_ID, BSR_ID) to the multiplex sublayer where FSCH_ID and BSR_ID are the values in BCMC_FLOW_LISTs corresponding to the logical-to-physical mapping selected for this BCMC_FLOW_ID.

• For any BCMC flow that the mobile station is currently monitoring, if the mobile station determines to monitor this BCMC flow on a traffic channel (e.g., BCMC_FLOW_ON_IND corresponding to this BCMC flow equals ‘0’, and BCMC_FLOW_ON_TRAFFIC_IND corresponding to this BCMC flow equals ‘1’), the mobile station shall perform the following:
  – Layer 3 shall send a BCMC-Monitor.Response(BCMC_FLOW_ID, result=FAILURE, cause= CANNOT_ACCOMMODATE, reason_ind) to the BCMC Service Layer, where reason_ind is set to MOBILITY if this is due to idle handoff or to CURRENT_SYS otherwise, and shall stop monitoring this BCMC flow as specified in 2.6.13.5.
  – The mobile station shall perform Mobile Station Origination Operation as specified in 2.6.2.5 to request monitoring of this BCMC flow on the Traffic Channel Substate. The mobile station shall include the BCMC_FLOW_ID (See section 2.6.13.11) in the Origination Message.
2.6.13.7 Procedures for Browsing BCMC Flows

If Layer 3 is requested by the BCMC Service Layer to report list of all available BCMC flows (see 2.6.13), the mobile station shall perform the following procedures in the order specified:

- If SENDING_BSPM equals ‘0’, Layer 3 shall send a \textit{BCMC-Browse.Response(result=FAILURE)} to the BCMC Service Layer.
- Otherwise, if FULL_BSPM_IND equals ‘0’, the mobile station shall monitor the overhead channel to receive the \textit{BCMC Service Parameters Message} as specified in 2.6.2.2.18 or until FULL_BSPM_IND equals ‘1’, and shall perform the following:
  - Layer 3 shall send a \textit{BCMC-Browse.Response(result = SUCCESS, \{BCMC_FLOW_IDs\}} to the BCMC Service Layer where \{BCMC_FLOW_IDs\} is a list of all unique BCMC flows configured for transmission in this sector as determined from the stored \textit{BCMC Service Parameters Message} parameters.

2.6.13.8 Procedures for BCMC Operation while on Traffic Channel

This section specifies the mobile station requirements for BCMC feature while in the Mobile Station Control on the Traffic Channel State.

If Layer 3 is requested by the BCMC Service Layer to commence reception of a BCMC flow (see 2.6.13), the mobile station shall send \textit{Enhanced Origination Message} as specified in 2.6.4.3.

If Layer 3 is requested by the BCMC Service Layer to stop monitoring a BCMC flow (see 2.6.13), the mobile station shall release a BCMC call as specified in 2.6.4.3.

If the mobile station is monitoring BCMC flow on traffic channel, when traffic channel is released and the BCMC Service Layer has not requested to stop monitoring the BCMC flow, the mobile station shall either continue monitoring the BCMC flow in idle state (see 2.6.13) or the Layer 3 shall send a \textit{BCMC-Monitor.Response(BCMC_FLOW_ID, result = FAILURE, cause = CALL_RELEASED)} to the BCMC Service Layer.

2.6.13.9 Procedures for Computation of Authorization Signature

For each BCMC flow included in the \textit{Registration Message}, \textit{Origination Message}, \textit{Page Response Message} and \textit{Enhanced Origination Message}, if BCMC_FLOW_LIST[i].AUTH_SIGNATURE_REQ_IND equals ‘1’, then the mobile station shall compute the Authorization Signature value for the BCMC flow as follows:

- The mobile station shall create an input working buffer to EHMACS_HA as shown in Table 2.6.13.9 1.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TIME_STAMP_LONG</td>
<td>TIME_STAMP_LONG_LENGTHs</td>
</tr>
</tbody>
</table>

Table 2.6.13.9-1. Subfields of the input working buffer
The mobile station shall set this field to the LSBs of the CDMA System Time, in units of $2^{\text{TIME}_\text{UNIT}}$ slots, corresponding to a time that is not later than when the Physical Layer will begin transmission of the Registration Message, Origination Message, Page Response Message, or Enhanced Origination Message that will carry this Authorization Signature. The mobile station shall use the same TIME_STAMP_LONG field for computing all Authorization Signature parameters included in a Registration Message, Origination Message, Page Response Message or a 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.

The mobile station shall set the AUTH_SIGNATURE field to the 32 least significant bits of the Message Digest computed MAC value obtained in the previous step.

2.6.13.10 Procedures for Public Long Code Mask schemes

2.6.13.10.1 Procedures for BCMC Flow ID based autonomous PLCM generation

The Public Long Code Mask of the Forward Supplemental Channel to be received in idle 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.
  - The 16 MSBs shall be set to sixteen ‘0’s.
  - The 16 LSBs shall be set to the BCMC_FLOW_ID.
• 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 24bits, FIRST_FLOW_ID shall be set as follows.
  - The 8 MSBs shall be set to eight '0's.
  - The 24 LSBs shall be set to the BCMC_FLOW_ID.

• 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 32bits, FIRST_FLOW_ID shall be set to the BCMC_FLOW_ID.

• Set the FIRST_BSR_ID to the BSR_ID corresponding to the FIRST_FLOW_ID in the BCMC Service Parameters Message multiplexed on this Forward Supplemental Channel.

• PLCM_42 is set as follows.
  - Bits P41 through P35 shall be set to '110001100110111000110011100'.
  - Bits P34 through P3 shall be set to FIRST_FLOW_ID.
  - Bits P2 through P0 shall be set to FIRST_BSR_ID.

2.6.13.10.2 Procedures for index based PLCM generation

The Public Long Code Mask of the Forward Supplemental Channel to be received in idle state is determined as follows:

• PLCM_42 is set as follows.
  - Bits P41 through P24 shall be set to
    '1100110110110000110011100110111000'.
  - Bits P23 through P16 shall be set to FSCH_PLCM_INDEXs.
  - Bits P15 through P0 shall be set to '0000000000000000'.

2.6.13.11 BCMC_FLOW_ID generation

The BCMC_FLOW_ID structure is shown in Figure 2.6.13.11-1.

BCMC_FLOW_ID is obtained by concatenating 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, and the exact content of the BCMC_FLOW_DISCRIMINATOR field.

The length of a BCMC_FLOW_ID shall be 16, 24, or 32 bits.
**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.

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, 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, then the BCMC_FLOW_ID shall be of 32 bits length.

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**Table:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3 bit</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>(Padded with '0's on the MSB side as required)</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>0 to 7 bits</td>
</tr>
</tbody>
</table>
2.6.13.12 BCME TDM

Base station may multiplex multiple BCME flows on a single F-SCH. Time Division Multiplexing (TDM) is an optional feature that supports BCME. 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 BCME Service Parameters Message. TDM related parameters are TDM_STRUCTURE_IND, TDM_SLOT_LENGTH, TDM_SUPER_PERIOD_MASK_LEN, TDM_MEGA_PERIOD_MASK_LEN, TDM_USED_IND, TDM_MASK, TDM_SUPER_PERIOD_MASK_INCL, TDM_SUPER_PERIOD_MASK, TDM_MEGA_PERIOD_MASK_INCL, TDM_MEGA_PERIOD_MASK.

TDM parameters include 3 levels TDM masks TDM_MASK, TDM_SUPER_PERIOD_MASK and TDM_MEGA_PERIOD_MASK. These masks indicate BCMC flow to F-SCH time slot mapping.

Each bit of TDM_MASK indicates presence of a flow on a slot. Length of a slot is defined by TDM_SLOT_LENGTH. Each bit of TDM_SUPER_PERIOD_MASK indicates presence of a flow on a super slot. Super slot length is equal to slot length multiplied by number of bits in TDM_MASK. Each bit of TDM_MEGA_PERIOD_MASK indicates presence of a flow on a mega slot. Super slot length is equal to super slot length multiplied by number of bits in TDM_SUPER_PERIOD_MASK.

When outercoding is used TDM_SUPER_PERIOD_MASK length is always 16 bits, but only partial mask (first part) is included in the BCME Service Parameters Message. Remaining bits in the mask that are not included in the BCME Service Parameters Message are “don’t care” bits, and the mobile station can decide if remaining slots need to be received based on outercoding algorithm.

Subsection 2.6.13.12.1 defines how TDM period is aligned with system time.

2.6.13.12.1 BCME TDM period alignment requirement

Each TDM period for a BCMC flow on a particular Forward Supplemental Channel starts when the system time (t) in 20 ms units satisfies the following equation:

• If outer coding is used for the FSCH where this BCMC flow is transmitted (i.e. FSCH_OUTER_CODE_INCL for the FSCH is equal to ‘1’)

\[ t \mod (\text{TDM period}) = \text{FSCH_OUTERCODE_OFFSET} \]

where FSCH_OUTERCODE_OFFSET is the outer coding buffer offset for the FSCH where this BCMC flow is transmitted

• Otherwise

\[ t \mod (\text{TDM period}) = 0 \]

Here, TDM period is calculated as following:

• If TDM MEGA_PERIOD_MASK_INCL for the BCMC flow on this particular Forward Supplemental Channel is equal to ‘1’
2.6.14 Common Procedures for Processing r-csch Messages

This section describes the common procedures for processing messages sent on the r-csch.

2.6.14.1 Reporting Band Class – Band Subclass Capabilities

If CAND_BAND_INFO_REQ is set to '1' in the Extended System Parameters Message or in the MC-RR Parameters Message, the mobile station shall perform the following procedures when reporting band class – band subclass capabilities via the Registration Message, Origination Message or Page Response Message:

- 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.
- 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_CLASS, 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 i = 0 to CAND_BAND_CLASS_REC[i].SUBCLASS_REC_LEN, if CAND_BAND_CLASS_REC[i].BAND_SUBCLASS_IND_REC[i] is equal to '1', 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 band subclass CAND_BAND_CLASS_REC[i].BAND_SUBCLASS_IND_REC[j], 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.

Figure 2.6.14.1-1 illustrates the relationship between the base station CAND_BAND_CLASS, BAND_SUBCLASS_IND fields and the mobile station BAND_SUBCLASS_SUP fields for one possible scenario.

2.6.15 MEID procedures when communicating with P_REV 6, 7, 8, 10 Base Stations

The mobile station shall conform to the requirements in [47] when communicating with a P_REV 6, 7, 8, or 10 base station.
2.7 PDU Formats for Mobile Stations

This section describes the formats of the PDUs corresponding to the messages sent by the mobile station.

In any multi-bit field in the following messages, the most significant bit (MSB) shall be transmitted first.

Some bits in the PDUs are marked as RESERVED. These bits allow extension of the PDUs for future features and capabilities. The mobile station sets all reserved bits to ‘0’. Some fields include values marked as reserved. The mobile station shall not set a field to a value that is marked as reserved.
This section describes the messages and their PDU formats sent by the mobile station on the r-csch.

2.7.1.1 Reserved

2.7.1.2 Reserved

2.7.1.3 PDU Formats on r-csch

The messages sent on the r-csch are summarized in Table 2.7.1.3-1.
### Table 2.7.1.3-1. Messages on r-csch

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>P_REV_IN_USE¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Message</td>
<td>RGM</td>
<td>2.7.1.3.2.1</td>
<td>All</td>
</tr>
<tr>
<td>Order Message</td>
<td>ORDM</td>
<td>2.7.1.3.2.2</td>
<td>All</td>
</tr>
<tr>
<td>Data Burst Message</td>
<td>DBM</td>
<td>2.7.1.3.2.3</td>
<td>All</td>
</tr>
<tr>
<td>Origination Message</td>
<td>ORM</td>
<td>2.7.1.3.2.4</td>
<td>All</td>
</tr>
<tr>
<td>Page Response Message</td>
<td>PRM</td>
<td>2.7.1.3.2.5</td>
<td>All</td>
</tr>
<tr>
<td>Authentication Challenge Response Message</td>
<td>AUCRM</td>
<td>2.7.1.3.2.6</td>
<td>All</td>
</tr>
<tr>
<td>Status Response Message</td>
<td>STRPM</td>
<td>2.7.1.3.2.7</td>
<td>1, 3</td>
</tr>
<tr>
<td>TMSI Assignment Completion Message</td>
<td>TACM</td>
<td>2.7.1.3.2.8</td>
<td>1, ≥ 4</td>
</tr>
<tr>
<td>PACA Cancel Message</td>
<td>PACNM</td>
<td>2.7.1.3.2.9</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Extended Status Response Message</td>
<td>ESTRPM</td>
<td>2.7.1.3.2.10</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Device Information Message</td>
<td>DIM</td>
<td>2.7.1.3.2.11</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Security Mode Request Message</td>
<td>SMRM</td>
<td>2.7.1.3.2.12</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Authentication Response Message</td>
<td>AURSPM</td>
<td>2.7.1.3.2.13</td>
<td>≥ 10</td>
</tr>
<tr>
<td>Authentication Resynchronization Message</td>
<td>AURSYNM</td>
<td>2.7.1.3.2.14</td>
<td>≥ 10</td>
</tr>
<tr>
<td>Reconnect Message</td>
<td>RCNM</td>
<td>2.7.1.3.2.15</td>
<td>≥ 9</td>
</tr>
<tr>
<td>Radio Environment Message</td>
<td>REM</td>
<td>2.7.1.3.2.16</td>
<td>≥ 11</td>
</tr>
</tbody>
</table>

---

1 P_REV_IN_USE equal to “All” implies all values applicable to the Band Class.
### 2.7.1.3.2.1 Registration Message

**MSG_TAG:** RGM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REG_TYPE</td>
<td>4</td>
</tr>
<tr>
<td>SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>MOB_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SCM</td>
<td>8</td>
</tr>
<tr>
<td>MOB_TERM</td>
<td>1</td>
</tr>
<tr>
<td>RETURN_CAUSE</td>
<td>4</td>
</tr>
<tr>
<td>QPCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ENHANCED_RC</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UZID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UZID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>GEO_LOC_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>GEO_LOC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>OTD_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>STS_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>3X_CCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_DEVICE_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>HOOK_STATUS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>ENC_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NEW_KEY_ID</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NEW_SSEQ_H_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIGN_SLOT_CYCLE_INDEX</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_FREQ_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>BCMC_CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 6</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>TIME_STAMP_SHORT_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_SHORT</td>
<td>Variable</td>
</tr>
</tbody>
</table>

NUM_BCMC_PROGRAMS+1 occurrences of the following field:

```
(NUM_BCMC_PROGRAMS+1)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>(Value of BCMC_PROGRAM_ID_LEN + 1)</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>(Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
</tbody>
</table>

NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

```
(NUM_FLOW_DISCRIMINATOR+1) or 1
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>(Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURESAME_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BAK_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>AUTH_SIGNATURE</td>
<td>0 or 32</td>
</tr>
</tbody>
</table>

\{(NUM\_FLOW\_DISCRIMINATOR+1)\} or 1 \{(NUM\_BCMC\_PROGRAMS+4)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_SUB_REP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_BAND_SUBCLASS</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

NUM\_BAND\_SUBCLASS occurrences of the following field:

\{(NUM\_BAND\_SUBCLASS)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_SUBCLASS_SUP</td>
<td>1</td>
</tr>
</tbody>
</table>

\{(NUM\_BAND\_SUBCLASS)\}

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

<table>
<thead>
<tr>
<th>REG_TYPE (binary)</th>
<th>Type of Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Timer-based (see 2.6.5.1.3)</td>
</tr>
<tr>
<td>0001</td>
<td>Power-up (see 2.6.5.1.1)</td>
</tr>
<tr>
<td>0010</td>
<td>Zone-based (see 2.6.5.1.5)</td>
</tr>
<tr>
<td>0011</td>
<td>Power-down (see 2.6.5.1.2)</td>
</tr>
<tr>
<td>0100</td>
<td>Parameter-change (see 2.6.5.1.6)</td>
</tr>
<tr>
<td>0101</td>
<td>Ordered (see 2.6.5.1.7)</td>
</tr>
<tr>
<td>0110</td>
<td>Distance-based (see 2.6.5.1.4)</td>
</tr>
<tr>
<td>0111</td>
<td>User Zone-based (see 2.6.5.1.10)</td>
</tr>
<tr>
<td>1000</td>
<td>Encryption Re-sync required (see 2.6.5.1.11)</td>
</tr>
<tr>
<td>1001</td>
<td>BCMC Registration (see 2.6.13.3)</td>
</tr>
</tbody>
</table>

All other REG_TYPE values are reserved.

SLOT_CYCLE_INDEX – Slot cycle index.

If \( P_{REV\_IN\_USE} \) 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**
  - 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**
  - 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).
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, \( \text{SLOT\_CYCLE\_INDEX}_p \) (see 2.6.2.1.1); otherwise, the mobile station shall set this field to '000'. The sign of the preferred slot cycle index, \( \text{SLOT\_CYCLE\_INDEX}_p \), is specified in the \( \text{SIGN\_SLOT\_CYCLE\_INDEX} \) 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 ‘0001011’.

- **SCM** – Station class mark.
  - The mobile station shall set this field to its station class mark.
  - See 2.3.3.

- **MOB_TERM** – Mobile terminated calls accepted indicator.
  - If the mobile station is configured to accept mobile terminated calls while operating with the current roaming status (see 2.6.5.3), the mobile station shall set this bit to ‘1’. Otherwise, the mobile station shall set this bit to ‘0’.

- **RETURN_CAUSE** – Reason of the mobile station registration or access.
  - The mobile station shall set this field to the \( \text{RETURN\_CAUSE} \) value shown in Table 2.7.1.3.2.1-2 corresponding to the service redirection failure condition (see 2.6.1.1).

### Table 2.7.1.3.2.1-2. RETURN_CAUSE Codes

<table>
<thead>
<tr>
<th>( \text{RETURN_CAUSE} ) (binary)</th>
<th>Redirect Failure Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Normal access.</td>
</tr>
<tr>
<td>0001</td>
<td>Service redirection failed as a result of system not found.</td>
</tr>
<tr>
<td>0010</td>
<td>Service redirection failed as a result of protocol mismatch.</td>
</tr>
<tr>
<td>0011</td>
<td>Service redirection failed as a result of registration rejection.</td>
</tr>
<tr>
<td>0100</td>
<td>Service redirection failed as a result of wrong SID.</td>
</tr>
<tr>
<td>0101</td>
<td>Service redirection failed as a result of wrong NID.</td>
</tr>
<tr>
<td></td>
<td>All other ( \text{RETURN_CAUSE} ) values are reserved.</td>
</tr>
</tbody>
</table>

- **QPCH_SUPPORTED** – Quick Paging Channel supported indicator.
If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Quick Paging Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**ENHANCED_RC** – Enhanced radio configuration supported indicator.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports any radio configuration in the Radio Configuration Class 2 (see 1.1.1), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**UZID_INCL** – User Zone Identifier included indicator.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the User Zone Identifier, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**UZID** – User Zone Identifier.

If the UZID_INCL is included in the message and is set to ‘1’, the mobile station shall include this field and set it to UZID\(_s\); otherwise, the mobile station shall omit this field.

**GEO_LOC_INCL** – Geo-location included indicator.

If \( P_{REV\_IN\_USE} \) is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the GEO_LOC_TYPE field, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**GEO_LOC_TYPE** – Geo-Location Type.

If GEO_LOC_INCL is included in the message and is set to ‘1’, the mobile station shall include this field and set it to the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile station shall omit this field.

**OTD_SUPPORTED** – Orthogonal Transmit Diversity supported.

If \( P_{REV\_IN\_USE} \) is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if Orthogonal Transmit Diversity is supported; otherwise, the mobile station shall set this field to ‘0’.
STS_SUPPORTED – Space Time Spreading Transmit Diversity supported.

If `P_REV_IN_USE` is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’, if Space Time Spreading Transmit Diversity is supported; otherwise, the mobile station shall set this field to ‘0’.

3X_CCH_SUPPORTED – 3X Common Channels supported.

If `P_REV_IN_USE` is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports the Spreading Rate 3 common channels (3X BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile station shall set this field to ‘0’.

WLL_INCL – WLL information included indicator.

If `P_REV_IN_USE` is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station is a Wireless Local Loop device, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

WLL_DEVICE_TYPE – WLL device type indicator.

If `WLL_INCL` is not included, or if `WLL_INCL` is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows.

The mobile station shall set this field to the `WLL_DEVICE_TYPE` value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

<table>
<thead>
<tr>
<th>WLL_DEVICE_TYPE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Wireless Local Loop terminal with no mobility</td>
</tr>
<tr>
<td>001</td>
<td>Wireless Local Loop terminal with limited mobility</td>
</tr>
<tr>
<td>010</td>
<td>Wireless Local Loop terminal with full mobility</td>
</tr>
<tr>
<td>011 - 111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

HOOK_STATUS – WLL terminal hook status.
If WLL_INCL is not included, or if WLL_INCL is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the value shown in Table 2.7.1.3.2.1-4 corresponding to the hook state.

<table>
<thead>
<tr>
<th>HOOK_STATUS (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Subscriber terminal is on-hook</td>
</tr>
<tr>
<td>0001</td>
<td>Subscriber terminal is off-hook</td>
</tr>
<tr>
<td>0010</td>
<td>Subscriber terminal is stuck off-hook</td>
</tr>
<tr>
<td>0011 – 1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

ENC_INFO_INCL – Encryption fields included.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the 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.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate which signaling encryption algorithms are supported by the mobile station.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMEA</td>
<td></td>
<td>Support of Cellular Message Encryption Algorithm</td>
</tr>
<tr>
<td>ECMEA</td>
<td></td>
<td>Support of Enhanced Cellular Message Encryption Algorithm</td>
</tr>
<tr>
<td>REA</td>
<td></td>
<td>Support of the Rijndael Encryption Algorithm</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
<td>Reserved bits</td>
</tr>
</tbody>
</table>

If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to ‘1’.

The mobile station shall set each other subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘00000’.

C_SIG_ENCRYPT_REQ – Common Channel signaling message encryption request indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-csch and r-csch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-csch and r-csch.

NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message encryption and integrity (if message integrity is performed).

NEW_SSEQ_H_SIG – The signature of NEW_SSEQ_H
If NEW_SEQ_H is included, 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 the digital signature of the NEW_SEQ_H computed as described in 2.3.12.4.5.

**UI_ENCRYPT_SUP** - User information encryption supported indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate the supported user information encryption algorithms.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.

**MSG_INT_INFO_INCL** - Signaling message integrity information included indicator.

If P_REV_IN_USE is less than nine, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If MSG_INTEGRITY_SUP is equal to ‘0’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

**SIG_INTEGRITY_SUP_INCL** - Signaling message integrity information included indicator.

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.

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 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 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’.

Table 2.7.1.3.2.1-6. Encoding of the SIG_INTEGRITY_SUP Field

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>8</td>
<td>Reserved bits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SIG_INTEGRITY_REQ</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT_UIA</td>
<td>‘000’</td>
<td>Default message integrity algorithm</td>
</tr>
<tr>
<td>RESERVED</td>
<td>‘001’ – ‘111’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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:
- If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’
- RESTORE_KEYS is equal to ‘1’.

In all other cases, the mobile station shall set this field to ‘1’.

NEW_SSEQ_H - The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.

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.

NEW_SSEQ_H_SIG - The signature of NEW_SSEQ_H

If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.

The mobile station shall set this field to the digital signature of the NEW_SSEQ_H computed as described in 2.3.12.4.5.

SIGN_SLOT_CYCLE_INDEX – Sign of the slot cycle index.

If P_REV_IN_USEₜ is less than 11, or if the SLOT_CYCLE_INDEX field is set to ‘000’, 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 as specified in Table 2.7.1.3.2.1-8 to the sign of the preferred slot cycle index, SLOT_CYCLE_INDEXₚ (see 2.6.2.1.1). The absolute value of the preferred slot cycle index, SLOT_CYCLE_INDEXₚ is specified in the SLOT_CYCLE_INDEX field of this message.
<table>
<thead>
<tr>
<th>Slot Cycle Index Value</th>
<th>SIGN_SLOT_CYCLE_INDEX</th>
<th>SLOT_CYCLE_INDEX</th>
<th>RSCI, REQ_RSCI</th>
<th>Slot Cycle Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>-7</td>
<td>N/A</td>
<td>N/A</td>
<td>0111</td>
<td>Non-slotted</td>
</tr>
<tr>
<td>-4</td>
<td>0</td>
<td>100</td>
<td>0100</td>
<td>0.08s (1 slot)</td>
</tr>
<tr>
<td>-3</td>
<td>0</td>
<td>011</td>
<td>0011</td>
<td>0.16s (2 slots)</td>
</tr>
<tr>
<td>-2</td>
<td>0</td>
<td>010</td>
<td>0010</td>
<td>0.32s (4 slots)</td>
</tr>
<tr>
<td>-1</td>
<td>0</td>
<td>001</td>
<td>0001</td>
<td>0.64s (8 slots)</td>
</tr>
<tr>
<td>0 omitted</td>
<td>000</td>
<td>0000</td>
<td>0000</td>
<td>1.28s (16 slots)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>001</td>
<td>1001</td>
<td>2.56s (32 slots)</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>010</td>
<td>1010</td>
<td>5.12s (64 slots)</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>011</td>
<td>1011</td>
<td>10.24s (128 slots)</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>100</td>
<td>1100</td>
<td>20.48s (256 slots)</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>101</td>
<td>1101</td>
<td>40.96s (512 slots)</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>110</td>
<td>1110</td>
<td>81.92s (1024 slots)</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>111</td>
<td>N/A</td>
<td>163.84s (2048 slots)</td>
</tr>
</tbody>
</table>

All other values reserved.
BCMC_FREQ_INFO_INCL - BCMC frequency information included indicator.

If the REG_TYPE field is not set to ‘1001’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the BCMC band class and frequency fields are included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

If this Registration Message is being sent only to request transmission of BCMC flows, the mobile station shall set this field to ‘0’.

BCMC_BAND_CLASS - BCMC Band Class.

If the BCMC_FREQ_INFO_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the CDMA band class, as specified in [30], corresponding to the CDMA frequency assignment for the CDMA Channel containing the Forward Broadcast Supplemental Channel that the mobile station will tune to upon receiving confirmation of delivery of this message.

BCMC_CDMA_FREQ - BCMC Frequency.

If the BCMC_FREQ_INFO_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing the Forward Broadcast Supplemental Channel that the mobile station will tune to upon receiving confirmation of delivery of this message.

NUM_BCMC_PROGRAMS - Number of BCMC programs being registered.

If the REG_TYPE field is not set to ‘1001’, 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 number of BCMC programs included in this message minus 1.

AUTH_SIGNATURE_INCL - Authorization signature included indication.
If the REG_TYPE field is not set to ‘1001’, 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’ to indicate that the authorization signature is included in this message for some of the BCMC flows included in this message; otherwise, the mobile station shall set this field to ‘0’.

**TIME_STAMP_SHORT_LENGTH** - Length of time stamp included in this message.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the time stamp, in units of bits, included in this message.

**TIME_STAMP_SHORT** - Time stamp short.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the **TIME_STAMP_SHORT_LENGTH** least significant bits of the time stamp parameter used to generate the Authorization signature included in this message.

The mobile station shall include **NUM_BCMC_PROGRAMS** occurrences of the following fields:

**BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

**BCMC_PROGRAM_ID** - BCMC program Identifier

The length of this field shall be one more than the value of **BCMC_PROGRAM_ID_LEN** bits.

The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station will continue to monitor or start to monitor upon receiving confirmation of delivery of this message or is requesting transmission.
The mobile station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program. To request all flows associated with this BCMC_PROGRAM_ID, the mobile station may set this field to ‘000’.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR – BCMC Flow discriminator.

The mobile station shall set this field to the discriminator of the BCMC flow that the mobile station will continue to monitor or start to monitor upon receiving confirmation of delivery of this message or is requesting transmission.

AUTH_SIGNATURE_IND – Authorization signature indicator.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ to indicate that the authorization signature is included in this message for this BCMC flow; otherwise, the mobile station shall set this field to ‘0’.

AUTH_SIGNATURESAME_IND – Authorization signature same as previous BCMC flow indicator.
If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to ‘0’.

For the first BCMC flow listed in this message, the mobile station shall set this field to ‘0’.

BAK_ID - BAK identifier.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 BAK identifier used to generate the Authorization signature included in this message.

AUTH_SIGNATURE - Authorization signature.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 Authorization signature computed for this BCMC flow as specified in 2.6.13.9.

BAND_SUB_REP_INCL – Band class – band subclass report included

If P_REV_IN_USE is less than eleven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If CAND_BAND_INFO_REQ is equal to ‘1’ and the mobile station supports at least 1 band class and band subclass (if applicable) combination queried by the base station, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

1  If the AUTH_SIGNATURE_IND field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

5  The mobile station shall set this field to ‘1’ to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to ‘0’.

10  For the first BCMC flow listed in this message, the mobile station shall set this field to ‘0’.

12  BAK_ID - BAK identifier.

13  If the AUTH_SIGNATURESAME_IND field is not included or is included and is set to ‘1’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

17  The mobile station shall set this field to BAK identifier used to generate the Authorization signature included in this message.

20  AUTH_SIGNATURE - Authorization signature.

21  If the AUTH_SIGNATURESAME_IND field is not included or is included and is set to ‘1’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

25  The mobile station shall set this field to the Authorization signature computed for this BCMC flow as specified in 2.6.13.9.

28  BAND_SUB_REP_INCL – Band class – band subclass report included

29  If P_REV_IN_USE is less than eleven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

32  If CAND_BAND_INFO_REQ is equal to ‘1’ and the mobile station supports at least 1 band class and band subclass (if applicable) combination queried by the base station, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.
NUM_BAND_SUBCLASS – Number of band class - band subclass capabilities reported

If BAND_SUB_REP_INCL is set to '0' or is not included, this field shall be omitted; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station supports all candidate band class and band subclass (if applicable) combinations queried by the 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.

If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall include NUM_BAND_SUBCLASS occurrences of the BAND_SUBCLASS_SUP field:

BAND_SUBCLASS_SUP – Band class - Band subclass supported indicator

The mobile station shall set this field as specified in section 2.6.14.1.
2.7.1.3.2.2 Order Message

MSG_TAG: ORDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDER</td>
<td>6</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Order-specific fields (if used)</td>
<td>$8 \times \text{ADD_RECORD_LEN}$</td>
</tr>
</tbody>
</table>

ORDER – Order code.

The mobile station shall set this field to the ORDER code (see 2.7.3) for this type of Order Message.

ADD_RECORD_LEN – Additional record length.

The mobile station shall set this field to the number of octets in the order-specific fields included in this message.

order-specific fields – Order-specific fields.

The mobile station shall include order-specific fields as specified in 2.7.3.
2.7.1.3.2.3 Data Burst Message

**MSG_TAG**: DBM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_NUMBER</td>
<td>8</td>
</tr>
<tr>
<td>BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>NUM_MSGS</td>
<td>8</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
{(NUM_FIELDS)
  CHARi
} (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 CHARi fields of this message equal to EXTENDED_BURST_TYPE_INTERNATIONAL as described in the definition of CHARi below. If the mobile station sets this field equal to ‘111111’, it shall set the first two CHARi fields of this message equal to the EXTENDED_BURST_TYPE as described in the definition of CHARi 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 CHARi fields included in this message.

**CHARi** – 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.
If the BURST_TYPE field of this message is equal to ‘111110’, the first two CHARi octets shall represent a 16 bit EXTENDED_BURST_TYPE_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC). Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED_BURST_TYPE_INTERNATIONAL field shall specify the COUNTRY_BURST_TYPE. The mobile station shall set the value of the COUNTRY_BURST_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Country Code</td>
<td>10</td>
</tr>
<tr>
<td>COUNTRY_BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 × (NUM_FIELDS - 2)</td>
</tr>
</tbody>
</table>

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].

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED_BURST_TYPE (first two CHARi fields)</td>
<td>16</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 × (NUM_FIELDS - 2)</td>
</tr>
</tbody>
</table>
2.7.1.3.2.4 Origination Message

MSG_TAG: ORM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOB_TERM</td>
<td>1</td>
</tr>
<tr>
<td>SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>MOB_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SCM</td>
<td>8</td>
</tr>
<tr>
<td>REQUEST_MODE</td>
<td>3</td>
</tr>
<tr>
<td>SPECIAL_SERVICE</td>
<td>1</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>0 or 16</td>
</tr>
<tr>
<td>PM</td>
<td>1</td>
</tr>
<tr>
<td>DIGIT_MODE</td>
<td>1</td>
</tr>
<tr>
<td>NUMBER_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>MORE_FIELDS</td>
<td>1</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

\{(NUM_FIELDS)\)

| CHARi                  | 4 or 8         |

\{(NUM_FIELDS)\)

| NAR_AN_CAP             | 1             |
| PACA_REORIG            | 1             |
| RETURN_CAUSE           | 4             |
| MORE_RECORDS           | 1             |
| ENCRYPTION_SUPPORTED   | 0 or 4        |
| PACA_SUPPORTED         | 1             |
| NUM_ALT_SO             | 3             |

NUM_ALT_SO occurrences of the following field:

\{(NUM_ALT_SO)\)

| ALT_SO                 | 16            |

\{(NUM_ALT_SO)\)

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UZID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UZID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>CH_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>OTD_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ENHANCED_RC</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RC_PREF</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_RC_PREF</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>DCCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>DCCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>GEO_LOC_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>GEO_LOC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_FCH_GATING_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ORIG_REASON</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ORIG_COUNT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>STS_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>3X_CCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_DEVICE_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>GLOBAL_EMERGENCY_CALL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOS_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOS_PARMS_LEN</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOS_PARMS</td>
<td>0 or variable</td>
</tr>
<tr>
<td>QOS_RESERVED</td>
<td>0 - 7</td>
</tr>
<tr>
<td>ENC_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or ((8 \times \text{SYNC_ID_LEN}))</td>
</tr>
<tr>
<td>PREV_SID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PREV_SID</td>
<td>0 or 15</td>
</tr>
<tr>
<td>PREV_NID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PREV_NID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>PREV_PZID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PREV_PZID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SO_BITMAP_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SO_GROUP_NUM</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SO_BITMAP</td>
<td>0 or (2^{\left(1+4\times\text{SO_BITMAP_IND}\right)})</td>
</tr>
<tr>
<td>SDB_DESIRED_ONLY</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ALT_BAND_CLASS_SUP</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NEW_KEY_ID</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NEW_SSEQ_H_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SIGN_SLOT_CYCLE_INDEX</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_SERV_INSTANCE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ADD_SERV_INSTANCE</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ADD_SERV_INSTANCE occurrences of the following record:

```c
(/ 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)
```

```c
/ (NUM_ADD_SERV_INSTANCE)
BCMC_INCL                    0 or 1
BCMC_ORIG_ONLY_IND           0 or 1
FUNDICATED_BCMC_SUPPORTED   0 or 1
FUNDICATED_BCMC Capability Type-specific fields | 0 or variable
AUTH_SIGNATURE_INCL          0 or 1
TIME_STAMP_SHORT_LENGTH     0 or 8
TIME_STAMP_SHORT             0 or Variable
```
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:

\{ NUM_BCMC_PROGRAMS+1 \}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>Variable (Value of BCMC_PROGRAM_ID_LEN + 1)</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
</tbody>
</table>

NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

\{ NUM_FLOW_DISCRIMINATOR+1 \} or 1

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURESAME_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BAK_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>AUTH_SIGNATURE</td>
<td>0 or 32</td>
</tr>
</tbody>
</table>

\{ NUM_FLOW_DISCRIMINATOR+1 \} or 1

\{ NUM_BCMC_PROGRAMS+1 \}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>BAND_SUB_REP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_BAND_SUBCLASS</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_BAND_SUBCLASS occurrences of the following field:</td>
<td></td>
</tr>
<tr>
<td>{ (NUM_BAND_SUBCLASS)</td>
<td></td>
</tr>
<tr>
<td>BAND_SUBCLASS_SUP</td>
<td>1</td>
</tr>
<tr>
<td>{ (NUM_BAND_SUBCLASS)</td>
<td></td>
</tr>
</tbody>
</table>

1

2 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’.

7 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’.

   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).

   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 ‘00001011’.

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.

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Requested Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Reserved</td>
</tr>
<tr>
<td>001</td>
<td>CDMA only</td>
</tr>
<tr>
<td>010</td>
<td>Wide analog only</td>
</tr>
<tr>
<td>011</td>
<td>Either wide analog or CDMA only</td>
</tr>
<tr>
<td>100</td>
<td>Narrow analog only</td>
</tr>
<tr>
<td>101</td>
<td>Either narrow analog or CDMA only</td>
</tr>
<tr>
<td>110</td>
<td>Either narrow analog or wide analog only</td>
</tr>
<tr>
<td>111</td>
<td>Narrow analog or wide analog or CDMA</td>
</tr>
</tbody>
</table>

SPECIAL_SERVICE – Special service option indicator. To request a special service option, the mobile station shall set this field to ‘1’. To request the default service option (Service Option 1), the mobile station shall set this field to ‘0’.

SERVICE_OPTION – Requested service option for this origination. If the SPECIAL_SERVICE field is set to ‘1’, the mobile station shall set this field to the value specified in [30], corresponding to the requested service option. If the SPECIAL_SERVICE field is set to ‘0’, the mobile station shall omit this field.

PM – Privacy mode indicator. To request voice privacy, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

DIGIT_MODE – Digit mode indicator. This field indicates whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan.
To originate the call using the binary representation of DTMF digits (i.e., CHARi fields are represented in Table 2.7.1.3.2.4-4), the mobile station shall set this field to ‘0’. To originate the call using ASCII characters, the mobile station shall set this field to ‘1’.

**NUMBER_TYPE** – Type of number.

The mobile station shall set this field to the NUMBER_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the number as defined in [7], Section 4.5.9. If the DIGIT_MODE field is set to ‘0’ and P_REV_IN_USEs is less than 11, the mobile station shall omit this field.

If this field is included and the mobile station determines that the user has entered an international number (for example, with a leading ‘+’ as specified in [39] for Plus Code Dialing or an international access code), the mobile station should set this field to ‘001’.

<table>
<thead>
<tr>
<th>Description</th>
<th>NUMBER_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>000</td>
</tr>
<tr>
<td>International number</td>
<td>001</td>
</tr>
<tr>
<td>National number</td>
<td>010</td>
</tr>
<tr>
<td>Network-specific number</td>
<td>011</td>
</tr>
<tr>
<td>Subscriber number</td>
<td>100</td>
</tr>
<tr>
<td>Reserved</td>
<td>101</td>
</tr>
<tr>
<td>Abbreviated number</td>
<td>110</td>
</tr>
<tr>
<td>Reserved for extension</td>
<td>111</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Description</th>
<th>NUMBER_PLAN (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>0000</td>
</tr>
<tr>
<td>ISDN/Telephony numbering plan ([17] and [16])</td>
<td>0001</td>
</tr>
<tr>
<td>Data numbering plan ([20])</td>
<td>0011</td>
</tr>
<tr>
<td>Telex numbering plan ([19])</td>
<td>0100</td>
</tr>
<tr>
<td>Private numbering plan</td>
<td>1001</td>
</tr>
<tr>
<td>Reserved for extension</td>
<td>1111</td>
</tr>
</tbody>
</table>

All other NUMBER_PLAN codes are reserved.

MORE_FIELDS – More dialed digits indicator.

This field indicates whether additional dialed digits will be sent in a later *Origination Continuation Message*.

If all dialed digits will fit into this message, the mobile station shall set this field to ‘0’. If not, the mobile station shall set this field to ‘1’.

NUM_FIELDS – Number of dialed digits in this message.

The mobile station shall set this field to the number of dialed digits included in this message.

CHARi – A dialed digit or character.

The mobile station shall include NUM_FIELDS occurrences of this field. If the DIGIT_MODE field is set to ‘0’, the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT_MODE field is set to ‘1’, the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the dialed digit, as specified in [9], with the most significant bit set to ‘0’.
Table 2.7.1.3.2.4-4. Representation of DTMF Digits

<table>
<thead>
<tr>
<th>Digit</th>
<th>Code (binary)</th>
<th>Digit</th>
<th>Code (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0001</td>
<td>7</td>
<td>0111</td>
</tr>
<tr>
<td>2</td>
<td>0010</td>
<td>8</td>
<td>1000</td>
</tr>
<tr>
<td>3</td>
<td>0011</td>
<td>9</td>
<td>1001</td>
</tr>
<tr>
<td>4</td>
<td>0100</td>
<td>0</td>
<td>1010</td>
</tr>
<tr>
<td>5</td>
<td>0101</td>
<td>*</td>
<td>1011</td>
</tr>
<tr>
<td>6</td>
<td>0110</td>
<td>#</td>
<td>1100</td>
</tr>
</tbody>
</table>

All other codes are reserved.

NAR_AN_CAP – Narrow analog capability.
If the mobile station is capable of narrow analog operation, the mobile station shall set this bit to ‘1’; otherwise, the mobile station shall set this bit to ‘0’.

PACA_REORIG – PACA re-origination.
If this is a user directed origination, the mobile station shall set this field to ‘0’. If this is a PACA re-origination, the mobile station shall set this field to ‘1’.

RETURN_CAUSE – Reason for the mobile station registration or access.
The mobile station shall set this field to the RETURN_CAUSE value shown in Table 2.7.1.3.2.1-2 corresponding to the service redirection failure condition (see 2.6.1.1).

MORE_RECORDS – More records indicator.
This field indicates whether information records will be sent in a later Origination Continuation Message. If information records will be sent, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

ENCRYPTION_SUPPORTED – Encryption algorithms supported by the mobile station.
If P_REV_IN_USE is greater than or equal to seven or AUTH_MODE is equal to ‘00’, the mobile station shall omit the ENCRYPTION_SUPPORTED field. If P_REV_IN_USE is less than seven and AUTH_MODE is not equal to ‘00’, the mobile station shall set this field as specified in Table 2.7.1.3.2.4-5.
### Table 2.7.1.3.2.4-5. Encryption Algorithms Supported

<table>
<thead>
<tr>
<th>Description</th>
<th>ENCRYPTION_SUPPORTED (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic encryption supported</td>
<td>0000</td>
</tr>
<tr>
<td>Basic and Enhanced encryption supported</td>
<td>0001</td>
</tr>
<tr>
<td>Reserved</td>
<td>0010 - 1111</td>
</tr>
</tbody>
</table>

**PACA_SUPPORTED** – CDMA PACA support indication.

This field identifies the mobile station’s support for PACA in CDMA mode. The mobile station shall set this field to ‘1’.

**NUM_ALT_SO** – Number of alternative service options.

If P_REV_IN_USE is less than seven, the mobile station shall set this field to the number of alternative service options it supports other than the one specified in the SERVICE_OPTION field. The mobile station shall set this field to a value less than or equal to MAX_NUM_ALT_SOs.

If P_REV_IN_USE is equal to or greater than seven, the mobile station shall set this field to the number of alternative service options, which either have no service option group number assigned or do not belong to the same service option group whose bitmap is being included. The alternate service option numbers are other than the one specified in the SERVICE_OPTION field. The mobile station shall set this field to a value less than or equal to MAX_NUM_ALT_SOs.

**ALT_SO** – Alternative service option.

If P_REV_IN_USE is less than 7, the mobile station shall include NUM_ALT_SO occurrences of this field. The mobile station shall set this field to the value specified in [30], corresponding to the alternative service option supported by the mobile station.

If P_REV_IN_USE is equal to or greater than seven, the mobile station shall include NUM_ALT_SO occurrences of this field. The mobile station shall set this field to the service option number defined in [30] corresponding to the alternate service options which either have no service option group number assigned or do not belong to the same service option group whose bitmap is included in this message.

**DRS** – Data Ready to Send.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.
If the service instance corresponding to SR_ID has data to send, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

UZID_INCL – User Zone Identifier included indicator.

If P_REV_IN_USEs is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the User Zone Identifier, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

UZID – User Zone Identifier.

If the UZID_INCL field is included in the message and is set to ‘1’, the mobile station shall include this field and set it to UZIDs; otherwise, the mobile station shall omit this field.

CH_IND – Channel indicator.

If P_REV_IN_USEs is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it, as shown in Table 2.7.1.3.2.4-6, to request physical resources.

Table 2.7.1.3.2.4-6. Channel Indicator

<table>
<thead>
<tr>
<th>CH_IND (binary)</th>
<th>Channel(s) Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Refer to EXT_CH_IND</td>
</tr>
<tr>
<td>01</td>
<td>Fundamental Channel</td>
</tr>
<tr>
<td>10</td>
<td>Dedicated Control Channel</td>
</tr>
<tr>
<td>11</td>
<td>Fundamental Channel and Dedicated Control Channel</td>
</tr>
</tbody>
</table>
SR_ID – Service reference identifier.

If $P_{REV\_IN\_USE} < 6$, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the SYNC_ID_INCL field is not included or is included and is set to ‘0’, the mobile station shall set this field as follows:

- If the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance. If the service instance does not provide a service reference identifier, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 (inclusive).

Otherwise, the mobile station shall set this field as follows:

- If the mobile station requests the restoration of a single service option connection from the stored service configuration, the mobile station shall set this field to the corresponding service reference identifier.

- If the mobile station requests the restoration of more than one but not all service option connections from the stored service configuration, the mobile station shall set this field to the service reference identifier corresponding to one of the service option connections to be restored.

- Otherwise (that is, the mobile station requests the restoration of all the service option connections from the stored service configuration), the mobile station shall set this field to ‘111’.

OTD_SUPPORTED – Orthogonal Transmit Diversity supported indicator.

If $P_{REV\_IN\_USE} < 6$, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station supports orthogonal transmit diversity, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

QPCH_SUPPORTED – Quick Paging Channel supported indicator.

If $P_{REV\_IN\_USE} < 6$, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.
If the mobile station supports the Quick Paging Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**ENHANCED_RC** – Enhanced radio configuration supported indicator.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports any radio configuration in the Radio Configuration Class 2 (see 1.1.1), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**FOR_RC_PREF** – Forward Radio Configuration preference.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to its preferred Radio Configuration for the Forward Fundamental Channel and/or Forward Dedicated Control Channel.


If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to its preferred Radio Configuration for the Reverse Fundamental Channel and/or Reverse Dedicated Control Channel.

**FCH_SUPPORTED** – Fundamental Channel supported indicator.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Fundamental Channel; otherwise, the mobile station shall set this field to ‘0’.

**FCH Capability**

Type-specific fields – Fundamental Channel capability information.

If the FCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.1; otherwise, the mobile station shall omit this field.

**DCCH_SUPPORTED** – Dedicated Control Channel supported indicator.

If \( P_{REV\_IN\_USE} \) is less than six, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Dedicated Control Channel; otherwise, the mobile station shall set this field to ‘0’.
DCCH Capability

Type specific fields – Dedicated Control Channel capability information.

If the DCCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.2; otherwise, the mobile station shall omit this field.

GEO_LOC_INCL – Geo-location included indicator.

If P_REV_IN_USE is less than six, the mobile station shall omit this field. If P_REV_IN_USE is equal to six, the mobile station shall set this field to ‘0’. Otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the GEO_LOC_TYPE field, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

GEO_LOC_TYPE – Geo-Location Type.

If GEO_LOC_INCL is included in the message and is set to ‘1’, the mobile station shall include this field and shall set it to the value shown in Table 2.7.1.3.2.4-7; otherwise, the mobile station shall omit this field.

Table 2.7.1.3.2.4-7. Geo-location Types

<table>
<thead>
<tr>
<th>GEO_LOC_TYPE</th>
<th>Type of Geo-location</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No mobile station assisted geo-location capabilities</td>
</tr>
<tr>
<td>001</td>
<td>IS-801 capable (Advanced Forward Link Triangulation only (AFLT))</td>
</tr>
<tr>
<td>010</td>
<td>IS-801 capable (Advanced Forward Link Triangulation and Global Positioning Systems)</td>
</tr>
<tr>
<td>011</td>
<td>Global Positioning Systems only</td>
</tr>
</tbody>
</table>

All other GEO_LOC_TYPE values are reserved.

REV_FCH_GATING_REQ – Reverse Fundamental Channel eighth gating mode request indicator.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station requests to turn on the reverse Fundamental Traffic Channel gating mode in Radio Configurations 3, 4, 5, and 6, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

ORIG_REASON - Re-Origination reason indicator.
If $P_{REV\_IN\_USE}$ is less than or equal to six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station initiates a silent-retry, i.e. an autonomous access re-attempt to re-originate this call without user interaction, after the mobile station received an access attempt failure from the ARQ Sublayer for a user initiated origination; otherwise, the mobile station shall set this field to ‘0’.

**ORIG_COUNT** - Re-Origination count.

If $P_{REV\_IN\_USE}$ is less than or equal to six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the ORIG_REASON is set to ‘1’, the mobile station shall set this field to the number of consecutive silent-retry, i.e. an autonomous access re-attempt that were made to re-originate the call, without user interaction, that were due to the mobile receiving an access attempt failure from the ARQ Sublayer. If the number of consecutive silent-retry is greater than three, the mobile station shall set this field to ‘11’.

If the ORIG_REASON is set to ‘0’, the mobile station shall set this field according to Table 2.7.1.3.2.4-8 depending on the number of autonomous re-connection attempts for the desired service (specified by SERVICE_OPTION) that have failed since the last successful connection of that desired service\(^2\). The count shall only include attempts since the last power-up.

<table>
<thead>
<tr>
<th>Number of autonomous re-origination attempts for the desired service that have failed since the last successful connection</th>
<th>ORIG_COUNT (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>‘00’</td>
</tr>
<tr>
<td>1, 2, 3 or 4</td>
<td>‘01’</td>
</tr>
<tr>
<td>5, 6, 7 or 8</td>
<td>‘10’</td>
</tr>
<tr>
<td>9 or more</td>
<td>‘11’</td>
</tr>
</tbody>
</table>

**STS_SUPPORTED** - STS supported indicator.

\(^2\) 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.
If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Space Time Spreading Transmit Diversity; otherwise, the mobile station shall set this field to ‘0’.

**3X_CCH_SUPPORTED** – 3X Common Channels supported.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports the Spreading Rate 3 common channels (3X BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile station shall set this field to ‘0’.

**WLL_INCL** – WLL information included indicator.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station is a Wireless Local Loop device, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**WLL_DEVICE_TYPE** – WLL device type indicator.

If WLL_INCL is not included, or if WLL_INCL is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows.

The mobile station shall set this field to the WLLDEVICE_TYPE value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

**GLOBAL_EMERGENCY_CALL** – Global Emergency Call indicator.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to ‘1’ if the mobile station recognizes that this is an emergency call; otherwise, the mobile station shall set this field to ‘0’.

**MS_INIT_POS_LOC_IND** – Mobile Initiated Position Location Session indicator.

If the GLOBAL_EMERGENCY_CALL field is not included in this message or is included but is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to ‘1’ if MS_INIT_POS_LOC_SUP_IND is equal to ‘1’ and if the mobile station is to initiate a position location session associated with this emergency call; otherwise, the mobile station shall set this field to ‘0’.
QOS_PARMS_INCL - Presence indicator for the QoS parameters.

If P_REV_IN_USEs is less than seven, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’, if QoS parameters are included in the message for the service instance corresponding to SR_ID; otherwise the mobile station shall set this field to ‘0’. The mobile station shall not set this field to ‘1’, if MOB_QOSs is set to ‘0’ or if the inclusion of the QoS parameters would prevent the inclusion of all the dialed digits in the message.

QOS_PARMS_LEN - Length of the block of QoS parameters.

If QOS_PARMS_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 the combined length in octets, of the QOS_PARMS field and the immediately following QOS_RESERVED field.

QOS_PARMS - QoS parameters block.

If QOS_PARMS_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 it to the set of QoS parameter values as defined in accordance with the requirements for the requested service option and/or for the user, per subscription.

QOS_RESERVED - QoS reserved bits.

If QOS_PARMS_INCL is included and is set to ‘1’, the mobile station shall include the minimum number of bits of ‘0’, such that the combined length of the QOS_PARMS field and of this field is an integer number of octets; otherwise, the mobile station shall omit this field.

ENC_INFO_INCL – Encryption fields included.

If P_REV_IN_USEs is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the 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.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, this field indicates which signaling encryption algorithms are supported by the mobile station.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to ‘1’.

The mobile station shall set each other subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘00000’.

D_SIG_ENCRYPT_REQ – Dedicated channel signaling encryption request indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-dsch and r-dsch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-dsch and r-dsch.

C_SIG_ENCRYPT_REQ – Common channel signaling encryption request indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-csch and r-csch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-csch and r-csch.

NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message encryption and integrity (if message integrity is performed).

NEW_SSEQ_H_SIG - The signature of NEW_SSEQ_H

If NEW_SSEQ_H is included, 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 the digital signature of the NEW_SSEQ_H as described in 2.3.12.4.5.

UI_ENCRYPT_REQ – Request for user information encryption on the traffic channel indicator.
If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request user information encryption, and to ‘0’ to request no user information encryption.

**UI_ENCRYPT_SUP** – User information encryption supported indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate the supported user information encryption algorithms.
This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

Table 2.7.1.3.2.4-9. Encoding of the UI_ENCRYPT_SUP Field

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORYX</td>
<td>1</td>
<td>Support for ORYX encryption algorithm</td>
</tr>
<tr>
<td>REA</td>
<td>1</td>
<td>Support for the Rijndael encryption algorithm used in extended encryption</td>
</tr>
<tr>
<td>RESERVED</td>
<td>6</td>
<td>Reserved bits</td>
</tr>
</tbody>
</table>

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.

SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_SUPPORTED is equal to ‘0’, the mobile station shall set this field to ‘0’.

SYNC_ID_LEN - Service Configuration synchronization identifier length indicator.

If the SYNC_ID_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the SYNC_ID field included in this message.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is not included, or is included but is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the Service
Configuration synchronization identifier corresponding to a stored service configuration.

PREV_SID_INCL - Previous System Identification (SID) included indicator.

If $P_{\text{REV IN USE}}$ is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ if:

- The mobile station determines that the SID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to ‘0’.

PREV_SID - Previous System Identification.

If PREV_SID_INCL is not included, or is included but is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous SID.

PREV_NID_INCL - Previous Network Identification (NID) included indicator.

If $P_{\text{REV IN USE}}$ is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ if:

- The mobile station determines that NID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to ‘0’.

PREV_NID - Previous Network Identification.

If PREV_NID_INCL is not included, or is included but is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous NID.

PREV_PZID_INCL - Previous Packet Zone ID (PZID) included indicator.

If $P_{\text{REV IN USE}}$ is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
The mobile station shall set this field to ‘1’ if:
- The mobile station determines that the Packet Zone ID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to ‘0’.

**PREV_PZID** - Previous Packet Zone ID.

If PREV_PZID_INCL is not included, or is included but is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous PZID.

**SO_BITMAP_IND** - Service option bitmap indicator.

If P_REV_IN_USEs is less than 7, the mobile station shall omit this field; otherwise, the mobile station shall set this field as defined in Table 2.7.1.3.2.4-10.

Table 2.7.1.3.2.4-10. Encoding of the SO_BITMAP_IND Field

<table>
<thead>
<tr>
<th><strong>SO_BITMAP_IND</strong></th>
<th>Size of bitmap (in bits) included</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>0 bit (i.e., No bitmap included)</td>
</tr>
<tr>
<td>01</td>
<td>4 bits</td>
</tr>
<tr>
<td>10</td>
<td>8 bits</td>
</tr>
<tr>
<td>11</td>
<td>Reserved 16 bits</td>
</tr>
</tbody>
</table>

**SO_GROUP_NUM** - Service option group number.

If SO_BITMAP_IND is included and not set to ‘00’, the mobile station shall include this field and set this field to service option group number defined in [30], of the bitmap to be included in this message; otherwise, the mobile station shall omit this field.

**SO_BITMAP** - Service option bitmap.

If the field SO_BITMAP_IND is included and is not set to ‘00’, the mobile station shall include the bitmap of the service option group (SO_GROUP_NUM); otherwise, the mobile station shall omit this field.

When the service option bitmap is included, if there are more than \(2^{(1+4 \times SO_BITMAP_IND)}\) service options defined in [30] for the service option group [SO_GROUP_NUM], the mobile station shall include the bitmap containing the least significant bits \(2^{(1+4 \times SO_BITMAP_IND)}\) for the service option group.
The mobile station shall set a bit in this bitmap to ‘1’, if the mobile station is capable of supporting the service option for which the bit represents; otherwise, the mobile station shall set a bit in this bitmap to ‘0’.

**SDB_DESIRED_ONLY** – Short Data Burst Desired Only.

If P_REV_IN_USE is less than eight, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station desires to exchange user data using only Short Data Bursts on common channels, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

**ALT_BAND_CLASS_SUP** – Alternate band class support indicator.

If P_REV_IN_USE is less than eight, then the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If BAND_CLASS_INFO_REQ is equal to ‘1’ and the mobile station supports the CDMA band class specified by ALT_BAND_CLASS, then the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**MSG_INT_INFO_INCL** – Signaling message integrity information included indicator.

If P_REV_IN_USE is less than nine, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If MSG_INTEGRITY_SUP is set to ‘0’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

**SIG_INTEGRITY_SUP_INCL** – Signaling message integrity information included indicator.

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.

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 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 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 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.

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 include indicator of the 24 MSB of the security sequence number.

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:
- If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’
- RESTORE_KEYS is equal to ‘1’.

In all other cases, the mobile station shall set this field to ‘1’.

NEW_SSEQ_H - The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.

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.
NEW_SSEQ_H_SIG - The signature of NEW_SSEQ_H
If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.
The mobile station shall set this field to the digital signature of the NEW_SSEQ_H computed as described in 2.3.12.4.5.

FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.
If P_REV_IN_USEs is less than nine, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.
If the mobile station supports the Forward Packet Data Channel, then the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_PDCH Capability
Type-specific fields - Forward Packet Data Channel capability information.
If the FOR_PDCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.5; otherwise, the mobile station shall omit this field.

EXT_CH_IND - Extended Channel Indicator.
If the CH_IND field is not included or is included but is not set to ‘00’, 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 as shown in Table 2.7.1.3.2.4-11 to request a physical resource.
### Table 2.7.1.3.2.4-11. Extended Channel Indicator

<table>
<thead>
<tr>
<th>EXT CH IND (Binary)</th>
<th>Physical Resource(s) Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000</td>
<td>Reserved</td>
</tr>
<tr>
<td>00001</td>
<td>F-PDCH + F-CPCCH + R-FCH</td>
</tr>
<tr>
<td>00010</td>
<td>F-PDCH + F-CPCCH + R-DCCH</td>
</tr>
<tr>
<td>00011</td>
<td>F-PDCH + F-FCH + R-FCH</td>
</tr>
<tr>
<td>00100</td>
<td>F-PDCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>00101</td>
<td>F-PDCH + F-FCH + R-FCH + R-DCCH</td>
</tr>
<tr>
<td>00110</td>
<td>F-PDCH + F-FCH + R-FCH + F-DCCH</td>
</tr>
<tr>
<td>00111</td>
<td>F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>01000</td>
<td>F-PDCH + R-PDCH + F-CPCCH</td>
</tr>
<tr>
<td>01001</td>
<td>F-PDCH + R-PDCH + F-CPCCH + R-FCH</td>
</tr>
<tr>
<td>01010</td>
<td>F-PDCH + R-PDCH + F-CPCCH + R-DCCH</td>
</tr>
<tr>
<td>01011</td>
<td>F-PDCH + R-PDCH + F-FCH</td>
</tr>
<tr>
<td>01100</td>
<td>F-PDCH + R-PDCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>01101</td>
<td>F-PDCH + R-PDCH + F-FCH + R-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>F-PDCH + R-PDCH + F-FCH + F-DCCH</td>
</tr>
<tr>
<td>01111</td>
<td>F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>SIGN_SLOT_CYCLE_INDEX</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
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<tr>
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<td>F-PDCH + F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10000</td>
<td>F-PDCH + F-CPCCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10001</td>
<td>F-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10010</td>
<td>F-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10011</td>
<td>F-PDCH + R-PDCH + F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10100</td>
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</tr>
<tr>
<td>10101</td>
<td>F-PDCH + R-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>10110</td>
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<td>10111</td>
<td>Reserved</td>
</tr>
<tr>
<td>~11111</td>
<td></td>
</tr>
</tbody>
</table>

1 SIGN_SLOT_CYCLE_INDEX – Sign of the slot cycle index.

If P_REV_IN_USEs is less than 11, or if the SLOT_CYCLE_INDEX field is set to ‘000’, 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 as specified in Table 2.7.1.3.2.1-8 to the sign of the preferred slot cycle index, SLOT_CYCLE_INDEXp (see 2.6.2.1.1). The absolute value of the preferred slot cycle index, SLOT_CYCLE_INDEXp, is specified in the SLOT_CYCLE_INDEX field of this message.
ADD_SERV_INSTANCE_INCL - Additional service instances included indicator.

If P_REV_IN_USEs is less than 11 or if SR_ID is included and set to ‘111’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If at least one occurrence of the ADD_SR_ID field is included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_INCL is equal to ‘0’ and MAX_ADD_SERV_INSTANCEs is equal to ‘0’, the mobile station shall set this field to ‘0’.

NUM_ADD_SERV_INSTANCE - Number of additional service instances included.

If ADD_SERV_INSTANCE_INCL is not included or is included and set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the number of additional service instances included in this message.

If SYNC_ID_INCL is equal to ‘0’, the mobile station shall set this field to a value less than or equal to MAX_ADD_SERV_INSTANCEs.

If ADD_SERV_INSTANCE_INCL is included and set to ‘1’, the mobile station shall include NUM_ADD_SERV_INSTANCE occurrences of the following variable-field record:

ADD_SR_ID - Additional service reference identifier.

If SYNC_ID_INCL is set to ‘0’, the mobile station shall set this field as follows:

- If the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance. If the service instance does not provide a service reference identifier, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 (inclusive).

Otherwise, the mobile station shall set this field to the service reference identifier corresponding to the service option connection that the mobile station requests to be restored from the stored service configuration.

ADD_DRS - Additional Data Ready to Send indicator.

If the service instance corresponding to the ADD_SR_ID field of this record has data to send, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

ADD_SERVICE_OPTION_INCL - Additional service option included indicator.
If SYNC_ID_INCL 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 ‘0’ if the requested service option number of the service instance corresponding to the ADD_SR_ID field of this record is the same as SERVICE_OPTION; otherwise, the mobile station shall set this field to ‘1’.

ADD_SERVICE_OPTION – Additional service option number.

If the ADD_SERVICE_OPTION_INCL field of this record is not included or is included and set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the value specified in [30], corresponding to the requested service option number of the service instance corresponding to the ADD_SR_ID field of this record.

ADD_QOS_PARMS_INCL – Additional QoS parameters included indicator.

If SYNC_ID_INCL 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 QoS parameters for the service instance corresponding to the ADD_SR_ID field of this record are included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

The mobile station shall not set this field to ‘1’ if MOB_QOSs is set to ‘0’.

ADD_QOS_PARMS_LEN – Additional Length of the block of QoS parameters.

If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the combined length of the ADD_QOS_PARMS field and the ADD_QOS_RESERVED field of this record, in octets.

ADD_QOS_PARMS – Additional QoS parameters block.

If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the set of QoS parameter values as defined in accordance with the requirements for the requested service option and/or for the user, per subscription.

ADD_QOS_RESERVED – Additional QoS reserved bits.
If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include the minimum number of bits of '0', such that the combined length of the QOS_PARMS field and of this field is an integer number of octets.

BCMC_INCL - BCMC information included indicator

If the P_REV_IN_USE is less than eleven, 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 one or more BCMC_PROGRAM_IDS are included in the message; otherwise, the mobile station shall set this field to '0'.

BCMC_ORIG ONLY_IND - BCMC origination only indicator

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that this origination is only for BCMC and no point to point call is requested in this message; otherwise the mobile station shall set this field to '0'.

FUNDICATED_BCMC_SUPPORTED - Fundicated BCMC capability type-specific supported indicator.

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station supports Fundicated BCMC channel configurations, the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

FUNDICATED_BCMC Capability

Type-specific fields - FUNDICATED_BCMC capability information.

If the FUNDICATED_BCMC_SUPPORTED field is included and is set to '1', the mobile station shall include this field and set it as defined in 2.7.4.27.7; otherwise, the mobile station shall omit this field.

AUTH_SIGNATURE_INCL - Authorization signature included indication.

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that the authorization signature is included in this message for some of the BCMC flows included in this message; otherwise, the mobile station shall set this field to '0'.

TIME_STAMP_SHORT_LENGTH - Length of time stamp included in this message.
If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the time stamp, in units of bits, included in this message.

**TIME_STAMP_SHORT** - Time stamp short.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the **TIME_STAMP_SHORT**_LENGTH_ least significant bits of the time stamp parameter used to generate the Authorization signature included in this message.

**NUM_BCMC_PROGRAMS** - Number of BCMC Programs

If the BCMC_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the number of BCMC programs included in this message minus 1.

The mobile station shall include **NUM_BCMC_PROGRAMS+1** occurrences of the following variable length record:

**BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

**BCMC_PROGRAM_ID** - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.

The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station will continue to monitor or start to monitor upon receiving confirmation of delivery of this message or is requesting transmission.

**BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

The mobile station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program. To request all flows associated with this BCMC_PROGRAM_ID, the mobile station may set this field to ‘000’.
NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators included for this program.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR – BCMC Flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the BCMC flow discriminator requested.

AUTH_SIGNATURE_IND - Authorization signature indicator.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ to indicate that the authorization signature is included in this message for this BCMC flow; otherwise, the mobile station shall set this field to ‘0’.

AUTH_SIGNATURESAME_IND - Authorization signature same as previous BCMC flow indicator.

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to '0'.
For the first BCMC flow listed in this message, the mobile station shall set this field to ‘0’.

BAK_ID - BAK identifier.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 BAK identifier used to generate the Authorization signature included in this message.

AUTH_SIGNATURE - Authorization signature.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 Authorization signature computed for this BCMC flow as specified in 2.6.13.9.

REV_PDCH_SUPPORTED - Reverse Packet Data Channel supported indicator.

If P_REV_IN_USES is less than 11 or FOR_PDCH_SUPPORTED is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Reverse Packet Data Channel (R-PDCH), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_PDCH Capability Type-specific fields - Reverse Packet Data Channel capability information.

If the REV_PDCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.6; otherwise, the mobile station shall omit this field.

BAND_SUB_REP_INCL – Band class – band subclass report included

If P_REV_IN_USES is less than eleven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
If CAND_BAND_INFO_REQ is equal to ‘1’ and the mobile station supports at least 1 band class and band subclass (if applicable) combination queried by the base station, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**NUM_BAND_SUBCLASS** – Number of band class - band subclass capabilities reported

If BAND_SUB_REP_INCL is set to ‘0’ or is not included, this field shall be omitted; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station supports all candidate band class and band subclass (if applicable) combinations queried by the 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.

If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall include NUM_BAND_SUBCLASS occurrences of the **BAND_SUBCLASS_SUP** field:

**BAND_SUBCLASS_SUP** – Band class-band subclass supported indicator

The mobile station shall set this field as specified in section 2.6.14.1.
### 2.7.1.3.2.5 Page Response Message

**MSG_TAG:** PRM

<table>
<thead>
<tr>
<th>Field</th>
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</thead>
<tbody>
<tr>
<td>MOB_TERM</td>
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</tr>
<tr>
<td>SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>MOB_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SCM</td>
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<tr>
<td>REQUEST_MODE</td>
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<tr>
<td>SERVICE_OPTION</td>
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<tr>
<td>PM</td>
<td>1</td>
</tr>
<tr>
<td>NAR_AN_CAP</td>
<td>1</td>
</tr>
<tr>
<td>ENCRYPTION_SUPPORTED</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_ALT_SO</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_ALT_SO occurrences of the following field:

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{ (NUM_ALT_SO)
  ALT_SO 16
} (NUM_ALT_SO)
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(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UZID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UZID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>CH_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>OTD_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ENHANCED_RC</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RC_PREF</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_RC_PREF</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>DCCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>DCCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>REV_FCH_GATING_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>STS_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>3X_CCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WLL_DEVICE_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>HOOK_STATUS</td>
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</tr>
<tr>
<td>ENC_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
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</tr>
<tr>
<td>D_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
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<tr>
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<td>0 or 24</td>
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<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or ((8 \times \text{SYNC_ID_LEN}))</td>
</tr>
<tr>
<td>SO_BITMAP_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SO_GROUP_NUM</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SO_BITMAP</td>
<td>0 or (2^{(1+4\times \text{SO_BITMAP_IND})})</td>
</tr>
<tr>
<td>ALT_BAND_CLASS_SUP</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
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<tr>
<td>SIG_INTEGRITY_REQ</td>
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<td>NEW_SSEQ_H_INCL</td>
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<td>NEW_SSEQ_H</td>
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<tr>
<td>NEW_SSEQ_H_SIG</td>
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</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SIGN_SLOT_CYCLE_INDEX</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_PREF_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FUNDICATED_BCMC_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FUNDICATED_BCMC Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>TIME_STAMP_SHORT_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_SHORT</td>
<td>0 or Variable</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

**NUM_BCMC_PROGRAMS**+1 occurrences of the following variable length record:

\{(NUM_BCMC_PROGRAMS+1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>Variable (Value of BCMC_PROGRAM_ID_LEN + 1)</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
</tbody>
</table>

**NUM_FLOW_DISCRIMINATOR**+1 or 1 occurrences of the following variable length record:

\{(NUM_FLOW_DISCRIMINATOR+1) or 1\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
<tr>
<td>BCMC_PREF</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURESAME_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>BAK_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>AUTH_SIGNATURE</td>
<td>0 or 32</td>
</tr>
</tbody>
</table>

\{(NUM\_FLOW\_DISCRIMINATOR\+1) \or 1\}

\{(NUM\_BCMC\_PROGRAMS\+1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>BAND_SUB_REP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_BAND_SUBCLASS</td>
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NUM\_BAND\_SUBCLASS occurrences of the following field:

\{(NUM\_BAND\_SUBCLASS)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>BAND_SUBCLASS_SUP</td>
<td>1</td>
</tr>
</tbody>
</table>

\{(NUM\_BAND\_SUBCLASS)\}

1

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 of 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\_INDEXp) (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\_INDEXp (see 2.6.2.1.1); otherwise, the mobile station shall set this field to ‘000’. The sign of SLOT\_CYCLE\_INDEXp 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 ‘00001011’.
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.

SERVICE_OPTION – Service option.

If the mobile station accepts the service option specified by the mobile-station-addressed page, it shall set this field as follows:

- If the page record to which the mobile station is responding contained a SERVICE OPTION field, the mobile station shall set this field to the service option number specified in the SERVICE OPTION field of the page record to which the mobile station is responding.

- If the page record to which the mobile station is responding did not contain a SERVICE OPTION field, the mobile station shall set this field to the default option number ‘0000000000000001’.

If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station does have an alternative service option to request, the mobile station shall set this field to the service option code specified in [30] corresponding to the alternative service option.

If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station does not have an alternative service option to request, the mobile station shall set this field to ‘0000000000000000’ to reject the service option specified by the page record of the General Page Message or Universal Page Message to which the mobile station is responding.

PM – Privacy mode indicator.

To request voice privacy, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NAR_AN_CAP – Narrow analog capability.

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3 This scenario could occur only in a Direct Channel Assignment call setup.
If the mobile station is capable of narrow analog operation, the mobile station shall set this bit to ‘1’; otherwise, the mobile station shall set this bit to ‘0’.

**ENCRYPTION_SUPPORTED** – Encryption algorithms supported by the mobile station.

If P_REV_IN_USEs is greater than or equal to seven or AUTH_MODE is equal to ‘00’, the mobile station shall omit this field. If P_REV_IN_USEs is less than seven and AUTH_MODE is not equal to ‘00’, then the mobile station shall set this field as specified in table 2.7.1.3.2.4-5.

**NUM_ALT_SO** – Number of alternative service options.

If P_REV_IN_USEs is less than seven, the mobile station shall set this field to the number of alternative service options it supports other than the one specified in the SERVICEOPTION field. The mobile station shall set this field to a value less than or equal to MAX_NUM_ALT_SOs.

If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall set this field to the number of alternate service options, which either have no service option group number assigned or do not belong to the same service option group whose bitmap is being included. The alternate service option numbers are other than the one specified in the SERVICEOPTION field. The mobile station shall set this field to a value less than or equal to MAX_NUM_ALT_SOs.

**ALT_SO** – Alternative service option.

The mobile station shall include NUM_ALT_SO occurrences of this field. The mobile station shall set this field to the value specified in [30], corresponding to the alternative service option supported by the mobile station.

If P_REV_IN_USEs is equal to or greater than seven, the mobile station shall include NUM_ALT_SO occurrences of this field. The mobile station shall set this field to the service option number defined in [30] corresponding to the alternate service options which either have no service option group number assigned or do not belong to the same service option group whose bitmap is included in this message.

**UZID_INCL** – User Zone Identifier included indicator.

If P_REV_IN_USEs is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the message is to contain the User Zone Identifier, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**UZID** – User Zone Identifier.

If the UZID_INCL field is included in the message and is set to ‘1’, the mobile station shall include this field and set it to UZIDs; otherwise, the mobile station shall omit this field.
CH_IND – Channel Indicator.

If $P_{REV\_IN\_USE_S}$ is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it, as shown in Table 2.7.1.3.2.5-1, to request physical resources.

<table>
<thead>
<tr>
<th>CH_IND (binary)</th>
<th>Channel(s) Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Refer to EXT_CH_IND</td>
</tr>
<tr>
<td>01</td>
<td>Fundamental Channel</td>
</tr>
<tr>
<td>10</td>
<td>Dedicated Control Channel</td>
</tr>
<tr>
<td>11</td>
<td>Fundamental Channel and Dedicated Control Channel</td>
</tr>
</tbody>
</table>

OTD_SUPPORTED – Orthogonal transmit diversity supported indicator

If $P_{REV\_IN\_USE_S}$ is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports orthogonal transmit diversity, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

QPCH_SUPPORTED – Quick Paging Channel supported indicator.

If $P_{REV\_IN\_USE_S}$ is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Quick Paging Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

ENHANCED_RC – Enhanced radio configuration supported indicator.

If $P_{REV\_IN\_USE_S}$ is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports any radio configuration in the Radio Configuration Class 2 (see 1.1.1), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_RC_PREF – Forward Radio Configuration preference.

If $P_{REV\_IN\_USE_S}$ is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.
The mobile station shall set this field to its preferred Radio Configuration for the Forward Fundamental Channel and/or Forward Dedicated Control Channel.

**REV_RC_PREF** – Reverse Radio Configuration preference.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to its preferred Radio Configuration for the Reverse Fundamental Channel and/or Reverse Dedicated Control Channel.

**FCH_SUPPORTED** – Fundamental Channel supported indicator.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Fundamental Channel; otherwise, the mobile station shall set this field to ‘0’.

**FCH Capability Type specific fields** – Fundamental Channel capability information.

If the FCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.1; otherwise, the mobile station shall omit this field.

**DCCH_SUPPORTED** – Dedicated Control Channel supported indicator.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Dedicated Control Channel; otherwise, the mobile station shall set this field to ‘0’.

**DCCH Capability Type specific fields** – Dedicated Control Channel capability information.

If DCCH_SUPPORTED is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.2; otherwise, the mobile station shall omit this field.

**REV_FCH_GATING_REQ** – Reverse Fundamental Channel eighth gating mode request indicator.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station requests to turn on the reverse Fundamental Traffic Channel gating mode in Radio Configurations 3, 4, 5, and 6, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**STS_SUPPORTED** – STS supported indicator.
If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports Space Time Spreading Transmit Diversity; otherwise, the mobile station shall set this field to ‘0’.

3X_CCH_SUPPORTED – 3X Common Channels supported.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the mobile station supports the Spreading Rate 3 common channels (3X BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile station shall set this field to ‘0’.

WLL_INCL - WLL information included indicator.

If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station is a Wireless Local Loop device, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

WLL_DEVICE_TYPE – WLL device type indicator.

If WLL_INCL is not included, or if WLL_INCL is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows.

The mobile station shall set this field to the WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

HOOK_STATUS – WLL terminal hook status.

If WLL_INCL is not included, or if WLL_INCL is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the value shown in Table 2.7.1.3.2.1-4 corresponding to the hook state.
ENC_INFO_INCL – Encryption fields included.
If P_REV_IN_USE is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ if the 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.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.
If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate which signaling encryption algorithms are supported by the mobile station.

This field consists of the subfields shown in Table 2.7.1.3.2.1-5.
If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to ‘1’.
The mobile station shall set each other subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.
The mobile station shall set the RESERVED subfield to ‘00000’.

D_SIG_ENCRYPT_REQ – Dedicated channel signaling encryption request indicator.
If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-dsch and r-dsch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-dsch and r-dsch.

C_SIG_ENCRYPT_REQ – Common channel signaling encryption request indicator.
If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-csch and r-csch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-csch and r-csch.

NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of the crypto-sync.

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If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message encryption and integrity (if message integrity is performed).

NEW_SSEQ_H_SIG - The signature of NEW_SSEQ_H

If the NEW_SSEQ_H field is included in the message, the mobile station shall set this field to the digital signature of the NEW_SSEQ_H as described in 2.3.12.4.5; otherwise, the mobile station shall omit this field.

UI_ENCRYPT_REQ – Request for user information encryption on the traffic channel indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request user information encryption, and to ‘0’ to request no user information encryption.

UI_ENCRYPT_SUP – User information encryption supported indicator.

If ENC_INFO_INCL is included and is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to indicate the supported user information encryption algorithms.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.

SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

If P_REV_IN_USES is less than seven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_SUPPORTEDS is equal to ‘0’, the mobile station shall set this field to ‘0’.
SYNC_ID_LEN - Service Configuration synchronization identifier length
indicator.

If the SYNC_ID_INCL field is not included or is included and
is set to '0', the mobile station shall omit this field; otherwise
the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the
SYNC_ID field included in this message.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is not included, or is included and
is set to '0', the mobile station shall omit this field; otherwise,
the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the Service
Configuration synchronization identifier corresponding to the
stored service configuration.

SO_BITMAP_IND - SO bitmap indicator.

If P_REV_IN_USEs is less than 7, the mobile station shall omit
this field; otherwise, the mobile station shall include this field
and set this field as defined in Table 2.7.1.3.2.4-10.

SO_GROUP_NUM - The service option group number.

If SO_BITMAP_IND is included and not set to '00', the mobile
station shall include this field and set this field to service
option group number of the bitmap to be included in this
message; otherwise, the mobile station shall omit this field.

SO_BITMAP - Service option bitmap.

If the field SO_BITMAP_IND field is included and is not set to
'00', the mobile station shall include the bitmap of the service
option group (SO_GROUP_NUM); otherwise, the mobile
station shall omit this field.

When the service option bitmap is included, if there are more
than \(2^{\left(1+4\times SO\_BITMAP\_IND\right)}\) service options defined for
the service option group, the mobile station shall include the
bitmap containing the least significant bits \(2^{\left(1+4\times SO\_BITMAP\_IND\right)}\) of the service option group.

The mobile station shall set a bit in this bitmap to '1', if the
mobile station is capable of supporting the service option for
which the bit represents; otherwise, the mobile station shall
set a bit in this bitmap to '0'.

ALT_BAND_CLASS_SUP – Alternate band class support indicator.

If P_REV_IN_USEs is less than eight, then the mobile station
shall omit this field; otherwise, the mobile station shall
include this field and set it as follows:
If BAND_CLASS_INFO_REQ\textsubscript{s} is equal to ‘1’ and the mobile station supports the CDMA band class specified by ALT_BAND_CLASS\textsubscript{s}, then the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

MSG\\_INT\\_INFO\\_INCL - Signaling message integrity information included indicator.  
If P\\_REV\\_IN\\_USE\textsubscript{s} is less than nine, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.  
If MSG\\_INTEGRITY\\_SUP\textsubscript{s} is set to ‘0’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

SIG\\_INTEGRITY\\_SUP\\_INCL - Signaling message integrity information included indicator.  
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.  
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 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 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 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.

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 include indicator of the 24 MSB of the security sequence number.

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:

- If SIG_ENCRYPT_SUP is included and the ECMEA or REA subfield in SIG_ENCRYPT_SUP is set to ‘1’
- RESTORE KEYS is equal to ‘1’.

In all other cases, the mobile station shall set this field to ‘1’.

NEW_SSEQ_H - The 24-bit value used to initialize the 24 MSB of the crypto-sync.

If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.

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.
NEW_SSEQ_H_SIG - The signature of NEW_SSEQ_H

If NEW_SSEQ_H_INCL is included and is set to ‘1’, the mobile station shall include this field and set this field as follows; otherwise, the mobile station shall omit this field.

The mobile station shall set this field to the digital signature of the NEW_SSEQ_H computed as described in 2.3.12.4.5.

FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.

If P_REV_IN_USEs is less than nine, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Forward Packet Data Channel, then the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_PDCH Capability

Type-specific fields - Forward Packet Data Channel capability information.

If the FOR_PDCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.5; otherwise, the mobile station shall omit this field.

EXT_CH_IND - Extended Channel Indicator.

If the CH_IND field is not included or is included but is not set to ‘00’, 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 as shown in Table 2.7.1.3.2.4-11 to request a physical resource.

SIGN_SLOT_CYCLE_INDEX - Sign of the slot cycle index.

If P_REV_IN_USEs is less than 11, or if the SLOT_CYCLE_INDEX field is set to ‘000’, 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 as specified in Table 2.7.1.3.2.1-8 to the sign of the preferred slot cycle index, SLOT_CYCLE_INDEXp (see 2.6.2.1.1). The absolute value of the preferred slot cycle index, SLOT_CYCLE_INDEXp, is specified in the SLOT_CYCLE_INDEX field of this message.

BCMC_INCL - BCMC information included indicator

If the P_REV_IN_USEs is less than 11, 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 one or more BCMC_PROGRAM_IDs are included in the message; otherwise, the mobile station shall set this field to ‘0’.

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BCMC_PREF_INCL - BCMC preference included indicator

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ if BCMC preference information is included in this message; otherwise, the mobile station shall set this field to ‘0’.

FUNDICATED_BCMC_SUPPORTED - Fundicated BCMC capability type-specific supported indicator.

If the BCMC_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports Fundicated BCMC channel configurations, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FUNDICATED_BCMC Capability

Type-specific fields - FUNDICATED_BCMC capability information.

If the FUNDICATED_BCMC_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.7; otherwise, the mobile station shall omit this field.

AUTH_SIGNATURE_INCL - Authorization signature included indication.

If the BCMC_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

The mobile station shall set this field to ‘1’ to indicate that the authorization signature is included in this message for each of the BCMC flows included in this message; otherwise, the mobile station shall set this field to ‘0’.

TIME_STAMP_SHORT_LENGTH - Length of time stamp included in this message.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the time stamp, in units of bits, included in this message.

TIME_STAMP_SHORT - Time stamp short.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
The mobile station shall set this field to the TIME_STAMP_SHORT_LENGTH least significant bits of the time stamp parameter used to generate the Authorization signature included in this message.

**NUM_BCMC_PROGRAMS** - Number of BCMC Programs

If the BCMC_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the number of BCMC programs included in this message minus 1.

The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:

**BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

**BCMC_PROGRAM_ID** - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.

The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station is requesting.

**BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

The mobile station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program. To request all flows associated with this BCMC_PROGRAM_ID, the mobile station may set this field to ‘000’.

**NUM_FLOW_DISCRIMINATOR** - Number of BCMC flow discriminators

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:
BCMC_FLOW_DISCRIMINATOR - BCMC Flow discriminator

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows:

1. If the BCMC_FLOW_DISCRIMINATOR_LEN field is not included or is included and is set to '000', this field is omitted;
2. otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

BCMC_FLOW_DISCRIMINATOR_LEN is set to '000' if this field is omitted.

The mobile station shall set this field to the BCMC flow discriminator requested.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN.

BCMC_FLOW_DISCRIMINATOR_LEN.

The mobile station shall set this field to the BCMC flow discriminator requested.

BCMC_PREF - BCMC preference indicator

The length of this field shall be BCMC_PREF as follows:

1. If the BCMC_PREF field is not included or is included and is set to '0', the mobile station shall omit this field;
2. otherwise, the mobile station shall include this field and set it as follows:
3. The mobile station shall set this field to '1' to indicate that the mobile station has higher preference for this BCMC flow than the incoming call for which this message is sent; otherwise, the mobile station shall set this field to '0'.

AUTH_SIGNATURE_IND - Authorization signature indicator

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to '1' to indicate that the authorization signature is included in this message for this BCMC flow; otherwise, the mobile station shall set this field to '0'.

AUTH_SIGNATURE_SAME_IND - Authorization signature same as previous BCMC flow indicator

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

1. The mobile station shall set this field to '1' to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to '0'.

BAK_ID - BAK identifier

For the first BCMC flow listed in this message, the mobile station shall set this field to '0'.

AUTH_SIGNATURE_SAME_IND - Authorization signature same as previous BCMC flow indicator

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

1. The mobile station shall set this field to '1' to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to '0'.

AUTH_SIGNATURE_IND - Authorization signature indicator

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

1. The mobile station shall set this field to '1' to indicate that the authorization signature is included in this message for this BCMC flow; otherwise, the mobile station shall set this field to '0'.

The mobile station shall set this field to the BCMC flow discriminator requested.
If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 BAK identifier used to generate the Authorization signature included in this message.

**AUTH_SIGNATURE** - Authorization signature.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 Authorization signature computed for this BCMC flow as specified in 2.6.13.9.

**REV_PDCH_SUPPORTED** - Reverse Packet Data Channel supported indicator.

If P_REV_IN_USEs is less than 11 or FOR_PDCH_SUPPORTED is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the mobile station supports the Reverse Packet Data Channel (R-PDCH), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**REV_PDCH Capability Type-specific fields** - Reverse Packet Data Channel capability information.

If the REV_PDCH_SUPPORTED field is included and is set to ‘1’, the mobile station shall include this field and set it as defined in 2.7.4.27.6; otherwise, the mobile station shall omit this field.

**BAND_SUB_REP_INCL** - Band class – band subclass report included

If P_REV_IN_USEs is less than eleven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If CAND_BAND_INFO_REQs is equal to ‘1’ and the mobile station supports at least 1 band class and band subclass (if applicable) combination queried by the base station, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’. 
**NUM_BAND_SUBCLASS** – Number of band class - band subclass capabilities reported

If BAND_SUB_REP_INCL is set to ‘0’ or is not included, this field shall be omitted; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station supports all candidate band class and band subclass (if applicable) combinations queried by the 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.

If the NUM_BAND_SUBCLASS field is included in this message, the mobile station shall include NUM_BAND_SUBCLASS occurrences of the BAND_SUBCLASS_SUP field:

**BAND_SUBCLASS_SUP** – Band class-band subclass supported indicator

The mobile station shall set this field as specified in section 2.6.14.1.
2.7.1.3.2.6 Authentication Challenge Response Message

MSG_TAG: AUCRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHU</td>
<td>18</td>
</tr>
</tbody>
</table>

AUTHU – Authentication challenge response.

The mobile station shall set this field as specified in 2.3.12.1.4.
2.7.1.3.2.7 Status Response Message

MSG_TAG: STRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{QUAL_INFO_LEN}$</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

```
/

RECORD_TYPE     8
RECORD_LEN      8
Type-specific fields $8 \times \text{RECORD_LEN}$
```

QUAL_INFO_TYPE – Qualification information type.

The mobile station shall set this field to the QUAL_INFO_TYPE field in the corresponding Status Request Message.

QUAL_INFO_LEN – Qualification information length.

The mobile station shall set this field to the QUAL_INFO_LEN field in the corresponding Status Request Message.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields to the qualification information in the corresponding Status Request Message.

The mobile station shall include all the records requested in the corresponding Status Request Message. The mobile station shall include one occurrence of the following fields for each information record to be included:

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets included in the type-specific fields of this information record.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields to the information as specified in 2.7.4 for the specific type of records. The mobile station shall only specify the information corresponding to the included qualification information.
2.7.1.3.2.8 TMSI Assignment Completion Message

MSG_TAG: TACM

There are no Layer 3 fields associated with this message.
2.7.1.3.2.9 PACA Cancel Message

MSG_TAG: PACNM

There are no Layer 3 fields associated with this message.
2.7.1.3.2.10 Extended Status Response Message

MSG_TAG: ESTRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{QUAL_INFO_LEN}$</td>
</tr>
<tr>
<td>NUM_INFO_RECORDS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_INFO_RECORDS occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{RECORD_LEN}$</td>
</tr>
</tbody>
</table>

QUAL_INFO_TYPE – Qualification information type.

The mobile station shall set this field to the QUAL_INFO_TYPE field in the corresponding Status Request Message.

QUAL_INFO_LEN – Qualification information length.

The mobile station shall set this field to the QUAL_INFO_LEN field in the corresponding Status Request Message.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields to the qualification information in the corresponding Status Request Message.

NUM_INFO_RECORDS – Number of information records included.

The mobile station shall set this field to the number of information records which are included. The mobile station shall include all the records requested in the corresponding Status Request Message.

The mobile station shall include one occurrence of the following fields for each information record which is included:

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The mobile station shall set this field to the number of octets included in the type-specific fields of this information record.</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Type-specific fields</strong> − Type-specific fields.</td>
</tr>
<tr>
<td>4</td>
<td>The mobile station shall set these fields to the information as specified in 2.7.4 for the specific type of records. The mobile station shall only specify the information corresponding to the included qualification information.</td>
</tr>
</tbody>
</table>
2.7.1.3.2.11 Device Information Message

MSG_TAG: DIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLL_DEVICE_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUM_INFO_RECORDS</td>
<td>5</td>
</tr>
</tbody>
</table>

NUM_INFO_RECORDS occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{RECORD_LEN}$</td>
</tr>
</tbody>
</table>

WLL_DEVICE_TYPE – WLL device type indicator.

The mobile station shall set this field to the WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

NUM_INFO_RECORDS – Number of information records included.

The mobile station shall set this field to the number of information records which are included.

The mobile station shall include one occurrence of the following fields for each information record which is included:

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type code shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets in the type-specific fields of this record.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields as specified in 2.7.4 for this type of information record.
### 2.7.1.3.2.12 Security Mode Request Message

**MSG_TAG**: SMRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI_ENC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_ENC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

- **UI_ENC_INCL**: User information encryption fields included.
  
The mobile station shall set this field to ‘1’ if the user information encryption related fields are included in this message; otherwise, the mobile station shall set this field to ‘0’.

- **UI_ENCRYPT_SUP**: User information encryption supported indicator.
  
  If **UI_ENC_INCL** is equal 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 the supported user information encryption algorithms.

  This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

  The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

- **SIG_ENC_INCL**: Signaling encryption fields included.
  
  The mobile station shall set the RESERVED subfield to ‘000000’.

- **NEW_SSEQ_H**

  The mobile station shall set the **NEW_SSEQ_H** field to a value between 0 and 24 inclusive.

- **NEW_SSEQ_H_SIG**

  The mobile station shall set the **NEW_SSEQ_H_SIG** field to a value between 0 and 8 inclusive.

- **MSG_INT_INFO_INCL**

  The mobile station shall set the **MSG_INT_INFO_INCL** field to ‘1’ if the message integrity information fields are included in this message; otherwise, the mobile station shall set this field to ‘0’.

- **SIG_INTEGRITY_SUP_INCL**

  If **MSG_INT_INFO_INCL** is equal 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 the supported message integrity algorithms.

  This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

  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 ‘000000’. 
The mobile station shall set this field to ‘1’ if the following two fields related to signaling encryption fields are included in this message; otherwise, the mobile station shall set this field to ‘0’.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

If SIG_ENC_INCL is equal 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 the supported signaling encryption algorithms supported by the mobile station.

This field consists of the subfields shown in Table 2.7.1.3.2.1.

If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to ‘1’.

The mobile station shall set each other subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘00000’.

C_SIG_ENCRYPT_REQ – Common channel signaling encryption request indicator.

If SIG_ENC_INCL is equal to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-csch and r-csch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-csch and r-csch.

NEW_SSEQ_H_INCL – The NEW_SSEQ included indicator.

The mobile station shall set this field to ‘1’ if NEW_SSEQ_H is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If MSG_INTEGRITY_SUP is equal to ‘0’, the mobile station shall set this field to ‘1’ if the mobile station is to include the NEW_SSEQ_H and NEW_SSEQ_H_SIG fields.

If MSG_INTEGRITY_SUP is equal to ‘1’, the mobile station shall set this field to ‘0’.

NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of crypto-sync.

If NEW_SSEQ_H_INCL is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message encryption and integrity.
NEW_SSEQ_H_SIG – The signature of NEW_SSEQ_H

If NEW_SSEQ_H is included, 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 the digital signature of the NEW_SSEQ_H computed as described in 2.3.12.4.5.

MSG_INT_INFO_INCL – Signaling message integrity information included indicator.

If MSG_INTEGRITY_SUP is equal to ‘0’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

SIG_INTEGRITY_SUP_INCL – Signaling message integrity information included indicator.

If MSG_INT_INFO_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If 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 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 set this field to indicate the supported message integrity algorithm 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 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.
### 2.7.1.3.2.13 Authentication Response Message

**MSG_TAG:** AURSPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RES</td>
<td>128</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NEW_KEY_ID</td>
<td>2</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>24</td>
</tr>
</tbody>
</table>

**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 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.
2.7.1.3.2.14 Authentication Resynchronization Message

\[
\text{MSG_TAG: AURSYNM}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_MS_SQN</td>
<td>48</td>
</tr>
<tr>
<td>MAC_S</td>
<td>64</td>
</tr>
</tbody>
</table>

- **CON_MS_SQN** – The concealed sequence number of the authentication vector. The mobile station shall set this field to the output, \( \text{CON_MS_SQN} \), of the function as specified in Figure 2.3.12.5.2-3.

- **MAC_S** – Message authentication code for resynchronization. The mobile station shall set this field to the output, \( \text{MAC_S} \), of the function as specified in Figure 2.3.12.5.2-3.
2.7.1.3.2.15 Reconnect Message

MSG_TAG: RCNM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIG_IND</td>
<td>1</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 \times ) SYNC_ID_LEN</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>0 or 16</td>
</tr>
<tr>
<td>SR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ADD_SERV_INSTANCE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ADD_SERV_INSTANCE</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ADD_SERV_INSTANCE occurrences of the following record:

\{ (NUM_ADD_SERV_INSTANCE) \\
ADD_SR_ID 3 \}

} (NUM_ADD_SERV_INSTANCE)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDB_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

\{ (NUM_FIELDS) \\
CHAR_8 \}

} (NUM_FIELDS)

ORIG_IND – Origination indicator

If this message is being sent in place of an Origination Message, the mobile station shall set this field to ‘1’; if this message is being sent in place of a Page Response Message, the mobile station shall set this field to ‘0’.

SYNC_ID_INCL – Service Configuration synchronization identifier included indicator.

The mobile station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_SUPPORTEDs is equal to ‘0’, the mobile station shall set this field to ‘0’.
SYNC_ID_LEN – Service Configuration synchronization identifier length indicator.

If the SYNC_ID_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the SYNC_ID field included in this message.

SYNC_ID – Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is 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 Service Configuration synchronization identifier corresponding to the stored service configuration.

SERVICE_OPTION – Service option number.

If the SYNC_ID_INCL field is set to ‘1’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the ORIG_IND field is set to ‘1’, the mobile station shall set this field to the service option number corresponding to the service being reconnected.

If the ORIG_IND field is set to ‘0’, the mobile station shall set this field as follows:

- If the mobile station accepts the service option specified by the mobile-station-addressed page, it shall set this field as follows:

  • If the mobile station accepts the service option specified by the mobile-station-addressed page, if the page record to which the mobile station is responding contained a SERVICE OPTION field, the mobile station shall set this field to the service option number specified in the SERVICE OPTION field of the page record to which the mobile station is responding.

  • If the page record to which the mobile station is responding did not contain a SERVICE OPTION field, the mobile station shall set this field to the default option number ‘0000000000000001’.

- If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station has an alternative service option to request, the mobile station shall set this field to the service option code
If the mobile station does not accept the service option specified by the mobile-station-addressed page to which the mobile station is responding and the mobile station does not have an alternative service option to request, the mobile station shall set this field to ‘0000000000000000’ to reject the service option specified by the page record of the General Page Message or Universal Page Message to which the mobile station is responding.
SR_ID – Service reference identifier.

If the ORIG_IND field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

If the SYNC_ID_INCL field is set to ‘0’, the mobile station shall set this field as follows:

- If the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance. If the service instance does not provide a service reference identifier, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 (inclusive).

Otherwise, the mobile station shall set this field as follows:

- If the mobile station requests the restoration of a single service option connection from the stored service configuration, the mobile station shall set this field to the corresponding service reference identifier.
- If the mobile station requests the restoration of more than one but not all service option connections from the stored service configuration, the mobile station shall set this field to the service reference identifier corresponding to one of the service option connections to be restored.
- Otherwise (that is, the mobile station requests the restoration of all the service option connections from the stored service configuration), the mobile station shall set this field to ‘111’.

ADD_SERV_INSTANCE_INCL – Additional service instances included indicator.

If the ORIG_IND field is set to ‘0’ or P_REV_IN_USE $s$ is less than 11 or if SYNC_ID_INCL is set to ‘0’ or if SR_ID is included and set to ‘111’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
If at least one occurrence of the ADD_SR_ID field is included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NUM_ADD_SERV_INSTANCE - Number of additional service instances included.

If ADD_SERV_INSTANCE_INCL is not included or is included and set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the number of additional service instances included in this message.

If ADD_SERV_INSTANCE_INCL is included and set to ‘1’, the mobile station shall include NUM_ADD_SERV_INSTANCE occurrences of the following record:

  ADD_SR_ID – Additional service reference identifier.
  The mobile station shall set this field to the service reference identifier corresponding to the service option connection that the mobile station requests to be restored from the stored service configuration.

  SDB_INCL – Short Data Burst included indicator.
  If P_REV_IN_USEs is less than eleven, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
  If a Short Data Burst (i.e., data burst message with burst type equal to ‘000110’, see [30]) is being included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.
  The mobile station shall set this field to ‘0’ if SDB_IN_RCNM_INDs or SDB_SUPPORTEDs is equal to ‘0’.

  NUM_FIELDS – Number of characters in this message.
  If SDB_INCL 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 number of CHARi fields included in this message.

  If SDB_INCL is included and set to ‘1’, the mobile station shall include NUM_FIELDS occurrences of the following record:

    CHARi – Character.
    The mobile station shall set these fields to the corresponding octet of the data burst stream.
2.7.1.3.2.16 Radio Environment Message

MSG_TAG: REM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODE_DISABLED</td>
<td>1</td>
</tr>
<tr>
<td>TKZ_MODE_IND</td>
<td>1</td>
</tr>
</tbody>
</table>

**MODE_DISABLED** - Mode disabled indicator.

The mobile station shall set this field to ‘1’ if any of the following conditions is true:

- RER_COUNT is equal to (RER_MAX_NUM_MSG_S – 1) and the TKZ_MODE_IND field in this message is set to ‘0’, or
- TKZ_COUNT is equal to (TKZ_MAX_NUM_MSG_S – 1) and the TKZ_MODE_IND field in this message is set to ‘1’.

Otherwise, the mobile station shall set this field to ‘0’.

**TKZ_MODE_IND** - Tracking zone mode indicator.

The mobile station shall set this field to ‘1’ if the *Radio Environment Message* is sent for tracking zone mode; otherwise, the mobile station shall set this field to ‘0’.
During Traffic Channel operation, the mobile station sends signaling messages to the base station using the r-dsch.

2.7.2.1 Reserved

2.7.2.2 Reserved

2.7.2.3 PDU Formats for Messages on r-dsch

The messages sent on the r-dsch are summarized in Table 2.7.2.3-1.

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Order Message</strong></td>
<td>ORDM</td>
<td>2.7.2.3.2.1</td>
<td>All</td>
</tr>
<tr>
<td><strong>Authentication Challenge Response Message</strong></td>
<td>AUCRM</td>
<td>2.7.2.3.2.2</td>
<td>All</td>
</tr>
<tr>
<td><strong>Flash With Information Message</strong></td>
<td>FWIM</td>
<td>2.7.2.3.2.3</td>
<td>All</td>
</tr>
<tr>
<td><strong>Data Burst Message</strong></td>
<td>DBM</td>
<td>2.7.2.3.2.4</td>
<td>All</td>
</tr>
<tr>
<td><strong>Pilot Strength Measurement Message</strong></td>
<td>PSMM</td>
<td>2.7.2.3.2.5</td>
<td>&lt; 7</td>
</tr>
<tr>
<td><strong>Power Measurement Report Message</strong></td>
<td>PMRM</td>
<td>2.7.2.3.2.6</td>
<td>All</td>
</tr>
<tr>
<td><strong>Send Burst DTMF Message</strong></td>
<td>BDTMFM</td>
<td>2.7.2.3.2.7</td>
<td>All</td>
</tr>
<tr>
<td><strong>Status Message (Band Class 0 only)</strong></td>
<td>STM</td>
<td>2.7.2.3.2.8</td>
<td>&lt; 8</td>
</tr>
<tr>
<td><strong>Origination Continuation Message</strong></td>
<td>ORCM</td>
<td>2.7.2.3.2.9</td>
<td>All</td>
</tr>
<tr>
<td><strong>Handoff Completion Message</strong></td>
<td>HOCM</td>
<td>2.7.2.3.2.10</td>
<td>&lt; 7</td>
</tr>
<tr>
<td><strong>Parameters Response Message</strong></td>
<td>PRSM</td>
<td>2.7.2.3.2.11</td>
<td>All</td>
</tr>
<tr>
<td><strong>Service Request Message</strong></td>
<td>SRQM</td>
<td>2.7.2.3.2.12</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td><strong>Service Response Message</strong></td>
<td>SRPM</td>
<td>2.7.2.3.2.13</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td><strong>Service Connect Completion Message</strong></td>
<td>SCCM</td>
<td>2.7.2.3.2.14</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td><strong>Service Option Control Message</strong></td>
<td>SOCM</td>
<td>2.7.2.3.2.15</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td><strong>Status Response Message</strong></td>
<td>STRPM</td>
<td>2.7.2.3.2.16</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td><strong>TMSI Assignment Completion Message</strong></td>
<td>TACM</td>
<td>2.7.2.3.2.17</td>
<td>1, ≥ 4</td>
</tr>
<tr>
<td><strong>Supplemental Channel Request Message</strong></td>
<td>SCRM</td>
<td>2.7.2.3.2.18</td>
<td>≥ 4</td>
</tr>
</tbody>
</table>

4 P_REV_IN_USE equal to “All” implies all values applicable to the Band Class.
Table 2.7.2.3-1. Messages on r-dsch (Part 2 of 2)

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate Frequency Search Response Message</td>
<td>CFSRSM</td>
<td>2.7.2.3.2.19</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Candidate Frequency Search Report Message</td>
<td>CFSRPM</td>
<td>2.7.2.3.2.20</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Periodic Pilot Strength Measurement Message</td>
<td>PPSMM</td>
<td>2.7.2.3.2.21</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Outer Loop Report Message</td>
<td>OLRM</td>
<td>2.7.2.3.2.22</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Resource Request Message</td>
<td>RRM</td>
<td>2.7.2.3.2.23</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Resource Request Mini Message</td>
<td>RRMM</td>
<td>2.7.2.3.2.24</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended Release Response Message</td>
<td>ERRM</td>
<td>2.7.2.3.2.25</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended Release Response Mini Message</td>
<td>ERRMM</td>
<td>2.7.2.3.2.26</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Pilot Strength Measurement Mini Message</td>
<td>PSMMM</td>
<td>2.7.2.3.2.27</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Supplemental Channel Request Mini Message</td>
<td>SCRMM</td>
<td>2.7.2.3.2.28</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Resource Release Request Message</td>
<td>RRRM</td>
<td>2.7.2.3.2.29</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Resource Release Request Mini Message</td>
<td>RRRMM</td>
<td>2.7.2.3.2.30</td>
<td>≥ 6</td>
</tr>
<tr>
<td>User Zone Update Request Message</td>
<td>UZURM</td>
<td>2.7.2.3.2.31</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Enhanced Origination Message</td>
<td>EOM</td>
<td>2.7.2.3.2.32</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Extended Flash With Information Message</td>
<td>EFWIM</td>
<td>2.7.2.3.2.33</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Extended Pilot Strength Measurement Message</td>
<td>EPSMM</td>
<td>2.7.2.3.2.34</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Extended Handoff Completion Message</td>
<td>EHOCM</td>
<td>2.7.2.3.2.35</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Security Mode Request Message</td>
<td>SMRM</td>
<td>2.7.2.3.2.36</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Call Cancel Message</td>
<td>CLCM</td>
<td>2.7.2.3.2.37</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Device Information Message</td>
<td>DIM</td>
<td>2.7.2.3.2.38</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Base Station Status Request Message</td>
<td>BSSREQM</td>
<td>2.7.2.3.2.39</td>
<td>≥ 7</td>
</tr>
<tr>
<td>CDMA Off Time Report Message</td>
<td>COTRM</td>
<td>2.7.2.3.2.40</td>
<td>≥ 8</td>
</tr>
<tr>
<td>Authentication Response Message</td>
<td>AURSPM</td>
<td>2.7.2.3.2.41</td>
<td>≥ 10</td>
</tr>
<tr>
<td>Authentication Resynchronization Message</td>
<td>AURSYNM</td>
<td>2.7.2.3.2.42</td>
<td>≥ 10</td>
</tr>
<tr>
<td>ITBSPM Request Message</td>
<td>ITBSPMRM</td>
<td>2.7.1.3.2.43</td>
<td>≥ 11</td>
</tr>
</tbody>
</table>
1. 2.7.2.3.1 Reserved
2. 2.7.2.3.2 Message Body Contents
2.7.2.3.2.1 Order Message

MSG_TAG: ORDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDER</td>
<td>6</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Order-specific fields (if used)</td>
<td>$8 \times \text{ADD_RECORD_LEN}$</td>
</tr>
<tr>
<td>CON_REF_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

ORDER – Order code.

The mobile station shall set this field to the ORDER code.

See 2.7.3.

ADD_RECORD_LEN – Additional record length.

The mobile station shall set this field to the number of octets in the order-specific fields included in this message.

Order-specific fields – Order-specific fields.

The mobile station shall include order-specific fields as specified in 2.7.3.

CON_REF_INCL – Connection reference included indicator.

If the order carried by this message is not a Call Control order (2.6.10), the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to ‘1’ if the 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 mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it to the value of the connection reference assigned to the service option connection of the call, to which this message corresponds.
2.7.2.3.2.2 Authentication Challenge Response Message

MSG_TAG: AUCRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHU</td>
<td>18</td>
</tr>
</tbody>
</table>

AUTHU – Authentication challenge response.

The mobile station shall set this field as specified in 2.3.12.1.4.
2.7.2.3.2.3 Flash With Information Message

MSG_TAG: FWIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero or more occurrences of</td>
<td></td>
</tr>
<tr>
<td>the following record:</td>
<td></td>
</tr>
<tr>
<td>/</td>
<td></td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 \times \text{RECORD_LEN}</td>
</tr>
</tbody>
</table>

The mobile station shall include one occurrence of the following record for each information record to be included:

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type code shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets in the type-specific fields of this record.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields as specified in 2.7.4 for this type of information record.
2.7.2.3.2.4 Data Burst Message

MSG_TAG: DBM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_NUMBER</td>
<td>8</td>
</tr>
<tr>
<td>BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>NUM_MSGS</td>
<td>8</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

<table>
<thead>
<tr>
<th>{ (NUM_FIELDS)</th>
<th>CHARi</th>
<th>8</th>
</tr>
</thead>
</table>

| } (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 CHARi fields of this message equal to EXTENDED_BURST_TYPE_INTERNATIONAL as described in the definition of CHARi below. If the mobile station sets this field equal to ‘111111’, it shall set the first two CHARi fields of this message equal to the EXTENDED BURST_TYPE as described in the definition of CHARi 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 CHARi fields included in this message.

CHARi – 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.
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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Country Code</td>
<td>10</td>
</tr>
<tr>
<td>COUNTRY_BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>$8 \times (\text{NUM}_\text{FIELDS} - 2)$</td>
</tr>
</tbody>
</table>

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].

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED_BURST_TYPE (first two CHARi fields)</td>
<td>16</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>$8 \times (\text{NUM}_\text{FIELDS} - 2)$</td>
</tr>
</tbody>
</table>
2.7.2.3.2.5 Pilot Strength Measurement Message

MSG_TAG: PSMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF_PN</td>
<td>9</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
<tr>
<td>KEEP</td>
<td>1</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following record:

```
{
  PILOT_PN_PHASE  15
  PILOT_STRENGTH  6
  KEEP            1
}
```

1. **REF_PN** – Time reference PN sequence offset.
   - The mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.

2. **PILOT_STRENGTH** – Pilot strength in dB.
   - The mobile station shall set this field to  
     \[ \left\lfloor -2 \times 10 \log_{10} \text{PS} \right\rfloor, \]
   - where PS is the strength of the pilot used by the mobile station to derive its time reference (see [2]), measured as specified in 2.6.6.2.2. If this value  \( \left\lfloor -2 \times 10 \log_{10} \text{PS} \right\rfloor \) 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’.

3. **KEEP** – Keep pilot indicator.
   - If the handoff drop timer (see 2.6.6.2.3) corresponding to the pilot used by the mobile station to derive its time reference (see [2]) has expired, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

If P_REV_IN_USE 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 is greater than
three and \( \text{SOFT}\_\text{SLOPE}_s \) is equal to ‘000000’, the mobile station shall include one occurrence of the three-field record given below for each pilot in the Active Set and for each pilot in the Candidate Set, other than the pilot identified by the REF\_PN field. If \( P\_\text{REV}\_\text{IN}\_\text{USE}_s \) is greater than three and \( \text{SOFT}\_\text{SLOPE}_s \) is not equal to ‘000000’, the mobile station shall include one occurrence of the three-field record given below for each pilot in the Active Set, for each pilot in the Candidate Set whose strength exceeds \( T\_\text{ADD} \), and shall also include one occurrence of the three-field record given below for each pilot in the Candidate Set whose strength satisfies the following inequality:

\[
10 \times \log_{10} PS > \frac{\text{SOFT}\_\text{SLOPE}_s}{8} \times 10 \times \log_{10} \sum_{i \in A} PS_i + \frac{\text{ADD}\_\text{INTERCEPT}_s}{2}
\]

where the summation is performed over all pilots currently in the Active Set. The mobile station shall not include these fields for the pilot identified by the REF\_PN field.

The mobile station shall order any occurrences of the three-field record given below which correspond to pilots in the Active Set such that they occur before any occurrences of the three-field record given below which correspond to pilots in the Candidate Set.

\[\text{PILOT}\_\text{PN}\_\text{PHASE} \quad \text{Pilot measured phase.}\]

The mobile station shall set this field to the phase of the pilot PN sequence relative to the zero offset pilot PN sequence of this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

\[\text{PILOT}\_\text{STRENGTH} \quad \text{Pilot strength in dB.}\]

The mobile station shall set this field to \([-2 \times 10 \log_{10} PS]\),

where \( PS \) is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value \([-2 \times 10 \log_{10} PS]\) 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’.

\[\text{KEEP} \quad \text{Keep pilot indicator.}\]

If the handoff drop timer (see 2.6.6.2.3) corresponding to this pilot has expired, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’. 
2.7.2.3.2.6 Power Measurement Report Message

MSG_TAG: PMRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERRORS_DETECTED</td>
<td>5</td>
</tr>
<tr>
<td>PWR_MEAS_FRAMES</td>
<td>10</td>
</tr>
<tr>
<td>LAST_HDM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following field:

\{ (NUM_PILOTS)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
</tbody>
</table>

\} (NUM_PILOTS)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCCH_PWR_MEAS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DCCH_PWR_MEAS_FRAMES</td>
<td>0 or 10</td>
</tr>
<tr>
<td>DCCH_ERRORS_DETECTED</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SCH_PWR_MEAS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SCH_ID</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SCH_PWR_MEAS_FRAMES</td>
<td>0 or 16</td>
</tr>
<tr>
<td>SCH_ERRORS_DETECTED</td>
<td>0 or 10</td>
</tr>
</tbody>
</table>

ERRORS_DETECTED – Number of detected bad frames.

When the Forward Fundamental Channel is assigned, the mobile station shall set this field to the number of bad frames detected [BAD_FRAMES, see 2.6.4.1.1] on the Forward Fundamental Channel.

If P_REV_IN_USE is greater than or equal to six and only the Forward Dedicated Control Channel is assigned, the mobile station shall set this field to the number of bad frames detected on the Forward Dedicated Control Channel [DCCH_BAD_FRAMES, see 2.6.4.1.1].

If the number of bad frames received on this channel within the measurement period is less than or equal to 31, the mobile station shall set this field to that number. If that number exceeds 31, the mobile station shall set this field to ‘11111’.
PWR_MEAS_FRAMES – Number of power measurement frames.
When the Forward Fundamental Channel is assigned, the mobile station shall set this field to the number of frames received on the Forward Fundamental Channel within the measurement period (TOT_FRAMESs, see 2.6.4.1.1).

If P_REV_IN_USEs is greater than or equal to six and only the Dedicated Control Channel is assigned, the mobile station shall set this field to the number of frames received on the Dedicated Control Channel (DCCH_TOT_FRAMESs, see 2.6.4.1.1).

LAST_HDM_SEQ – Extended Handoff Direction Message or a General Handoff Direction Message, or Universal Handoff Direction Message sequence number.
If an Extended Handoff Direction Message, a General Handoff Direction Message, or Universal Handoff Direction Message has been received during this call, the mobile station shall set this field to the value of the HDM_SEQ field from the Extended Handoff Direction Message, the General Handoff Direction Message or the Universal Handoff Direction Message that determined the current Active Set. If no Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message has been received during this call, the mobile station shall set this field to ‘11’.

NUM_PILOTS – Number of pilots reported.
The mobile station shall set this field to the number of pilots in the current Active Set.

PILOT_STRENGTH – Pilot strength in dB.
The mobile station shall include one occurrence of this field for each pilot in the Active Set. If the Active Set contains more than one pilot, the mobile station shall include the pilot strengths in the same order as in the Extended Channel Assignment Message, Extended Handoff Direction Message, General Handoff Direction Message or the Universal Handoff Direction Message that determined the current Active Set.
The mobile station shall set each occurrence of this field to \[-2 \times 10 \log_{10} PS\], where PS is the strength of the pilot, measured as specified in 2.6.6.2.2. If this value \(-2 \times 10 \log_{10} PS\) 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’.

DCCH_PWR_MEAS_INCL - Forward Dedicated Control Channel power measurement included.
If both Forward Fundamental Channel and Forward Dedicated Control Channel are assigned, the mobile station shall set this field equal to ‘1’; otherwise, the mobile shall set this field to ‘0’.

DCCH_PWR_MEAS_FRAMES - Number of received Dedicated Control Channel frames.

If DCCH_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 frames received on the Dedicated Control Channel within the measurement period (DCCH_TOT_FRAMES, see 2.6.4.1.1).

DCCH_ERRORS_DETECTED - Number of detected bad Dedicated Control Channel frames.

If DCCH_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 frames (DCCH_BAD_FRAMES) detected on the Forward Dedicated Control Channel.

If DCCH_BAD_FRAMES exceeds 31, the mobile station shall set this field to ‘11111’; otherwise, the mobile station shall set this field to DCCH_BAD_FRAMES (see 2.6.4.1.1).

SCH_PWR_MEAS_INCL - Supplemental Channel power measurement included indicator.

If FOR_SCH_FER_REP is set to ‘1’ and this message is to report the frame counts at the end of the burst on an assigned Supplemental Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to

SCH_ID - Forward Supplemental Channel identifier.

If the SCH_PWR_MEAS_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile shall set this field to the Identifier of the Forward Supplemental Channel of which the frame counts are being reported in this message.

SCH_PWR_MEAS_FRAMES - Number of received Supplemental Channel frames.

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 total number of frames (SCH_TOT_FRAMES) received during the burst duration on the Supplemental Channel specified by SCH_ID. If this measurement is greater than or equal to $2^{16} - 1$, the mobile station shall set this field to ‘1111111111111111’.

SCH_ERRORS_DETECTED - Number of detected bad Supplemental Channel frames.
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) detected on the SCH_ID Supplemental Channel during the burst is greater than 1023, the mobile station shall set this field to ‘1111111111’.
### 2.7.2.3.2.7 Send Burst DTMF Message

**MSG_TAG:** BDTFM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_DIGITS</td>
<td>8</td>
</tr>
<tr>
<td>DTMF_ON_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>DTMF_OFF_LENGTH</td>
<td>3</td>
</tr>
</tbody>
</table>

**NUM_DIGITS** occurrences of the following field:

```
{ (NUM_DIGITS)
  DIGITi
} (NUM_DIGITS)
```

**CON_REF_INCL**

- **CON_REF**
  - 0 or 8

### NUM_DIGITS
- **Number of DTMF digits.**
  - The mobile station shall set this field to the number of DTMF digits included in this message.

### DTMF_ON_LENGTH
- **DTMF pulse width code.**
  - 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.

#### Table 2.7.2.3.2.7-1. Recommended DTMF Pulse Width

<table>
<thead>
<tr>
<th>DTMF_ON_LENGTH Field (binary)</th>
<th>Recommended Pulse Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>95 ms</td>
</tr>
<tr>
<td>001</td>
<td>150 ms</td>
</tr>
<tr>
<td>010</td>
<td>200 ms</td>
</tr>
<tr>
<td>011</td>
<td>250 ms</td>
</tr>
<tr>
<td>100</td>
<td>300 ms</td>
</tr>
<tr>
<td>101</td>
<td>350 ms</td>
</tr>
</tbody>
</table>

All other DTMF_ON_LENGTH codes are reserved.
DTMF_OFF_LENGTH – DTMF inter-digit interval code.

The mobile station shall set this field to the DTMF_OFF_LENGTH value shown in Table 2.7.2.3.2.7-2 corresponding to the requested minimum interval between DTMF pulses to be generated by the base station.

Table 2.7.2.3.2.7-2. Recommended Minimum Inter-digit Interval

<table>
<thead>
<tr>
<th>DTMF_OFF_LENGTH Field (binary)</th>
<th>Recommended Minimum Inter-digit Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>60 ms</td>
</tr>
<tr>
<td>001</td>
<td>100 ms</td>
</tr>
<tr>
<td>010</td>
<td>150 ms</td>
</tr>
<tr>
<td>011</td>
<td>200 ms</td>
</tr>
</tbody>
</table>

All other DTMF_OFF_LENGTH codes are reserved.

DIGITi – DTMF digit.

The mobile station shall include one occurrence of this field for each DTMF digit to be generated by the base station. The mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit.

CON_REF_INCL – Connection reference included indicator.

The mobile station shall set this field to ‘1’ if the connection reference field is included in this message; otherwise, it shall set this field to ‘0’.

CON_REF – Connection reference.

If the CON_REF_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it to the value of the connection reference assigned to the service option connection of the call, to which this message corresponds.
2.7.2.3.2.8 Status Message

MSG_TAG: STM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets included in the type-specific fields of this information record.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields as specified in 2.7.4 for this type of record.
### 2.7.2.3.2.9 Origination Continuation Message

**MSG_TAG**: ORCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGIT_MODE</td>
<td>1</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

\[
\text{CHAR}_i
\]

Zero or more occurrences of the following record:

\[
\text{RECORD TYPE} \quad 8 \\
\text{RECORD_LEN} \quad 8 \\
\text{Type-specific fields} \quad 8 \times \text{RECORD_LEN}
\]

**DIGIT_MODE** – Digit mode indicator. The mobile station shall set this field to the DIGIT_MODE value from the *Origination Message* for which this message is a continuation.

**NUM_FIELDS** – Number of dialed digits in this message. The mobile station shall set this field to the number of dialed digits included in this message.

**CHAR** – A dialed digit or character. The mobile station shall include NUM_FIELDS occurrences of this field. The mobile station shall include occurrences of this field for all dialed digits after those sent in the *Origination Message* of which this message is a continuation. If the DIGIT_MODE field is set to ‘0’, the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT_MODE field is set to ‘1’, the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the dialed digit, as specified in [9], with the most significant bit set to ‘0’.

If the MORE_RECORDS field in the last *Origination Message*, of which this message is a continuation, is set to ‘1’, the mobile station shall include one or more occurrences of the following three-field record; otherwise, the mobile station shall not include the following record.
<table>
<thead>
<tr>
<th></th>
<th>RECORD_TYPE</th>
<th>Information record type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The mobile station shall set this field to the record type value shown in Table 2.7.4-1.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The mobile station shall not include the record type for QoS Parameters information record if MOB_QOS = '0'.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>RECORD_LEN</td>
<td>Information record length.</td>
</tr>
<tr>
<td>7</td>
<td>The mobile station shall set this field to the number of octets in the type-specific fields included in this record.</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Type-specific fields</td>
<td>Type-specific fields.</td>
</tr>
<tr>
<td>10</td>
<td>The mobile station shall include type-specific fields as specified in 2.7.4.</td>
<td></td>
</tr>
</tbody>
</table>
2.7.2.3.2.10 Handoff Completion Message

MSG_TAG: HOCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST_HDM_SEQ</td>
<td>2</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

\{

PILOT_PN 9

\}

LAST_HDM_SEQ – *Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message* sequence number.

The mobile station shall set this field to the value of the HDM_SEQ field from the *Extended Handoff Direction Message, General Handoff Direction Message, or the Universal Handoff Direction Message* that determined the current Active Set.

PILOT_PN – Pilot PN sequence offset.

The mobile station shall include one occurrence of this field for each pilot in the current Active Set. The mobile station shall set this field to the pilot PN sequence offset, relative to the zero offset pilot PN sequence in units of 64 PN chips, for this pilot. If the Active Set contains more than one pilot, the mobile station shall include the pilot offsets in the same order as in the *Extended Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff Direction Message* that determined the current Active Set.
2.7.2.3.2.11 Parameters Response Message

MSG_TAG: PRSM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more occurrences of the following record:</td>
<td></td>
</tr>
<tr>
<td>{</td>
<td></td>
</tr>
<tr>
<td>PARAMETER_ID</td>
<td>16</td>
</tr>
<tr>
<td>PARAMETER_LEN</td>
<td>10</td>
</tr>
<tr>
<td>PARAMETER</td>
<td>0 or PARAMETER_LEN + 1</td>
</tr>
<tr>
<td>}</td>
<td></td>
</tr>
</tbody>
</table>

The mobile station shall include one occurrence of the following three-field record for each occurrence of the PARAMETER_ID field in the Forward Traffic Channel Retrieve Parameters Message to which this message is a response. See Annex E.

PARAMETER_ID – Parameter identification.

The mobile station shall set this field to the value of the PARAMETER_ID field for this parameter from the Retrieve Parameters Message to which this message is a response.

PARAMETER_LEN – Parameter length.

The mobile station shall set this field to the length shown in Table E-1 corresponding to this PARAMETER_ID.

If the mobile station is unable to return the value of this parameter, or if the parameter identification is unknown, the mobile station shall set this field to ‘1111111111’.

PARAMETER – Parameter value.

The mobile station shall set this field equal to the value of the parameter shown in Table E-1 corresponding to the PARAMETER_ID field of the record.

If the mobile station is unable to return the value of this parameter, or if the parameter identification is unknown, the mobile station shall omit this field.
2.7.2.3.2.12 Service Request Message

MSG_TAG: SRQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERV_REQ_SEQ</td>
<td>3</td>
</tr>
<tr>
<td>REQ_PURPOSE</td>
<td>4</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 \times RECORD_LEN</td>
</tr>
</tbody>
</table>

SERV_REQ_SEQ – Service request sequence number.

The mobile station shall set this field to the service request sequence number pertaining to this request message as specified in 2.6.4.1.2.1.1.

REQ_PURPOSE – Request purpose.

The mobile station shall set this field to the appropriate REQ_PURPOSE code from Table 2.7.2.3.2.12-1 to indicate the purpose of the message.

Table 2.7.2.3.2.12-1. REQ_PURPOSE Codes

<table>
<thead>
<tr>
<th>REQ_PURPOSE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Indicates that the purpose of the message is to accept a proposed service configuration.</td>
</tr>
<tr>
<td>0001</td>
<td>Indicates that the purpose of the message is to reject a proposed service configuration.</td>
</tr>
<tr>
<td>0010</td>
<td>Indicates that the purpose of the message is to propose a service configuration.</td>
</tr>
</tbody>
</table>

All other REQ_PURPOSE codes are reserved.
RECORD_TYPE – Information record type.

If the REQ_PURPOSE code is set to '0010', 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 the record type value shown in Table 2.7.4-1 corresponding to the Service Configuration information record.

RECORD_LEN – Information record length.

If the REQ_PURPOSE code is set to '0010', 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 the number of octets included in the type-specific fields of the Service Configuration information record.

Type-specific fields – Type-specific fields.

If the REQ_PURPOSE code is set to '0010', 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 these fields as specified in 3.7.5.7 for the Service Configuration information record.
2.7.2.3.2.13 Service Response Message

MSG_TAG: SRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERV_REQ_SEQ</td>
<td>3</td>
</tr>
<tr>
<td>RESP_PURPOSE</td>
<td>4</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

SERV_REQ_SEQ – Service request sequence number.

The mobile station shall set this field to the value of the SERV_REQ_SEQ field of the Service Request Message to which it is responding.

RESP_PURPOSE – Response purpose.

The mobile station shall set this field to the appropriate RESP_PURPOSE code from Table 2.7.2.3.2.13-1 to indicate the purpose of the message.

Table 2.7.2.3.2.13-1. RESP_PURPOSE Codes

<table>
<thead>
<tr>
<th>RESP_PURPOSE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Indicates that the purpose of the message is to accept a proposed service configuration.</td>
</tr>
<tr>
<td>0001</td>
<td>Indicates that the purpose of the message is to reject a proposed service configuration.</td>
</tr>
<tr>
<td>0010</td>
<td>Indicates that the purpose of the message is to propose a service configuration.</td>
</tr>
</tbody>
</table>

All other RESP_PURPOSE codes are reserved.
RECORD_TYPE – Information record type.

If the RSP_PURPOSE code is set to ‘0010’, 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 the record type value shown in Table 2.7.4-1 corresponding to the Service Configuration information record.

RECORD_LEN – Information record length.

If the RSP_PURPOSE code is set to ‘0010’, 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 the number of octets included in the type-specific fields of the Service Configuration information record.

Type-specific fields – Type-specific fields.

If the RSP_PURPOSE code is set to ‘0010’, 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 these fields as specified in 3.7.5.7 for the Service Configuration information record.
2.7.2.3.2.14 Service Connect Completion Message

MSG_TAG: SCCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
<tr>
<td>SERV_CON_SEQ</td>
<td>3</td>
</tr>
</tbody>
</table>

RESERVED Reserved bit.
The mobile station shall set this field to ‘0’.

SERV_CON_SEQ Service connect sequence number.
The mobile station shall set this field to the value of the SERV_CON_SEQ field of the Service Connect Message to which it is responding.
2.7.2.3.2.15 Service Option Control Message

MSG_TAG: SOCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>7</td>
</tr>
<tr>
<td>CTL_REC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times CTL_REC_LEN$</td>
</tr>
</tbody>
</table>

- **CON_REF** — Service option connection reference. The mobile station shall set this field to the reference for the target service option (see 2.6.4.1.2).
- **SERVICE_OPTION** — Service option. The mobile station shall set this field to the service option in use with the service option connection.
- **RESERVED** — Reserved bits. The mobile station shall set this field to ‘0000000’.
- **CTL_REC_LEN** — Control record length. The mobile station shall set this field to the number of octets included in the type-specific fields of this service option control record.
- **Type-specific fields** — Type-specific fields. The mobile station shall set these fields as specified by the requirements for the service option.
2.7.2.3.2.16 Status Response Message

MSG_TAG: STRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields.</td>
<td>$8 \times \text{QUAL_INFO_LEN}$</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

```
RECORD_TYPE 8
RECORD_LEN 8
Type-specific fields $8 \times \text{RECORD_LEN}
```

QUAL_INFO_TYPE – Qualification information type.

The mobile station shall set this field to the QUAL_INFO_TYPE field in the corresponding Status Request Message.

QUAL_INFO_LEN – Qualification information length.

The mobile station shall set this field to the QUAL_INFO_LEN field in the corresponding Status Request Message.

Type-specific fields – Type-specific fields.

The mobile station shall set these fields to the qualification information in the corresponding Status Request Message.

The mobile station shall include all the records requested in the corresponding Status Request Message. The mobile station shall include one occurrence of the following fields for each information record that is included:

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1 corresponding to the type of this information record.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets included in the type-specific fields of this information record.
<table>
<thead>
<tr>
<th></th>
<th>Type-specific fields</th>
<th>Type-specific fields.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>The mobile station shall set these fields as specified in 2.7.4 for this type of record, according to the mobile station's capabilities under the qualification information included in this message.</td>
</tr>
</tbody>
</table>
2.7.2.3.2.17 TMSI Assignment Completion Message

MSG_TAG: TACM

There are no Layer 3 fields associated with this message.
2.7.2.3.2.18 Supplemental Channel Request Message

MSG_TAG: SCRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE_OF_REQ_BLOB</td>
<td>4</td>
</tr>
<tr>
<td>REQ_BLOB</td>
<td>$8 \times \text{SIZE_OF_REQ_BLOB}$</td>
</tr>
<tr>
<td>USE_SCRM_SEQ_NUM</td>
<td>1</td>
</tr>
<tr>
<td>SCRM_SEQ_NUM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REF_PN</td>
<td>0 or 9</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_ACT_PN</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ACT_PN occurrences of the following record:

{ (NUM_ACT_PN)
  ACT_PN_PHASE 15
  ACT_PILOT_STRENGTH 6
  (NUM_ACT_PN)
}

NUM_NGHBR_PN occurrences of the following record:

{ (NUM_NGHBR_PN)
  NGHBR_PN_PHASE 15
  NGHBR_PILOT_STRENGTH 6
  (NUM_NGHBR_PN)
}

REF_PILOT_REC_INCL 0 or 1

REF_PILOT_REC_TYPE 0 or 3

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF_RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or $8 \times$ RECORD_LEN</td>
</tr>
</tbody>
</table>

NUM_ACT_PN occurrences of the following record:

```
[NUM_ACT_PN]
PILOT_REC_INCL     1
PILOT_REC_TYPE    0 or 3
RECORD_LEN       0 or 3
Type-specific fields 0 or $8 \times$ RECORD_LEN
```

NUM_NGHBR_PN occurrences of the following record:

```
[NUM_NGHBR_PN]
PILOT_REC_INCL     1
PILOT_REC_TYPE    0 or 3
RECORD_LEN       0 or 3
Type-specific fields 0 or $8 \times$ RECORD_LEN
```

SIZE_OF_REQ_BLOB  – Size of the request information block of bytes (REQ_BLOB).

The mobile station shall set this field to the number of bytes in the Reverse Supplemental Code Channel or the Reverse Supplemental Channel request block of bytes (REQ_BLOB).

REQ_BLOB  – Reverse Supplemental Code Channel or Reverse Supplemental Channel request block of bytes.

The mobile station shall include information in this field containing the parameters that specify the characteristics of the Reverse Supplemental Code Channels or the Reverse Supplemental Channel request. The mobile station shall set this field in accordance with the connected Service Option.

USE_SCRM_SEQ_NUM  – Use Supplemental Channel Request Message sequence number indicator.

The mobile station shall set this field to ‘1’ if the Supplemental Channel Request Message sequence number is included in this message; otherwise, the mobile station shall set this field to ‘0’.

SCRM_SEQ_NUM  – Supplemental Channel Request Message sequence number.
If USE_SCRM_SEQ_NUM is set to '1', the mobile station shall set this field to the Supplemental Channel Request Message sequence number that the base station is to include in a Supplemental Channel Assignment Message or Extended Supplemental Channel Assignment Message which is in response to this message; otherwise, the mobile station shall omit this field.

**REF_PN** – Time reference PN sequence offset.

If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.

**PILOT_STRENGTH** – Reference pilot strength in dB.

If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to

\[ \lceil -2 \times 10 \times \log_{10} \text{PS} \rceil, \]

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 \( \lceil -2 \times 10 \log_{10} \text{PS} \rceil \) 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'.

**NUM_ACT_PN** – Number of reported pilots in the Active Set.

If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of reported pilots in the Active Set other than the pilot identified by the REF_PN field.

If SIZE_OF_REQ_BLOB is set to '0000' and USE_SCRM_SEQ_NUM is set to '0', the mobile station shall not include any occurrence of the following record; otherwise, the mobile station shall include one occurrence of the following two-field record for each pilot in the Active Set other than the pilot identified by the REF_PN field:

**ACT_PN_PHASE** – Active pilot measured phase.

The mobile station shall set this field to the phase of this pilot PN sequence relative to the zero offset pilot PN sequence, in units of one PN chip, as specified in 2.6.6.2.4.

**ACT_PILOT_STRENGTH** – Active pilot strength in dB.

The mobile station shall set this field to

\[ \lceil -2 \times 10 \times \log_{10} \text{PS} \rceil, \]
where $PS$ is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value $\lfloor -2 \times 10 \log_{10} PS \rfloor$ is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than 63, the mobile station shall set this field to ‘111111’.

**NUM_NGHBR_PN** – Number of reported neighbor pilots in the Candidate Set and the Neighbor Set.

If $\text{SIZE_OF_REQ_BLOB}$ is set to ‘0000’, the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows:

The mobile station shall set this field to the number of reported pilots which are not in the Active Set and have measurable strength that exceeds $(T_{ADD}s - T_{MULCHAN}s)$. $(\text{NUM_ACT_PN} + \text{NUM_NGHBR_PN})$ shall not exceed 8. If there are more than $(8 - \text{NUM_ACT_PN})$ pilots not in the Active Set with strength exceeding $(T_{ADD}s - T_{MULCHAN}s)$, the mobile station shall set $\text{NUM_NGHBR_PN}$ to $(8 - \text{NUM_ACT_PN})$ and report the $\text{NUM_NGHBR_PN}$ strongest pilots not in the Active Set.

If $\text{SIZE_OF_REQ_BLOB}$ is set to ‘0000’ and USE_SCRM_SEQ_NUM is set to ‘0’, the mobile station shall not include any occurrence of the following record; otherwise, the mobile station shall include one occurrence of the following two-field record for each of the $\text{NUM_NGHBR_PN}$ reported pilots.

**NGHBR_PN_PHASE** – Neighbor pilot measured phase.

The mobile station shall set this field to the phase of this pilot PN sequence relative to the zero offset pilot PN sequence, in units of one PN chip, as specified in 2.6.6.2.4.

**NGHBR_PILOT_STRENGTH** – Neighbor pilot strength.

The mobile station shall set this field to

$$\lfloor -2 \times 10 \times \log_{10} PS \rfloor,$$

where $PS$ is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value $\lfloor -2 \times 10 \log_{10} PS \rfloor$ is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than 63, the mobile station shall set this field to ‘111111’.

**REF_PILOT_REC_INCL** – Additional pilot information included indicator.

If $\text{SIZE_OF_REQ_BLOB}$ is set to ‘0000’, 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 additional reference pilot information listed in the $\text{REF_PILOT_REC_TYPE}$ and $\text{REF_RECORD_LEN}$ fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

**REF_PILOT_REC_TYPE** – Reference pilot record type.
If REF_PILOT_REC_INCL is included and set to ‘0’, the mobile station shall omit this field. If REF_PILOT_REC_INCL is included and set to ‘1’, the mobile station shall set this field to the REF_PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

REF_RECORD_LEN  – Pilot record length for the reference pilot.

If REF_PILOT_REC_INCL is included and set to ‘0’, the mobile station shall omit this field. If REF_PILOT_REC_INCL is included and set to ‘1’, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

Type-specific fields  – Pilot record type-specific fields for the reference pilot.

If REF_PILOT_REC_INCL is included and set to ‘0’, the mobile station shall omit this field. If REF_PILOT_REC_INCL is included and set to ‘1’, the mobile station shall include type-specific fields based on the REF_PILOT_REC_TYPE of this pilot record.

If REF_PILOT_REC_TYPE is equal to ‘000’, the mobile station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>PILOT_WALSH</td>
<td>(WALSH_LENGTH + 6)</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

QOF  – Quasi-orthogonal function index.

The mobile station shall set this field to the index of the Quasi-orthogonal function of the corresponding Auxiliary Pilot.

WALSH_LENGTH  – Length of the Walsh code for the reference pilot.

The mobile station shall set this field to the WALSH_LENGTH value shown in Table 2.7.2.3.2.34-2 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary Pilot.

PILOT_WALSH  – Walsh code for the Auxiliary Pilot used by the mobile station to derive its time reference.

The mobile station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.
RESERVED – Reserved bits.
The mobile station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

If SIZE_OF_REQ_BLOB is set to ‘0000’ and USE_SCRM_SEQ_NUM is set to ‘0’, the mobile station shall not include any occurrence of the following record; otherwise, the mobile station shall include one occurrence of the following record for each pilot in the Active Set other than the pilot identified by the REF_PN field:

PILOT_REC_INCL – Additional pilot information included indicator.
The mobile station shall set this field to ‘1’ if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE – Reference pilot record type.
If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

RECORD_LEN – Pilot record length.
If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

Type-specific fields – Pilot record type-specific fields.
If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If SIZE_OF_REQ_BLOB is set to ‘0000’ and USE_SCRM_SEQ_NUM is set to ‘0’, the mobile station shall not include any occurrence of the following record; otherwise, the mobile station shall include one occurrence of the following record for each of the NUM_NGHBR_PN reported pilots.

PILOT_REC_INCL – Additional pilot information included indicator.
The mobile station shall set this field to ‘1’ if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE – Reference pilot record type.
If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

**RECORD_LEN** – Pilot record length.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

**Type-specific fields** – Pilot record type-specific fields.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.
2.7.2.3.2.19 Candidate Frequency Search Response Message

MSG_TAG: CFSRSM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST_CFSRM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL_OFF_TIME_FWD</td>
<td>6</td>
</tr>
<tr>
<td>MAX_OFF_TIME_FWD</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL_OFF_TIME_REV</td>
<td>6</td>
</tr>
<tr>
<td>MAX_OFF_TIME_REV</td>
<td>6</td>
</tr>
<tr>
<td>PCG_OFF_TIMES</td>
<td>1</td>
</tr>
<tr>
<td>ALIGN_TIMING_USED</td>
<td>1</td>
</tr>
<tr>
<td>MAX_NUM_VISITS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>INTER_VISIT_TIME</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

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.

TOTAL_OFF_TIME_REV – Total time that the mobile station is away from the Reverse 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 Reverse 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 or power control groups for all visits to the Candidate Frequency in a search period.

MAX_OFF_TIME_REV – Maximum time the mobile station is away from the Reverse Traffic Channel.

The mobile station shall set this field to the mobile station’s estimate of the maximum number of frames or power control groups 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.

PCG_OFF_TIMES – Indicator if off times are expressed in units of power control groups.

If P_REV_IN_USE is less than six, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’ if it expresses TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV, and MAX_OFF_TIME_REV in units of power control groups; otherwise, the mobile station shall set this field to ‘0’ so that TOTAL_OFF_TIME_FWD, MAX_OFF_TIME_FWD, TOTAL_OFF_TIME_REV, and MAX_OFF_TIME_REV are expressed in units of frames.

ALIGN_TIMING_USED – Alignment timing used indicator.

The mobile station shall set this field to ‘1’ if it will align the times of its visits away from the Serving Frequency, as requested by the base station; otherwise, the mobile station shall set this field to ‘0’.

MAX_NUM_VISITS – Maximum number of visits per search period.
If the ALIGN_TIMING_USED field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the maximum number of visits per search period minus one.

**INTER_VISIT_TIME** – Inter-visit time.

If the mobile station includes the MAX_NUM_VISITS field and sets it to a value other than 0, the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

The mobile station shall set INTER_VISIT_TIME to

\[
\min \left( 63, \left\lfloor \frac{\text{inter\_visit\_time}}{\text{search\_time\_resolution}} \right\rfloor \right)
\]

where

\[
\text{search\_time\_resolution} \text{ is equal to } 0.02 \text{ if the mobile station sets PCG\_OFF\_TIMES to ‘0’; otherwise, } \text{search\_time\_resolution} \text{ is equal to } 0.00125,
\]

and

\[
\text{inter\_visit\_time} \text{ is the mobile station’s estimate of the time, in seconds, between the beginning of consecutive visits away from the Serving Frequency.}
\]
2.7.2.3.2.20 Candidate Frequency Search Report Message

MSG_TAG: CFSRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST_SRCH_MSG</td>
<td>1</td>
</tr>
<tr>
<td>LAST_SRCH_MSG_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>SEARCH_MODE</td>
<td>4</td>
</tr>
<tr>
<td>MODE_SPECIFIC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Mode-specific fields</td>
<td>8 × MODE_SPECIFIC_LEN</td>
</tr>
</tbody>
</table>

- LAST_SRCH_MSG – Indicator for the type of message that started the search being reported. If this message is being sent to report the results of a single search or a periodic search started by a Candidate Frequency Search Control Message or by a Candidate Frequency Search Request Message, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

- LAST_SRCH_MSG_SEQ – Sequence number received in the message that started the search being reported. If this message is being sent in response to a Candidate Frequency Search Control Message, the mobile station shall set this field to the value of the CFSCM_SEQ field from the Candidate Frequency Search Control Message. If this message is being sent in response to a Candidate Frequency Search Request Message, the mobile station shall set this field to the value of the CFSRM_SEQ field from the Candidate Frequency Search Request Message. If this message is being sent in response to a General Handoff Direction Message or a Universal Handoff Direction Message, the mobile station shall set this field to the value of the HDM_SEQ field from the General Handoff Direction Message or the Universal Handoff Direction Message.

- SEARCH_MODE – Search mode. The mobile station shall set this field to the SEARCH_MODE value shown in Table 3.7.3.3.2.27-2 corresponding to the type of search specified by the Candidate Frequency Search Request Message that specified the search parameters.

- MODE_SPECIFIC_LEN – Length of mode-specific fields included in this message.

- Mode-specific fields – Search mode-specific fields.
The mobile station shall include mode-specific fields based on the SEARCH_MODE of this message.

If SEARCH_MODE is equal to ‘0000’, the mobile station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>11</td>
</tr>
<tr>
<td>SF_TOTAL_RX_PWR</td>
<td>5</td>
</tr>
<tr>
<td>CF_TOTAL_RX_PWR</td>
<td>5</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

/* (NUM_PILOTS)
 * PILOT_PN_PHASE          15
 * PILOT_STRENGTH          6
 * RESERVED_1              3
 */

/* (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
 */

BAND_CLASS - Band class.

If this message is being sent to report an unsuccessful hard handoff attempt, the mobile station shall set this field to the CDMA band class corresponding to the CDMA Frequency Assignment for the Target Frequency, as specified in [30]. If this message is being sent to report measurements on a Candidate Frequency, the mobile station shall set this field to the CDMA band class corresponding to the CDMA Frequency Assignment for the Candidate Frequency, as specified in [30].

CDMA_FREQ - Frequency assignment.
If this message is being sent to report an unsuccessful hard handoff attempt, the mobile station shall set this field to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA Frequency Assignment for the Target Frequency, as specified in [2]. If this message is being sent to report measurements on a Candidate Frequency, the mobile station shall set this field to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA Frequency Assignment for the Candidate Frequency, as specified in [2].

**SF_TOTAL_RX_PWR** – Total received power on the Serving Frequency.

The mobile station shall set this field to

\[
\min (31, \lceil (10 \times \log_{10}(total_{received\_power}) + 110) / 2 \rceil)
\]

where \(total_{received\_power}\) is the mean input power received by the mobile station on the Serving Frequency, in mW/1.23 MHz.

**CF_TOTAL_RX_PWR** – Indicates the total received power on the Target Frequency or the Candidate Frequency.

If this message is being sent to report an unsuccessful hard handoff attempt, the mobile station shall include the total received power on the Target Frequency; if this message is being sent to report measurements on a Candidate Frequency, the mobile station shall include the total received power on the Candidate Frequency.

The mobile station shall set this field to

\[
\min (31, \lceil (10 \times \log_{10}(total_{received\_power}) + 110) / 2 \rceil)
\]

where \(total_{received\_power}\) is the mean input power received by the mobile station on the Target Frequency or the Candidate Frequency, in mW/1.23 MHz.

**NUM_PILOTS** – Number of pilots.

The mobile station shall set this field to the number of pilots included in this message. The mobile station shall set this field to a value from 0 to \(N_{8m}\), inclusive.

The mobile station shall include NUM_PILOTS occurrences of the following three-field record:

**PILOT_PN_PHASE** – Pilot measured phase.

The mobile station shall set this field to the phase of the pilot PN sequence relative to the zero offset pilot PN sequence of this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

**PILOT_STRENGTH** – Pilot strength in dB.

The mobile station shall set this field to

\[
\lfloor - 2 \times 10 \times \log_{10} PS \rfloor
\]
where PS is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value \((-2 \times 10 \log_{10} PS)\) is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than 63, the mobile station shall set this field to ‘111111’.

RESERVED_1 – Reserved bits.

The mobile station shall set this field to ‘000’.

The mobile station shall include NUM_PILOTS occurrences of the following record in the same order as the pilots listed above.

PILOT_REC_INCL – Additional pilot information included indicator.

The mobile station shall set this field to ‘1’ if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE – Reference Pilot record type

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

RECORD_LEN – Pilot record length.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

Type-specific fields – Pilot record type-specific fields.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If SEARCH_MODE is equal to ‘0001’, the mobile station shall include the following fields:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>SF_TOTAL_RX_PWR</td>
<td>5</td>
</tr>
<tr>
<td>NUM_ANALOG_FREQS</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED_2</td>
<td>5</td>
</tr>
</tbody>
</table>

NUM_ANALOG_FREQS occurrences of the following record:

\[
\{ \text{NUM_ANALOG_FREQS} \\
\begin{align*}
\text{ANALOG_FREQ} & & 11 \\
\text{SIGNAL_STRENGTH} & & 6
\end{align*}
\} \text{NUM_ANALOG_FREQS}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED_3</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

1. BAND_CLASS – Band class. The mobile station shall set this field to the CDMA band class corresponding to the analog frequencies that are being reported in this message, as specified in [30].

2. SF_TOTAL_RX_PWR – Indicates the total received power on the Serving Frequency. The mobile station shall set this field to

\[
\min(31, \lceil (10 \times \log_{10}(\text{total\_received\_power}) + 110) / 2 \rceil)
\]

where \(\text{total\_received\_power}\) is the mean input power received by the mobile station on the Serving Frequency, in mW/1.23 MHz.

3. NUM_ANALOG_FREQS – Number of analog frequencies. The mobile station shall set this field to the number of analog frequencies included in this message.

4. RESERVED_2 – Reserved bits. The mobile station shall set this field to ‘00000’.

The message will include NUM_ANALOG_FREQS occurrences of the following two-field record, one for each neighbor on the candidate frequency.

5. ANALOG_FREQ – Analog frequency channel number. The mobile station shall set this field analog frequency channel number to search.

6. SIGNAL_STRENGTH – Signal strength. The mobile station shall set this field to

\[
\lfloor -0.5 \times SS \rfloor
\]
where SS is the strength of this signal, measured in dBm as specified in 2.6.6.2.10.3. If this value \((-0.5 \times SS)\) is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than 63, the mobile station shall set this field to ‘111111’.

**RESERVED_3** – The mobile 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 mobile station shall set each of these bits to ‘0’.
### 2.7.2.3.2.21 Periodic Pilot Strength Measurement Message

**MSG_TAG:** PPSMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF_PN</td>
<td>9</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
<tr>
<td>KEEP</td>
<td>1</td>
</tr>
<tr>
<td>SF_RX_PWR</td>
<td>5</td>
</tr>
<tr>
<td>NUM_PILOT</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_PILOT occurrences of the following record:

```
{ (NUM_PILOT)
  PILOT_PN_PHASE       15
  PILOT_STRENGTH       6
  KEEP                 1
}
```

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_SUP occurrences of the following fields:

```
{ (NUM_SUP)
  SCH_ID               1
  FPC_SCH_CURR_SETPT   8
}
```

**REF_PN** - Time reference PN sequence offset.
The mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.

**PILOT_STRENGTH** - Pilot strength in dB.

The mobile station shall set this field to

\[ -2 \times 10 \times \log_{10}PS \, \text{dB}, \]

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 is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than ‘111111’, the mobile station shall set this field to ‘111111’.

**KEEP** - Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to the pilot used by the mobile station to derive its time reference (see [2]) has expired, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

**SF_RX_PWR** - The received power spectral density of the Serving Frequency.

The mobile station shall set this field to

\[ \min (31, \lceil (10 \times \log_{10}(spec\_density) + 120) / 2 \rceil) \]

where \( spec\_density \) is the mobile station received power spectral density of the Serving Frequency, in mW/1.23MHz. If this value is less than 0, the mobile station shall set this field to ‘000000’.

**NUM_PILOT** - Number of Pilots.

The mobile station shall set this field to the number of other reported pilots of the Active Set and the Candidate Set.

The mobile station shall include **NUM_PILOT** occurrences of the following three-field record, one for each pilot in the Active Set and one for each pilot in the Candidate Set, other than the pilot identified by the **REF_PN** field.

**PILOT_PN_PHASE** - Pilot measured phase.

The mobile station shall set this field to the phase of the pilot PN sequence relative to the zero offset pilot PN sequence of this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

**PILOT_STRENGTH** - Pilot strength in dB.

The mobile station shall set this field to

\[ -2 \times 10 \times \log_{10}PS \, \text{dB}, \]

where \( PS \) is the strength of this pilot, measured as specified in 2.6.6.2.2. 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’.
KEEP - Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to this pilot has expired, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

The mobile station shall include NUM_PILOTS occurrences of the following record in the same order as the pilots listed above.

PILOT_REC_INCL - Additional pilot information included indicator.

The mobile station shall set this field to ‘1’ if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Reference Pilot record type

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

RECORD_LEN - Pilot record length.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

Type-specific fields - Pilot record type-specific fields.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 2.7.2.3.2.34.

SETPT_INCL - Setpoint information included indicator.

The mobile station shall set this field to ‘1’ if setpoint information is included in this message; otherwise, the mobile station shall set this field to ‘0’.

FCH_INCL - Fundamental Channel included indicator.

If SETPT_INCL is equal to ‘1’, the mobile station shall include this field and set it as follows; otherwise, the mobile station shall omit this field.

If P_REV_IN_USE is less than nine, the mobile station shall do the following:

- The mobile station shall set this field to ‘1’ if FPC_PRI_CHAN is equal to ‘0’; otherwise, the mobile station shall set this field to ‘0’.

If P_REV_IN_USE is greater than or equal to nine, the mobile station shall do the following:

2-865
The mobile station shall set this field to ‘1’ if a Fundamental Channel is assigned; otherwise, the mobile station shall set this field to ‘0’.

FPC_FCH_CURR_SETPT - The outer loop $E_b/N_t$ setpoint of the Fundamental Channel.

If SETPT_INCL is equal to ‘1’ and if FCH_INCL is set to ‘1’, the mobile station shall set this field to the value of the $E_b/N_t$ setpoint, in units of 0.125 dB, currently in use in the Fundamental Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.

DCCH_INCL - Dedicated Control Channel included indicator.

If SETPT_INCL is equal to ‘1’, the mobile station shall include this field and set it as follows; otherwise, the mobile station shall omit this field.

If P_REV_IN_USE is less than nine, the mobile station shall do the following:

The mobile station shall set this field to ‘1’ if FPC_PRI_CHAN is equal to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

If P_REV_IN_USE is greater than or equal to nine, the mobile station shall do the following:

The mobile station shall set this field to ‘1’ if a Dedicated Control Channel is assigned; otherwise, the mobile station shall set this field to ‘0’.

FPC_DCCH_CURR_SETPT - The outer loop $E_b/N_t$ setpoint of the Forward Dedicated Channel.

If SETPT_INCL is equal to ‘1’, and if DCCH_INCL is set to ‘1’, the mobile station shall set this field to the value of the $E_b/N_t$ setpoint, in units of 0.125 dB, currently in use in the Dedicated Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.

NUM_SUP - The number of Supplemental Channels.

If SETPT_INCL is equal 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 the total number of the Supplemental Channels reported by this message.

The mobile station shall include NUM_SUP occurrences of the following two fields:

SCH_ID - The Supplemental Channel index.

The mobile station shall set this field to the Supplemental Channel index to indicate the Forward Supplemental Channel that is to be reported.
FPC_SCH_CURR_SETPT - The supplemental channel outer loop $E_b/N_t$ setpoint.

The mobile station shall set this field to the value of the power control outer loop $E_b/N_t$ setpoint, in units of 0.125 dB, currently in use in the Channel specified by SCH_ID.
2.7.2.3.2.22 Outer Loop Report Message

MSG_TAG: OLRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_FCH_CURR_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>DCCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_DCCH_CURR_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_SUP</td>
<td>2</td>
</tr>
</tbody>
</table>

NUM_SUP occurrences of the following fields:

/ (NUM_SUP)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FPC_SCH_CURR_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

/ (NUM_SUP)

FCH_INCL – Fundamental Channel included indicator.

The mobile station shall set this field to ‘1’ if FPC_FCH_CURR_SETPT is included; otherwise the mobile station shall set this field to ‘0’.

FPC_FCH_CURR_SETPT – The outer loop $E_b/N_t$ setpoint of the Fundamental Channel.

If FCH_INCL is set to ‘1’, the mobile station shall set this field to the value of the $E_b/N_t$ setpoint, in units of 0.125 dB, currently in use in the Fundamental Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.

DCCH_INCL – Dedicated Control Channel included indicator.

The mobile station shall set this field to ‘1’ if the FPC_DCCH_CURR_SETPT field is included; otherwise the mobile station shall set this field to ‘0’.

FPC_DCCH_CURR_SETPT – The outer loop $E_b/N_t$ setpoint of the Forward Dedicated Channel.

If DCCH_INCL is set to ‘1’, the mobile station shall set this field to the value of the $E_b/N_t$ setpoint, in units of 0.125 dB, currently in use in the Dedicated Channel power control outer loop estimation; otherwise, the mobile station shall omit this field.
NUM_SUP – The number of Supplemental Channels.
The mobile station shall set this field to the total number of
the Supplemental Channels reported by this message.

The mobile station shall in NUM_SUP occurrences of the following two fields:

SCH_ID – The Supplemental Channel index.
The mobile station shall set this field to the Supplemental
Channel index to indicate the Forward Supplemental Channel
that to be reported

FPC_SCH_CURR_SETPT – The supplemental outer loop E_b/N_t setpoint.
The mobile station shall set this field to the value of the power
control outer loop E_b/N_t setpoint, in units of 0.125 dB,
currently in use in the Channel specified by SCH_ID.
2.7.2.3.2.23 Resource Request Message

MSG_TAG: RRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH_IND_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CH_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

CH_IND_INCL – Channel indicator inclusion bit.

The mobile station shall set this field to ‘1’ if the mobile station is requesting a channel configuration; otherwise, the mobile station shall set this field to ‘0’.

CH_IND – Channel indicator.

If CH_IND_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as shown in Table 2.7.1.3.2.4-6 to request a new physical channel configuration.

EXT_CH_IND – Extended Channel Indicator.

If the CH_IND field is not included, or is included and not set to ‘00’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as shown in Table 2.7.1.3.2.4-11 to request a new physical channel configuration.
2.7.2.3.2.24 Resource Request Mini Message

MSG_TAG: RRMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH_IND_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CH_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

CH_IND_INCL – Channel indicator inclusion bit.

The mobile station shall set this field to ‘1’ if the mobile station is requesting a channel configuration; otherwise, the mobile station shall set this field to ‘0’.

CH_IND – Channel indicator.

If CH_IND_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as shown in Table 2.7.1.3.2.4-6 to request a new physical channel configuration.

EXT_CH_IND – Extended Channel Indicator.

If the CH_IND field is not included, or is included and not set to ‘00’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as shown in Table 2.7.1.3.2.4-11 to request a new physical channel configuration.
2.7.2.3.2.25 Extended Release Response Message

MSG_TAG: ERRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC_MODE_IND</td>
<td>1</td>
</tr>
<tr>
<td>RSCI</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RSC_END_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RSC_END_TIME_VALUE</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

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 following release of the traffic channel; otherwise, the mobile station shall set this field to ‘0’.

RSCI – Reduced slot cycle index.

If RSC_MODE_IND is 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.

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 equal 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 \( \text{mod } 16 \), in units of time specified by RSC_END_TIME_UNIT\( \text{mod } 16 \), at which the mobile station is to exit the reduced slot cycle mode.
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.
2.7.2.3.2.27 Pilot Strength Measurement Mini Message

MSG_TAG: PSMMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSMM_POS</td>
<td>3</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
<tr>
<td>RANK</td>
<td>3</td>
</tr>
</tbody>
</table>

- **PSMM_POS** – Pilot Strength Measurement Message position.
  The mobile station shall set this field to an index corresponding to the position, within the last sent Pilot Strength Measurement Message (see 2.7.2.3.2.5) or Extended Pilot Strength Measurement Message (see 2.7.2.3.2.34), of the Active-Set pilot whose strength is being reported. The mobile station shall use a value of 0 to report the pilot represented by the REF_PN field in the last sent Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message. The mobile station shall use a value of n, where n is an integer greater than 0, to report the pilot represented by the n\(^{th}\) 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.
2.7.2.3.2.28 Supplemental Channel Request Mini Message

MSG_TAG: SCRMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQ_BLOB</td>
<td>16</td>
</tr>
</tbody>
</table>

REQ_BLOB – Reverse Supplemental Channel request block of bytes.

The mobile station shall include information in this field containing the parameters that specify the characteristics of the Reverse Supplemental Channels request. The mobile station shall set this field in accordance with the connected Service Options.
2.7.2.3.2.29 Resource Release Request Message

MSG_TAG: RRRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GATING_DISCONNECT_IND</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PURGE_SERVICE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_CON_REF_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ADD_CON_REF</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

\( (\text{NUM_ADD_CON_REF} + 1) \)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>ADD_PURGE_SERVICE</td>
<td>1</td>
</tr>
</tbody>
</table>

\( (\text{NUM_ADD_CON_REF} + 1) \)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMCINFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 3 or 6</td>
</tr>
</tbody>
</table>

0 or \( \text{NUM_BCMC_PROGRAMS} \)\+1 occurrences of the following variable length record:

\( (0 \text{ or NUM_BCMC_PROGRAMS} + 1) \)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BMC_PROGRAM_ID</td>
<td>Variable (Value of ( \text{BMC_PROGRAM_ID_LEN} + 1 ))</td>
</tr>
<tr>
<td>BMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of ( \text{BMC_FLOW_DISCRIMINATOR_LEN} ))</td>
</tr>
</tbody>
</table>

\( \text{NUM_FLOW_DISCRIMINATOR} + 1 \) or 1 occurrences of the following variable length record:

\( (\text{NUM_FLOW_DISCRIMINATOR} + 1) \) or 1

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMC_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of ( \text{BMC_FLOW_DISCRIMINATOR_LEN} ))</td>
</tr>
</tbody>
</table>

\( (\text{NUMFLOW_DISCRIMINATOR} + 1) \) or 1
1) \( \{0 \text{ or } \text{NUM_BCMC_PROGRAMS} + 1 \} \)

2 GATING_DISCONNECT_IND - Reverse pilot gating or service disconnect indicator.

3 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'.

4 CON_REF - Connection reference.

5 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:

6 To request the release of a service option connection, the mobile station shall set this field to the connection reference corresponding to one of the service option connections requested to be released; otherwise the mobile station shall set this field to '00000000'.

7 PURGE_SERVICE - Purge service instance indicator.

8 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:

9 If the CON_REF is not set to '00000000' and 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'. When CON_REF is set to '00000000', this field does not have any significance.

10 ADD_CON_REF_INCL - Additional connection reference included indicator.

11 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:

12 If at least one occurrence of the ADD_CON_REF field is included in this message, then the mobile station shall set this field to '1'; otherwise, the mobile station shall set this field to '0'.

13 NUM_ADD_CON_REF - Number of additional connection references.
If the ADD_CON_REF_INCL field is included and set to ‘1’, the mobile station shall include this field and set it to one less than the number of occurrences of the ADD_CON_REF field included in this message; otherwise, the mobile station shall omit this field.

ADD_CON_REF - Additional connection reference.

The mobile station shall set this field to the connection reference corresponding to a service option connection that is requested to be released.

ADD_PURGE_SERVICE - Additional purge service instance indicator.

If the packet data service instance identified by the ADD_CON_REF field has been inactivated, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

BCMC_INFO_INCL - BCMC information includes indicator.

If the mobile station includes BCMC related fields in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NUM_BCMC_PROGRAMS - Number of BCMC Programs

If the GATING_DISCONNECT_IND field is set to ‘01’ or if P_REV_IN_USE is less than 11, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If the mobile station is requesting the release of all the BCMC programs being monitored, the mobile station shall set this field to ‘000000’; otherwise, the mobile station shall set this field to the number of BCMC programs included in this message minus 1.

The mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:

BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

BCMC_PROGRAM_ID - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.
The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station is requesting to release.

BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

The mobile station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program. To request release of all flows associated with this BCMC_PROGRAM_ID, the mobile station may set this field to ‘000’.

NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR – BCMC Flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the BCMC flow discriminator that is requested to be released.
2.7.2.3.2.30 Resource Release Request Mini Message

MSG_TAG: RRRMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GATING_DISCONNECT_IND</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PURGE_SERVICE</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

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’.
2.7.2.3.2.31 User Zone Update Request Message

MSG_TAG: UZURM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UZID</td>
<td>16</td>
</tr>
</tbody>
</table>

UZID - User Zone identifiers.
The mobile station shall set this field to the UZID\(_S\).
### 2.7.2.3.2.32 Enhanced Origination Message

#### MSG_TAG: EOM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAG</td>
<td>4</td>
</tr>
<tr>
<td>CH_IND</td>
<td>3</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SR_ID</td>
<td>3</td>
</tr>
<tr>
<td>GLOBAL_EMERGENCY_CALL</td>
<td>1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SINFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>UI_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>MORE_SO_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_ALT_SO</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

**NUM_ALT_SO** occurrences of the following field:

```
{ (NUM_ALT_SO)

   ALT_SO                16

} (NUM_ALT_SO)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO_BITMAP_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SO_GROUP_NUM</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SO_BITMAP</td>
<td>0 or (2^{1+4\times \text{SO_BITMAP_IND}})</td>
</tr>
<tr>
<td>DRS</td>
<td>1</td>
</tr>
<tr>
<td>PREV_SID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PREV_SID</td>
<td>0 or 15</td>
</tr>
<tr>
<td>PREV_NID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PREV_NID</td>
<td>0 or 16</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREV_PZID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PREV_PZID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>DIALED_DIGS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DIGIT_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUMBER_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
{ (NUM_FIELDS)
  CHARi
  }
```

NUM_RECS occurrences of the following three-field records:

```
{ (NUM_RECS)
  RECORD_TYPE 8
  RECORD_LEN 8
  Type-specific fields 8 × RECORD_LEN
  }
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNC_ID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 × SYNC_ID_LEN)</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>ADD_SERV_INSTANCE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ADD_SERV_INSTANCE</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ADD_SERV_INSTANCE occurrences of the following record:

<table>
<thead>
<tr>
<th>ADD_SR_ID</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_DRS</td>
<td>1</td>
</tr>
<tr>
<td>ADD_TAG</td>
<td>4</td>
</tr>
<tr>
<td>ADD_SERVICE_OPTION_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_SERVICE_OPTION</td>
<td>0 or 16</td>
</tr>
<tr>
<td>ADD_NUM_RECS</td>
<td>5</td>
</tr>
</tbody>
</table>

ADD_NUM_RECS occurrences of the following three-field records:

<table>
<thead>
<tr>
<th>ADD_RECORD_TYPE</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_RECORD_LEN</td>
<td>8</td>
</tr>
</tbody>
</table>

Type-specific fields $8 \times$ ADD_RECORD_LEN

<table>
<thead>
<tr>
<th>ADD_QOS_PARMS_INCL</th>
<th>0 or 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_QOS_PARMS_LEN</td>
<td>0 or 5</td>
</tr>
<tr>
<td>ADD_QOS_PARMS</td>
<td>0 or variable</td>
</tr>
<tr>
<td>ADD_QOS_RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:

<p>| BCMC_PROGRAM_ID_LEN        | 5            |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>Variable (Value of BCMC_PROGRAM_ID_LEN + 1)</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
</tbody>
</table>

NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

\[
\{ \text{(NUM_FLOW_DISCRIMINATOR+1) or 1} \}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURESAME_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BAK_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>AUTH_SIGNATURE</td>
<td>0 or 32</td>
</tr>
</tbody>
</table>

\[
\{ \text{(NUM_FLOW_DISCRIMINATOR NUM_BCMC_FLOWS+1) or 1} \}
\]

\[
\{ \text{(NUM_BCMC_PROGRAMS+1)} \}
\]

1  TAG  – Call initiation transaction identifier.

2  The mobile station shall set this field to the identifier for the
transaction corresponding to SR_ID.

4  CH_IND  – Channel indicator.

5  The mobile station shall set this field as shown in Table
2.7.2.3.2.32-1, to request physical resources.
Table 2.7.2.3.2.32-1. Channel Indicator

<table>
<thead>
<tr>
<th>CH_IND (binary)</th>
<th>Channel(s) Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No additional channels requested.</td>
</tr>
<tr>
<td>001</td>
<td>Fundamental Channel.</td>
</tr>
<tr>
<td>010</td>
<td>Dedicated Control Channel.</td>
</tr>
<tr>
<td>011</td>
<td>Reserved.</td>
</tr>
<tr>
<td>100</td>
<td>Continuous Reverse Pilot Channel.</td>
</tr>
<tr>
<td>101</td>
<td>Fundamental Channel and Continuous Reverse Pilot Channel.</td>
</tr>
<tr>
<td>110</td>
<td>Reserved.</td>
</tr>
<tr>
<td>111</td>
<td>Refer to EXT_CH_IND.</td>
</tr>
</tbody>
</table>

EXT_CH_IND - Extended Channel Indicator.

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.
SR_ID – Service reference identifier.

If the SYNC_ID_INCL field is set to ‘0’, the mobile station shall set this field as follows:

- If the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance. If the service instance does not provide a service reference identifier, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 (inclusive).

Otherwise, the mobile station shall set this field as follows:

- If the mobile station requests the restoration of a single service option connection from the stored service configuration, the mobile station shall set this field to the corresponding service reference identifier.

- Otherwise (that is, the mobile station requests the restoration of all remaining service option connections from the stored service configuration), the mobile station shall set this field to ‘111’.

GLOBAL_EMERGENCY_CALL – Global emergency call indicator.

The mobile station shall set this field to ‘1’, if the mobile station recognizes that this is an emergency call; otherwise, the mobile station shall set this field to ‘0’.

MS_INIT_POS_LOC_IND – Mobile Initiated Position Location Session indicator.

If the GLOBAL_EMERGENCY_CALL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to ‘1’ if MS_INIT_POS_LOC_SUP_IND is equal to ‘1’ and if the mobile station is to initiate a position location session associated with this emergency call; otherwise, the mobile station shall set this field to ‘0’.
NEW_SINFO_INCL  – Encryption fields included.

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.

UI_ENCRYPT_REQ  – Request for user information encryption on the traffic channel indicator.

If NEW_SINFO_INCL is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to ‘1’ to request user information encryption, and to ‘0’ to request no user information encryption.

UI_ENCRYPT_SUP  – User information encryption supported indicator.

If NEW_SINFO_INCL 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 the supported user information encryption algorithms.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.

SERVICE_OPTION  – Requested service option for this origination.

The mobile station shall set this field to the value specified in [30], corresponding to the requested service option.

MORE_SO_INFO_INCL  – More service option information included.

If MAX_NUM_ALT_SO is equal to ‘000’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field as follows:

If any alternate service option number or/and service option bitmap is to be included in this message, the mobile station shall set this field to ‘1’, otherwise, the mobile station shall set this field to ‘0’. In other words, MORE_SO_INFO_INCL is set to ‘1’, if NUM_ALT_SO is included and not set to ‘000’ or/and SO_BITMAP_IND is included and not set to ‘00’.

NUM_ALT_SO  – Number of alternative service options.
If \texttt{MORE\_SO\_INFO\_INCL} is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of supported alternative service options which either have no service option group number assigned or do not belong to the same service option group whose bitmap is included in the message.

The mobile station shall include \texttt{NUM\_ALT\_SO} occurrences of the following field:

\begin{itemize}
  \item \texttt{ALT\_SO} – Alternative service option.
  \item \texttt{SO\_BITMAP\_IND} – SO bitmap indicator.
  \item \texttt{SO\_GROUP\_NUM} – Service option group number.
  \item \texttt{SO\_BITMAP} – Service option bitmap.
  \item \texttt{DRS} – Data ready to send indicator.
\end{itemize}
If the service instance corresponding to SR_ID has data to send, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**PREV_SID_INCL** - Previous System Identification (SID) included indicator.

The mobile station shall set this field to ‘1’ if:
- The mobile station determines that the SID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to ‘0’.

**PREV_SID** - Previous System Identification.

If PREV_SID_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous SID.

**PREV_NID_INCL** - Previous Network Identification (NID) included indicator.

The mobile station shall set this field to ‘1’ if:
- The mobile station determines that NID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall set this field to ‘0’.

**PREV_NID** - Previous Network Identification.

If PREV_NID_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the previous NID.

**PREV_PZID_INCL** - Previous Packet Zone ID (PZID) included indicator.

The mobile station shall set this field to ‘1’ if:
- The mobile station determines that the Packet Zone ID has been changed after a packet data dormant handoff, and
- This message includes the main service instance (see [42]).

Otherwise, the mobile station shall omit this field.

**PREV_PZID** - Previous Packet Zone ID.

If PREV_PZID_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
The mobile station shall set this field to the previous PZID.

**DIALED_DIGS_INCL** - Dialed digits included indicator.

The mobile station shall set this field to ‘1’ if the dialed digits related fields are included in this message; otherwise, the mobile station shall set this field to ‘0’.

**DIGIT_MODE** - Digit mode indicator.

If the DIALED_DIGS_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

This field indicates whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan.

To originate the call using the binary representation of DTMF digits (i.e., CHARi fields are represented in Table 2.7.1.3.2.4-4), the mobile station shall set this field to ‘0’. To originate the call using ASCII characters, the mobile station shall set this field to ‘1’.

**NUMBER_TYPE** - Type of number.

If the DIALED_DIGS_INCL field is set to ‘0’, or if P_REV_IN_USEs < 11 and DIGIT_MODE is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to 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 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’.

**NUMBER_PLAN** - Numbering plan.

If the DIALED_DIGS_INCL field is set to ‘0’ or if the DIGIT_MODE field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:
The mobile station shall set this field to 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.

NUM_FIELDS – Number of dialed digits in this message.

If the DIALED_DIGS_INCL field is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it as follows:

The mobile station shall set this field to the number of dialed digits included in this message.

The mobile station shall include NUM_FIELDS occurrences of the following field:

CHARi – A dialed digit or character.

If the DIGIT_MODE field is set to '0', the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT_MODE field is set to '1', the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the dialed digit, as specified in [9], with the most significant bit set to '0'.

NUM_RECS – Number of records.

The mobile station shall set this field to the number of information records included with this message.

The mobile station shall include NUM_RECS occurrences of the following three-field record.

RECORD_TYPE – Information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1.

The mobile station shall not include the record type for QoS Parameters information record if MOB_QOSs is equal to '0'.

RECORD_LEN – Information record length.

The mobile station shall set this field to the number of octets in the type-specific fields included in this record.

Type-specific fields – Type-specific fields.

The mobile station shall include type-specific fields as specified in 2.7.4.
SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

The mobile station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_SUPPORTED is equal to ‘0’, the mobile station shall set this field to ‘0’.

SYNC_ID_LEN - Service Configuration synchronization identifier length indicator.

If the SYNC_ID_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the SYNC_ID field included in this message.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is 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 Service Configuration synchronization identifier corresponding to the stored service configuration.

ADD_SERV_INSTANCE_INCL - Additional service instances included indicator.

If SR_ID is included and set to ‘111’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

If at least one occurrence of the ADD_SR_ID field is included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

If SYNC_ID_INCL is equal to ‘0’ and MAX_ADD_SERV_INSTANCE is equal to ‘0’, the mobile station shall set this field to ‘0’.

NUM_ADD_SERV_INSTANCE - Number of additional service instances included.

If ADD_SERV_INSTANCE_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the number of additional service instances included in this message.
If SYNC_ID_INCL is equal to ‘0’, the mobile station shall set this field to a value less than or equal to MAX_ADD_SERV_INSTANCEs.

If ADD_SERV_INSTANCE_INCL is set to ‘1’, the mobile station shall include NUM_ADD_SERV_INSTANCE occurrences of the following variable-field record:

**ADD_SR_ID** – Additional service reference identifier.

If SYNC_ID_INCL is set to ‘0’, the mobile station shall set this field as follows:

- If the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance. If the service instance does not provide a service reference identifier, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 (inclusive).

Otherwise, the mobile station shall set this field to the service reference identifier corresponding to the service option connection that the mobile station requests to be restored from the stored service configuration.

**ADD_DRS** – Additional Data Ready to Send indicator.

If the service instance corresponding to the ADD_SR_ID field of this record has data to send, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**ADD_TAG** – Additional call initiation transaction identifier.

The mobile station shall set this field to the identifier for the transaction corresponding to the ADD_SR_ID field of this record.

**ADD_SERVICE_OPTION_INCL** – Additional service option included indicator.

If SYNC_ID_INCL 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 ‘0’ if the requested service option number of the service instance corresponding to the ADD_SR_ID field of this record is the same as SERVICE_OPTION; otherwise, the mobile station shall set this field to ‘1’.
ADD_SERVICE_OPTION – Additional service option number.

If the ADD_SERVICE_OPTION_INCL field of this record is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the value specified in [30], corresponding to the requested service option number of the service instance corresponding to the ADD_SR_ID field of this record.

ADD_NUM_RECS – Additional number of records.

The mobile station shall set this field to the number of information records included in this record for the service instance corresponding to the ADD_SR_ID field in this record.

The mobile station shall include ADD_NUM_RECS occurrences of the following three-field record.

ADD_RECORD_TYPE – Additional information record type.

The mobile station shall set this field to the record type value shown in Table 2.7.4-1.

The mobile station shall not include the record type for QoS Parameters information record if MOB_QOS is equal to ‘0’.

ADD_RECORD_LEN – Additional information record length.

The mobile station shall set this field to the number of octets in the type-specific fields included in this record.

Type-specific fields – Type-specific fields.

The mobile station shall include type-specific fields as specified in 2.7.4.

ADD_QOS_PARMS_INCL – Additional QoS parameters included indicator.

If SYNC_ID_INCL 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 QoS parameters for the service instance corresponding to the ADD_SR_ID field of this record are included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

The mobile station shall not set this field to ‘1’ if MOB_QOS is set to ‘0’.

ADD_QOS_PARMS_LEN – Additional Length of the block of QoS parameters.
If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the combined length of the ADD_QOS_PARMS field and the ADD_QOS_RESERVED field of this record, in octets.

**ADD_QOS_PARMS** — Additional QoS parameters block.

If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the set of QoS parameter values as defined in accordance with the requirements for the requested service option and/or for the user, per subscription.

**ADD_QOS_RESERVED** — Additional QoS reserved bits.

If the ADD_QOS_PARMS_INCL field of this record is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include the minimum number of bits of '0', such that the combined length of the QOS_PARMS field and of this field is an integer number of octets.

**BCMC_INCL** — BCMC information included indicator

If the P_REV_IN_USE field is less than 11, 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 one or more BCMC_PROGRAM_IDs are included in the message; otherwise, the mobile station shall set this field to '0'.

**BCMC_ORIG_ONLY_IND** — BCMC origination only indicator

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that this origination is only for BCMC and no point to point call is requested in this message; otherwise the mobile station shall set this field to '0'.

**AUTH_SIGNATURE_INCL** — Authorization signature included indication.

If the BCMC_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that the authorization signature is included in this message for some of the BCMC flows included in this message; otherwise, the mobile station shall set this field to '0'.

**TIME_STAMP_SHORT_LENGTH** — Length of time stamp included in this message.
If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the length of the time stamp, in units of bits, included in this message.

**TIME_STAMP_SHORT** - Time stamp short.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the **TIME_STAMP_SHORT_LENGTH** least significant bits of the time stamp parameter used to generate the Authorization signature included in this message.

**NUM_BCMC_PROGRAMS** - Number of BCMC Programs

If the BCMC_INCL field is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to the number of BCMC programs included in this message minus 1.

The mobile station shall include **NUM_BCMC_PROGRAMS+1** occurrences of the following variable length record:

**BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

**BCMC_PROGRAM_ID** - BCMC program Identifier

The length of this field shall be one more than the value of **BCMC_PROGRAM_ID_LEN** bits.

The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station will continue to monitor or start to monitor upon receiving confirmation of delivery of this message or is requesting transmission.

**BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

The mobile station shall set this field to the length, in bits, of the **BCMC_FLOW_DISCRIMINATOR** of this program. To request all flows associated with this **BCMC_PROGRAM_ID**, the mobile station may set this field to ‘000’.

---

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NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators included for this program.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN field as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR - BCMC Flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN field as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the BCMC flow discriminator requested.

AUTH_SIGNATURE_IND - Authorization signature indicator.

If the AUTH_SIGNATURE_INCL field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that the authorization signature is included in this message for this BCMC flow; otherwise, the mobile station shall set this field to '0'.

AUTH_SIGNATURESAME_IND - Authorization signature same as previous BCMC flow indicator.

If the AUTH_SIGNATURE_IND field is not included or is included and is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

The mobile station shall set this field to '1' to indicate that the authorization signature generated for this BCMC flow is the same as the one generated for the BCMC flow listed prior to this BCMC flow in this message; otherwise, the mobile station shall set this field to '0'.

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For the first BCMC flow listed in this message, the mobile station shall set this field to '0'.

**BAK_ID** - BAK identifier.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 BAK identifier used to generate the Authorization signature included in this message.

**AUTH_SIGNATURE** - Authorization signature.

If the AUTH_SIGNATURESAME_IND field is not included or is included and 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 Authorization signature computed for this BCMC flow as specified in 2.6.13.9.
2.7.2.3.2.33 Extended Flash With Information Message

MSG_TAG: EFWIM

### Field Length (bits)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_REC</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_REC occurrences of the following record:

```
/ (NUM_REC)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

```
/ (NUM_REC)
```

**CON_REF_INCL** – Connection reference included indicator.

The mobile station shall set this field to ‘1’ if the connection reference field is included in this message; otherwise, it shall set this field to ‘0’.

**CON_REF** – Connection reference.

If the CON_REF_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and shall set it to the value of the connection reference assigned to the service option connection of the call, to which this message corresponds.

**NUM_REC** – Number of records.

The mobile station shall set this field to the number of information records included with this message.

The mobile station shall include NUM_REC occurrence of the following three-field record:
<table>
<thead>
<tr>
<th></th>
<th>RECORD_TYPE</th>
<th>Information record type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The mobile station shall set this field to the record type code shown in Table 2.7.4-1 corresponding to the type of this information record.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>RECORD_LEN</td>
<td>Information record length.</td>
</tr>
<tr>
<td>6</td>
<td>The mobile station shall set this field to the number of octets in the type-specific fields of this record.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Type-specific fields</td>
<td>Type-specific fields.</td>
</tr>
<tr>
<td>9</td>
<td>The mobile station shall set these fields as specified in 2.7.4 for this type of information record.</td>
<td></td>
</tr>
</tbody>
</table>
2.7.2.3.2.34 Extended Pilot Strength Measurement Message

MSG_TAG: EPSMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REF_PN</td>
<td>9</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
<tr>
<td>KEEP</td>
<td>1</td>
</tr>
<tr>
<td>REF_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REF_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REF_RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 ×</td>
</tr>
<tr>
<td></td>
<td>REF_RECORD_LEN</td>
</tr>
<tr>
<td>SF_RX_PWR</td>
<td>5</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

\[
\{(\text{NUM_PILOTS})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN_PHASE</td>
<td>15</td>
</tr>
<tr>
<td>PILOT_STRENGTH</td>
<td>6</td>
</tr>
<tr>
<td>KEEP</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 ×</td>
</tr>
<tr>
<td></td>
<td>RECORD_LEN</td>
</tr>
</tbody>
</table>

\[
\{(\text{NUM_PILOTS})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESQ_IND_INCL</td>
<td>1</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

\[
\{(0 \text{ or NUM_PILOTS})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESQ_IND</td>
<td>1</td>
</tr>
</tbody>
</table>

\[
\{(0 \text{ or NUM_PILOTS})
\]

REF_PN – Time reference PN sequence offset.

The mobile station shall set this field to the PN sequence offset of the pilot used by the mobile station to derive its time reference, relative to the zero offset pilot PN sequence in units of 64 PN chips.
PILOT_STRENGTH – Pilot strength in dB.

The mobile station shall set this field to

\[-2 \times 10 \log_{10} PS\],

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 \([-2 \times 10 \log_{10} PS]\) is less than 0, the mobile station shall set this field to ‘000000’. If this value is greater than ‘111111’, the mobile station shall set this field to ‘111111’.

KEEP – Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to the pilot used by the mobile station to derive its time reference (see [2]) has expired, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

REF_PILOT_REC_INCL – Reference pilot information included indicator.

The mobile station shall set this field to ‘1’ if additional reference pilot information listed in the REF_PILOT_REC_TYPE and REF_RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

REF_PILOT_REC_TYPE – Reference pilot record type.

If REF_PILOT_REC_INCL is set to ‘1’, the mobile station shall set this field to the REF_PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

Table 2.7.2.3.2.34-1. Pilot Record Types

<table>
<thead>
<tr>
<th>Description</th>
<th>REF_PILOT_REC_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Pilot</td>
<td>000</td>
</tr>
<tr>
<td>All other REF_PILOT_REC_TYPE or PILOT_REC_TYPE values are reserved</td>
<td></td>
</tr>
</tbody>
</table>

If REF_PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field.

REF_RECORD_LEN – Reference pilot record length.

If REF_PILOT_REC_INCL is set to ‘1’, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.
If REF_PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If REF_PILOT_REC_INCL is set to ‘1’, the mobile station shall include type-specific fields based on the REF_PILOT_REC_TYPE of this pilot record.

If REF_PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field.

If REF_PILOT_REC_TYPE is equal to ‘000’, the mobile station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>PILOT_WALSH</td>
<td>(WALSH_LENGTH + 6)</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

QOF - Quasi-orthogonal function index.

The mobile station shall set this field to the index of the Quasi-orthogonal function of the corresponding Auxiliary Pilot.

WALSH_LENGTH - Length of the Walsh code for the reference pilot.

The mobile station shall set this field to the WALSH_LENGTH value shown in Table 2.7.2.3.2.34-2 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary Pilot.

**Table 2.7.2.3.2.34-2. Walsh Code Length**

<table>
<thead>
<tr>
<th>WALSH_LENGTH (binary)</th>
<th>Length of the Walsh Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘000’</td>
<td>64</td>
</tr>
<tr>
<td>‘001’</td>
<td>128</td>
</tr>
<tr>
<td>‘010’</td>
<td>256</td>
</tr>
<tr>
<td>‘011’</td>
<td>512</td>
</tr>
<tr>
<td>‘100’ – ‘111’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
PILOT_WALSH - Walsh code for the Auxiliary Pilot used by the mobile station to derive its time reference. The mobile station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

RESERVED - Reserved bits. The mobile station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

SF_RX_PWR – The received power spectral density of the Serving Frequency. The mobile station shall set this field to

\[ \left\lfloor \frac{10 \times \log_{10}(\text{spec\_density}) + 120}{2} \right\rfloor \]

where \text{spec\_density} is the mobile station received power spectral density of the Serving Frequency, in mW/1.23MHz, averaged over the last N_{12m} frames (see 2.6.6.2.5.1).

If this value is less than 0, the mobile station shall set this field to ‘00000’.

NUM_PILOTS – Number of pilots reported. The mobile station shall set this field to the number of pilots being reported other than the reference pilot.

The mobile station shall include NUM_PILOTS occurrences of the following record: one occurrence for each pilot in the Active Set, for each pilot in the Candidate Set whose strength exceeds T_ADD, and for each pilot in the Candidate Set whose strength satisfies the following inequality:

\[
10 \times \log_{10}\left( \frac{\text{SOFT\_SLOPE}_s \times 10 \times \log_{10} \sum_{i \in A} \text{PS}_i + \text{ADD\_INTERCEPT}_s}{8} \right) > \text{PS}
\]

where the summation is performed over all pilots currently in the Active Set. The mobile station shall not include these fields for the pilot identified by the REF_PN field.

The mobile station shall order any occurrences of the following record which correspond to pilots in the Active Set such that they occur before any occurrences of the following record which correspond to pilots in the Candidate Set.

PILOT_PN_PHASE – Pilot measured phase. The mobile station shall set this field to the phase of the pilot PN sequence relative to the zero offset pilot PN sequence of this pilot, in units of one PN chip, as specified in 2.6.6.2.4.

PILOT_STRENGTH – Pilot strength in dB. The mobile station shall set this field to

\[ \left\lfloor -2 \times 10 \log_{10} \text{PS} \right\rfloor \]
where PS is the strength of this pilot, measured as specified in 2.6.6.2.2. If this value \( \left( 9.2 \times 10^{10} \log_{10} \text{PS} \right) \) is less than 0, the mobile station shall set this field to '000000'. If this value is greater than '111111', the mobile station shall set this field to '111111'.

**KEEP** – Keep pilot indicator.

If the handoff drop timer (see 2.6.6.2.3) corresponding to this pilot has expired, the mobile station shall set this field to '0'; otherwise, the mobile station shall set this field to '1'.

**PILOT_REC_INCL** - Additional pilot information included indicator.

The mobile station shall set this field to '1' if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to '0' if the corresponding pilot is the common pilot and there is no additional pilot information included.

**PILOT_REC_TYPE** - Reference pilot record type.

If PILOT_REC_INCL is set to '1', the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

If PILOT_REC_INCL is set to '0', the mobile station shall omit this field.

**RECORD_LEN** - Pilot record length.

If PILOT_REC_INCL is set to '1', the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

If PILOT_REC_INCL is set to '0', the mobile station shall omit this field.

**Type-specific fields** - Pilot record type-specific fields.

If PILOT_REC_INCL is set to '1', the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If PILOT_REC_INCL is set to '0', the mobile station shall omit this field.

**RESQ_IND_INCL** - Call rescue flag included indicator.
The mobile station shall set this field to ‘1’ if a pilot in the mobile station’s Active Set was autonomously promoted 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’. If RESQ_IND_INCL is set to ‘1’, the mobile station shall include NUM_PILOTS occurrences of the following one-field record in the same order as the pilots listed above.

**RESQ_IND** - Call rescue flag.

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’.
2.7.2.3.2.35 Extended Handoff Completion Message

MSG_TAG: EHOCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAST_HDM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

LAST_HDM_SEQ – Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message sequence number.

The mobile station shall set this field to the value of the HDM_SEQ field from the Extended Handoff Direction Message, General Handoff Direction Message, or the Universal Handoff Direction Message that determined the current Active Set.

NUM.PILOTS – Number of pilots reported.

The mobile station shall set this field to the number of pilots in the current Active Set.

The mobile station shall include NUM.PILOTS occurrences of the following record: one occurrence for each pilot in the Active Set. If the Active Set contains more than one pilot, the mobile station shall include the pilot information 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.

PILOT_PN - Pilot PN sequence offset.

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.

PILOT_REC_INCL - Additional pilot information included indicator.
The mobile station shall set this field to ‘1’ if additional pilot information listed in the PILOT_REC_TYPE and RECORD_LEN fields are included. The mobile station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

**PILOT_REC_TYPE** - Reference pilot record type.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the PILOT_REC_TYPE value shown in Table 2.7.2.3.2.34-1 corresponding to the type of Pilot Record specified by this record.

**RECORD_LEN** - Pilot record length.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of octets in the type-specific fields of this pilot record.

**Type-specific fields** - Pilot record type-specific fields.

If PILOT_REC_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 2.7.2.3.2.34.
2.7.2.3.2.36 Security Mode Request Message

**MSG_TAG: SMRM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UI_ENC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_RECS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_RECS + 1 occurrences of the following two field record

\{(NUM_RECS + 1)\
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

\} (NUM_RECS + 1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIG_ENC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NEW_SSEQ_H_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>0 or 24</td>
</tr>
<tr>
<td>NEW_SSEQ_H_SIG</td>
<td>0 or 8</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

**UI_ENC_INCL** – User information encryption fields included.

The mobile station shall set this field to ‘1’ if the user information encryption related fields are included in this message; otherwise, the mobile station shall set this field to ‘0’.

**UI_ENCRYPT_SUP** – User information encryption supported indicator.

If UI_ENC_INCL is equal 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 the supported user information encryption algorithms.
This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.

NUM_REC – Number of user information encryption records.

If UI_ENC_INCL is equal 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 number of user information encryption records included in this message minus 1.

The mobile station shall include NUM_REC + 1 occurrences of the following two field record

CON_REF – Connection reference corresponding to the service instance requesting for encryption.

If UI_ENC_INCL is equal 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 the connection reference of the service option connection corresponding to this user information encryption request record.

UI_ENCRYPT_REQ – Request for user information encryption on the traffic channel indicator.

The mobile station shall set this field to ‘1’ to request user information encryption for the user information corresponding to the service option connection identified by CON_REF; otherwise, the mobile station shall set this field to ‘0’.

SIG_ENC_INCL – Signaling encryption fields included.

The mobile station shall set this field to ‘1’ if the following two fields related to signaling encryption fields are included in this message. Otherwise, the mobile station shall set this field to ‘0’.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

If SIG_ENC_INCL is equal to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile shall set this field to indicate the supported signaling encryption algorithms supported by the mobile station.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

If this field is included, the mobile station shall set the subfields as follows:

The mobile station shall set the CMEA subfield to ‘1’.

The mobile station shall set each other subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘00000’.

D_SIG_ENCRYPT_REQ – Dedicated channel signaling encryption request indicator. If SIG_ENC_INCL is equal to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If included the mobile station shall set this field to ‘1’ to request signaling encryption to be turned on for signaling messages sent on f-dsch and r-dsch, and to ‘0’ to request signaling encryption to be turned off for signaling messages sent on f-dsch and r-dsch.

NEW_SSEQ_H_INCL – The NEW_SSEQ included indicator. The mobile station shall set this field to ‘1’ if NEW_SSEQ_H is included in this message; otherwise, the mobile station shall set this field to ‘0’.

If MSG_INTEGRITY_SUP is equal to ‘0’, the mobile station shall set this field to ‘1’ if the mobile station is to include the NEW_SSEQ_H and NEW_SSEQ_H_SIG fields.

If MSG_INTEGRITY_SUP is equal to ‘1’, the mobile station shall set this field to ‘0’.

NEW_SSEQ_H – The 24-bit value used to initialize the 24 MSB of crypto-sync. If NEW_SSEQ_H_INCL is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If this field is included, the mobile station shall set this field to a 24-bit value that will be used as the initial value of the 24 MSB of the crypto-sync for both forward and reverse link message integrity.

NEW_SSEQ_H_SIG – The signature of NEW_SSEQ_H. If NEW_SSEQ_H is included, 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 the digital signature of the NEW_SSEQ_H computed as described in 2.3.12.4.5.
MSG_INT_INFO_INCL – Signaling message integrity information included indicator.
   If MSG_INTEGRITY_SUP is equal to ‘0’, the mobile station shall set this field to ‘0’; otherwise, the mobile station shall set this field to ‘1’.

SIG_INTEGRITY_SUP_INCL – Signaling message integrity information included indicator.
   If MSG_INT_INFO_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
   - If 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 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 set this field to indicate the supported message integrity algorithm 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 request indicator.
   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.
2.7.2.3.2.37 Call Cancel Message

MSG_TAG: CLCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAG</td>
<td>4</td>
</tr>
<tr>
<td>ADD_TAG_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_ADD_TAG</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ADD_TAG occurrences of the following field:

{ (NUM_ADD_TAG)
  ADD_TAG 4
} (NUM_ADD_TAG)

TAG – Transaction identifier.
The mobile station shall set this field to the TAG value in the list TAG_OUTSTANDING_LIST in the Enhanced Origination Message sent to originate this call.

ADD_TAG_INCL - Additional call initiation transaction identifiers included indicator.
If at least one occurrence of the ADD_TAG field is included in this message, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NUM_ADD_TAG - Number of additional call initiation transaction identifiers included.
If ADD_TAG_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it to the number of occurrences of the ADD_TAG field included in this message.

If ADD_TAG_INCL is set to ‘1’, the mobile station shall include NUM_ADD_TAG occurrences of the following field:

ADD_TAG – Additional call initiation transaction identifier.
The mobile station shall set this field to the TAG value in the Enhanced Origination Message.
2.7.2.3.2.38 Device Information Message

**MSG_TAG**: DIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLL_DEVICE_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUM_INFO_RECORDS</td>
<td>5</td>
</tr>
</tbody>
</table>

NUM_INFO_RECORDS occurrences of the following record:

```plaintext
{ (NUM_INFO_RECORDS)
  RECORD_TYPE 8
  RECORD_LEN 8
  Type-specific fields 8 × RECORD_LEN
}
```

**WLL_DEVICE_TYPE** – WLL device type indicator.

The mobile station shall set this field to the WLL_DEVICE_TYPE value shown in Table 2.7.1.3.2.1-3 corresponding to the mobile station device type.

**NUM_INFO_RECORDS** – Number of information records included.

The mobile station shall set this field to the number of information records which are included.

The mobile station shall include one occurrence of the following fields for each information record which is included:

**RECORD_TYPE** – Information record type.

The mobile station shall set this field to the record type code shown in Table 2.7.4-1 corresponding to the type of this information record.

**RECORD_LEN** – Information record length.

The mobile station shall set this field to the number of octets in the type-specific fields of this record.

**Type-specific fields** – Type-specific fields.

The mobile station shall set these fields as specified in 2.7.4 for this type of information record.
2.7.2.3.2.39 Base Station Status Request Message

MSG_TAG: BSSREQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times$ QUAL_INFO_LEN</td>
</tr>
<tr>
<td>NUM_RECORD</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_RECORD occurrences of the following record:

{ (NUM_RECORD)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LENGTH</td>
<td>8</td>
</tr>
<tr>
<td>Record type specific fields</td>
<td>variable</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (as required)</td>
</tr>
</tbody>
</table>

} (NUM_RECORD)

QUAL_INFO_TYPE - Qualification information type.

The mobile station shall set this field to the value shown in Table 3.7.2.3.2.15-1 to show the inclusion of qualification information in the type-specific fields.

QUAL_INFO_LEN - Qualification information length.

The mobile station shall set this field to the number of octets included in the type-specific fields of the qualification information.

Type-specific fields - Type-specific fields.

The mobile station shall set these fields to the qualification information according to the QUAL_INFO_TYPE field.

If QUAL_INFO_TYPE is equal to ‘00000000’, the type-specific fields are omitted.

If QUAL_INFO_TYPE is equal to ‘00000001’, the mobile station shall use the following fixed-length format for the type-specific fields:

<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

If QUAL_INFO_TYPE is equal to ‘00000001’, the mobile station shall use the following fixed-length format for the type-specific fields:
<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>OP_MODE</td>
<td>8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

1. **BAND_CLASS** - Band class.
   The mobile station shall set this field to the CDMA band class, as specified in [30].

2. **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.

3. **RESERVED** - Reserved bits.
   The mobile station shall set this field to ‘000’.

4. **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.

5. **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**

<table>
<thead>
<tr>
<th>Information Record Requested</th>
<th>Record Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Information</td>
<td>00000000</td>
</tr>
<tr>
<td>Reserved</td>
<td>00000001-1111111</td>
</tr>
</tbody>
</table>

6. **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.

7. **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.

8. If the RECORD_TYPE field is set to ‘00000000’, the mobile
station shall set the record type specific field as follows:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PILOTS</td>
<td>4</td>
</tr>
<tr>
<td>SID_NID_REQ</td>
<td>1</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following one field record:

\[
\text{NUM_PILOTS}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
</tbody>
</table>

\[
\text{LAT_LONG_REQ}
\]

RESERVED - Reserved bits.

The mobile station shall set the record type specific field as follows:

2 NUM_PILOTS - Number of Pilots reported.

The mobile station shall set this field to the number of pilots whose information is requested in this message.

The mobile station shall set this field to a number equal or greater than one.

7 SID_NID_REQ - SID, NID information requested indicator.

The mobile station shall set this field to ‘1’ if it also requests the SID and NID information for these pilots; otherwise, the mobile station shall set this field to ‘0’.

The mobile station shall include NUM_PILOTS occurrences of the following one-field record:

13 PILOT_PN - Pilot PN sequence offset index.

The mobile station shall set this field to the pilot PN sequence offset for the base station, in units of 64 PN chips, whose Base Station identification number information is being requested.

18 LAT_LONG_REQ - Base station LAT/LONG information requested indicator.

The mobile station shall set this field to ‘1’ if it also requests the LAT/LONG information for these pilots; otherwise, the mobile station shall set this field to ‘0’.

22 RESERVED - Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the record equal to an integer number.
of octets. The mobile station shall set these bits to ‘0’.
2.7.2.3.2.40 CDMA Off Time Report Message

**MSG_TAG:** COTRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMA_OFF_TIME_ENABLE</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_START</td>
<td>0 or 6</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME</td>
<td>0 or 4</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_PERIOD</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

**CDMA_OFF_TIME_ENABLE** – Off time reporting enable
The mobile station shall set this field to ‘1’ if the mobile station plans to suspend its CDMA Traffic Channel processing. The mobile station shall set this field to ‘0’ to cancel a previously reported CDMA Traffic Channel processing suspension.

**CDMA_OFF_TIME_START** – The start time when the mobile station moves 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 the System Time, in units of 80 ms (modulo 64), at which the mobile station plans to go away from the CDMA Traffic Channel.

**CDMA_OFF_TIME_UNIT** – Time unit used in **CDMA_OFF_TIME**
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 the time unit used in **CDMA_OFF_TIME**, as specified in Table 2.7.2.3.2.40-1.
Table 2.7.2.3.2.40-1. CDMA Off Time Unit

<table>
<thead>
<tr>
<th>CDMA_OFF_TIME_UNIT (binary)</th>
<th>Time Unit (decimal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>80 ms</td>
</tr>
<tr>
<td>01</td>
<td>0.5 sec</td>
</tr>
<tr>
<td>10</td>
<td>1 sec</td>
</tr>
<tr>
<td>11</td>
<td>RESERVED</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RES</td>
<td>128</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SIG_INTEGRITY_REQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NEW_KEY_ID</td>
<td>2</td>
</tr>
<tr>
<td>NEW_SSEQ_H</td>
<td>24</td>
</tr>
</tbody>
</table>

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’.
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.
2.7.2.3.2.42 Authentication Resynchronization Message

MSG_TAG: AURSYNM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_MS_SQN</td>
<td>48</td>
</tr>
<tr>
<td>MAC_S</td>
<td>64</td>
</tr>
</tbody>
</table>

CON_MS_SQN – The concealed sequence number of the authentication vector. The mobile station shall set this field to the output, CON_MS_SQN, of the function as specified in Figure 2.3.12.5.2-3.

MAC_S – Message authentication code for resynchronization. The mobile station shall set this field to the output, MAC_S, of the function as specified in Figure 2.3.12.5.2-3.
### 2.7.2.3.2.43 ITBSPM Request Message

**MSG_TAG: ITBSPMRM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_REQ_TYPE</td>
<td>4</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 68</td>
</tr>
</tbody>
</table>

If NUM_BCMC_PROGRAMS field is included, NUM_BCMC_PROGRAMS+1 occurrences of the following record:

```
{ (NUM_BCMC_PROGRAMS+1)
    BCMC_PROGRAM_ID_LEN  5
    BCMC_PROGRAM_ID      Variable (Value of BCMC_PROGRAM_ID_LEN + 1)
    BCMC_FLOW_DISCRIMINATOR_LEN  3
    NUM_FLOW_DISCRIMINATOR Variable (Value of 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 Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)
    } (NUM_BCMC_PROGRAMS+1)
```

**BCMC_REQ_TYPE** – BCMC Request Type.

The mobile station shall set this field as specified in Table 2.7.2.3.2.43-1 to request transmission of ITBSPM over traffic channel.

#### Table 2.7.2.3.2.43-1 BCMC Request Type

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>BCMC Request</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Request Information for all BCMC_FLOW_IDS

<table>
<thead>
<tr>
<th>0000</th>
<th>Request information for all BCMC_FLOW_IDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>Request information for Traffic Channel BCMC_FLOW_IDS</td>
</tr>
<tr>
<td>0010</td>
<td>Request information for BCMC_FLOW_IDS (See section 2.6.13.11) specified in this message</td>
</tr>
<tr>
<td>0011-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

1 NUM_BCMC_PROGRAMS – Number of BCMC programs included.

2 If BCMC_REQ_TYPE is not set to ‘0010’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows.

3 The mobile station shall set this field to the number of BCMC programs included in this message minus 1.

4 If the NUM_BCMC_PROGRAMS field is included, the mobile station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following record:

5 **BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

6 The mobile station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

7 **BCMC_PROGRAM_ID** - BCMC program Identifier

8 The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.

9 The mobile station shall set this field to the identifier of the BCMC program corresponding to one or more flows that the mobile station will continue to monitor or start to monitor upon receiving confirmation of delivery of this message or is requesting transmission.

10 **BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

11 The mobile station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program. To request all flows associated with this BCMC_PROGRAM_ID, the mobile station may set this field to ‘000’.
NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the mobile station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the mobile station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR – BCMC Flow Discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The mobile station shall set this field to the discriminator of the BCMC flow.
2.7.3 Orders

*Order Messages* are sent by the mobile station on the r-csch and on the r-dsch. The general PDU format used on the r-csch is defined in 2.7.1.3.2.2, and the general PDU format used on the r-dsch is defined in 2.7.2.3.2.1. There are many specific types of *Order Messages*, as shown in Table 2.7.3-1.

The mobile station may send on the r-csch any type of order shown in Table 2.7.3-1 with a ‘Y’ in the first column, but shall not send on the r-csch any type of order with an ‘N’ in the first column. The mobile station may send on the r-dsch any type of order shown in Table 2.7.3-1 with a ‘Y’ in the second column, but shall not send on the r-dsch any type of order with an ‘N’ in the second column. The mobile station shall be capable of sending all types of orders shown in Table 2.7.3-1 with a ‘Y’ in the sixth column.

An order consists of a 6-bit order code and zero or more order-specific fields. The mobile station shall set the ORDER field in the *Order Message* to the order code shown in Table 2.7.3-1 corresponding to the type of order being sent.

If the order qualification code in the fourth column of Table 2.7.3-1 is ‘00000000’ and there are no other additional fields as shown by an ‘N’ in the fifth column, the mobile station shall include no order qualification code or other order-specific fields in the *Order Message*. The order qualification code of such a message is implicitly ‘00000000’.

If the order qualification code is not ‘00000000’ and there are no other additional fields as shown in Table 2.7.3-1 by an ‘N’ in the fifth column, the mobile station shall include the order qualification code as the only order-specific field in the *Order Message*.

If there are other additional fields as shown in Table 2.7.3-1 by a ‘Y’ in the fifth column, the mobile station shall include order-specific fields as specified in the corresponding subsection of this section.
# Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch

## (Part 1 of 5)

<table>
<thead>
<tr>
<th>r-csch Order</th>
<th>r-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>More Fields other than ORDQ</th>
<th>Support Req’d</th>
<th>P_REV_I N_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td>000010</td>
<td>00000000</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Base Station Challenge Order (see 2.7.3.1)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>000011</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>SSD Update Confirmation Order</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>000011</td>
<td>00000001</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>SSD Update Rejection Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>000101</td>
<td>0000nnnn</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Parameter Update Confirmation Order (where ‘nnnn’ is the Request Number)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>001011</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Request Wide Analog Service Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>001011</td>
<td>00000001</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Request Narrow Analog Service Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>001011</td>
<td>00000010</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Request Analog Service Order</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010000</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Acknowledgment Order (see [4])</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010011</td>
<td>00000000</td>
<td>Y</td>
<td>N</td>
<td>&lt; 7</td>
<td>Service Option Request Order (Band Class 0 only; see 2.7.3.2)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010100</td>
<td>00000000</td>
<td>Y</td>
<td>Y</td>
<td>&lt; 7</td>
<td>Service Option Response Order (Band Class 0 only; see 2.7.3.3)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010101</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Release Order (normal release)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010101</td>
<td>00000001</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Release Order (with power-down indication)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010101</td>
<td>00000010</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
<td>Release Order (with service inactive indication)</td>
</tr>
</tbody>
</table>

---

5 P_REV_I N_USE equal to “All” implies all values applicable to the Band Class.
<table>
<thead>
<tr>
<th>N</th>
<th>Y</th>
<th>010101</th>
<th>00000011</th>
<th>Y</th>
<th>N</th>
<th>≥ 11</th>
</tr>
</thead>
</table>

*Release Order (with reduced slot cycle mode indication; see 2.7.3.5)*
### Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch (Part 2 of 5)

<table>
<thead>
<tr>
<th>r-csch Order</th>
<th>r-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>More Fields other than ORDQ</th>
<th>Support Req’d</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Long Code Transition Request Order (request public)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>00000001</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Long Code Transition Request Order (request private)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>00000010</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Long Code Transition Response Order (use public)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>00000011</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Long Code Transition Response Order (use private)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011000</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Connect Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011001</td>
<td>0000nnnn</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Continuous DTMF Tone Order (where ‘nnnn’ is the tone per Table 2.7.1.3.2.4-4).</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011001</td>
<td>11111111</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Continuous DTMF Tone Order (Stop continuous DTMF tone)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011101</td>
<td>nnnnnnnn</td>
<td>N</td>
<td>Y</td>
<td>&lt;7</td>
<td>Service Option Control Order (Band Class 0 only; the specific control is designated by ‘nnnnnnnn’ as determined by each service option)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011110</td>
<td>nnnnnnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Local Control Response Order (specific response as designated by ‘nnnnnnnn’ as determined by each system)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>000000001</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (unspecified reason; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>000000010</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message not accepted in this state; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>000000011</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message structure not acceptable; see 2.7.3.4)</td>
</tr>
</tbody>
</table>
### Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch  
(Part 3 of 5)

<table>
<thead>
<tr>
<th>r-csch Order</th>
<th>r-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>More Fields other than ORDQ</th>
<th>Support Req’d</th>
<th>P_REV_ IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00000100</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message field not in valid range; see 2.7.3.4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00000101</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message type or order code not understood; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00000110</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message requires a capability that is not supported by the mobile station; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00000111</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
<td>Mobile Station Reject Order (message cannot be handled by the current mobile station configuration; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00001000</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (response message would exceed allowable length; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00001001</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (information record is not supported for the specified band class and operating mode; see 2.7.3.4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00001010</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (search set not specified; see 2.6.6.2.5.1)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00001011</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (invalid search request; see 2.6.6.2.5.1)</td>
</tr>
</tbody>
</table>
### Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch

(Part 4 of 5)

<table>
<thead>
<tr>
<th>r-csch Order</th>
<th>r-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>More Fields other than ORDQ</th>
<th>Support Req’d</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00001100</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (invalid Frequency Assignment; see 2.6.6.2.5.1)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00001101</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
<td>Mobile Station Reject Order (search period too short; see 2.6.6.2.5.1)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011111</td>
<td>00001110</td>
<td>Y</td>
<td>Y</td>
<td>≥ 6</td>
<td>Mobile Station Reject Order (RC does not match with the value in the field DEFAULT_CONFIG; see 2.6.3.3 and 2.6.3.5)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00010000</td>
<td>Y</td>
<td>Y</td>
<td>≥ 7</td>
<td>Mobile Station Reject Order (call assignment not accepted; see 2.7.3.4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00010001</td>
<td>Y</td>
<td>Y</td>
<td>≥ 7</td>
<td>Mobile Station Reject Order (no call control instance present with the specified identifier; see 2.7.3.4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00010010</td>
<td>Y</td>
<td>Y</td>
<td>≥ 7</td>
<td>Mobile Station Reject Order (a call control instance is already present with the specified identifier; see 2.7.3.4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00010011</td>
<td>Y</td>
<td>Y</td>
<td>≥ 7</td>
<td>Mobile Station Reject Order (TAG received does not match any of the TAG stored; see 2.7.3.4)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00010100</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Mobile Station Reject Order (UAK not supported)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011111</td>
<td>00010101</td>
<td>Y</td>
<td>Y</td>
<td>≥ 9</td>
<td>Mobile Station Reject Order (stored configuration already restored at channel assignment)</td>
</tr>
</tbody>
</table>
### Table 2.7.3-1. Order and Order Qualification Codes Used on the r-dsch and the r-csch
(Part 5 of 5)

<table>
<thead>
<tr>
<th>r-csch Order</th>
<th>r-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>More Fields other than ORDQ</th>
<th>Support Req’d</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00010110</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Mobile Station Reject Order (The MAC-I field (see [4]) is missing)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00011000</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Mobile Station Reject Order (The MAC-I field (see [4]) is present but invalid)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00011001</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Mobile Station Reject Order (The security sequence number is invalid)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00011010</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Mobile Station Reject Order (The message can not be decrypted)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00011011</td>
<td>NY</td>
<td>Y</td>
<td>≥ 11</td>
<td>Mobile Station Reject Order (Requested stored service configuration is not available)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011111</td>
<td>00011100</td>
<td>NY</td>
<td>Y</td>
<td>≥ 11</td>
<td>Mobile Station Reject Order (PLCM_TYPE mismatch)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>100000</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 8</td>
<td>Call Rescue Cancel Order</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>100001</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 10</td>
<td>Security Mode Completion Order</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>100010</td>
<td>00000000</td>
<td>Y</td>
<td>N</td>
<td>≥ 11</td>
<td>Fast Call Setup Order (indicates mobile station request to operate in a fast call setup mode, see 2.7.3.6)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>100010</td>
<td>00000001</td>
<td>Y</td>
<td>N</td>
<td>≥ 11</td>
<td>Fast Call Setup Order (indicates mobile station response to operate in a fast call setup mode, see 2.7.3.6)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>100011</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
<td>Shared Channel Configuration Order (requests R-FCH assignment)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>100011</td>
<td>00000001</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
<td>Shared Channel Configuration Order (requests R-FCH release)</td>
</tr>
<tr>
<td>All other codes are reserved.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.7.3.1 Base Station Challenge Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>RANDBS</td>
<td>32</td>
</tr>
</tbody>
</table>

ORDQ – Order qualification code. The mobile station shall set this field to ‘00000000’.

RANDBS – Random challenge data. The mobile station shall set this field as specified in 2.3.12.1.5.
2.7.3.2 Service Option Request Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
</tbody>
</table>

ORDQ – Order qualification code. The mobile station shall set this field to ‘00000000’.

SERVICE_OPTION – Service option. The mobile station shall set this field to the service option code specified in [30], corresponding to the requested or alternative service option.
2.7.3.3 Service Option Response Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
</tbody>
</table>

ORDQ – Order qualification code. The mobile station shall set this field to ‘00000000’.

SERVICE_OPTION – Service option. The mobile station shall set this field to the service option code specified in [30], corresponding to the accepted service option, or to ‘0000000000000000’ to reject the proposed service option. See 2.6.4.1.2.2.1.
### 2.7.3.4 Mobile Station Reject Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>REJECTED_TYPE</td>
<td>8</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED_1</td>
<td>2</td>
</tr>
<tr>
<td>REJECTED_ORDER</td>
<td>6</td>
</tr>
<tr>
<td>REJECTED_ORDQ</td>
<td>8</td>
</tr>
</tbody>
</table>

If the order is sent on the Reverse Traffic Channel and

REJECTED_TYPE is ‘00001100’,

the order-specific fields also include the following field:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REJECTED_PARAM_ID</td>
<td>16</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REJECTED_RECORD</td>
<td>8</td>
</tr>
</tbody>
</table>

If the ORDQ is ‘00010000’, ‘00010001’, or ‘00010010’, the order-specific fields also include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
</tbody>
</table>

If the ORDQ is ‘00010011’, the order-specific fields also include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>TAG</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REJECTED_PDU_TYPE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RESERVED_2</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>
ORDQ – Order qualification code.
The mobile station shall set this field to the ORDQ value shown in Table 2.7.3-1 corresponding to the reason for rejecting the message.

REJECTED_TYPE – Message type of rejected message.
The mobile station shall set this field to the value of the MSG_TYPE or the MSG_ID (see [4]) field of the message being rejected. If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits, the mobile station shall set the least significant bits of this field to the value of the MSG_TYPE field and set all the remaining bits to ‘0’.

RESERVED_1 - Reserved bits.
The mobile station shall set this field to ‘00’.

REJECTED_ORDER – Order type of rejected message.
If the rejected message was an Order Message, the mobile station shall set this field to the value of the ORDER field in the rejected message. Otherwise, the mobile station shall omit this field.

REJECTED_ORDQ – Order qualification code of rejected message.
If the rejected message was an Order Message including an ORDQ field, the mobile station shall set this field to the value of the ORDQ field in the rejected message. If the rejected message was an Order Message not including an ORDQ field, the mobile station shall set this field to ‘00000000’. Otherwise, the mobile station shall omit this field.

REJECTED_PARAM_ID – Parameter identification of the rejected parameter.
If the rejected message was a Set Parameters Message, the mobile station shall set this field to the PARAMETER_ID of the first parameter for which the requested operation could not be completed. Otherwise, the mobile station shall omit this field.

REJECTED_RECORD – Record type of the rejected information record.
If the rejected message was a Feature Notification Message, an Alert With Information Message, Extended Alert With Information Message, Extended Flash With Information Message, or a Flash With Information Message, the mobile station shall set this field to the RECORD_TYPE field of the first information record that could not be accepted. Otherwise, the mobile station shall omit this field.

CON_REF – Connection reference.
The mobile station shall set this field to the value of the connection reference of the service option connection corresponding to the call.

**TAG** – Transaction identifier.

The mobile station shall set this field to the transaction identifier (received from the base station) of the call assignment being rejected.

**REJECTED_PDU_TYPE** – PDU type of the rejected message.

If P_REV_IN_USE is less than six, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the REJECTED_PDU_TYPE code shown in Table 2.7.3.4-1 corresponding to the PDU type of the message being rejected.

### Table 2.7.3.4-1. REJECTED_PDU_TYPE codes

<table>
<thead>
<tr>
<th>REJECTED_PDU_TYPE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>20 ms regular message</td>
</tr>
<tr>
<td>01</td>
<td>5 ms mini message</td>
</tr>
<tr>
<td>01</td>
<td>Reserved</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**RESERVED_2** – Reserved bits.

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’.
2.7.3.5 Release Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
</tbody>
</table>

If the ORDQ is ‘00000011’, the mobile station shall include the following order-specific record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSC_MODE_IND</td>
<td>1</td>
</tr>
<tr>
<td>RSCI</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RSC_END_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RSC_END_TIME_VALUE</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

ORDQ – Order qualification code. The mobile station shall set this field to the order qualification code, in accordance with Table 2.7.3-1.

RSC_MODE_IND – Reduced slot cycle mode indicator. If ORDQ is equal to ‘00000011’, the mobile station shall include this field and set it as specified below; otherwise, the mobile station shall omit this field. The mobile station shall set this field to ‘1’ to indicate that it will operate in the reduced slot cycle mode following release of the traffic channel; otherwise, the mobile station shall set this field to ‘0’.

RSCI – Reduced slot cycle index. If RSC_MODE_IND is included and equal to ‘1’, the mobile station shall include this field and set it to the value of the reduced slot cycle index, as specified in Table 2.7.1.3.2.1-8; otherwise, the mobile station shall omit this field.
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.

Table 2.7.3.5-1. RSC_END_TIME_UNIT and MAX_RSC_END_TIME_UNIT values

<table>
<thead>
<tr>
<th>Field (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>unit is 4 seconds</td>
</tr>
<tr>
<td>01</td>
<td>unit is 20 seconds</td>
</tr>
<tr>
<td>10</td>
<td>unit is 100 seconds</td>
</tr>
<tr>
<td>11</td>
<td>RESERVED</td>
</tr>
</tbody>
</table>

RSC_END_TIME_VALUE - Reduced slot cycle mode end time value.

If RSC_MODE_IND is equal 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 (modulo 16), in units of time specified by RSC_END_TIME_UNIT (modulo 16), at which the mobile station is to exit the reduced slot cycle mode.
2.7.3.6 Fast Call Setup Order

<table>
<thead>
<tr>
<th>Order-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>RSC_MODE_IND</td>
<td>1</td>
</tr>
<tr>
<td>RSCI</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RSC_END_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RSC_END_TIME_VALUE</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

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 \(\text{(modulo 16)}\), in units of time specified by RSC_END_TIME_UNIT \(\text{(modulo 16)}\), at which the mobile station is to exit the reduced slot cycle mode.
2.7.4 Information Records

On the r-csch, information records may be included in the *Status Response Message*, the *Extended Status Response Message*, the *Origination Message*, and the *Device Information Message*. On the r-dsch, information records may be included in the *Origination Continuation Message*, the *Enhanced Origination Message*, the *Flash With Information Message*, the *Extended Flash With Information Message*, the *Service Request Message*, the *Service Response Message*, the *Status Message*, and the *Status Response Message*. Table 2.7.4-1 lists the information record type values that may be used with each message type. The following sections describe the contents of each of the record types in detail.
### Table 2.7.4-1. Information Record Types (Part 1 of 3)

<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>QUAL_INFO_TYPE (binary)</th>
<th>Message Type</th>
<th>r-csch</th>
<th>r-dsch</th>
<th>P_REV_IN_USE&lt;sup&gt;6&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserved</td>
<td>000000001</td>
<td>-</td>
<td>None</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Reserved for Obsolete Identification</td>
<td>00000010</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keypad Facility</td>
<td>00000011</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Called Party Number</td>
<td>00000100</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Calling Party Number</td>
<td>00000101</td>
<td>Flash</td>
<td>Origination Continuation</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Reserved for Obsolete Identification</td>
<td></td>
<td></td>
<td>Enhanced Origination Message</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Call Mode</td>
<td>00000111</td>
<td>00000000</td>
<td>Status [1]</td>
<td>N</td>
<td>Y</td>
<td>&lt; 7</td>
</tr>
<tr>
<td>Terminal Information</td>
<td>00001000</td>
<td>00000100</td>
<td>Status [1]</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Roaming Information</td>
<td>00001001</td>
<td>00000100</td>
<td>Status [1]</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Security Status</td>
<td>00001010</td>
<td>00000000</td>
<td>Status [1]</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Connected Number</td>
<td>00010111</td>
<td>Flash</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>IMSI</td>
<td>00011001</td>
<td>00000000</td>
<td>Status [1]</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>ESN</td>
<td>00011010</td>
<td>00000000</td>
<td>Status [1]</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Band Class Information</td>
<td>00011100</td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Power Class Information</td>
<td>00011111</td>
<td>00000100</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Operating Mode Information</td>
<td>00100000</td>
<td>00000001</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Service Option Information</td>
<td>00100010</td>
<td>00000100</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Multiplex Option Information</td>
<td>00100100</td>
<td>00000010</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Service Configuration Information</td>
<td>00100111</td>
<td>00000000</td>
<td>Status [2]</td>
<td>N</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>Service Request</td>
<td>N</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>Service Response</td>
<td>N</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>6</sup> P_REV_IN_USE equal to “All” implies all values applicable to the Band Class.
<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>QUAL_INFO_TYPE (binary)</th>
<th>Message Type</th>
<th>r-csch</th>
<th>r-dsch</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Called Party Subaddress</td>
<td>00010100</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Origination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Continuation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Enhanced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Origination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Message</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calling Party Subaddress</td>
<td>00010101</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Origination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Continuation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Enhanced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Origination</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Message</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected Subaddress</td>
<td>00010110</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Power Control Information</td>
<td>00010111</td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>IMSI_M</td>
<td>00011000</td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>IMSI_T</td>
<td>00011001</td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Capability Information</td>
<td>00011010</td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Reserved for Obsolete Identification</td>
<td>00011101</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Global Emergency Call</td>
<td>00100000</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>≥ 76</td>
</tr>
<tr>
<td>Hook Status</td>
<td>00100001</td>
<td>-</td>
<td>DIM</td>
<td>Y</td>
<td>Y</td>
<td>≥ 76</td>
</tr>
<tr>
<td></td>
<td></td>
<td>00000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>QoS Parameters</td>
<td>00100010</td>
<td>-</td>
<td>Origination</td>
<td>N</td>
<td>Y</td>
<td>≥ 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>Continuation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Enhanced</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Origination</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 2.7.4-1. Information Record Types (Part 3 of 3)

<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>QUAL_INFO_TYPE (binary)</th>
<th>Message Type</th>
<th>r-csch</th>
<th>r-dsch</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signaling Message Integrity Capability</td>
<td>00100100</td>
<td>000000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
</tr>
<tr>
<td>ESN_ME</td>
<td>00100110</td>
<td>000000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 9</td>
</tr>
<tr>
<td>MEID</td>
<td>00100111</td>
<td>000000000</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 11</td>
</tr>
<tr>
<td>Extended Keypad Facility</td>
<td>00101000</td>
<td>-</td>
<td>Flash</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
</tr>
<tr>
<td>Extended Service Option Information</td>
<td>00101011</td>
<td>000000010</td>
<td>Status [2]</td>
<td>Y</td>
<td>Y</td>
<td>≥ 11</td>
</tr>
<tr>
<td>Extended Record Type — International</td>
<td>11111110</td>
<td>-</td>
<td>Country-Specific</td>
<td>1, ≥ 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
2.7.4.2 Keypad Facility

This information record can be included in a Flash With Information Message and allows the user to send characters entered via a keyboard or other such terminal.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARi</td>
<td>8</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```
{ 
  CHARi
}
```

CHARi – Character.

The mobile station shall include one occurrence of this field for each character entered. The mobile station shall set each occurrence of this field to the ASCII representation corresponding to the character entered, as specified in [9], with the most significant bit set to ‘0’.
2.7.4.3 Called Party Number

This information record identifies the called party’s number.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

{CHAR_i 8}

| RESERVED  | 1 |

NUMBER_TYPE – Type of number.

The mobile station shall set this field to the NUMBER_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the called number, as defined in [7], Section 4.5.9.

If 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’.

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 called number, as defined in [7], Section 4.5.9.

CHAR_i – Character.

The mobile stations shall include one occurrence of this field for each character in the called 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 bit.

The mobile station shall set this field to ‘0’.
2.7.4.4 Calling Party Number

This information record can be included in a *Flash With Information Message* and identifies the calling party’s number.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
<tr>
<td>PI</td>
<td>2</td>
</tr>
<tr>
<td>SI</td>
<td>2</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
/  
CHARi 8  
/  
RESERVED 5  
```

- **NUMBER_TYPE** – Type of number.
  - The mobile station shall set this field to the NUMBER_TYPE value shown in Table 2.7.1.3.2.4.2 corresponding to the type of the calling number, as defined in [7], Section 4.5.9.
  - If the mobile station determines that this number is an international number (for example, with a leading “+” as specified in [39] for Plus Code Dialing or an international access code), the mobile station should set this field to ‘001’.

- **NUMBER_PLAN** – Numbering plan.
  - The mobile station shall set this field to the NUMBER_PLAN value shown in Table 2.7.1.3.2.4.3 corresponding to the numbering plan used for the calling number, as defined in [7], Section 4.5.9.

- **PI** – Presentation indicator.
  - This field indicates whether or not the calling number should be displayed.
  - The mobile station shall set this field to the PI value shown in Table 2.7.4.4.1 corresponding to the presentation indicator, as defined in [7], Section 4.5.9.
Table 2.7.4.4-1. Presentation Indicators

<table>
<thead>
<tr>
<th>Description</th>
<th>PI (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation allowed</td>
<td>00</td>
</tr>
<tr>
<td>Presentation restricted</td>
<td>01</td>
</tr>
<tr>
<td>Number not available</td>
<td>10</td>
</tr>
<tr>
<td>Reserved</td>
<td>11</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Description</th>
<th>SI (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>User-provided, not screened</td>
<td>00</td>
</tr>
<tr>
<td>User-provided, verified and passed</td>
<td>01</td>
</tr>
<tr>
<td>User-provided, verified and failed</td>
<td>10</td>
</tr>
<tr>
<td>Network-provided</td>
<td>11</td>
</tr>
</tbody>
</table>

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
2.7.4.6 Call Mode

This information record can be included in a Status Message or a Status Response Message to return the mobile station's preferred call mode and call-related information.

If \( P_{\text{REV_{IN\_USE}}} \) is equal to or greater than seven, this information record will not be requested by the base station (see 3.7.2.3.2.15 & 3.7.4.4).

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORIG_MODE</td>
<td>1</td>
</tr>
<tr>
<td>PRI_SERVICE</td>
<td>16</td>
</tr>
<tr>
<td>SEC_SERVICE</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>7</td>
</tr>
</tbody>
</table>

ORIG_MODE – Origination mode indicator.

If the current call is a mobile-originated call, the mobile station shall set this field to ‘0’. If the current call is a mobile-terminated call, the mobile station shall set this field to ‘1’.

PRI_SERVICE – Primary service option.

The mobile station shall set this field to the value specified in [30], corresponding to the current primary service option. If no primary service option is active, the mobile station shall set this field to ‘0000000000000000’.

SEC_SERVICE – Secondary service option.

The mobile station shall set this field to the value specified in [30], corresponding to the current secondary service option. If no secondary service option is active, the mobile station shall set this field to ‘0000000000000000’.

RESERVED – Reserved bits.

The mobile station shall set this field to ‘0000000’.
2.7.4.7 Terminal Information

This information record can be included in a *Status Message*, a *Status Response Message*, or an *Extended Status Response Message* to return configuration information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOB_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>MOB_MFG_CODE</td>
<td>8</td>
</tr>
<tr>
<td>MOB_MODEL</td>
<td>8</td>
</tr>
<tr>
<td>MOB_FIRM_REV</td>
<td>16</td>
</tr>
<tr>
<td>SCM</td>
<td>8</td>
</tr>
<tr>
<td>LOCAL_CTRL</td>
<td>1</td>
</tr>
<tr>
<td>SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

\[
\{
\begin{align*}
\text{SERVICE OPTION} & \quad 16 \\
\text{SIGN_SLOT_CYCLE_INDEX} & \quad 0 \text{ or } 1 \\
\text{RESERVED} & \quad 0 - 7 \text{ (as needed) }
\end{align*}
\]

MOB_P_REV – Protocol revision of the mobile station.

If the status request does not specify a band class, the mobile station shall set this field to ‘00001011’; otherwise, the mobile station shall set this field to the MOB_P_REV associated with the requested band class and operating mode.

MOB_MFG_CODE – Manufacturer code.

This field identifies the manufacturer of the mobile station.

The mobile station shall set this field to the manufacturer code assigned to its manufacturer.

MOB_MODEL – Model number.

This number is assigned by the manufacturer for a particular model.

The mobile station shall set this field to the model number assigned by the manufacturer for this mobile station.
MOB_FIRM_REV – Firmware revision number. This number is assigned by the manufacturer for a particular firmware version. The mobile station shall set this field to the revision number assigned by the manufacturer for the firmware version running in this mobile station.

SCM – Station class mark. The mobile station shall set this field to its station class mark. See 2.3.3.

LOCAL_CTRL – Local control indicator. If local control is enabled, the mobile station shall set this field to ‘1’. If local control is disabled, the mobile station shall set this field to ‘0’. See [6].

SLOT_CYCLE_INDEX – Slot cycle index. If the requested operating mode is not CDMA and the mobile station is not configured for slotted mode operation, the mobile station shall set this field to ‘000’; otherwise, the mobile station shall set this field as follows:

- If \( P_{REV\_IN\_USE} \) is less than eleven, the mobile station shall set this field to \( \min(0, \text{SLOT\_CYCLE\_INDEX\_REG}) \) (see 2.6.2.1.1).

- If \( P_{REV\_IN\_USE} \) is greater or equal to eleven, the mobile station shall set this field to the absolute value of the registered slot cycle index, \( \text{SLOT\_CYCLE\_INDEX\_REG} \) (see 2.6.2.1.1); otherwise, the mobile station shall set this field to ‘000’. The sign of the registered slot cycle, \( \text{SLOT\_CYCLE\_INDEX\_REG} \), is specified in the SIGN_SLOT_CYCLE_INDEX field of this message (see Table 2.7.1.3.2.1-8).

SERVICE_OPTION – Supported service option. If the requested operating mode is CDMA, the mobile station shall include one occurrence of this field for each service option supported by the mobile station (see [30]); otherwise, the mobile station shall include one occurrence of this field with the value set to ‘0000000000000000’.

SIGN_SLOT_CYCLE_INDEX – Sign of the slot cycle index. If the SLOT_CYCLE_INDEX field is set to ‘000’, 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 as specified in Table 2.7.1.3.2.1-8 to the sign of the registered slot cycle index, \( \text{SLOT\_CYCLE\_INDEX\_REG} \) (see 2.6.2.1.1). The absolute value of the registered slot cycle index, \( \text{SLOT\_CYCLE\_INDEX\_REG} \), is specified in the SLOT_CYCLE_INDEX field of this message.
reserved – Reserved bits.

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'. The mobile station shall set this field to '000'.
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.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOLC</td>
<td>4</td>
</tr>
<tr>
<td>MOBTERM_HOME</td>
<td>1</td>
</tr>
<tr>
<td>MOBTERM_FOR_SID</td>
<td>1</td>
</tr>
<tr>
<td>MOBTERM_FOR_NID</td>
<td>1</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following record:

```
{
  SID          15
  NID          16
}
```

RESERVED          0 - 7 (as needed)

ACCOLC – Overload class.

The mobile station shall set this field to the access overload class assigned to the mobile station.

MOBTERM_HOME – Home (non-roaming) registration enable indicator.

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.

MOBTERM_FOR_SID – Foreign SID roaming registration enable indicator.

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.

MOBTERM_FOR_NID – Foreign NID roaming registration enable indicator.

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.
The mobile station shall include one occurrence of the following two-field record for each home (non-roaming) (SID, NID) pair (see 2.6.5.2):

- **SID** – System identification. The mobile station shall set this field to the SID value for this (SID, NID) pair.

- **NID** – Network identification. The mobile station shall set this field to the NID value for this (SID, NID) pair.

- **RESERVED** – Reserved bits. The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.9 Security Status

This information record can be included in a Status Message or a Status Response Message to return the authentication, encryption, and voice privacy modes of the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTH_MODE</td>
<td>2</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>2</td>
</tr>
<tr>
<td>PRIVATE_LCM</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

- **AUTH_MODE** – Authentication mode.
- If the mobile station provided standard authentication information at the initiation of this call, the mobile station shall set this field to ‘01’; otherwise, the mobile station shall set this field to ‘00’. All other values are reserved.

- **ENCRYPT_MODE** – Message encryption mode.
- The mobile station shall set this field to the value shown in Table 3.7.2.3.2.8-2 corresponding to the message encryption mode currently in use for this call.

- **PRIVATE_LCM** – Private long code mask indicator.
- If the mobile station is using the private long code mask for this call, the mobile station shall set this field to ‘1’. If the mobile station is using the public long code mask for this call, the mobile station shall set this field to ‘0’.

- **RESERVED** – Reserved bits.
- The mobile station shall set this field to ‘000’.
2.7.4.10 Connected Number

This information record can be included in a *Flash With Information Message* to identify the responding party to a call.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
<tr>
<td>PI</td>
<td>2</td>
</tr>
<tr>
<td>SI</td>
<td>2</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```plaintext
{ CHARi 8 }
```

- **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 connected number as defined [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 connected number, as defined, in [7], Section 4.5.9.

- **PI** - Presentation indicator.
  - This field indicates whether or not the connected number should be displayed. The 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.

- **SI** - Screening indicator.
  - This field indicates how the connected 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>
<thead>
<tr>
<th>No.</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CHARi</td>
<td>Character. The mobile station shall include one occurrence of this field for each character in the connected 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’.</td>
</tr>
<tr>
<td>2</td>
<td>RESERVED</td>
<td>Reserved bits. The mobile station shall set this field to ‘00000’.</td>
</tr>
</tbody>
</table>
2.7.4.11 IMSI

This information record can be included in a Status Message, a Status Response Message, or an Extended Status Response Message to return the mobile station’s operational IMSI.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMSI_CLASS</td>
<td>1</td>
</tr>
<tr>
<td>IMSI_ADDR_NUM</td>
<td>3</td>
</tr>
<tr>
<td>MCC_O</td>
<td>10</td>
</tr>
<tr>
<td>IMSI_O_11_12</td>
<td>7</td>
</tr>
<tr>
<td>IMSI_O_S</td>
<td>34</td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
</tbody>
</table>

- **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’.
2.7.4.12 ESN

This information record can be included in a *Status Message*, a *Status Response Message*, or an *Extended Status Response Message* to return the mobile station ESN.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESN</td>
<td>32</td>
</tr>
</tbody>
</table>

ESN – Mobile station electronic serial number.

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 ESNp (see 2.3.2).
2.7.4.13 Band Class Information

This information record can be included in a Status Response Message, or an Extended Status Response Message to return band class information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS_INFO</td>
<td>8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

BAND_CLASS_INFO – Band class information.

This field indicates which band classes are supported by the mobile station.

The mobile station shall set the Nth most significant bit of this field to ‘1’ if the Nth band class defined in [45] is supported by the mobile station; otherwise, the mobile station shall set the Nth most significant bit of this field to ‘0’. Example of this field coding is shown in Figure 2.7.4.13-1.

![Figure 2.7.4.13-1. BAND_CLASS_INFO field coding](image)

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.14 Power Class Information

This information record can be included in a Status Response Message, or an Extended Status Response Message to return power class information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX_EIRP</td>
<td>8</td>
</tr>
</tbody>
</table>

- **MAX_EIRP** – Maximum effective isotropic radiated power (EIRP).

The mobile station shall set this field to the minimum EIRP at maximum output (in dBW) for the mobile station plus 60 (see [11]). When the mobile station output power is expressed in ERP, it may be converted to EIRP by adding 2 dB to the ERP value.\(^7\)

\(^7\) For example, if a mobile station has a minimum ERP at maximum output of -4 dBW, then the mobile station sets this field to 58.
2.7.4.15 Operating Mode Information

This information record can be included in a Status Response Message or an Extended Status Response Message to return operating mode information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP_MODE_INFO</td>
<td>8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

OP_MODE_INFO – Operating mode information.

This field indicates which operating modes are supported by the mobile station in the band class for which information is requested.

This field currently consists of the following subfields which are included in the information record in the order shown in Table 2.7.4.15-1 for P_REV_IN_USEs less than or equal to three and in Table 2.7.4.15-2 for P_REV_IN_USEs greater than three.

**Table 2.7.4.15-1. OP_MODE for P_REV_IN_USEs Less Than or Equal to Three**

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP_MODE0</td>
<td>1</td>
<td>CDMA mode in Band Class 1 and Band Class 4</td>
</tr>
<tr>
<td>OP_MODE1</td>
<td>1</td>
<td>CDMA mode in Band Class 0 and Band Class 3</td>
</tr>
<tr>
<td>OP_MODE2</td>
<td>1</td>
<td>Analog mode [6]</td>
</tr>
<tr>
<td>OP_MODE3</td>
<td>1</td>
<td>wide analog mode [22]</td>
</tr>
<tr>
<td>OP_MODE4</td>
<td>1</td>
<td>narrow analog mode [22]</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>
Table 2.7.4.15-2. OP_MODE for P_REV_IN_USEs Greater Than Three

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
<th>Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>OP_MODE0</td>
<td>1</td>
<td>CDMA mode</td>
<td></td>
</tr>
<tr>
<td>OP_MODE1</td>
<td>1</td>
<td>CDMA mode&lt;sup&gt;8&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>OP_MODE2</td>
<td>1</td>
<td>Analog mode [6]</td>
<td></td>
</tr>
<tr>
<td>OP_MODE3</td>
<td>1</td>
<td>Wide analog mode [22]</td>
<td></td>
</tr>
<tr>
<td>OP_MODE4</td>
<td>1</td>
<td>Narrow analog mode [22]</td>
<td></td>
</tr>
<tr>
<td>OP_MODE5</td>
<td>1</td>
<td>DS-41 [32]</td>
<td></td>
</tr>
<tr>
<td>OP_MODE6</td>
<td>1</td>
<td>MC-MAP [31]</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

The mobile station shall set each subfield to ‘1’, if the corresponding operating mode is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

RESERVED – Reserved bits.

The mobile station shall set each bit in this field to ‘0’.

When more operating modes are defined, the reserved bits will be used for the new corresponding subfields. Sufficient octets will also be added to this field to accommodate the corresponding new subfields. All the undefined bits in an additional octet will be reserved bits.

If all bits are set to ‘0’ in an octet and all succeeding octets, the mobile station shall omit the octet and the succeeding octets.

<sup>8</sup> The mobile station shall set OP_MODE1 the same as OP_MODE0.
2.7.4.16 Service Option Information

This information record can be included in a Status Response Message, or an Extended Status Response Message to return service option information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>6</td>
</tr>
<tr>
<td>FORWARD_SUPPORT</td>
<td>1</td>
</tr>
<tr>
<td>REVERSE_SUPPORT</td>
<td>1</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
</tbody>
</table>

The mobile station shall include one occurrence of the following record for each service option supported:

- **RESERVED** – Reserved bits. The mobile station shall set this field to ‘000000’.
- **FORWARD_SUPPORT** – Support indicator for Forward Traffic Channel. The mobile station shall set this field to ‘1’ if the service option specified in the SERVICE_OPTION field is supported on the Forward Traffic Channel.
- **REVERSE_SUPPORT** – Support indicator for Reverse Traffic Channel. The mobile station shall set this field to ‘1’ if the service option specified in the SERVICE_OPTION field is supported on the Reverse Traffic Channel.
- **SERVICE_OPTION** – Service option. The mobile station shall set this field to the value specified in [30] for the service option supported.
2.7.4.17 Multiplex Option Information

This information record can be included in a Status Response Message or an Extended Status Response Message to return multiplex option information about the mobile station. The mobile station shall include at least one, and not more than six, instances of the record within the type-specific field according to the following rules:

- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 1. If this instance is included, the mobile station shall support Multiplex Option 1 for forward and reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 2. If this instance is included, the mobile station shall support Multiplex Option 2 for forward and reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 3, 5, 7, 9, 11, 13, or 15 and with FOR_NUM_BITS set to ‘00000000’. If this instance is included, the mobile station shall set MULTIPLEX_OPTION to the highest numbered multiplex option from the set {3, 5, 7, 9, 11, 13, 15} which the mobile station supports for reverse operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX_OPTION from that set for reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 4, 6, 8, 10, 12, 14, or 16 and with FOR_NUM_BITS set to ‘00000000’. If this instance is included, the mobile station shall set MULTIPLEX_OPTION to the highest numbered multiplex option from the set {4, 6, 8, 10, 12, 14, 16} which the mobile station supports for reverse operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX_OPTION from that set for reverse operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 3, 5, 7, 9, 11, 13, or 15 and with REV_NUM_BITS set to ‘00000000’. If this instance is included, the mobile station shall set MULTIPLEX_OPTION to the highest numbered multiplex option from the set {3, 5, 7, 9, 11, 13, 15} which the mobile station supports for forward operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX_OPTION from that set for forward operation.
- Within the type-specific field, the mobile station may include one instance of a record in which MULTIPLEX_OPTION is set to 4, 6, 8, 10, 12, 14, or 16 and with REV_NUM_BITS set to ‘00000000’. If this instance is included, the mobile station shall set MULTIPLEX_OPTION to the highest numbered multiplex option from the set {4, 6, 8, 10, 12, 14, 16} which the mobile station supports for forward operation, and the mobile station shall support all multiplex options less than or equal to MULTIPLEX_OPTION from that set for forward operation.
- Within the type-specific field, the mobile station shall include at least one instance of a record in which FOR_NUM_BITS is set to a value other than ‘00000000’.

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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’.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MULTIPLEX_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>FOR_NUM_BITS</td>
<td>8</td>
</tr>
<tr>
<td>REV_NUM_BITS</td>
<td>8</td>
</tr>
</tbody>
</table>

The mobile station shall include one occurrence of the following record for each specified multiplex option according to the previously stated rules:

MULTIPLEX_OPTION – Supported multiplex option.

The mobile station shall set this field to the number of the supported multiplex option from the set {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16} (e.g., 1 corresponds to Multiplex Option 1).

FOR_NUM_BITS – Forward Traffic Channel number of bits per frame.

If FOR_NUM_BITS = ‘00000000’, then the specified multiplex option in this record shall indicate the supported multiplex option for the Reverse Traffic Channel only. In this case, no further interpretation of the FOR_NUM_BITS field shall be made. The mobile station shall not set both FOR_NUM_BITS and REV_NUM_BITS equal to ‘00000000’ in the same information record.

If MULTIPLEX_OPTION is equal to 1, 3, 5, 7, 9, 11, 13, or 15, this field consists of the subfields specified in Table 2.7.4.17-1 which are included in the information record in the order shown in the table. The subfields in Table 2.7.4.17-1 refer to the number of bits per frame supported on the Fundamental Channel of the Forward Traffic Channel.
Table 2.7.4.17-1. Forward Fundamental Traffic Channel
Number of Bits per Frame for Forward Multiplex Option 1

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS1_9600_FOR</td>
<td>1</td>
<td>172 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS1_4800_FOR</td>
<td>1</td>
<td>80 bits per F-FCH</td>
</tr>
<tr>
<td>RS1_2400_FOR</td>
<td>1</td>
<td>40 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS1_1200_FOR</td>
<td>1</td>
<td>16 bits per F-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS2_14400_FOR</td>
<td>1</td>
<td>267 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_7200_FOR</td>
<td>1</td>
<td>125 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_3600_FOR</td>
<td>1</td>
<td>55 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_1800_FOR</td>
<td>1</td>
<td>21 bits per F-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS1_9600_REV</td>
<td>1</td>
<td>172 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_4800_REV</td>
<td>1</td>
<td>80 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_2400_REV</td>
<td>1</td>
<td>40 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_1200_REV</td>
<td>1</td>
<td>16 bits per R-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS2_14400_REV</td>
<td>1</td>
<td>267 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_7200_REV</td>
<td>1</td>
<td>125 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_3600_REV</td>
<td>1</td>
<td>55 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_1800_REV</td>
<td>1</td>
<td>21 bits per R-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>
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’.
2.7.4.18 Service Configuration

The format of the Service Configuration information record is defined in 3.7.5.7.
2.7.4.19 Called Party Subaddress

This information record identifies the called party subaddress.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
{
   CHARi 8
}
```

EXTENSION_BIT – The extension bit. The mobile station shall set this field to ‘1’.

SUBADDRESS_TYPE – Type of subaddress. The mobile station shall set this field to the SUBADDRESS_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.8.

<table>
<thead>
<tr>
<th>Description</th>
<th>SUBADDRESS TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSAP (see [34])</td>
<td>000</td>
</tr>
<tr>
<td>User specified</td>
<td>010</td>
</tr>
<tr>
<td>Reserved</td>
<td>others</td>
</tr>
</tbody>
</table>

ODD/EVEN_INDICATOR – The indicator of odd/even bits. The mobile station shall set this field to the ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.8. This field is only used when the type of subaddress is “User specified” and the coding is BCD.
Table 2.7.4.19-2. Odd/Even Indicator

<table>
<thead>
<tr>
<th>Description</th>
<th>ODD/EVEN INDICATOR (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even number of address signals</td>
<td>0</td>
</tr>
<tr>
<td>Odd number of address signals</td>
<td>1</td>
</tr>
</tbody>
</table>

2

RESERVED – Reserved bits.

The mobile station shall set this field to '000'.

CHARi – Character.

The mobile station shall include one occurrence of this field for each character in the called party subaddress.

When the SUBADDRESS_TYPE field is equal to ‘000’, the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS_TYPE field is set to ‘010’, the user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets.

When interworking with CCITT Recommendation X.25 networks, BCD coding should be applied.
2.7.4.20 Calling Party Subaddress

This information record identifies the calling party subaddress.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
/  
  
CHARi 8

/  
```

EXTENSION_BIT – The extension bit.

The mobile station shall set this field to ‘1’.

SUBADDRESS_TYPE – Type of subaddress.

The mobile station shall set this field to the SUBADDRESS_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.10.

ODD/EVEN_INDICATOR – The indicator of odd/even bits.

The mobile station shall set this field to the ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.10. It is only used when the type of subaddress is “User specified” and the coding is BCD.

RESERVED – Reserved bits.

The mobile station shall set this field to ‘000’.

CHARi – Character.

The mobile station shall include one occurrence of this field for each character in the calling party subaddress.

When the SUBADDRESS_TYPE field is equal to ‘000’, the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS_TYPE field is set to ‘010’, user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.
2.7.4.21 Connected Subaddress

This information record identifies the subaddress of the responding party.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

\[
\{ \text{CHAR}_i \}^{8}\]

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’.

CHARi – 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.
2.7.4.22 Power Control Information

This information record can be included in a Status Response Message, or an Extended Status Response Message to return the minimum power control step size supported by the mobile station (see 2.1.2.3.2).

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIN_PWR_CNTL_STEP</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>

- MIN_PWR_CNTL_STEP – Minimum power control step size
  - The mobile station shall set this field to the PWR_CNTL_STEP value associated with the minimum closed loop power control step size shown in Table 3.7.3.3.25-1 that the mobile station supports.

- RESERVED – Reserved bits.
  - The mobile station shall set this field to ‘00000’.
2.7.4.23 IMSI

This information record can be included in a Status Response Message, or an Extended Status Response Message to return the mobile station’s IMSI_Mp.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMSI_M_CLASS</td>
<td>1</td>
</tr>
<tr>
<td>IMSI_M_ADDR_NUM</td>
<td>3</td>
</tr>
<tr>
<td>MCC_M</td>
<td>10</td>
</tr>
<tr>
<td>IMSI_M_11_12</td>
<td>7</td>
</tr>
<tr>
<td>IMSI_M_S</td>
<td>34</td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
</tbody>
</table>

- **IMSI_M_CLASS** – IMSI_M Class assignment of the mobile station.
  - The mobile station shall set this field to ‘0’.

- **IMSI_M_ADDR_NUM** – Number of IMSI_Mp address digits.
  - The mobile station shall set this field to ‘000’.

- **MCC_M** – Mobile Country Code of the MIN based IMSI.
  - The mobile station shall set this field the MCC_Mp. See 2.3.1.

- **IMSI_M_11_12** – The 11th and 12th digits of IMSI_M.
  - The mobile station shall set this field to IMSI_M_11_12p. See 2.3.1.

- **IMSI_M_S** – Last ten digits of the IMSI_M.
  - The mobile station shall set this field to IMSI_M_Sp. See 2.3.1.

- **RESERVED** – Reserved bit.
  - The mobile station shall set this field to ‘0’.
2.7.4.24 IMSI_T

This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return the mobile station’s IMSI_T.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMSI_T_CLASS</td>
<td>1</td>
</tr>
<tr>
<td>IMSI_T_ADDR_NUM</td>
<td>3</td>
</tr>
<tr>
<td>MCC_T</td>
<td>10</td>
</tr>
<tr>
<td>IMSI_T_11_12</td>
<td>7</td>
</tr>
<tr>
<td>IMSI_T_S</td>
<td>34</td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
</tbody>
</table>

**IMSI_T_CLASS** – IMSI_T Class assignment of the mobile station.

If the mobile station’s IMSI_T 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_T_ADDR_NUM** – Number of IMSI_T address digits.

If the mobile station’s IMSI_T 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_T** – Mobile Country Code of the IMSI_T.

The mobile station shall set this field to the MCC_T.

See 2.3.1.

**IMSI_T_11_12** – The 11th and 12th digits of the IMSI_T.

The mobile station shall set this field to IMSI_T_11_12.

See 2.3.1.

**IMSI_T_S** – Last ten digits of the IMSI_T.

The mobile station shall set this field to IMSI_T_S.

See 2.3.1.

**RESERVED** – Reserved bit.

The mobile station shall set this field to ‘0’.
2.7.4.25 Capability Information

This information record identifies whether the following optional or MOB_P_REV dependent features are supported by the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESS_ENTRY_HO</td>
<td>1</td>
</tr>
<tr>
<td>ACCESS_PROBE_HO</td>
<td>1</td>
</tr>
<tr>
<td>ANALOG_SEARCH</td>
<td>1</td>
</tr>
<tr>
<td>HOPPING_BEACON</td>
<td>1</td>
</tr>
<tr>
<td>MAHOO</td>
<td>1</td>
</tr>
<tr>
<td>PUF</td>
<td>1</td>
</tr>
<tr>
<td>ANALOG_553A</td>
<td>1</td>
</tr>
<tr>
<td>QPCH</td>
<td>1</td>
</tr>
<tr>
<td>SLOTTED_TIMER</td>
<td>1</td>
</tr>
<tr>
<td>CHH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>GATING_RATE_SET</td>
<td>0 or 2</td>
</tr>
<tr>
<td>EXT_CAP_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>MABO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SDB</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLP_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>RLP_BLOB</td>
<td>8 × RLP_INFO_LEN</td>
</tr>
<tr>
<td>FLEX_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>F_FCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>R_FCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F_DCCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>R_DCCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>F_SCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>R_SCH_FLEX_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>VAR_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>F_SCH_VAR_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>R_SCH_VAR_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MAX_SUM_NUM_BITS_C</td>
<td>0 or 16</td>
</tr>
<tr>
<td>MAX_SUM_NUM_BITS_T</td>
<td>0 or 16</td>
</tr>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>F_SCH_LTU_TAB_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>R_SCH_LTU_TAB_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>ERAM_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PDCH_CHM_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_FCH_GATING_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>RER_MODE_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>ADD_NUM_SYNC_ID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ADD_NUM_SYNC_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RSC_MODE_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>TKZ_MODE_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

ACCESS_ENTRY_HO – Access Entry Handoff Support.

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’.

ACCESS_PROBE_HO – Access Probe Handoff Support.

This field identifies the mobile station’s support for access probe handoff (see 2.6.3.1.3.3). The mobile station shall set this field to ‘1’ if access probe handoff is supported; otherwise, the mobile station shall set this field to ‘0’.

ANALOG_SEARCH – Analog Search Support.
This field identifies the mobile station’s support for analog searching (see 2.6.6.2.10). The mobile station shall set this field to ‘1’ if analog searching is supported; otherwise, the mobile station shall set this field to ‘0’.

**HOPPING_BEACON** – Hopping Beacon Support.

This field identifies the mobile station’s support for hopping pilot beacons. The mobile station shall set this field to ‘1’ if hopping pilot beacons are supported; otherwise, this field shall be set to ‘0’.

**MAHHO** – Mobile Assisted Hard Handoff Support.

This field identifies the mobile station’s support for mobile assisted hard handoff. The mobile station shall set this field to ‘1’.

**PUF** – Location Power Up Function Support.

This field identifies the mobile station’s support for location power up function (see 2.6.4.1.7).

If MOB_P_REVp is equal to ‘00000101’, the mobile station shall set this field to ‘1’; otherwise the mobile station shall set this field as follows:

If the mobile station supports location power up function, the mobile station shall set this field to ‘1’, otherwise, the mobile station shall set this field to ‘0’.

**ANALOG_553A** – Analog Support.

This field identifies the mobile station’s compatibility with [12]. The mobile station shall set this field to ‘1’.

**QPCH** – Quick Paging Channel Support.

This field identifies the mobile station’s support for the Quick Paging Channel. The mobile station shall set this field to ‘1’ if the Quick Paging Channel is supported; otherwise, the mobile station shall set this field to ‘0’.

**SLOTTED_TIMER** – Slotted Timer Support.

This field identifies the mobile station’s support for the Slotted Timer. The mobile station shall set this field to ‘1’ if the Slotted Timer is supported; otherwise, the mobile station shall set this field to ‘0’.

**CHM_SUPPORTED** – Control Hold Mode supported indicator.

The mobile station shall set this field to ‘1’ to indicate that the mobile station supports the Control Hold Mode; otherwise, the mobile station shall set this field to ‘0’.

**GATING_RATE_SET** – Set of supported Reverse Pilot gating rates.

If CHS_SUPPORTED is included and is set to ‘1’, the mobile station shall set this field to value shown in Table 2.7.4.25-1 corresponding to the set of supported reverse pilot gating rates; otherwise the mobile station shall omit this field.
### Table 2.7.4.25-1. Set of Supported Reverse Pilot Gating Rates

<table>
<thead>
<tr>
<th>GATING_RATE_SET field (binary)</th>
<th>Gating Rates Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Gating rates 1</td>
</tr>
<tr>
<td>01</td>
<td>Gating rates 1 and ½</td>
</tr>
<tr>
<td>10</td>
<td>Gating rates 1, ½ and ¼</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

---

1. **EXT_CAP_INCLUDED** — Extended Capabilities Included indicator.
   - The mobile station shall set this field to ‘1’ to indicate that extended capability indicators are included in this record; otherwise, the mobile station shall set this field to ‘0’.

2. **MABO** — Mobile Assisted Burst Operation capability indicator.
   - If **EXT_CAP_INCLUDED** is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
   - The mobile station shall set this field to ‘1’ if it supports the Mobile Assisted Burst Operation capability; otherwise, the mobile station shall set this field to ‘0’.

3. **SDB** — Short Data Burst supported indicator.
   - If **EXT_CAP_INCLUDED** is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
   - If MOB_P_REVp is greater or equal to 11 and if the mobile station supports packet data service as specified in [42], the mobile station shall set this field to ‘1’.
   - Otherwise, the mobile station shall set this field to ‘1’ if it supports Short Data Burst capability; otherwise, the mobile station shall set this field to ‘0’.

4. **RLP_INFO_LEN** — RLP capability information length.
   - The mobile station shall set this field to ‘000’ if the RLP_BLOB field is not included in this record; otherwise, it shall set this field to the size of the RLP_BLOB field in integer number of octets.


---

9 Short Data Burst Capability support is mandatory for the mobile station with MOB_P_REVp greater than or equal to 11 that supports packet data service as specified in [42]
If the RLP_INFO_LEN field is set to ‘000’, the mobile station shall omit this field; otherwise, the mobile station shall set this field as follows:

If \( P_{REV\_IN\_USE_s} \) is equal or greater than seven\(^{10} \), the mobile station shall set this field to the Radio Link Protocol information block of bits (see [42]).

If \( P_{REV\_IN\_USE_s} \) equals six, the mobile station shall set this field to the Radio Link Protocol capability information block of bits, as shown in Table 2.7.4.25-2.

### Table 2.7.4.25-2. RLP Capability Information Block

<table>
<thead>
<tr>
<th>Subfields</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX_MS_NAK_ROUNDS_FWD</td>
<td>3</td>
</tr>
<tr>
<td>MAX_MS_NAK_ROUNDS_REV</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>2</td>
</tr>
</tbody>
</table>

\(^{10} \) \( P_{REV\_IN\_USE_s} \geq 7 \) can not work with TIA/EIA/IS-707-A
R_FCH_FLEX_SUPPORTED – Reverse Fundamental channel flexible rate feature supported indicator.

The mobile station shall include this field only if FLEX_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the flexible rate feature for the Reverse Fundamental Channel; otherwise, the mobile station shall set this field to ‘0’.

F_DCCH_FLEX_SUPPORTED – Forward Dedicated Control channel flexible rate feature supported indicator.

The mobile station shall include this field only if FLEX_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the flexible rate feature for the Forward Dedicated Control Channel; otherwise, the mobile station shall set this field to ‘0’.

R_DCCH_FLEX_SUPPORTED – Reverse Dedicated Control channel flexible rate feature supported indicator.

The mobile station shall include this field only if FLEX_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the flexible rate feature for the Reverse Dedicated Control Channel; otherwise, the mobile station shall set this field to ‘0’.

F_SCH_FLEX_SUPPORTED – Forward Supplemental channel flexible rate feature supported indicator.

The mobile station shall include this field only if FLEX_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the flexible rate feature for the Forward Supplemental Channel; otherwise, the mobile station shall set this field to ‘0’.

R_SCH_FLEX_SUPPORTED – Reverse Supplemental channel flexible rate feature supported indicator.

The mobile station shall include this field only if FLEX_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the flexible rate feature for the Reverse Supplemental Channel; otherwise, the mobile station shall set this field to ‘0’.

VAR_SUPPORTED – Variable rate feature supported indicator.

The mobile station shall set this field to ‘1’ if it supports the variable rate feature (the capability to support rate determination) on any of the forward or reverse Supplemental channels; otherwise, the mobile station shall set this field to ‘0’.

F_SCH_VAR_SUPPORTED – Forward Supplemental Channel Variable Rate supported indicator.


The mobile station shall include this field only if VAR_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the variable rate feature on the Forward Supplemental Channels.

**R_SCH_VAR_SUPPORTED** – Reverse Supplemental Channel Variable Rate supported indicator.

The mobile station shall include this field only if VAR_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to ‘1’ if it supports the variable rate feature on the Reverse Supplemental Channels.

**MAX_SUM_NUM_BITS_C** – Maximum sum of number of bits corresponding to Convolutional rates in the variable rate set.

The mobile station shall include this field only if F_SCH_VAR_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to the maximum of the sum of possible information bits per 20 ms corresponding to the Convolutional Code rates in the Variable Rate Set for a Forward Supplemental Channel below which the mobile station is capable of performing rate determination on the forward supplemental channel when Convolutional coding is used.

**MAX_SUM_NUM_BITS_T** – Maximum sum of number of bits corresponding to Turbo Code rates in the variable rate set

The mobile station shall include this field only if F_SCH_VAR_SUPPORTED is equal to ‘1’. If this field is included, the mobile station shall set this field to the maximum of the sum of possible information bits per 20 ms corresponding to the Turbo Code rates in the Variable Rate Set for a Forward Supplemental Channel below which the mobile station is capable of performing rate determination on the forward supplemental channel when Turbo coding is used.

**CS_SUPPORTED** – Concurrent Services supported indicator.

If the mobile station supports concurrent services, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**F_SCH_LTU_TAB_SUPPORTED** – Forward Supplemental Channel Downloadable LTU tables supported indicator.

If the mobile station supports downloadable LTU Tables for Forward Supplemental Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

**R_SCH_LTU_TAB_SUPPORTED** – Reverse Supplemental Channel Downloadable LTU tables supported indicator.

If the mobile station supports downloadable LTU Tables for Reverse Supplemental Channel, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.
ERAM_SUPPORTED – Enhanced Rate Adaptation Mode supported indicator.

If FLEX_SUPPORTED or VAR_SUPPORTED is set to ‘1’, the mobile station shall include this field; otherwise, the mobile station shall omit this field. If included, the mobile station shall set this field to ‘1’ if the mobile station supports the Enhanced Rate Adaptation Mode; otherwise, the mobile station shall set this field to ‘0’.

PDCH_CHM_SUPPORTED – PDCH Control Hold Mode supported indicator.

The mobile station shall set this field to ‘1’ to indicate that the mobile station supports the PDCH Control Hold Mode; otherwise, the mobile station shall set this field to ‘0’.

REV_FCH_GATING_SUPPORTED – Reverse Fundamental eighth gating mode supported indicator.

If the Reverse Fundamental Traffic Channel gating mode is supported, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

RER_MODE_SUPPORTED – Radio environment reporting mode supported indicator.

The mobile station shall set this field to ‘1’ if it supports radio environment reporting mode; otherwise, the mobile station shall set this field to ‘0’.

ADD_NUM_SYNC_ID_INCL – Additional number of synchronization identifiers included indicator.

If this record is to contain the ADD_NUM_SYNC_ID field, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

ADD_NUM_SYNC_ID – Additional number of synchronization identifiers.

If ADD_NUM_SYNC_ID_INCL field is set to ‘1’, the mobile station shall include this field and set it to the number of SYNC_ID’s supported minus 5; otherwise it shall omit this field.

RSC_MODE_SUPPORTED – Reduced Slot Cycle Mode supported indicator.

The mobile station shall set this field to ‘1’ if it supports the reduced slot cycle mode; otherwise, the mobile station shall set this field to ‘0’.

TKZ_MODE_SUPPORTED – Tracking zone mode supported indicator.

The mobile station shall set this field to ‘1’ if it supports tracking zone mode; otherwise, the mobile station shall set this field to ‘0’.

RESERVED – Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.26 Extended Record Type - International

The use of this record type is country-specific. The first ten bits of the type-specific fields shall include the Mobile Country Code (MCC) associated with the national standards organization administering the use of the record type. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the first two octets of the type-specific fields shall be used to specify the country-specific record type.
2.7.4.27 Channel Configuration Capability Information

This information record can be included in a Status Response Message or an Extended Status Response Message to return channel configuration capability information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTD_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>FCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>FCH Type-specific fields</td>
<td>0 or Variable</td>
</tr>
<tr>
<td>DCCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>DCCH Type-specific fields</td>
<td>0 or Variable</td>
</tr>
<tr>
<td>FOR_SCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH Type-specific fields</td>
<td>0 or Variable</td>
</tr>
<tr>
<td>REV_SCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH Type-specific fields</td>
<td>0 or Variable</td>
</tr>
<tr>
<td>RESERVED_1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>STS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>3X_CCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>CCSH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>FOR_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>FOR_PDCH_SCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH Capability Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>FUNDICATED_BCMC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>FUNDICATED_BCMC Type-specific fields</td>
<td>0 or variable</td>
</tr>
<tr>
<td>SCH_BCMC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

OTD_SUPPORTED – OTD supported indicator.
The mobile station shall set this field to ‘1’ if the mobile station supports orthogonal transmission diversity; otherwise, the mobile station shall set this field to ‘0’.

FCH_SUPPORTED – Fundamental Channel supported indicator.

The mobile station shall set this field to ‘1’, if the mobile station supports the Fundamental Channel; otherwise, the mobile station shall set this field to ‘0’.

FCH Type-specific fields – Fundamental Channel configuration capability information.

If the FCH_SUPPORTED field is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.1; otherwise the mobile station shall omit this field.

DCCH_SUPPORTED – Dedicated Control Channel supported indicator.

The mobile station shall set this field to ‘1’ if the mobile station supports the Dedicated Control Channel; otherwise, the mobile station shall set this field to ‘0’.

DCCH Type specific fields – Fundamental Channel configuration capability information.

If the DCCH_SUPPORTED field is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.2; otherwise the mobile station shall omit this field.

FOR_SCH_SUPPORTED – Forward Supplemental Channel supported indicator.

The mobile station shall set this field to ‘1’ if the mobile station supports the Forward Supplemental Channel; otherwise, the mobile station shall set this field to ‘0’.

FOR_SCH Type-specific fields – Forward Supplemental Channel Configuration Capability Information.

If the FOR_SCH_SUPPORTED field is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.3; otherwise the mobile station shall omit this field.

REV_SCH_SUPPORTED – Reverse Supplemental Channel supported indicator.

The mobile station shall set this field to ‘1’ if the mobile station supports the Reverse Supplemental Channel; otherwise, the mobile station shall set this field to ‘0’.

REV_SCH Type-specific fields – Reverse Supplemental Channel Configuration capability information.

If the REV_SCH_SUPPORTED field is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.4; otherwise the mobile station shall omit this field.

RESERVED_1 – Reserved bits.

If both the FOR_SCH_SUPPORTED and REV_SCH_SUPPORTED fields are set to ‘0’, the mobile station shall omit this field. Otherwise, the mobile station shall include this field and set this field to ‘00’.
STS_SUPPORTED – STS supported indicator.

The mobile station shall set this field to ‘1’ if the mobile station supports Space Time Spreading Transmit Diversity; otherwise, the mobile station shall set this field to ‘0’.

3X_CCH_SUPPORTED – 3X Common Channel supported.

The mobile station shall set this field to ‘1’ if the mobile station supports the Spreading Rate 3 common channels (3X BCCH, 3X F-CCCH, and 3X R-EACH); otherwise, the mobile station shall set this field to ‘0’.

CCSH_SUPPORTED – CCSH supported indicator.

If the FOR_SCH_SUPPORTED field is set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it as follows:

- If the mobile station supports Code Combining Soft Handoff, the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_PDCH_SUPPORTED – Forward Packet Data Channel supported indicator.

If the mobile station supports the Forward Packet Data Channel, then the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_PDCH Capability

Type-specific fields – Forward Packet Data Channel capability information.

If the FOR_PDCH_SUPPORTED field is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.5; otherwise the mobile station shall omit this field.

FOR_PDCH_SCH_SUPPORTED – Simultaneous support of F-PDCH and F-SCH indicator.

If FOR_PDCH_SUPPORTED is set to ‘0’, or FOR_SCH_SUPPORTED is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

- The mobile station shall set this field to ‘1’ if it supports the simultaneous assignment of F-PDCH and F-SCH; otherwise, the mobile station shall set this field to ‘0’.

REV_PDCH_SUPPORTED – Reverse Packet Data Channel supported indicator.

If FOR_PDCH_SUPPORTED is not included or is included and is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

- If the mobile station supports the Reverse Packet Data Channel (R-PDCH), the mobile station shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_PDCH Capability

Type-specific fields – Forward Packet Data Channel capability information.
If the REV_PDCH_SUPPORTED field included and is set to ‘1’, the mobile station shall include this field and set it as described in 2.7.4.27.6; otherwise the mobile station shall omit this field.

FUNDICATED_BCMC_SUPPORTED – Fundicated Channel BCMC supported indicator.

The mobile station shall set this field to ‘1’ to indicate that the mobile station supports the BCMC reception on shared Forward Fundicated Channels in Mobile Station Control on the Traffic Channel State; otherwise, the mobile station shall set this field to ‘0’.

FUNDICATED_BCMC Type-specific fields – Fundicated Channel BCMC capability information.

If the FUNDICATED_BCMC_SUPPORTED field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as described in 2.7.4.27.7.

SCH_BCMC_SUPPORTED – Supplemental Channel BCMC supported indicator.

The mobile station shall set this field to ‘1’ to indicate that the mobile station supports the BCMC reception on shared Forward Supplemental Channels in Mobile Station Control on the Traffic Channel State; otherwise, the mobile station shall set this field to ‘0’.

RESERVED – Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.27.1 FCH Type-specific Fields

The Fundamental Channel configuration capability information included in the FCH Type-specific fields contains the following subfields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCH_FRAME_SIZE</td>
<td>Fundamental Channel Frame Size capability indicator.</td>
</tr>
<tr>
<td>FOR_FCH_LEN</td>
<td>Forward Fundamental Channel Configuration information length.</td>
</tr>
<tr>
<td>FOR_FCH_RC_MAP</td>
<td>Forward Fundamental Radio Configuration information.</td>
</tr>
<tr>
<td>REV_FCH_LEN</td>
<td>Reverse Fundamental Channel Configuration information length.</td>
</tr>
<tr>
<td>REV_FCH_RC_MAP</td>
<td>Reverse Fundamental Radio Configuration information.</td>
</tr>
</tbody>
</table>

- **FCH_FRAME_SIZE**: 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**: The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR_FCH_RC_MAP field.

- **FOR_FCH_RC_MAP**: 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

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC1</td>
<td>1</td>
<td>Radio Configuration 1</td>
</tr>
<tr>
<td>RC2</td>
<td>1</td>
<td>Radio Configuration 2</td>
</tr>
<tr>
<td>RC3</td>
<td>1</td>
<td>Radio Configuration 3</td>
</tr>
<tr>
<td>RC4</td>
<td>1</td>
<td>Radio Configuration 4</td>
</tr>
<tr>
<td>RC5</td>
<td>1</td>
<td>Radio Configuration 5</td>
</tr>
<tr>
<td>RC6</td>
<td>1</td>
<td>Radio Configuration 6</td>
</tr>
<tr>
<td>RC7</td>
<td>1</td>
<td>Radio Configuration 7</td>
</tr>
<tr>
<td>RC8</td>
<td>1</td>
<td>Radio Configuration 8</td>
</tr>
<tr>
<td>RC9</td>
<td>1</td>
<td>Radio Configuration 9</td>
</tr>
</tbody>
</table>

**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.

**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’.
### Table 2.7.4.27.1-2. Reverse Channel Radio Configurations Supported

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC1</td>
<td>1</td>
<td>Radio Configuration 1</td>
</tr>
<tr>
<td>RC2</td>
<td>1</td>
<td>Radio Configuration 2</td>
</tr>
<tr>
<td>RC3</td>
<td>1</td>
<td>Radio Configuration 3</td>
</tr>
<tr>
<td>RC4</td>
<td>1</td>
<td>Radio Configuration 4</td>
</tr>
<tr>
<td>RC5</td>
<td>1</td>
<td>Radio Configuration 5</td>
</tr>
<tr>
<td>RC6</td>
<td>1</td>
<td>Radio Configuration 6</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>DCCH_FRAME_SIZE</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Either 5 ms or 20 ms frame sizes (not dynamically switchable)</td>
</tr>
<tr>
<td>01</td>
<td>20 ms frame size only</td>
</tr>
<tr>
<td>10</td>
<td>5 ms frame size only</td>
</tr>
<tr>
<td>11</td>
<td>Both 5 ms and 20 ms frame sizes (Dynamically switchable)</td>
</tr>
</tbody>
</table>

Table 2.7.4.27.2-1. DCCH Frame Size Supported

FOR_DCCH_LEN – Forward Dedicated Control Channel Configuration information length.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR_DCCH_RC_MAP field.

FOR_DCCH_RC_MAP – Forward Dedicated Channel Radio Configuration information.

The mobile station shall set this field as described below to indicate which Radio Configurations (see [2]) are supported by the mobile station on the Forward Dedicated Control Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-1.
The mobile station shall set each indicator to ‘1’ if the corresponding Radio Configuration on the Forward Dedicated Control 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’.

```
REV_DCCH_LEN  - Reverse 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 REV_DCCH_RC_MAP field.

REV_DCCH_RC_MAP  - Reverse Dedicated Control 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 Reverse 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 2.7.4.27.1-2.

The mobile station shall set each indicator to ‘1’ if the corresponding Radio Configuration on the Reverse Dedicated Control 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’.
```
2.7.4.27.3 FOR_SCH Type-Specific Fields

The Forward Supplemental Channel configuration capability information included in the FOR_SCH Type-specific fields contains the following subfields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Subfield</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_LEN</td>
<td>3</td>
</tr>
<tr>
<td>FOR_SCH_RC_MAP</td>
<td>3 \times FOR_SCH_LEN</td>
</tr>
<tr>
<td>FOR_SCH_NUM</td>
<td>2</td>
</tr>
</tbody>
</table>

FOR_SCH_NUM occurrences of the following fields:

```plaintext
{ (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_LEN – Forward Supplemental Channel information length in units of 3 bits. The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the FOR_SCH_RC_MAP field.

FOR_SCH_RC_MAP – Forward Supplemental Channel Radio Configuration capability. The mobile station shall set this field as described below to indicate which Radio Configurations (see [2] Table 3.1.3.1-1) are supported by the mobile station on the Forward Supplemental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-1.

The mobile station shall set each indicator to ‘1’ if the corresponding Radio Configuration on the Forward Supplemental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the field to ‘0’.
FOR_SCH_NUM – Number of Forward Supplemental Channels.

The mobile station shall set this field to the number of Forward Supplemental Channels supported by the mobile station.

If the FOR_SCH_NUM field is greater than zero, the mobile station shall include one occurrence of the following 8 fields for each Forward Supplemental Channel supported by the mobile station. The first occurrence is SCH0 related information. The second occurrence (if any) is SCH1 related information.

FOR_TURBO_SUPPORTED – Forward Turbo Coding supported indicator.

If the mobile station supports Turbo Coding on this Forward Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

FOR_MAX_TURBO_BLOCK_SIZE – Forward maximum Turbo Coding block size.

If the field FOR_TURBO_SUPPORTED is set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it to the maximum block size allowed for Turbo coding (see Table 2.7.4.27.3-1).

Table 2.7.4.27.3-1. Block Size

<table>
<thead>
<tr>
<th>FOR_MAX_TURBO_BLOCK_SIZE</th>
<th>REV_MAX_TURBO_BLOCK_SIZE</th>
<th>Block Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_MAX_CONV_BLOCK_SIZE</td>
<td>REV_MAX_CONV_BLOCK_SIZE</td>
<td>(binary)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>R-SCH RC 3 and 5</th>
<th>R-SCH RC 4 and 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>172</td>
<td>267</td>
</tr>
<tr>
<td>0001</td>
<td>360</td>
<td>552</td>
</tr>
<tr>
<td>0010</td>
<td>744</td>
<td>1128</td>
</tr>
<tr>
<td>0011</td>
<td>1512</td>
<td>2280</td>
</tr>
<tr>
<td>0100</td>
<td>3048</td>
<td>4584</td>
</tr>
<tr>
<td>0101</td>
<td>6120</td>
<td>9192</td>
</tr>
<tr>
<td>0110</td>
<td>12264</td>
<td>20712</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>FOR_CONV_SUPPORTED</strong></td>
<td>Forward Convolutional Coding supported indicator.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the mobile station supports Convolutional Coding on this</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Forward Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.</td>
<td></td>
</tr>
<tr>
<td><strong>FOR_MAX_CONV_BLOCK_SIZE</strong></td>
<td>Forward maximum Convolutional Coding block size.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the field FOR_CONV_SUPPORTED is set to ‘0’, the mobile</td>
<td></td>
</tr>
<tr>
<td></td>
<td>station shall omit this field; otherwise the mobile station shall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>include this field and set it to the maximum block size</td>
<td></td>
</tr>
<tr>
<td></td>
<td>allowed for Convolutional coding. (see Table 2.7.4.27.3-1)</td>
<td></td>
</tr>
<tr>
<td><strong>FOR_FRAME_40_SUPPORTED</strong></td>
<td>Forward 40ms frame indicator.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the mobile station supports 40 ms frames on this Forward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.</td>
<td></td>
</tr>
<tr>
<td><strong>FOR_FRAME_80_SUPPORTED</strong></td>
<td>Forward 80ms frame Indicator.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the mobile station supports 80 ms frames on this Forward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.</td>
<td></td>
</tr>
<tr>
<td><strong>FOR_MAX_RATE</strong></td>
<td>Maximum forward supplemental channels rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The mobile station shall set this field according to Table</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.7.4.27.3-2 to indicate the maximum forward supplemental</td>
<td></td>
</tr>
<tr>
<td></td>
<td>channel frame rate supported.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2.7.4.27.3-2. SCH Data Rate

<table>
<thead>
<tr>
<th>REV_MAX_RATE</th>
<th>FOR_MAX_RATE (binary)</th>
<th>Max Rate (kbps)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>R-SCH RC 3, 5</td>
</tr>
<tr>
<td>F-SCH RC</td>
<td></td>
<td>F-SCH RC 3, 4, 6, 7</td>
</tr>
<tr>
<td>0000</td>
<td></td>
<td>9.6</td>
</tr>
<tr>
<td>0001</td>
<td></td>
<td>19.2</td>
</tr>
<tr>
<td>0010</td>
<td></td>
<td>38.4</td>
</tr>
<tr>
<td>0011</td>
<td></td>
<td>76.8</td>
</tr>
<tr>
<td>0100</td>
<td></td>
<td>153.6</td>
</tr>
<tr>
<td>0101</td>
<td></td>
<td>307.2</td>
</tr>
<tr>
<td>0110</td>
<td></td>
<td>614.4</td>
</tr>
<tr>
<td>0111</td>
<td></td>
<td>Reserved</td>
</tr>
<tr>
<td>1000</td>
<td></td>
<td>Reserved</td>
</tr>
<tr>
<td>RESERVED</td>
<td></td>
<td>All other values are reserved</td>
</tr>
</tbody>
</table>
2.7.4.27.4 REV_SCH Type-Specific Fields

The Reverse Supplemental Channel configuration capability information included in the REV_SCH Type-specific fields contains the following subfields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_LEN</td>
<td>3</td>
</tr>
<tr>
<td>REV_SCH_RC_MAP</td>
<td>REV_SCH_LEN x 3</td>
</tr>
<tr>
<td>REV_SCH_NUM</td>
<td>2</td>
</tr>
</tbody>
</table>

REV_SCH_NUM occurrences of the following fields:

\{(REV_SCH_NUM)

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_TURBO_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_MAX_TURBO_BLOCK_SIZE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_CONV_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_MAX_CONV_BLOCK_SIZE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_FRAME_40_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_FRAME_80_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>REV_MAX_RATE</td>
<td>4</td>
</tr>
</tbody>
</table>

\} (REV_SCH_NUM)

REV_SCH_LEN – Reverse Supplemental Channel information length in units of 3 bits.

The mobile station shall set this field to the number of 3 bit units required to specify the length, in bits, of the REV_SCH_RC_MAP field.

REV_SCH_RC_MAP – Reverse Supplemental Channel Radio Configuration capability.

The mobile station shall set this field as described below to indicate which Radio Configurations (See [2] Table 2.1.3.1-1) are supported by the mobile station on the Reverse Supplemental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for specific Radio Configuration. Bit positions of these indicators in the field and corresponding Radio Configurations are specified in Table 2.7.4.27.1-2.

The mobile station shall set each indicator to ‘1’ if the corresponding Radio Configuration on the Reverse Supplemental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the field to ‘0’.
REV_SCH_NUM – Number of Reverse Supplemental Channels

The mobile station shall set this field to the number of Reverse Supplemental Channels supported by the mobile station.

If the REV_SCH_NUM field is greater than zero, the mobile station shall include one occurrence of the following 8 fields for each Reverse Supplemental Channel supported by the mobile station. The first occurrence is SCH0 related information. The second occurrence (if any) is SCH1 related information.

REV_TURBO_SUPPORTED – Reverse Turbo Coding supported indicator.

If the mobile station supports Turbo Coding on this Reverse Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_MAX_TURBO_BLOCK_SIZE – Reverse maximum Turbo Coding block size.

If the field REV_TURBO_SUPPORTED is set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it to the maximum block size allowed for Turbo coding (see Table 2.7.4.27.3-1).

REV_CONV_SUPPORTED – Reverse Convolutional Coding supported indicator.

If the mobile station supports Convolutional Coding on this Reverse Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_MAX_CONV_BLOCK_SIZE – Reverse maximum Convolutional Coding block size.

If the field REV_CONV_SUPPORTED is set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include this field and set it to the maximum block size allowed for Convolutional coding (see Table 2.7.4.27.3-1).

REV_FRAME_40_SUPPORTED – Reverse 40ms frame indicator.

If the mobile station supports 40 ms frames on this Reverse Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_FRAME_80_SUPPORTED – Reverse 80ms frame indicator.

If the mobile station supports 80 ms frames on this Reverse Supplemental Channel, it shall set this field to ‘1’; otherwise, the mobile station shall set this field to ‘0’.

REV_MAX_RATE – Maximum reverse supplemental channels rate

The mobile station shall set this field according to Table 2.7.4.27.3-2 to indicate the maximum reverse supplemental channel frame rate supported.
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:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACK_DELAY</td>
<td>Delay for the acknowledgment sent on the Reverse Acknowledgment Channel.</td>
</tr>
<tr>
<td>NUM_ARQ_CHAN</td>
<td>Number of Physical Layer ARQ Channels supported.</td>
</tr>
<tr>
<td>FOR_PDCH_LEN</td>
<td>Forward Packet Data Channel Configuration information length.</td>
</tr>
<tr>
<td>FOR_PDCH_RC_MAP</td>
<td>Forward Packet Data Channel Radio Configuration information.</td>
</tr>
<tr>
<td>CH_CONFIG_SUP_MAP_LEN</td>
<td>Length of the CH_CONFIG_SUP_MAP subfield.</td>
</tr>
<tr>
<td>CH_CONFIG_SUP_MAP</td>
<td>Length of the CH_CONFIG_SUP_MAP subfield.</td>
</tr>
</tbody>
</table>

- ACK_DELAY – Delay for the acknowledgment sent on the Reverse Acknowledgment Channel.
  If the mobile station requires a 2-slot delay to send an acknowledgment on the R-ACKCH, then the mobile station shall set this subfield to ‘1’; otherwise (the mobile station requires a 1-slot delay), the mobile station shall set this subfield to ‘0’.

- NUM_ARQ_CHAN – Number of Physical Layer ARQ Channels supported.
  The mobile station shall set this subfield to the number of Physical Layer ARQ Channels that it supports, minus two.
  The mobile station shall not set this field to ‘11’.

- FOR_PDCH_LEN – Forward Packet Data Channel Configuration information length.
  The mobile station shall set this subfield to one less than the number of 3 bit units required to specify the length of the FOR_PDCH_RC_MAP subfield.

- FOR_PDCH_RC_MAP – Forward Packet Data Channel Radio Configuration information.
  The mobile station shall set this subfield as described below to indicate which Radio Configurations (see [2]) are supported by the mobile station on the Forward Packet Data Channel.
  This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific Radio Configuration. Bit positions of these indicators in the subfield and corresponding Radio Configurations are specified in Table 2.7.4.27.5-1.
The mobile station shall set each indicator to ‘1’ if the corresponding Radio Configuration on the Forward Packet Data Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the subfield to ‘0’.

**Table 2.7.4.27.5-1. Forward Packet Data Channel Radio Configurations Supported**

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RC10</td>
<td>1</td>
<td>Radio Configuration 10</td>
</tr>
<tr>
<td>Reserved</td>
<td>(3 \times (\text{FOR_PDCH_LEN} + 1) - 1)</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**CH_CONFIG_SUP_MAP_LEN** – Channel Configuration Supported Bitmap length.

The mobile station shall set this field to one less than the number of 3 bit units required to specify the length, in bits, of the CH_CONFIG_SUP_MAP field.

**CH_CONFIG_SUP_MAP** – Channel Configuration Supported Bitmap.

The mobile station shall set this subfield as described below to indicate which physical channel configurations are supported by the mobile station.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific channel configuration. Bit positions of these indicators in the subfield and corresponding channel configurations are specified in Table 2.7.4.27.5-2.

The mobile station shall set each indicator to ‘1’ if the corresponding channel configuration is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the field to ‘0’.

The mobile station shall set the subfield F-PDCH_1 to ‘1’, or the subfield F-PDCH_2 to ‘1’, or the subfields F-PDCH_1 and F-PDCH_2 to ‘1’.

The mobile station shall set the subfields F-PDCH_1 and F-PDCH_3 to the same value.

The mobile station shall set the subfields F-PDCH_2 and F-PDCH_4 to the same value.
### Table 2.7.4.27.5-2. F-PDCH Channel Configurations Supported

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-PDCH_1</td>
<td>1</td>
<td>F-PDCH + F-CPCCH + R-FCH</td>
</tr>
<tr>
<td>F-PDCH_2</td>
<td>1</td>
<td>F-PDCH + F-CPCCH + R-DCCH</td>
</tr>
<tr>
<td>F-PDCH_3</td>
<td>1</td>
<td>F-PDCH + F-FCH + R-FCH</td>
</tr>
<tr>
<td>F-PDCH_4</td>
<td>1</td>
<td>F-PDCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>F-PDCH_5</td>
<td>1</td>
<td>F-PDCH + F-FCH + R-FCH + R-DCCH</td>
</tr>
<tr>
<td>F-PDCH_6</td>
<td>1</td>
<td>F-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_LEN</td>
<td>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.</td>
</tr>
<tr>
<td>REV_PDCH_RC_MAP</td>
<td>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’.</td>
</tr>
<tr>
<td>REV_PDCH_CH_CONFIG_SUP_MAP_LEN</td>
<td>2</td>
</tr>
<tr>
<td>REV_PDCH_CH_CONFIG_SUP_MAP</td>
<td>3 ( \times (\text{REV_PDCH_LEN} + 1) )</td>
</tr>
<tr>
<td>REV_PDCH_MAX_SIZE_SUPPORTED_ENCODE_R_PACKET</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Subfield Length (bits) Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7.4.27.6-1. Table 2.7.4.27.6-1. Reverse Packet Data Channel Radio Configurations Supported</td>
<td>RC7 1 Radio Configuration 7</td>
</tr>
<tr>
<td></td>
<td>Reserved 3 ( \times (\text{REV_PDCH_LEN} + 1) -1 ) Reserved</td>
</tr>
</tbody>
</table>
REV_PDCH_CH_CONFIG_SUP_MAP_LEN – Reverse Packet Data Channel Channel Configuration Supported Bitmap length.

The mobile station shall set this field to one less than the number of 3 bit units required to specify the length, in bits, of the REV_PDCH_CH_CONFIG_SUP_MAP field.

REV_PDCH_CH_CONFIG_SUP_MAP – Reverse Packet Data Channel Channel Configuration Supported Bitmap.

The mobile station shall set this subfield as described below to indicate which physical channel configurations are supported by the mobile station.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific channel configuration. Bit positions of these indicators in the subfield and corresponding channel configurations are specified in Table 2.7.4.27.6-2.

The mobile station shall set each indicator to ‘1’ if the corresponding channel configuration is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the field to ‘0’. The mobile station shall set the indicator corresponding to the channel configuration F/R-PDCH_0 to ‘1’.

The mobile station shall set the subfield F/R-PDCH_1 to ‘1’, or the subfield F/R-PDCH_2 to ‘1’, or the subfields F/R-PDCH_1 and F/R-PDCH_2 to ‘1’.

The mobile station shall set the subfields F/R-PDCH_1 and F/R-PDCH_3 to the same value.

The mobile station shall set the subfields F/R-PDCH_2 and F/R-PDCH_4 to the same value.
Table 2.7.4.27.6-2.  F/R-PDCH Channel Configurations Supported

<table>
<thead>
<tr>
<th>Subfield of F/R-PDCH Channel Configurations</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/R-PDCH_0</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-CPCCH</td>
</tr>
<tr>
<td>F/R-PDCH_1</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-CPCCH + R-FCH</td>
</tr>
<tr>
<td>F/R-PDCH_2</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-CPCCH + R-DCCH</td>
</tr>
<tr>
<td>F/R-PDCH_3</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-FCH + R-FCH</td>
</tr>
<tr>
<td>F/R-PDCH_4</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td>F/R-PDCH_5</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-FCH + R-FCH + R-DCCH</td>
</tr>
<tr>
<td>F/R-PDCH_6</td>
<td>1</td>
<td>F-PDCH + R-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH</td>
</tr>
</tbody>
</table>

REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET - Reverse Packet Data Channel
Maximum Size Encoder Packet supported

If REV_PDCH_SUPPORT is '0', the mobile station shall omit this subfield; otherwise, the mobile station shall include this subfield and set it as follows.

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]).

Table 2.7.4.27.6-3. Maximum supported encoder packet size.

<table>
<thead>
<tr>
<th>REV_PDCH_MAX_SIZE_SUPPORTED_ENCODER_PACKET (binary)</th>
<th>Maximum supported encoder packet size, (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>12312</td>
</tr>
<tr>
<td>01</td>
<td>15384</td>
</tr>
<tr>
<td>10</td>
<td>18456</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
2.7.4.27.7 FUNDICATED_BCMC Type-specific Fields

The Fundicated Channel BCMC capability information included in the FUNDICATED_BCMC Type-specific fields contains the following subfields:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNDICATED_BCMC_CH_SUP_MAP_LEN</td>
<td>2</td>
</tr>
<tr>
<td>FUNDICATED_BCMC_CH_SUP_MAP</td>
<td>3 × (FUNDICATED_BCMC_CH_SUP_MAP_LEN + 1)</td>
</tr>
</tbody>
</table>

FUNDICATED_BCMC_CH_SUP_MAP_LEN – Fundicated Channel BCMC channel configurations supported bitmap length.

The mobile station shall set this field to one less than the number of 3 bit units required to specify the length, in bits, of the FUNDICATED_BCMC_CH_SUP_MAP field.

FUNDICATED_BCMC_CH_SUP_MAP – Fundicated Channel BCMC channel configurations supported bitmap.

The mobile station shall set this subfield as described below to indicate which physical channel configurations are supported by the mobile station.

This subfield consists of the sequence of 1-bit indicators, each indicating the mobile station support for a specific channel configuration. Bit positions of these indicators in the subfield and corresponding channel configurations are specified in Table 2.7.4.27.7-1.

The mobile station shall set each indicator to ‘1’ if the corresponding channel configuration is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’. The mobile station shall set any unused bits in the field to ‘0’.

The mobile station shall not set all the indicators in this subfield to ‘0’.
### Table 2.7.4.27.7-1. Fundicated BCMC Channel Configurations Supported

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundicated BCMC Channel Configuration 1</td>
<td>1</td>
<td>a) F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) F-PDCH + F-FCH + F-DCCH + R-DCCH, if F-PDCH is supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) F-PDCH + R-PDCH + F-FCH + F-DCCH + R-DCCH, if R-PDCH is supported</td>
</tr>
<tr>
<td>Fundicated BCMC Channel Configuration 2</td>
<td>1</td>
<td>a) F-FCH + R-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) F-PDCH + F-FCH + R-FCH + F-DCCH + R-DCCH, if F-PDCH is supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) F-PDCH + R-PDCH + F-FCH + F-DCCH + R-DCCH, if R-PDCH is supported</td>
</tr>
<tr>
<td>Fundicated BCMC Channel Configuration 3</td>
<td>1</td>
<td>a) F-CPCCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) F-PDCH + F-CPCCH + F-DCCH + R-DCCH, if F-PDCH is supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) F-PDCH + R-PDCH + F-CPCCH + F-DCCH + R-DCCH, if R-PDCH is supported</td>
</tr>
<tr>
<td>Fundicated BCMC Channel Configuration 4</td>
<td>1</td>
<td>a) F-CPCCH + F-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) F-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH, if F-PDCH is supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) F-PDCH + R-PDCH + F-CPCCH + F-FCH + F-DCCH + R-DCCH, if R-PDCH is supported</td>
</tr>
<tr>
<td>Fundicated BCMC Channel Configuration 5</td>
<td>1</td>
<td>a) F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) F-PDCH + F-CPCCH + F-FCH + R-DCCH + F-DCCH, if F-PDCH is supported</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) F-PDCH + R-PDCH + F-CPCCH + F-FCH + R-FCH + F-DCCH + R-DCCH, if R-PDCH is supported</td>
</tr>
<tr>
<td>Reserved</td>
<td>1</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
2.7.4.28 Extended 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.
<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_MO_FOR_FCH</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_MO_FOR_FCH occurrences of the following record:

\[
\begin{array}{|l|}
\hline
\text{MO_FOR_FCH} & 16 \\
\text{FOR_NUM_BITS_FCH} & 8 \\
\hline
\end{array}
\]

NUM_MO_REV_FCH occurrences of the following record:

\[
\begin{array}{|l|}
\hline
\text{MO_REV_FCH} & 16 \\
\text{REV_NUM_BITS_FCH} & 8 \\
\hline
\end{array}
\]

NUM_MO_FOR_DCCH occurrences of the following record:

\[
\begin{array}{|l|}
\hline
\text{MO_FOR_DCCH} & 16 \\
\hline
\end{array}
\]

NUM_MO_REV_DCCH occurrences of the following record:

\[
\begin{array}{|l|}
\hline
\text{MO_REV_DCCH} & 16 \\
\hline
\end{array}
\]

NUM_MO_FOR_SCH occurrences of the following record:

\[
\begin{array}{|l|}
\hline
\text{FOR_SCH_ID} & 1 \\
\text{MO_FOR_SCH} & 16 \\
\hline
\end{array}
\]

(continued on next page)
<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_MO_REV_SCH</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_MO_REV_SCH occurrences of the following record:

```plaintext
(DBGNUM_MO_REV_SCH)
REV_SCH_ID     1
MO_REV_SCH     16
(DBGNUM_MO_REV_SCH)
```

NUM_MO_FOR_PDCH occurrences of the following record:

```plaintext
(DBGNUM_MO_FOR_PDCH)
MO_FOR_PDCH     16
(DBGNUM_MO_FOR_PDCH)
```

NUM_MO_REV_PDCH occurrences of the following record:

```plaintext
(DBGNUM_MO_REV_PDCH)
MO_REV_PDCH     16
(DBGNUM_MO_REV_PDCH)
```

RESERVED 0 - 7 (as needed)

1. **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.

2. 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:

3. **MO_FOR_FCH** – Forward Fundamental Channel multiplex option. The mobile station shall set this field to the Forward Fundamental Channel multiplex option.

4. **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

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS1_9600_FOR</td>
<td>1</td>
<td>172 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS1_4800_FOR</td>
<td>1</td>
<td>80 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS1_2400_FOR</td>
<td>1</td>
<td>40 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS1_1200_FOR</td>
<td>1</td>
<td>16 bits per F-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>

### Table 2.7.4.28-2. Forward Fundamental Channel Number of Bits per Frame for MO_FOR_FCH equal to 2

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS2_14400_FOR</td>
<td>1</td>
<td>267 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_7200_FOR</td>
<td>1</td>
<td>125 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_3600_FOR</td>
<td>1</td>
<td>55 bits per F-FCH frame</td>
</tr>
<tr>
<td>RS2_1800_FOR</td>
<td>1</td>
<td>21 bits per F-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>
Table 2.7.4.28-3. Forward Fundamental Channel Number of Bits per Frame for MO_FOR_FCH equal to 0x704

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>1</td>
<td>Highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0000])</td>
</tr>
<tr>
<td>R2</td>
<td>1</td>
<td>Second highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0001])</td>
</tr>
<tr>
<td>R3</td>
<td>1</td>
<td>Third highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0010])</td>
</tr>
<tr>
<td>R4</td>
<td>1</td>
<td>Forth highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0011])</td>
</tr>
<tr>
<td>R5</td>
<td>1</td>
<td>Fifth Second highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0100])</td>
</tr>
<tr>
<td>R6</td>
<td>1</td>
<td>Sixth highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0101])</td>
</tr>
<tr>
<td>R7</td>
<td>1</td>
<td>Seventh highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0110])</td>
</tr>
<tr>
<td>R8</td>
<td>1</td>
<td>Eighth highest possible number of bits on F-FCH (specified by NUM_BITSs[FFCH_NBIT_TABLE_ID][0111])</td>
</tr>
</tbody>
</table>

NUM_MO_REV_FCH – Number of Reverse Fundamental Channel Multiplex Options.

The mobile station shall set this field to the number of the Reverse Fundamental Channel Multiplex Options supported by the mobile station.

If NUM_MO_REV_FCH is not equal to ‘0000’, the mobile station shall include NUM_MO_REV_FCH occurrences of the following two fields for each supported Reverse Fundamental Channel multiplex option:

MO_REV_FCH – Reverse Fundamental Channel multiplex option.

The mobile station shall set this field to the Reverse Fundamental Channel multiplex option.

REV_NUM_BITS_FCH – Reverse Fundamental Channel number of bits per frame.
The mobile station shall set this field as described below to indicate which number of bits per frame are supported by the mobile station on the Reverse Fundamental Channel.

This field consists of the sequence of 1-bit indicators, each indicating the mobile station support for number of bits per frame. Bit positions of these indicators in the field and corresponding number of bits per frame are specified in Table 2.7.4.28-4 if MO_REV_FCH is equal to 1, Table 2.7.4.28-5 if MO_REV_FCH is equal to 2, and Table 2.7.4.28-6 if MO_REV_FCH is equal to 0x704.

The mobile station shall set each indicator to ‘1’ if the corresponding number of bits per frame on the Reverse Fundamental Channel is supported by the mobile station; otherwise, the mobile station shall set the indicator to ‘0’.

### Table 2.7.4.28-4. Reverse Fundamental Channel Number of Bits per Frame for MO_REV_FCH equal to 1

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS1_9600_REV</td>
<td>1</td>
<td>172 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_4800_REV</td>
<td>1</td>
<td>80 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_2400_REV</td>
<td>1</td>
<td>40 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS1_1200_REV</td>
<td>1</td>
<td>16 bits per R-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>

### Table 2.7.4.28-5. Reverse Fundamental Channel Number of Bits per Frame for MO_REV_FCH equal to 2

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS2_14400_REV</td>
<td>1</td>
<td>267 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_7200_REV</td>
<td>1</td>
<td>125 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_3600_REV</td>
<td>1</td>
<td>55 bits per R-FCH frame</td>
</tr>
<tr>
<td>RS2_1800_REV</td>
<td>1</td>
<td>21 bits per R-FCH frame</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
<td>Reserved Bits</td>
</tr>
</tbody>
</table>
Table 2.7.4.28-6. Reverse Fundamental Channel Number of Bits per Frame for MO_REV_FCH equal to 0x704

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1</td>
<td>1</td>
<td>Highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0000])</td>
</tr>
<tr>
<td>R2</td>
<td>1</td>
<td>Second highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0001])</td>
</tr>
<tr>
<td>R3</td>
<td>1</td>
<td>Third highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0010])</td>
</tr>
<tr>
<td>R4</td>
<td>1</td>
<td>Forth highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0011])</td>
</tr>
<tr>
<td>R5</td>
<td>1</td>
<td>Fifth Second highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0100])</td>
</tr>
<tr>
<td>R6</td>
<td>1</td>
<td>Sixth highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0101])</td>
</tr>
<tr>
<td>R7</td>
<td>1</td>
<td>Seventh highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0110])</td>
</tr>
<tr>
<td>R8</td>
<td>1</td>
<td>Eighth highest possible number of bits on R-FCH (specified by NUM_BITSs[RFCH_NBIT_TABLE_ID][0111])</td>
</tr>
</tbody>
</table>

NUM_MO_FOR_DCCH – Number of Forward Dedicated Control Channel Multiplex Options.

The mobile station shall set this field to the number of the Forward Dedicated Control Channel Multiplex Options supported by the mobile station.

If NUM_MO_FOR_DCCH is not equal to ‘0000’, the mobile station shall include NUM_MO_FOR_DCCH occurrence of the following one field for each supported Forward Dedicated Control Channel multiplex option:

MO_FOR_DCCH – Forward Dedicated Control Channel multiplex option.

The mobile station shall set this field to the Forward Dedicated Control Channel multiplex option.
NUM_MO_REV_DCCH – Number of Reverse Dedicated Control Channel Multiplex Options. The mobile station shall set this field to the number of the Reverse Dedicated Control Channel Multiplex Options supported by the mobile station. If NUM_MO_REV_DCCH is not equal to ‘0000’, the mobile station shall include NUM_MO_REV_DCCH occurrence of the following one field for each supported Reverse Dedicated Control Channel multiplex option:

MO_REV_DCCH – Reverse Dedicated Control Channel multiplex option. The mobile station shall set this field to the Reverse Dedicated Control Channel multiplex option.

NUM_MO_FOR_SCH – Number of Forward Supplemental Channel Multiplex Options. The mobile station shall set this field to the number of Forward Supplemental Channel Multiplex Options supported by the mobile station included in this message. The mobile station shall include the multiplex option associated with the highest data rate it supports for each combination of MuxPDU type, rate set, and block size. If NUM_MO_FOR_SCH is not equal to ‘0000’, the mobile station shall include NUM_MO_FOR_SCH occurrence of the following two fields:

FOR_SCH_ID – Forward Supplemental Channel identifier. The mobile station shall set this field to specify the Forward Supplemental Channel to which the Forward Supplemental multiplex option supported by the mobile station corresponds.

MO_FOR_SCH – Forward Supplemental Channel multiplex option. The mobile station shall set this field to the Forward Supplemental Channel multiplex option associated with the maximum data rate (see [3]) that the mobile station supports.

NUM_MO_REV_SCH – Number of Reverse Supplemental Channel Multiplex Options.

---

11 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]).

12 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].
The mobile station shall set this field to the number of Reverse Supplemental Channel Multiplex Options included in this message. The mobile station shall include the multiplex option associated with the highest data rate it supports for each combination of MuxPDU type, rate set, and block size\( ^{13} \).

If NUM_MO_REV_SCH is not equal to ‘0000’, the mobile station shall include NUM_MO_REV_SCH occurrence of the following two fields:

- **REV_SCH_ID** – Reverse Supplemental Channel identifier.
  - The mobile station shall set this field to specify the Reverse Supplemental Channel to which the Reverse Supplemental multiplex option supported by the mobile station corresponds.

- **MO_REV_SCH** – Reverse Supplemental Channel multiplex option.
  - The mobile station shall set this field to the Reverse Supplemental Channel multiplex option associated with the maximum data rate (see [3]) that the mobile station supports\( ^{14} \).

If NUM_MO_FOR_PDCH is not equal to ‘0000’, the mobile station shall include NUM_MO_FOR_PDCH occurrences of the following one-field record:

- **MO_FOR_PDCH** – Forward Packet Data Channel multiplex option.
  - The mobile station shall set this field to the Forward Packet Data Channel multiplex option.

If NUM_MO_REV_PDCH is not equal to ‘0000’, the mobile station shall include NUM_MO_REV_PDCH occurrences of the following one-field record:

\[ \text{(13) If any Rate Set 1 multiplex option is included, then mobile station support of MuxPDU Type 1 is implied and the mobile station is not required to include multiplex option 0x03. If any Rate Set 2 multiplex option is included, then mobile station support of MuxPDU Type 2 is implied and the mobile station is not required to include multiplex option 0x04 (see [3]).} \]

\[ \text{(14) If the mobile station supports the multiplex option associated with the maximum data rate, the mobile station shall support all lower data rates as specified in [3].} \]
MO_REV_PDCCH – Reverse Packet Data Channel multiplex option.

The mobile station shall set this field to the Reverse Packet Data Channel multiplex option (see [3]).

RESERVED – Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.29 Geo-Location Capability

This information record identifies the geo-location capabilities of the mobile station. The mobile station shall use the following fixed-length format for the type-specific fields:

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO_LOC</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>

GEO_LOC – Geo-location.

The mobile station shall set this field to the value shown in Table 2.7.4.29-1.

<table>
<thead>
<tr>
<th>GEO_LOC (binary)</th>
<th>Type of Wireless Assisted GPS Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No mobile station assisted geo-location capabilities</td>
</tr>
<tr>
<td>001</td>
<td>IS-801 capable (Advanced Forward Link Triangulation only)</td>
</tr>
<tr>
<td>010</td>
<td>IS-801 capable (Advanced Forward Link Triangulation and Global Positioning Systems)</td>
</tr>
<tr>
<td>011</td>
<td>Global Positioning Systems only</td>
</tr>
</tbody>
</table>

All other GEO_LOC_TYPE values are reserved.

RESERVED – Reserved bit.

The mobile station shall set this field to ‘00000’.
2.7.4.30 Band Subclass Information

This information record can be included in a *Status Response Message*, or an *Extended Status Response Message* to return band subclass information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_SUBCLASS_INFO</td>
<td>$8 \times \text{RECORD_LEN}$</td>
</tr>
</tbody>
</table>

**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 Status Request Message but there is no subclass defined for this band class,** the mobile station shall set this field to ‘10000000’ and set the RECORD_LEN field for this record to ‘00000001’.

- **Otherwise,** the mobile station shall set the Nth most significant bit of this field to ‘1’ if the Nth sub-band class defined in [45] corresponding to the BAND_CLASS specified in the Status Request Message is supported by the mobile station; otherwise, the mobile station shall set the Nth most significant bit of this field to ‘0’. **Example of this field coding is shown in Figure 2.7.4.30-1.**

**Figure 2.7.4.30-1. BAND_SUBCLASS_INFO field coding**

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.31 Global Emergency Call

This information record identifies that an emergency call is being originated. This record may be included in a *Flash With Information Message* or an *Extended Flash With Information Message* and allows the user to originate an emergency call.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DIGIT_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUMBER_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_CHAR</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

NUM_CHAR occurrences of the following field:

```
/* (NUM_CHAR)
CHARi 4 or 8
*/ (NUM_CHAR)
```

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MS_ORIG_POS_LOC_IND</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

**NUM_INCL** – Dialed number included indicator.

The mobile station shall set this field to ‘1’ to indicate that the dialed digits are included in this information record; otherwise, the mobile station shall set this field to ‘0’.

**DIGIT_MODE** – Digit mode indicator.

If NUM_INCL is set to ‘1’, the mobile station shall set this field to indicate whether the dialed digits are 4-bit DTMF codes or 8-bit ASCII codes using a specified numbering plan; otherwise, the mobile station shall omit this field.

To originate the call using the binary representation of DTMF digits, the mobile station shall set this field to ‘0’. To originate the call using ASCII characters, the mobile station shall set this field to ‘1’.

**NUMBER_TYPE** – Type of number.

If NUM_INCL is set to ‘1’ and the DIGIT_MODE field is set to ‘1’, the mobile station shall set this field to the NUMBER_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the called number, as defined in [7], Section 4.5.9; otherwise, the mobile station shall omit this field.

**NUMBER_PLAN** – Numbering plan.
If NUM_INCL is set to ‘1’ and the DIGIT_MODE field is set to ‘1’, the mobile station shall set this field to the NUMBER_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the called number, as defined in [7], Section 4.5.9; otherwise, the mobile station shall omit this field.

NUM_CHAR – Number of characters.

If NUM_INCL is set to ‘1’, the mobile station shall set this field to the number of characters included in this record; otherwise, the mobile station shall omit this field.

CHARi – Character.

If the NUM_INCL is set to ‘1’, the mobile stations shall include NUM_CHAR occurrences of this field.

If the DIGIT_MODE field is set to ‘0’, the mobile station shall set each occurrence of this field to the code value shown in Table 2.7.1.3.2.4-4 corresponding to the dialed digit. If the DIGIT_MODE field is set to ‘1’, the mobile station shall set each occurrence of this field to the ASCII representation corresponding to the character, as specified in [9], with the most significant bit set to ‘0’.

MS_INIT_POS_LOC_IND – Mobile Initiated Position Location Session indicator.

The mobile station shall set this field to ‘1’ if MS_INIT_POS_LOC_SUP_IND is equal to ‘1’ and if the mobile station is to initiate a position location session associated with this emergency call; otherwise, the mobile station shall set this field to ‘0’.

RESERVED – Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the entire information record equal to an integer number of octets. The mobile station shall set these bits to ‘0’.
2.7.4.32 Hook Status

This information record shall indicate the status of the hook switch in Wireless Local Loop mobile stations. The mobile station shall use the following fixed-length format for the type-specific fields:

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOOK_STATUS</td>
<td>4</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
</tbody>
</table>

HOOK_STATUS – WLL terminal hook status.

The mobile station shall set this sub-field to the value shown in Table 2.7.3.2.1-4 corresponding to the hook state.

RESERVED – Reserved bits.

The mobile station shall set this field to ‘0000’.
2.7.4.33 QoS Parameters

This information record conveys to the user the QoS parameters associated with the service to be provided:

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QoS Parameters</td>
<td>variable</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

QoS Parameters - Block containing the QoS Parameters.

The mobile station shall set this field to the QoS parameters associated with the user (per subscription), service type (e.g., assured vs. non-assured services) and the service option. The details of the QoS parameters may be found in documents describing the service options.

RESERVED - Reserved bits for octet alignment.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to '0'.
2.7.4.34 Encryption Capability

This information record identifies the encryption capability of the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>8</td>
</tr>
</tbody>
</table>

**SIG_ENCRYPT_SUP** – Signaling Encryption supported indicator.

The mobile station shall set this field to indicate which signaling encryption algorithms are supported by the mobile station, as shown in Table 2.7.1.3.2.1-5.

The mobile station shall set the subfields as follows:

- The mobile station shall set the CMEA subfield to ‘1’.
- The mobile station shall set each subfield to ‘1’ if the corresponding signaling encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.
- The mobile station shall set the RESERVED subfield to ‘00000’.

**UI_ENCRYPT_SUP** – User information encryption supported indicator.

The mobile station shall set this field to indicate the supported user information encryption algorithms, as shown in Table 2.7.1.3.2.4-9.

The mobile station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the mobile station; otherwise, the mobile station shall set the subfield to ‘0’.

The mobile station shall set the RESERVED subfield to ‘000000’.
2.7.4.35 Signaling Message Integrity Capability

This information record identifies the signaling message integrity capability of the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>8</td>
</tr>
</tbody>
</table>

SIG_INTEGRITY_SUP — Signaling message integrity supported by the mobile station.

The mobile station shall set this field to indicate the supported message integrity algorithm 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’.
This information record can be included in a Status Response Message or an Extended Status Response Message to return the mobile station UIM_ID.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UIM_ID_LEN</td>
<td>4</td>
</tr>
<tr>
<td>UIM_ID</td>
<td>$8 \times UIM_ID_LEN$</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

UIM_ID_LEN – The length of mobile station User Identity Module identifier.

The mobile station shall set this field to the length, in units of octets, of its User Identity Module identifier. If the mobile station does not have a User Identity Module identifier, the mobile station shall set this field to ‘0000’.

UIM_ID – Mobile station User Identity Module identifier.

The mobile station shall set this field to its User Identity Module identifier (see [40]).

RESERVED - Reserved bits for octet alignment.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’. 
2.7.4.37 ESN_ME

This information record can be included in a Status Response Message or an Extended Status Response Message to return the mobile station ESN_ME.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESN_ME_LEN</td>
<td>4</td>
</tr>
<tr>
<td>ESN_ME</td>
<td>$8 \times \text{ESN_ME_LEN}$</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

- ESN_ME_LEN – The length of mobile equipment electronic serial number. The mobile station shall set this field to the length, in units of octets, of its mobile equipment electronic serial number.
- ESN_ME\textsuperscript{15} – Mobile equipment electronic serial number. The mobile station shall set this field to ESN_p (see 2.3.2).
- RESERVED – Reserved bits for octet alignment. The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to '0'.

\textsuperscript{15} The ESN_ME field is always set to ESN_p and never carries UIM ID value.
2.7.4.38 MEID

This information record can be included in a Status Response Message or an Extended Status Response Message to return the mobile station MEID.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEID_LEN</td>
<td>4</td>
</tr>
<tr>
<td>MEID</td>
<td>8 × MEID_LEN</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

MEID_LEN – The length of mobile station Mobile Equipment Identifier.

The mobile station shall set this field to the length, in units of octets, of its Mobile Equipment Identifier.

MEID – Mobile Equipment Identifier.

The mobile station shall set this field to MEID_p.

RESERVED – Reserved bits for octet alignment.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’.
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.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUMBER_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
{ CHARi 8 }
```

| RESERVED | 0 - 7 (as needed) |

5

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 station 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.
The mobile station shall include one occurrence of this field for each character entered. The mobile station shall set each occurrence of this field to the ASCII representation corresponding to the character entered, as specified in [9], with the most significant bit set to ‘0’.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’.
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.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_SYNC_ID</td>
<td>5</td>
</tr>
<tr>
<td>SID</td>
<td>0 or 15</td>
</tr>
<tr>
<td>NID</td>
<td>0 or 16</td>
</tr>
</tbody>
</table>

NUM_SYNC_ID occurrences of the following fields:

\[
\{ (NUM\_SYNC\_ID) \\
\quad \text{SYNC\_ID\_LEN} & 4 \\
\quad \text{SYNC\_ID} & (8 \times \text{SYNC\_ID\_LEN}) \\
\} (NUM\_SYNC\_ID) \\
\]

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.
  - The mobile station shall set this field to the length (in octets) of the SYNC_ID field included in this message. The mobile station shall set this field to a value larger than zero.

- **SYNC_ID** - Service Configuration synchronization identifier.
  - The mobile station shall set this field to the synchronization identifier corresponding to a stored service configuration associated with SID and NID included in this message.

- **RESERVED** - Reserved bits for octet alignment.
  - The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’.
2.7.4.41 Extended Terminal Information

This information record can be included in a Status Response Message, or an Extended Status Response Message to return configuration information about the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOB_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>MOB_MFG_CODE</td>
<td>8</td>
</tr>
<tr>
<td>MOB_MODEL</td>
<td>8</td>
</tr>
<tr>
<td>MOB_FIRM_REV</td>
<td>16</td>
</tr>
<tr>
<td>SCM</td>
<td>8</td>
</tr>
<tr>
<td>LOCAL_CTRL</td>
<td>1</td>
</tr>
<tr>
<td>SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>SIGN_SLOT_CYCLE_INDEX</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_SO</td>
<td>0 or 6</td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>![Table](NUM_SO + 1)</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

- **MOB_P_REV** – Protocol revision of the mobile station.
  - If the status request does not specify a band class, the mobile station shall set this field to ‘00001011’; otherwise, the mobile station shall set this field to the MOB_P_REV associated with the requested band class and operating mode.

- **MOB_MFG_CODE** – Manufacturer code.
  - This field identifies the manufacturer of the mobile station.
  - The mobile station shall set this field to the manufacturer code assigned to its manufacturer.
MOB_MODEL – Model number.
This number is assigned by the manufacturer for a particular model.
The mobile station shall set this field to the model number assigned by the manufacturer for this mobile station.

MOB_FIRM_REV – Firmware revision number.
This number is assigned by the manufacturer for a particular firmware version.
The mobile station shall set this field to the revision number assigned by the manufacturer for the firmware version running in this mobile station.

SCM – Station class mark.
The mobile station shall set this field to its station class mark. See 2.3.3.

LOCAL_CTRL – Local control indicator.
If local control is enabled, the mobile station shall set this field to ‘1’. If local control is disabled, the mobile station shall set this field to ‘0’. See [6].

SLOT_CYCLE_INDEX – Slot cycle index.
If the requested operating mode is CDMA and the mobile station is configured for slotted mode operation, the mobile station shall set this field to the absolute value of the registered slot cycle index, SLOT_CYCLE_INDEX_REG (see 2.6.2.1.1); otherwise, the mobile station shall set this field to ‘000’. The sign of the registered slot cycle, SLOT_CYCLE_INDEX_REG, is specified in the SIGN_SLOT_CYCLE_INDEX field of this message (see Table 2.7.1.3.2.1-8).

SIGN_SLOT_CYCLE_INDEX – Sign of the slot cycle index.
If the SLOT_CYCLE_INDEX field is set to ‘000’, 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 as specified in Table 2.7.1.3.2.1-8 to the sign of the registered slot cycle index, SLOT_CYCLE_INDEX_REG (see 2.6.2.1.1). The absolute value of the registered slot cycle index, SLOT_CYCLE_INDEX_REG, is specified in the SLOT_CYCLE_INDEX field of this message.

SO_INCL – Service option inclusion indicator.
If there is a service option supported by the mobile station which does not belong to any service option group assigned (see [30]), the mobile station shall set this field ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NUM_SO – Number of service option included indicator.
If the SO_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of service option to be included minus one.

If SO_INCL is set to '1', the mobile station shall include NUM_SO + 1 occurrences of the following variable-field record:

**SERVICE_OPTION** – Supported service option.

If the SO_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field as follow:

If the requested operating mode is CDMA, the mobile station shall includes one occurrence of this field for each service option supported by the mobile station (see [30]) which has no service option group number assigned.

**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.

If SO_GROUP_INCL is set to '0', the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of service option groups to be included minus one.

If SO_GROUP_INCL is set to '1', the mobile station shall include NUM_SO_GROUP + 1 occurrences of the following variable-field record:

**SO_BITMAP_IND** - Service option bitmap indicator.

The mobile station shall set this field as defined in Table 2.7.1.3.2.4-10.

**SO_GROUP_NUM** - Service option group number.

If SO_BITMAP_IND is included and not set to '00', the mobile station shall include this field and set this field to service option group number defined in [30], of the bitmap to be included in this message; otherwise, the mobile station shall omit this field.

**SO_BITMAP** – Service option bitmap.

If SO_BITMAP_IND is included and is not set to '00', the mobile station shall include the bitmap of the service option group (SO_GROUP_NUM); otherwise, the mobile station shall omit this field.

When the service option bitmap is included, if there are more than \(2^{\text{SO_GROUP_NUM}}\) service options defined in [30] for the service option group [SO_GROUP_NUM], the mobile station shall include the bitmap containing the least significant bits \(2^{\text{SO_GROUP_NUM}}\) for the service option group.
RESERVED – Reserved bits.

The mobile station shall set this field to ‘0’ to make the entire record octet-aligned.
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.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO_GROUP_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_SO_GROUP</td>
<td>0 or 5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>{ (NUM_SO_GROUP+1) }</td>
<td></td>
</tr>
<tr>
<td>SO_BITMAP_IND</td>
<td>2</td>
</tr>
<tr>
<td>SO_GROUP_NUM</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_BITMAP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_SUP_SO_BITMAP</td>
<td>0 or 2^(1+SO_BITMAP_IND)</td>
</tr>
<tr>
<td>REV_SUP_SO_BITMAP</td>
<td>0 or 2^(1+SO_BITMAP_IND)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>{ (NUM_SO_GROUP + 1) }</td>
<td></td>
</tr>
<tr>
<td>SO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_SO</td>
<td>0 or 6</td>
</tr>
<tr>
<td>REVERSE_SUPPORT_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>{ (NUM_SO + 1) }</td>
<td></td>
</tr>
<tr>
<td>FORWARD_SUPPORT</td>
<td>1</td>
</tr>
<tr>
<td>REVERSE_SUPPORT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>{ (NUM_SO + 1) }</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

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.
If the SO_GROUP_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of service option groups to be included minus one.

If SO_GROUP_INCL is set to ‘1’, the mobile station shall include NUM_SO_GORUP +1 occurrences of the following variable-field record:

SO_BITMAP_IND - Service option bitmap indicator.
The mobile station shall set this field as defined in Table 2.7.1.3.2.4-10.

SO_GROUP_NUM - Service option group number.
If SO_BITMAP_IND is included and not set to ‘00’, the mobile station shall include this field and set this field to service option group number defined in [30], of the bitmap to be included in this message; otherwise, the mobile station shall omit this field.

REV_BITMAP_INCL - Reverse traffic channel bitmap included indicator.
If SO_BITMAP_IND is included and set to ‘00’, the mobile station shall omit this field; otherwise the mobile station shall set this field as follow:
The mobile station shall set this field to ‘0’ to indicate FOR_SUP_SO_BITMAP is used to specify the service option supports for both forward traffic channel and reverse traffic channel; otherwise the mobile station shall set this field to ‘1’.

FOR_SUP_SO_BITMAP - Support bitmap indicator for Forward Traffic Channel.
If SO_BITMAP_IND is included and set to ‘00’, the mobile station shall omit this field; otherwise the mobile station shall include the bitmap of the service option group (SO_GROUP_NUM) as follow:

If REV_BITMAP_INCL is set to ‘1’:

- If the service option specified by FOR_SUP_SO_BITMAP is supported on forward traffic channel, the mobile station shall set the corresponding bit to ‘1’; otherwise, the mobile station shall set this bit to ‘0’.

Otherwise,

- If the service option specified by FOR_SUP_SO_BITMAP is supported on forward traffic channel and on reverse traffic channel, the mobile station shall set the corresponding bit to ‘1’; otherwise, the mobile station shall set this bit to ‘0’.

REV_SUP_SO_BITMAP - Support bitmap indicator for Reverse Traffic Channel.
If REV_BITMAP_INCL is included and set to ‘0’, the mobile station shall omit this field; otherwise the mobile station shall include the bitmap of the service option group (SO_GROUP_NUM) as follow:

If the service option specified by REV_SUP_SO_BITMAP is supported on reverse traffic channel, the mobile station shall set the corresponding bit to ‘1’; otherwise, the mobile station shall set this bit to ‘0’.

SO_INCL - Service option inclusion indicator.

If there is a service option supported by the mobile station which does not belong to any service option group assigned (see [30]), the mobile station shall set this field ‘1’; otherwise, the mobile station shall set this field to ‘0’.

NUM_SO - Number of service option included indicator.

If the SO_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall set this field to the number of service option to be included minus one.

REVERSE_SUPPORT_INCL - Reverse service option support included indicator.

If the SO_INCL is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follow:

The mobile station shall set this field to ‘0’ to indicate FORWARD_SUPPORT is used to specify the service option supports for both forward traffic channel and reverse traffic channel; otherwise the mobile station shall set this field to ‘1’.

If SO_INCL is set to ‘1’, the mobile station shall include NUM_SO + 1 occurrences of the following variable-field record:

FORWARD_SUPPORT – Support indicator for Forward Traffic Channel.

The mobile station shall set this field as follow:

If REVERSE_SUPPORT_INCL is set to ‘1’, the mobile station shall set this field to ‘1’ if the service option specified in the SERVICE OPTION field is supported on the Forward Traffic Channel.

If REVERSE_SUPPORT_INCL is set to ‘0’, the mobile station shall set this field to ‘1’ if the service option specified in the SERVICE OPTION field is supported on the forward traffic channel and on reverse traffic channel.

REVERSE_SUPPORT – Support indicator for Reverse Traffic Channel.

If REVERSE_SUPPORT_INCL field is not included or 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 the service option specified in the SERVICE_OPTION field is supported on the Reverse Traffic Channel.

**SERVICE_OPTION** – Service option.

If the requested operating mode is CDMA, the mobile station shall include one occurrence of this field for each service option supported by the mobile station (see [30]) which has no service option group number assigned.

**RESERVED** – Reserved bits.

The mobile station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.
2.7.4.43 Band Class and Band Subclass Information

When this information record is included in a Status Response Message or an Extended Status Response Message, the mobile station shall include all the band classes and band subclasses that it supports.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_BAND_CLASS</td>
<td>3</td>
</tr>
<tr>
<td>NUM_BAND_CLASS + 1 occurrences of the following record:</td>
<td></td>
</tr>
<tr>
<td>{ (NUM_BAND_CLASS + 1)</td>
<td></td>
</tr>
<tr>
<td>BAND_CLASS_REC_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>SUBCLASS_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SUBCLASS_REC_LEN</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SUBCLASS_REC_LEN + 1 occurrences of the following subrecord:</td>
<td></td>
</tr>
<tr>
<td>{ (SUBCLASS_REC_LEN + 1)</td>
<td></td>
</tr>
<tr>
<td>SUBCLASS_SUP</td>
<td>1</td>
</tr>
<tr>
<td>} (SUBCLASS_REC_LEN + 1)</td>
<td></td>
</tr>
<tr>
<td>BAND_CLASS_RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
<tr>
<td>} (NUM_BAND_CLASS + 1)</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

**NUM_BAND_CLASS** – Number of band classes.

The mobile station shall set this field to the number of band classes included in the record minus one.

The mobile station shall include NUM_BAND_CLASS + 1 occurrences of the following record:

**BAND_CLASS_REC_LEN** – Band class information record length.

The mobile station shall set this field to the number of octets included in this record starting from this field and ending with BAND_CLASS_RESERVED.

**BAND_CLASS** – Band class

This field specifies a band class supported by the mobile station. The mobile station shall set this field according to the values defined in [45].

**SUBCLASS_INFO_INCL** – Band subclass information included
The mobile station shall set this field to ‘0’ when it is not aware of any band subclasses associated with the BAND_CLASS field above; otherwise, the base station shall set this field to ‘1’.

SUBCLASS_REC_LEN – Band subclass subrecord length

If SUBCLASS_INFO_INCL is set to ‘0’, the base station shall omit this field; otherwise, the mobile station shall set this field to the number of band subclass supported indicator fields included in the subrecord minus 1.

If the SUBCLASS_REC_LEN field is included, the mobile station shall include SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the Nth field included corresponds to band subclass ‘N-1’.

SUBCLASS_SUP – Band subclass supported indicator

The mobile station shall set this field to ‘1’ if the corresponding band subclass is supported for the associated BAND_CLASS; otherwise, the mobile station shall set this field to ‘0’.

BAND_CLASS_RESERVED – Reserved bits.

The mobile station shall add reserved bits as needed in order to make the length of the record equal to an integer number of octets. The mobile station shall set each of these bits to ‘0’.

RESERVED – Reserved bits.

The mobile 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 mobile station shall set each of these bits to ‘0’.
2.7.4.44 EXT_UIM_ID

This information record can be included in a Status Response Message or an Extended Status Response Message to return the mobile station EXT_UIM_ID.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXT_UIM_ID_LEN</td>
<td>4</td>
</tr>
<tr>
<td>EXT_UIM_ID</td>
<td>8 \times EXT_UIM_ID_LEN</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

EXT_UIM_ID_LEN – The length of mobile station Extended User Identity Module identifier.

The mobile station shall set this field to the length, in units of octets, of its Extended User Identity Module identifier. If the mobile station does not have an Extended User Identity Module identifier, the mobile station shall set this field to ‘0000’.

EXT_UIM_ID – Mobile station Extended User Identity Module identifier.

The mobile station shall set this field to its Extended User Identity Module identifier (see [40]).

RESERVED – Reserved bits for octet alignment.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’.
No text.
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. If the base station supports 800 MHz analog operation, the base station should set the RAND parameter of the Access Parameters Message to the same value transmitted on the forward analog control channel (see [6]).

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., T₁b and N₄m) 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.

3.6.1.3 Sync Channel Operation

The Sync Channel (see [2]) provides the mobile station with system configuration and timing information.

The base station shall transmit at most one Sync Channel for each supported CDMA Channel. The base station shall support a Sync Channel on at least one member of the preferred set of frequency assignments that it supports. The base station should support a Sync Channel on every member of the preferred set of frequency assignments that it supports.

If the base station operates in Band Class 0 or Band Class 3, and supports the Primary CDMA Channel, then the base station shall transmit a Sync Channel on the Primary CDMA Channel.

The base station shall continually send the Sync Channel Message on each Sync Channel that the base station transmits.

3.6.2 Common Channel Processing

3.6.2.1 Paging Channel and Forward Common Control Channel Procedures

During Common Channel Processing, the base station transmits the Paging Channel or the Forward Common Control Channel (see [2]) which the mobile station monitors to receive messages while the mobile station is in the Mobile Station Idle State and the System Access State.

The base station may transmit up to seven Paging Channels on each supported CDMA Channel. The base station may transmit up to seven Forward Common Control Channels and one Primary Broadcast Control Channel on each supported CDMA Channel.

For each Paging Channel that the base station transmits, the base station shall continually send valid Paging Channel messages (see 3.7.2), which may include the Null Message (see [4]).
The base station shall not send any message which is not completely contained within two consecutive Paging Channel or Forward Common Control Channel slots, unless the processing requirements for the message explicitly specify a different size limitation.\(^1\)

### 3.6.2.1.1 CDMA Channel Determination

The base station may send the **CDMA Channel List Message** and the **Extended CDMA Channel List Message** on the Paging Channel. When the base station supports Broadcast Control Channel, the base station shall send the **Extended CDMA Channel List Message** on the Primary Broadcast Control Channel.

**When the base station sends a CDMA Channel List Message or an Extended CDMA Channel List Message on the Paging Channel or on the Primary Broadcast Control Channel, the base station shall determine the assigned band and CDMA Channel using the mobile station hashing procedures for the corresponding P\_REV\_IN\_USE.**

**When the base station sends the CDMA Channel List Message on the Paging Channel, the base station shall determine the assigned CDMA Channel using the hash function specified in 2.6.7.1 with the following inputs:**

- IMSI\_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of CDMA Channels in the **CDMA Channel List Message** in accordance with the procedures defined in 2.6.2.2.12.1 for mobile stations with:
  - MOB\_P\_REV\_s less than six.
  - MOB\_P\_REV\_s equal to six if the base station does not send the **Extended CDMA Channel List Message** on the Paging Channel.
  - MOB\_P\_REV\_s greater than or equal to seven, if the base station does not send the **Extended CDMA Channel List Message** on the paging channel and does not support Primary Broadcast Control Channel.

**When the base station sends the Extended CDMA Channel List Message on the Paging Channel, the base station shall determine the assigned CDMA Channel using the hash function specified in 2.6.7.1 with the following inputs:**

- IMSI\_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of CDMA Channels of the selected channel subset of CDMA channels in the **Extended CDMA Channel List Message** in accordance with the procedures defined in 2.6.2.2.12.1 for mobile stations with:
  - MOB\_P\_REV\_s equal to six.
  - MOB\_P\_REV\_s greater than or equal to seven, if the base station does not support Primary Broadcast Control Channel.

\(^1\)See, for example, [14] which specifies processing requirements for the **Data Burst Message**.
When the base station sends the *Extended CDMA Channel List Message* on the Primary Broadcast Control Channel, the base station shall determine the assigned CDMA Channel for MOB_P_REVs greater than or equal to seven using the hash function specified in 2.6.7.1 with the following inputs:

- IMSI_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of CDMA Channels of the selected channel subset of CDMA channels in the *Extended CDMA Channel List Message* in accordance with the procedures defined in 2.6.2.2.12.2.

### 3.6.2.1.2 Common Channel Determination

To determine the mobile station’s assigned Paging Channel or Forward Common Control Channel, the base station shall use the hash function specified in 2.6.7.1 with the following inputs:

- IMSI_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of Paging Channels or Forward Common Control Channels which the base station transmits on the mobile station’s assigned CDMA Channel.

### 3.6.2.1.3 Paging Slot Determination

To determine the assigned Paging Channel or Forward Common Control Channel slots for a mobile station with a given slot cycle index, the base station shall select a number PGSLOT using the hash function specified in 2.6.7.1 with the following inputs:

- IMSI_S based on the IMSI with which the mobile station registered (see 6.3.1)
- Maximum number of Paging Channel or Forward Common Control Channel slots (2048).

The assigned Paging Channel or Forward Common Control Channel slots for the mobile station are those slots for which

\[ \left( \frac{t}{4} \right) - \text{PGSLOT} \mod (16 \times T) = 0, \]

where \(t\) is the System Time in 20ms frames, and \(T\) is the slot cycle length in units of 1.28 seconds given by

\[ T = 2^i, \]

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

When the base station is able to determine that the mobile station is operating in the slotted mode and is able to determine the mobile station’s preferred slot cycle index, the base station determines the slot cycle index to use for the mobile station as follows:

- If the base station is able to determine that the mobile station is operating in the reduced slot cycle mode, the base station uses \(\min(\text{reduced slot cycle index}, \text{preferred slot cycle index}, \text{maximum slot cycle index})\) for the mobile station’s slot cycle index.
• Otherwise:
  – If the base station supports negative values of slot cycle index, the base station uses min(preferred slot cycle index, maximum slot cycle index) for the mobile station’s slot cycle index.
  – Otherwise, the base station uses max(0, min(preferred slot cycle index, maximum slot cycle index)) for the mobile station’s slot cycle index.

When the base station is not able to determine whether the mobile station is operating in the slotted mode, or the base station is not able to determine the mobile station’s preferred slot cycle index, the base station uses for the mobile station’s slot cycle index the smaller of the maximum slot cycle index and 1.

3.6.2.1.4 Message Transmission and Acknowledgment Procedures

The Paging Channel or Forward Common Control Channel acknowledgment procedures facilitate the reliable exchange of messages between the base station and the mobile station on the f-csch and r-csch. The acknowledgment procedures and requirements are described in [4].

3.6.2.2 Overhead Information

The base station sends overhead messages to provide the mobile station with the information that it needs to operate with the base station. If the base station supports the Primary Broadcast Control Channel for overhead messages and is not a pilot beacon, it shall support the Forward Common Control Channel for all other general page information.

The base station with a P_REV greater than six that supports Broadcast Control Channel shall send overhead messages on the Primary Broadcast Control Channel. The base station with a P_REV greater than six that does not support the Broadcast Control Channel shall send overhead messages on each Paging Channel. The overhead messages sent on the Primary Broadcast Control Channel are:

1. ANSI-41 System Parameters Message
2. User Zone Identification Message
3. Private Neighbor List Message
4. Extended Global Service Redirection Message
5. Extended CDMA Channel List Message
6. MC-RR Parameters Message
7. Universal Neighbor List Message
8. Enhanced Access Parameters Message
9. ANSI-41 RAND Message
10. BCMC Service Parameters Message

The overhead messages on the Paging Channel are:
1. System Parameters Message
2. Neighbor List Message (Band Class 0 only)
3. Access Parameters Message
4. CDMA Channel List Message
5. Extended System Parameters Message
6. Extended Neighbor List Message (band classes other than Band Class 0)
7. General Neighbor List Message
8. Global Service Redirection Message
9. User Zone Identification Message
10. Private Neighbor List Message
11. Extended Global Service Redirection Message
12. Extended CDMA Channel List Message
13. BCMC Service Parameters Message

The base station shall maintain a configuration sequence number (CONFIG_SEQ) for configuration messages transmitted on the Paging Channel, and shall increment CONFIG_SEQ modulo 64 whenever the base station modifies the following messages:

1. System Parameters Message
2. Neighbor List Message (Band Class 0 only)
3. CDMA Channel List Message
4. Extended System Parameters Message
5. Extended Neighbor List Message (band classes other than Band Class 0)
6. General Neighbor List Message
7. Global Service Redirection Message
8. User Zone Identification Message
9. Private Neighbor List Message
10. Extended Global Service Redirection Message
11. Extended CDMA Channel List Message

The base station shall maintain a configuration sequence number (CONFIG_SEQ) for configuration messages transmitted on the Primary Broadcast Control Channel, and shall increment CONFIG_SEQ modulo 64 whenever the base station modifies the following messages:

1. ANSI-41 System Parameters Message
2. User Zone Identification Message
3. Private Neighbor List Message
4. **Extended Global Service Redirection Message**

5. **Extended CDMA Channel List Message**

6. **MC-RR Parameters Message**

7. **Universal Neighbor List Message**

The base station shall maintain an access configuration sequence number (ACC_CONFIG_SEQ) for the Access Channel, and shall increment ACC_CONFIG_SEQ modulo 64 whenever the base station modifies the *Access Parameters Message*.

The base station shall maintain an access configuration sequence number (ACC_CONFIG_SEQ) for the Enhanced Access Channel, and shall increment ACC_CONFIG_SEQ modulo 64 whenever the base station modifies the *Enhanced Access Parameters Message*.

On each Primary Broadcast Control Channel which the base station transmits, the base station shall send each of the following system overhead messages at least once per T_{1b} seconds:

1. **Extended CDMA Channel List Message**

2. **ANSI-41 System Parameters Message**

3. **MC-RR Parameters Message**

4. **Enhanced Access Parameters Message**

5. **Universal Neighbor List Message**

If the base station supports Primary Broadcast Control Channels, and the base station is sending the *ANSI-41 RAND Message*, it shall send it at least once per T_{1b} seconds.

On each of the Paging Channels the base station transmits, the base station shall send each of the following system overhead messages at least once per T_{1b} seconds:

1. **Access Parameters Message**

2. **CDMA Channel List Message**

3. **Extended System Parameters Message**

4. **System Parameters Message**

For the messages sent on the Paging Channel, if the base station is operating in Band Class 1, Band Class 3, or Band Class 4 and MIN_P_REV is less than seven, the base station shall send the *Extended Neighbor List Message*, and may also send the *General Neighbor List Message*. If the base station is operating in Band Class 0 and MIN_P_REV is less than seven, the base station shall send the *Neighbor List Message*, and may also send the *General Neighbor List Message*. If the base station is sending the *Neighbor List Message*, it shall send it at least once per T_{1b} seconds. If the base station is sending the *Extended Neighbor List Message*, it shall send it at least once per T_{1b} seconds. If the base station is sending the *General Neighbor List Message*, it shall send it at least once per T_{1b} seconds.

Overhead Messages sent on the Primary Broadcast Control Channel shall be transmitted on a continuous basis, consecutively.
If the base station uses addressing modes requiring use of only the IMSI_M_S, independent of values of the IMSI_M_11_12 and MCC_M, the base station shall set IMSI_T_SUPPORTED to ‘0’, MCC to ‘1111111111’, and IMSI_11_12 to ‘1111111’ in the Extended System Parameters Message, MC-RR Parameters Message, and ANSI-41 System Parameters Message.

If the base station sets IMSI_T_SUPPORTED to ‘1’, the base station shall not set PREF_MSID_TYPE to ‘00’ in the Extended System Parameters Message and ANSI-41 System Parameters Message.

The base station may send a Global Service Redirection Message on any given Paging Channel. If the message is sent, the base station shall send it at least once per $T_{1b}$ seconds.

If P_REV is greater than or equal to six, the base station may send an Extended Global Service Redirection Message. If the message is sent, the base station shall send it at least once per $T_{1b}$ seconds. The base station may send this message to redirect only those mobile stations with MOB_P_REV equal to or greater than six.

When both the Global Service Redirection Message and the Extended Global Service Redirection Message are sent, the base station shall use the Global Service Redirection Message for mobile stations with MOB_P_REV less than six, and shall use the Extended Global Service Redirection Message for mobile stations with MOB_P_REV equal to or greater than six. When only the Global Service Redirection Message is sent and this message is for mobile station with MOB_P_REV less than six, the base station shall set EXCL_P_REV_MS to ‘1’.

If only the Global Service Redirection Message is sent and this message is for redirecting all mobile stations, the base station shall set EXCL_P_REV_MS to ‘0’.

The base station may send a User Zone Identification Message. If the message is sent, the base station shall send it at least once per $T_{1b}$ seconds.

The base station may send a Private Neighbor List Message. If the message is sent, the base station shall send it at least once per $T_{1b}$ seconds.

The base station may send an Extended CDMA Channel List Message. If the message is sent, the base station shall send it at least once per $T_{1b}$ seconds.

3.6.2.3 Mobile Station Directed Messages

The base station may send the following messages directed to a mobile station on the f-csch. If the base station sends a message, the base station shall comply with the specified requirements for sending the message, if any:

1. Abbreviated Alert Order
2. Audit Order
3. Authentication Challenge Message
4. Base Station Challenge Confirmation Order
5. Channel Assignment Message (if $P_{REV_{IN\_USE}} < 8$)
<table>
<thead>
<tr>
<th></th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data Burst Message</td>
</tr>
<tr>
<td>2</td>
<td>Extended Channel Assignment Message</td>
</tr>
<tr>
<td>3</td>
<td>Fast Call Setup Order</td>
</tr>
<tr>
<td>4</td>
<td>Feature Notification Message</td>
</tr>
<tr>
<td>5</td>
<td>General Page Message</td>
</tr>
<tr>
<td>6</td>
<td>Intercept Order</td>
</tr>
<tr>
<td>7</td>
<td>Local Control Order</td>
</tr>
<tr>
<td>8</td>
<td>Lock Until Power-Cycled Order</td>
</tr>
<tr>
<td>9</td>
<td>Maintenance Required Order</td>
</tr>
<tr>
<td>10</td>
<td>PACA Message</td>
</tr>
<tr>
<td>11</td>
<td>Registration Accepted Order</td>
</tr>
<tr>
<td>12</td>
<td>Registration Rejected Order</td>
</tr>
<tr>
<td>13</td>
<td>Registration Request Order</td>
</tr>
<tr>
<td>14</td>
<td>Release Order</td>
</tr>
<tr>
<td>15</td>
<td>Reorder Order</td>
</tr>
<tr>
<td>16</td>
<td>Retry Order</td>
</tr>
<tr>
<td>17</td>
<td>Security Mode Command Message</td>
</tr>
<tr>
<td>18</td>
<td>Service Redirection Message</td>
</tr>
<tr>
<td>19</td>
<td>Slotted Mode Order</td>
</tr>
<tr>
<td>20</td>
<td>SSD Update Message</td>
</tr>
<tr>
<td>21</td>
<td>Status Request Message</td>
</tr>
<tr>
<td>22</td>
<td>TMSI Assignment Message</td>
</tr>
<tr>
<td>23</td>
<td>Universal Page Message (Forward Common Control Channel Only)</td>
</tr>
<tr>
<td>24</td>
<td>Unlock Order</td>
</tr>
<tr>
<td>25</td>
<td>User Zone Reject Message</td>
</tr>
</tbody>
</table>

The base station shall not send the Channel Assignment Message if P_REV_IN_USE is greater than or equal to nine.

The base station should send at least one General Page Message in each Paging Channel slot. The base station shall not omit a General Page Message in two adjacent Paging Channel slots.

The base station should send at least one General Page Message or Universal Page Message in each Forward Common Control Channel slot. The base station shall not omit both a General Page Message and a Universal Page Message in two adjacent slots.
3.6.2.3.1 Processing when the General Page Message is Used

The base station shall use the following rules for selecting the Paging Channel or Forward Common Control Channel slot in which to send a message to a mobile station:

- If the base station is able to determine that the mobile station is operating in the non-slotted mode, the base station may send the message to the mobile station in any Paging Channel or Forward Common Control Channel slot.

- If the base station is able to determine that the mobile station is operating in the slotted mode and is able to determine the mobile station’s slot cycle index (see 2.6.2.1.1.3), the base station shall send the message at least once in an assigned Paging Channel slot for the mobile station (see 3.6.2.1.3), with the position within the slot subject to the following limitations:
  - If the mobile station has registered with a class 0 IMSI, the base station shall not send the message in the assigned Paging Channel slot after sending a General Page Message with CLASS_0_DONE set to ‘1’ in that slot.
  - If the mobile station has registered with a class 1 IMSI, the base station shall not send the message in the assigned Paging Channel slot after sending a General Page Message with CLASS_1_DONE set to ‘1’ in that slot.
  - If the mobile station has been assigned a TMSI, the base station shall not send the message in the assigned Paging Channel slot after sending a General Page Message with TMSI_DONE set to ‘1’ in that slot.

- If the base station is able to determine that the mobile station is operating in the slotted mode and that the mobile station is not waiting for a priority access channel assignment and that the slotted timer in the mobile station is not active, and the base station is able to determine the mobile station’s slot cycle index (see 2.6.2.1.1.3), the base station shall send the message at least once in an assigned Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3), with the position within the slot subject to the following limitations:
  - If the mobile station has registered with a class 0 IMSI, the base station shall not send the message in the assigned Forward Common Control Channel slot after sending a General Page Message with CLASS_0_DONE set to ‘1’ in that slot.
  - If the mobile station has registered with a class 1 IMSI, the base station shall not send the message in the assigned Forward Common Control Channel slot after sending a General Page Message with CLASS_1_DONE set to ‘1’ in that slot.
  - If the mobile station has been assigned a TMSI, the base station shall not send the message in the assigned Forward Common Control Channel slot after sending a General Page Message with TMSI_DONE set to ‘1’ in that slot.
If the base station is able to determine that the mobile station is operating in the slotted mode and that the mobile station is waiting for a priority access channel assignment, or that the slotted timer in the mobile station is active, the base station may send the message to the mobile station in any Forward Common Control Channel slot with the position within the slot subject to the following limitation:

- If the mobile station has registered with a class 0 IMSI, the base station shall not send the message in any Forward Common Control Channel slot after sending a General Page Message with CLASS_0_DONE set to ‘1’ in that slot.

- If the mobile station has registered with a class 1 IMSI, the base station shall not send the message in any Forward Common Control Channel slot after sending a General Page Message with CLASS_1_DONE set to ‘1’ in that slot.

- If the mobile station has been assigned a TMSI, the base station shall not send the message in any Forward Common Control Channel slot after sending a General Page Message with TMSI_DONE set to ‘1’ in that slot.

If the base station is not able to determine whether the mobile station is operating in the non-slotted mode, or the base station is not able to determine the mobile station’s slot cycle index, the base station shall assume that the mobile station is operating in the slotted mode with a slot cycle index which is the smaller of MAX_SLOT_CYCLE_INDEX and 1. The base station shall send the message at least once in an assigned Paging Channel or Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3), with the position within the slot subject to the following limitations:

- If the mobile station has registered with a class 0 IMSI, the base station shall not send the message in the assigned Paging Channel or Forward Common Control Channel slot after sending a General Page Message with CLASS_0_DONE set to ‘1’ in that slot.

- If the mobile station has registered with a class 1 IMSI, the base station shall not send the message in the assigned Paging Channel or Forward Common Control Channel slot after sending a General Page Message with CLASS_1_DONE set to ‘1’ in that slot.

- If the mobile station has been assigned a TMSI, the base station shall not send the message in the assigned Paging Channel or Forward Common Control Channel slot after sending a General Page Message with TMSI_DONE set to ‘1’ in that slot.

The base station should send messages directed to mobile stations operating in the slotted mode as the first messages in the slot.

If the base station sends a General Page Message with ORDERED_TMSIS set to ‘1’ in a slot, the base station shall order page records with PAGE_CLASS equal to ‘10’ in ascending order such that if a particular TMSI_CODE value for one page record is greater than the TMSI_CODE value for another page record, the page record with the greater TMSI_CODE value is sent later in the slot.
3.6.2.3.2 Processing when the Universal Page Message is Used

The base station shall use the following rules for selecting the Forward Common Control Channel slot in which to send a message to a mobile station:

- If the base station is able to determine that the mobile station is operating in the non-slotted mode, the base station may send the message to the mobile station in any Forward Common Control Channel slot.

- If the base station is able to determine that the mobile station is capable of operating in the slotted mode and that the mobile station is waiting for a priority access channel assignment, or that the slotted timer in the mobile station is active, the base station may send the message to the mobile station in any Forward Common Control Channel slot with the position within the slot subject to the following limitation:
  - The base station shall not send the message later in the slot than a *Universal Page Message* which lacks a mobile station-directed message announcement and which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile station.

- If the base station is able to determine that the mobile station is operating in the slotted mode and that the mobile station is not waiting for a priority access channel assignment and that the slotted timer in the mobile station is not active and the base station is able to determine the mobile station’s slot cycle index (see 2.6.2.1.1.3.3), the base station shall send the message at least once in an assigned Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3) or in the following slot, with the position within these two slots subject to the following limitation:
  - The base station shall not send the message later in the slot than a *Universal Page Message* that lacks a mobile station-directed message announcement and which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile station.

- If the base station is not able to determine whether the mobile station is operating in the non-slotted mode, or the base station is not able to determine the mobile station’s slot cycle index, the base station shall assume that the mobile station is operating in the slotted mode with a slot cycle index which is the smaller of MAX_SLOT_CYCLE_INDEX and 1. The base station shall send the message at least once in an assigned Forward Common Control Channel slot for the mobile station (see 3.6.2.1.3), or in the following slot, with the position within these two slots subject to the following limitation:
  - The base station shall not send the message later in the slot than a *Universal Page Message* that lacks a mobile station-directed message announcement and which lacks a mobile station-addressed page (see 3.7.2.3.2.36) for that mobile station.

The base station should send messages directed to both mobile stations operating in the slotted mode and mobile stations operating in the non-slotted mode later in the slot than
the *Universal Page Message*.

3.6.2.4 Broadcast Messages

3.6.2.4.1 Broadcast Messages Sent on the Paging Channel

The base station may transmit *Data Burst Messages* directed to broadcast addresses. When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode, the base station may use broadcast page records (see 3.7.2.3.2.17) in accordance with the broadcast procedures specified in 3.6.2.4.1 to announce the presence of broadcast *Data Burst Messages* on the Paging Channel. The base station should use the rules specified in 3.6.2.4.1.1 for selecting the Paging Channel slot in which to send a broadcast *Data Burst Message*.

3.6.2.4.1.1 Broadcast Procedures for Slotted Mode

The base station may announce the presence of broadcast *Data Burst Messages* on the Paging Channel by paging, using a broadcast address with PAGE_CLASS equal to ‘11’ and PAGE_SUBCLASS equal to ‘00’.

3.6.2.4.1.1.1 General Overview

The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since mobile stations operating in slotted mode do not constantly monitor a Paging Channel, it is necessary to use special procedures to ensure that mobile stations operating in the slotted mode are able to receive the message. The base station may either send a broadcast message in many slots, or may send a broadcast message in a predetermined paging slot. This single transmission of the pending broadcast message may be announced by a preceding “broadcast page”. A broadcast page is a *General Page Message* record with the PAGE_CLASS field set to ‘11’.

If pending transmission of the broadcast message is announced by the broadcast page, mobile stations use the BC_ADDR and the BURST_TYPE fields of the broadcast page record to determine whether or not to receive the announced broadcast message. The base station sets the value of the BC_ADDR according to the requirements of the standards related to the BURST_TYPE. There is a predetermined timing relationship between the sending of the broadcast page and the sending of the related broadcast message. This timing relationship allows mobile stations to determine which slot to monitor in order to receive the broadcast message.

To reduce the overhead for sending broadcast pages or broadcast messages, a base station may use periodic broadcast paging (see 3.6.2.4.1.1.2.1.2). When periodic broadcast paging is enabled, broadcast pages or broadcast messages are sent only once during a broadcast paging cycle. Mobile stations that are operating in the slotted mode and are configured to receive broadcast messages monitor the paging channel during the slot in which the broadcast pages or broadcast messages are sent. For the purpose of periodic broadcast paging, system time is divided into broadcast paging cycles, each having a duration of \((B + 3)\) Paging Channel slots, where \(B\) is a power of two. In each broadcast paging cycle, the first paging slot may contain broadcast pages or broadcast messages.
3.6.2.4.1.2 Requirements for Sending Broadcast Messages

3.6.2.4.1.2.1 Broadcast Delivery Options

When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode and monitoring the Paging Channel, the base station shall use one of the two following procedures to transmit a broadcast message.

3.6.2.4.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

The base station may send a broadcast message using this method without regard to whether periodic broadcast paging is enabled or disabled (see 3.6.2.4.1.2.3).

When using this method, the base station shall send the broadcast message in a sufficient number of paging slots such that it may be received by any mobile station that is operating in the slotted mode. For example, the base station may send the broadcast message in \( M \) successive paging slots where \( M \) is the number of slots in a maximum paging cycle as defined in 2.6.2.1.1.3.3.

3.6.2.4.1.2.1.2 Method 2: Periodic Broadcast Paging

If the base station sends a broadcast message using this method, then the base station shall enable periodic broadcast paging (see 3.6.2.4.1.2.3).

To deliver a broadcast message using this method, the base station should perform the following:

- If the number and size of the broadcast messages waiting to be sent are such that the messages can be sent in a single slot, the base station should send the broadcast messages in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- If there is a single broadcast message waiting to be sent, the base station should send the broadcast message beginning in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).
- Otherwise, the base station should first include a broadcast page for each broadcast message to be sent, in a General Page Message that is sent in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send the related broadcast messages in the paging slots specified in 3.6.2.4.1.2.4.

3.6.2.4.1.2.2 Duplicate Broadcast Message Transmission

If the base station sends a broadcast message or a broadcast page and an associated broadcast message more than once when periodic broadcast paging is enabled (see 3.6.2.4.1.2.3), then all repetitions of the broadcast message or the broadcast page and the associated broadcast message should be sent within \( 4 \times (B + 3) \) paging slots of the paging slot in which the broadcast message or broadcast page was first sent. \( B + 3 \) is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

When a base station sends a broadcast message or a broadcast page when periodic broadcast paging is enabled (see 3.6.2.4.1.2.3), and the base station has a second,
different broadcast message to send which contains identical BURST_TYPE and BC_ADDR fields, then the base station shall wait $4 \times (B + 3)$ paging slots after the first slot of the broadcast paging cycle containing the final sending of the first broadcast message or broadcast page before sending the second, different broadcast message or related broadcast page.

3.6.2.4.1.2.3 Periodic Broadcast Paging

The base station uses the BCAST_INDEX field of the *Extended System Parameters Message* to specify the current state of periodic broadcast paging to all mobile stations.

To enable periodic broadcast paging, the base station shall set the BCAST_INDEX field of the *Extended System Parameters Message* to an unsigned 3-bit number in the range 1-7, equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3. The value of the BCAST_INDEX field may exceed the value of the MAX_SLOT_CYCLE_INDEX field sent in the *System Parameters Message*.

To indicate that periodic broadcast paging is either disabled or is not supported by the base station, the base station shall set the BCAST_INDEX field to ‘000’.

3.6.2.4.1.2.4 Broadcast Message Slot Determination

When a base station uses broadcast paging, it shall determine the slot in which to send the corresponding broadcast message using the following procedures:

- The base station shall consider a broadcast page to have been sent in the paging slot in which the *General Page Message* containing the broadcast page began.
- The reference slot is defined as the paging slot in which the broadcast page was sent.
- Let $n$ represent the ordinal number of the broadcast page relative to other broadcast pages that are contained in the same *General Page Message* ($n = 1, 2, 3,...$). The base station shall send the broadcast message announced by broadcast page $n$ in the paging slot that occurs $n \times 3$ paging slots after the reference slot.

3.6.2.4.2 Broadcast Messages Sent on the Broadcast Control Channel

The base station may transmit *Data Burst Messages* directed to broadcast addresses when **NUM_BCCH_BCAST** does not equal ‘000’. When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode, the base station may use enhanced broadcast pages (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with the broadcast procedures specified in 3.6.2.4.2 to announce the presence of broadcast *Data Burst Messages* on the Broadcast Control Channel. The base station should use the rules specified in 3.6.2.4.2.1 for selecting the Broadcast Control Channel slot in which to send a broadcast *Data Burst Message*.

3.6.2.4.2.1 Broadcast Procedures for Slotted Mode

The base station may announce the presence of broadcast *Data Burst Messages* on the Broadcast Control Channel by sending an enhanced broadcast page.
3.6.2.4.2.1.1 General Overview

The base station may transmit *Data Burst Messages* directed to broadcast addresses. Since mobile stations operating in slotted mode do not constantly monitor a Broadcast Control Channel, it is necessary to use special procedures to ensure that mobile stations operating in the slotted mode are able to receive the message. The base station may either send an enhanced broadcast page in many Forward Common Control Channel slots, directing the mobile station to the appropriate Broadcast Control Channel slot, or the base station may also send an enhanced broadcast page in a predetermined slot, called a broadcast slot, on the Forward Common Control Channel, directing the mobile station to a specified Broadcast Control Channel slot or Forward Common Control Channel slot. The Forward Common Control Channel is used for transmission of broadcast messages only when there is not a secondary Broadcast Control Channel allocated, i.e., NUM_BCCH_BCAST equals 0.

If pending transmission of the broadcast message is announced by the enhanced broadcast page, mobile stations use the BC_ADDR and the BURST_TYPE fields of the enhanced broadcast page record to determine whether or not to receive the announced broadcast message. The base station sets the value of the BC_ADDR according to the requirements of the standards related to the BURST_TYPE. The timing relationship between the sending of the enhanced broadcast page and the sending of the related broadcast message is specified in the enhanced broadcast page. This timing relationship allows mobile stations to determine which Broadcast Control Channel slot or Forward Common Control Channel slot to monitor in order to receive the broadcast message.

To reduce the overhead for sending broadcast pages or broadcast messages, a base station may use Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.1.2). When Periodic Enhanced Broadcast Paging is enabled, enhanced broadcast pages are sent only once during a broadcast paging cycle. Mobile stations that are operating in the slotted mode and are configured to receive broadcast messages monitor the Forward Common Control Channel during the broadcast slot in which the enhanced broadcast pages are sent. For the purpose of Periodic Enhanced Broadcast Paging, system time is divided into broadcast paging cycles, each having a duration of \((B + 7)\) Forward Common Control Channel slots, where \(B\) is a power of two. In each broadcast paging cycle, the first Forward Common Control Channel slot may contain enhanced broadcast pages.

3.6.2.4.2.1.2 Requirements for Sending Broadcast Messages

3.6.2.4.2.1.2.1 Broadcast Delivery Options

When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode and monitoring the Forward Common Control Channel/Broadcast Control Channel, the base station shall use one of the two following procedures to transmit a broadcast message.

3.6.2.4.2.1.2.1.1 Method 1: Multi-Slot Enhanced Broadcast Paging

The base station may send a broadcast message using this method without regard to whether Periodic Enhanced Broadcast Paging is enabled or disabled (see 3.6.2.4.2.1.2.3).
When using this method, the base station shall send the enhanced broadcast page in a sufficient number of Forward Common Control Channel slots such that it may be received by any mobile station that is operating in the slotted mode. The enhanced broadcast page then directs mobile stations to a subsequent Broadcast Control Channel slot, or to a subsequent Forward Common Control Channel slot when NUM_BCCH_BCAST equals 0.

The base station shall not send an enhanced broadcast page that directs a mobile station to receive a broadcast message on the Primary Broadcast Control Channel.

The base station shall not send a broadcast message on the Forward Common Control Channel when NUM_BCCH_BCAST is greater than 0.

3.6.2.4.2.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

If the base station sends a broadcast message using this method, then the base station shall enable Periodic Enhanced Broadcast Paging (see 3.6.2.4.2.1.2.3).

To deliver a broadcast message using this method, the base station should perform the following:

- The base station should first include an enhanced broadcast page for each broadcast message to be sent, in a page that is sent on the Forward Common Control Channel in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send the corresponding broadcast messages in the Broadcast Control Channel slots specified in 3.6.2.4.2.1.2.4 - when NUM_BCCH_BCAST is greater than 0.

The base station shall not send an enhanced broadcast page that directs a mobile station to receive a broadcast message on the Primary Broadcast Control Channel.

The base station shall not send a broadcast message on the Forward Common Control Channel when NUM_BCCH_BCAST is greater than 0.

3.6.2.4.2.1.2.2 Duplicate Broadcast Message Transmission

If the base station sends an enhanced broadcast page and an associated broadcast message more than once when Periodic Enhanced Broadcast Paging is enabled (see 3.6.2.4.2.1.2.3), then all repetitions of the enhanced broadcast page should be sent within $4 \times (B + 7)$ slots of the slot in which the enhanced broadcast page was first sent. $(B + 7)$ is the duration of the broadcast paging cycle as defined in 2.6.2.1.1.3.3).

When a base station sends an enhanced broadcast page when Periodic Enhanced Broadcast Paging is enabled (see 3.6.2.4.2.1.2.3), and the base station has a second, different broadcast message to send which contains identical BURST_TYPE and BC_ADDR fields, then the base station shall wait $4 \times (B + 7)$ paging slots after the first slot of the broadcast paging cycle containing the final sending of the first broadcast message or enhanced broadcast page before sending the second, different enhanced broadcast page.

3.6.2.4.2.1.2.3 Periodic Enhanced Broadcast Paging

The base station uses the BCAST_INDEX fields of the MC-RR Parameters Message to specify the current state of Periodic Enhanced Broadcast Paging to all mobile stations.
To enable Periodic Enhanced Broadcast Paging, the base station shall set the BCAST_INDEX field to a non-zero unsigned 3-bit number equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3.

To indicate that Periodic Enhanced Broadcast Paging is either disabled or is not supported by the base station, the base station shall set the BCAST_INDEX field to ‘000’.

3.6.2.4.2.1.2.4 Broadcast Message Slot Determination

When a base station uses broadcast message announcement and transmits the broadcast message on a secondary Broadcast Control Channel, it shall determine the slot in which to send the corresponding broadcast message using the following procedures:

- The base station shall consider an enhanced broadcast page to have been sent in the Forward Common Control Channel slot in which the page message containing the enhanced broadcast page began.
- The reference slot is defined as the Forward Common Control Channel slot in which the enhanced broadcast page was sent.
- The base station shall send a first transmission of the broadcast message announced by the enhanced broadcast page in the Broadcast 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 Broadcast Control Channel slot which begins $40 \text{ ms} \times (1 + \text{REPEAT_TIME_OFFSET})$ later than the Broadcast Control Channel slot in which the first transmission began.

When a base station uses broadcast message announcement and transmits the broadcast message on a Forward Common Control Channel, it shall determine the slot in which to send the corresponding broadcast message using the following procedures:

- The base station shall consider an enhanced broadcast page to have been sent in the Forward Common Control Channel slot in which the page message containing the enhanced broadcast page began.
- The reference slot is defined as the Forward Common Control Channel slot in which the enhanced broadcast page was sent.
- The base station shall send a first transmission of the broadcast message announced by the enhanced broadcast page in the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{TIME_OFFSET})$ later than the beginning of the slot in which the page message containing the enhanced broadcast page began. The base station may send a repetition of the broadcast message announced by the enhanced broadcast page in the Forward Common Control Channel slot which begins $40 \text{ ms} \times (1 + \text{REPEAT_TIME_OFFSET})$ later than the Forward Common Control Channel slot in which the first transmission began.
3.6.2.4.3 Broadcast Messages Sent on the Forward Common Control Channel

The Forward Common Control Channel is used for transmission of broadcast messages only when there is not a secondary Broadcast Control Channel allocated, i.e., NUM_BCCH_BCAST equals ‘000’. The base station may transmit Data Burst Messages directed to broadcast addresses. When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode, the base station may use enhanced broadcast page records (see 3.7.2.3.2.17 and 3.7.2.3.2.36) in accordance with the broadcast procedures specified in 3.6.2.4.3 to announce the presence of broadcast Data Burst Messages on the Forward Common Control Channel. The base station shall send the broadcast messages on the Forward Common Control Channel where the enhanced broadcast page is sent. The base station should use the rules specified in 3.6.2.4.3.1 for selecting the Forward Common Control Channel slot in which to send a broadcast Data Burst Message.

3.6.2.4.3.1 Broadcast Procedures for Slotted Mode

The base station may announce the presence of broadcast Data Burst Messages on the Forward Common Control Channel by sending an enhanced broadcast page.

3.6.2.4.3.1.1 General Overview

The base station may transmit Data Burst Messages directed to broadcast addresses. Since mobile stations operating in slotted mode do not constantly monitor a Forward Common Control Channel, it is necessary to use special procedures to ensure that mobile stations operating in the slotted mode are able to receive the message. The base station may either send a broadcast message in many Forward Common Control Channel slots, or may send a broadcast message in a predetermined Forward Common Control slot. This single transmission of the pending broadcast message may be announced by a preceding “enhanced broadcast page”.

If pending transmission of the broadcast message is announced by the enhanced broadcast page, mobile stations use the BC_ADDR and the BURST_TYPE fields of the enhanced broadcast page record to determine whether or not to receive the announced broadcast message. The base station sets the value of the BC_ADDR according to the requirements of the standards related to the BURST_TYPE. There is a predetermined timing relationship between the sending of the enhanced broadcast page and the sending of the related broadcast message. This timing relationship allows mobile stations to determine which Forward Common Control Channel slot to monitor in order to receive the broadcast message.

To reduce the overhead for sending enhanced broadcast pages or broadcast messages, a base station may use periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.1.2). When periodic enhanced broadcast paging is enabled, enhanced broadcast pages or broadcast messages are sent only once during a broadcast paging cycle. Mobile stations that are operating in the slotted mode and are configured to receive broadcast messages monitor the Forward Common Control Channel during the Forward Common Control Channel slot in which the enhanced broadcast pages or broadcast messages are sent. For the purpose of periodic enhanced broadcast paging, system time is divided into broadcast paging cycles.
each having a duration of \((B + 7)\) Forward Common Control Channel slots, where \(B\) is a power of two. In each broadcast paging cycle, the first Forward Common Control Channel slot may contain enhanced broadcast pages or broadcast messages.

3.6.2.4.3.1.2 Requirements for Sending Broadcast Messages

3.6.2.4.3.1.2.1 Broadcast Delivery Options

When transmitting broadcast messages that are to be received by mobile stations operating in the slotted mode and monitoring the Forward Common Control Channel, the base station shall use one of the two following procedures to transmit a broadcast message.

3.6.2.4.3.1.2.1.1 Method 1: Multi-Slot Broadcast Message Transmission

The base station may send a broadcast message using this method without regard to whether periodic enhanced broadcast paging is enabled or disabled (see 3.6.2.4.3.1.2.3).

When using this method, the base station shall send the broadcast message in a sufficient number of Forward Common Control Channel slots such that it may be received by any mobile station that is operating in the slotted mode. For example, the base station may send the broadcast message in \(M\) successive paging slots where \(M\) is the number of slots in a maximum paging cycle as defined in 2.6.2.1.1.3.3.

3.6.2.4.3.1.2.1.2 Method 2: Periodic Enhanced Broadcast Paging

If the base station sends a broadcast message using this method, then the base station shall enable periodic enhanced broadcast paging (see 3.6.2.4.3.1.2.3).

To deliver a broadcast message using this method, the base station should perform the following:

- If the number and size of the broadcast messages waiting to be sent are such that the messages can be sent in a single slot, the base station should send the broadcast messages in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).

- If there is a single broadcast message waiting to be sent, the base station should send the broadcast message beginning in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3).

- Otherwise, the base station should first include an enhanced broadcast page for each broadcast message to be sent, in a General Page Message or a Universal Page Message that is sent in the first slot of the next broadcast paging cycle (see 2.6.2.1.1.3.3). The base station should then send the related broadcast messages in the Forward Common Control Channel slots specified in 3.6.2.4.3.1.2.4.

3.6.2.4.3.1.2.2 Duplicate Broadcast Message Transmission

If the base station sends a broadcast message or an enhanced broadcast page and an associated broadcast message more than once when periodic enhanced broadcast paging is enabled (see 3.6.2.4.3.1.2.3), then all repetitions of the broadcast message or the enhanced broadcast page and the associated broadcast message should be sent within \(4 \times (B + 7)\)
slots of the Forward Common Control Channel slot in which the broadcast message or
enhanced broadcast page was first sent. \( (B + 7) \) is the duration of the broadcast paging
cycle as defined in 2.6.2.1.3.3).

When a base station sends a broadcast message or an enhanced broadcast page when
periodic enhanced broadcast paging is enabled (see 3.6.2.4.3.1.2.3), and the base station
has a second, different broadcast message to send which contains identical BURST_TYPE
and BC_ADDR fields, then the base station shall wait \( 4 \times (B + 7) \) Forward Common Control
Channel slots after the first slot of the enhanced broadcast paging cycle containing the final
sending of the first broadcast message or enhanced broadcast page before sending the
second, different broadcast message or related enhanced broadcast page.

3.6.2.4.3.1.2.3 Periodic Enhanced Broadcast Paging

The base station uses the BCAST_INDEX field of the MC-RR Parameters Message to specify
the current state of periodic broadcast paging to all mobile stations.

To enable periodic enhanced broadcast paging, the base station shall set the
BCAST_INDEX field of the MC-RR Parameters Message to an unsigned 3-bit number in the
range 1-7, equal to the broadcast slot cycle index as defined in 2.6.2.1.3.3. The value of
the BCAST_INDEX field may exceed the value of the MAX SLOT CYCLE_INDEX field sent
in the System Parameters Message.

To indicate that periodic enhanced broadcast paging is either disabled or is not supported
by the base station, the base station shall set the BCAST_INDEX field to ‘000’.

3.6.2.4.3.1.2.4 Broadcast Message Slot Determination

When a base station uses enhanced broadcast paging, it shall determine the slot in which
to send the corresponding broadcast message using the following procedures:

- The base station shall consider an enhanced broadcast page to have been sent in
  the Forward Common Control Channel slot in which the General Page Message or
  the Universal Page Message containing the enhanced broadcast page began.

- The reference slot is defined as the Forward Common Control Channel slot in
  which the enhanced broadcast page was sent.

- The base station shall send a first transmission of the broadcast message
  announced by the enhanced broadcast page in the Forward Common Control
  Channel slot which begins \( 40 \text{ ms} \times (1 + \text{TIME_OFFSET}) \) later than the beginning of
  the slot in which the page message containing the enhanced broadcast page began.

- The base station may send a repetition of the broadcast message announced by the
  enhanced broadcast page in the Forward Common Control Channel slot which
  begins \( 40 \text{ ms} \times (1 + \text{REPEAT_TIME_OFFSET}) \) later than the Forward Common
  Control Channel slot in which the first transmission began.

3.6.2.5 Quick Paging Channel Processing

The base station may support a Quick Paging Channel. The base station may transmit up
to three Quick Paging Channels on each supported CDMA Channel.
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 to the beginning of the Forward Common Control Channel slot in which the message containing the enhanced broadcast page begins. At all other times, the base station shall set all broadcast indicators for a Quick Paging Channel broadcast slot to “OFF”.

When the base station sends a broadcast page using Periodic Broadcast Paging (see 3.6.2.4.1.1.2.1.2), the base station should set all broadcast indicators to “ON” for the Quick Paging Channel broadcast slot which begins 100 ms prior to the beginning of the Paging Channel slot in which the message containing the broadcast page begins. At all other times, the base station shall set all broadcast indicators for a Quick Paging Channel broadcast slot to “OFF”.

The base station shall set all reserved indicators to “OFF”.

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3.6.2.5.1 Quick Paging Channel Determination

To determine the mobile station’s assigned Quick Paging Channel, the base station shall use the hash function specified in 2.6.7.1 with the following inputs:

- IMSI_S based on the IMSI with which the mobile station registered (see 2.3.1)
- Number of Quick Paging Channels which the base station transmits on the mobile station’s assigned CDMA Channel.

3.6.2.5.2 Quick Paging Channel Slot Determination

The mobile station’s assigned Quick Paging Channel slots are those slots for which

\[
\left\lfloor \frac{(t+5)/4}{PGSLOT} \right\rfloor \mod (16 \times T) = 0,
\]

where \(t\) is the System Time in \(20\text{ms}\) frames, PGSLOT is selected in the range 0 to 2047 by using the hash function specified in 2.6.7.1, and \(T\) is the slot cycle length in units of 1.28 seconds such that

\[T = 2^i,\]

and \(i\) is the slot cycle index which can take the values -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, and 7.

3.6.2.5.3 Paging Indicator Position Determination

To determine the mobile station’s assigned paging indicators, the base station shall use the same formula as used by the mobile station (see 2.6.2.1.2.2).

3.6.2.5.4 Configuration Change Indicator Position Determination

Configuration change indicators are transmitted on the first Quick Paging Channel.

If the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the bit positions of the first pair of configuration change indicators in a Quick Paging Channel slot shall be the last two bits in the first 40 ms half of the Quick Paging Channel slot. The bit positions of the second pair of configuration change indicators in a Quick Paging Channel slot shall be the last two bits in the Quick Paging Channel slot.

If the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the bit positions of the first four configuration change indicators in a Quick Paging Channel slot shall be the last four bits in the first 40 ms half of the Quick Paging Channel slot. The bit position of the second four configuration change indicators in a Quick Paging Channel slot shall be the last four bits in the Quick Paging Channel slot.

3.6.2.5.5 Broadcast Indicator Position Determination

Broadcast indicators are transmitted on the first Quick Paging Channel.

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the broadcast indicator positions are described as follows:

- The two Quick Paging Channel bit positions prior to the last two bits in the first 40 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The two
Quick Paging Channel bit positions prior to the last two bits in a Quick Paging Channel broadcast slot are also broadcast indicators.

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the broadcast indicator positions are described as follows:

- The four Quick Paging Channel bit positions prior to the last four bits in the first 40 ms half of a Quick Paging Channel broadcast slot are broadcast indicators. The four Quick Paging Channel bit positions prior to the last four bits in a Quick Paging Channel broadcast slot are also broadcast indicators.

### 3.6.2.5.6 Reserved Indicator Positions

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the reserved indicator positions are described as follows:

- The two Quick Paging Channel bit positions prior to the last two bits in the first 40 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are reserved. The two Quick Paging Channel bit positions prior to the last two bits in a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are also reserved.

On the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the reserved indicator positions are described as follows:

- The four Quick Paging Channel bit positions prior to the last four bits in the first 40 ms half of a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are reserved. The four Quick Paging Channel bit positions prior to the last four bits in a Quick Paging Channel slot that is not a Quick Paging Channel Broadcast slot are also reserved.

On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging Channel data rate is 2400 bps (indicator rate is 4800 bps), the reserved indicator positions are described as follows:

- The last four Quick Paging Channel bit positions in the first 40 ms half of a Quick Paging Channel slot are reserved. The last four Quick Paging Channel bit positions in a Quick Paging Channel slot are also reserved.

On Quick Paging Channels other than the first Quick Paging Channel, if the Quick Paging Channel data rate is 4800 bps (indicator rate is 9600 bps), the reserved indicator positions are described as follows:

- The last eight Quick Paging Channel bit positions in the first 40 ms half of a Quick Paging Channel slot are reserved. The last eight Quick Paging Channel bit positions in a Quick Paging Channel slot are also reserved.

### 3.6.3 Access Channel and Enhanced Access Channel Processing

During *Access Channel Processing*, the base station monitors the Access Channel to receive messages which the mobile station sends while the mobile station is in the *System Access State*. 
Each Access Channel is associated with a Paging Channel. Up to 32 Access Channels can be associated with a Paging Channel. The number of Access Channels associated with a particular Paging Channel is specified in the *Access Parameters Message* sent on that Paging Channel.

If the base station supports Access Channels, the base station shall continually monitor all Access Channels associated with each Paging Channel that the base station transmits.

If the base station supports Enhanced Access Channels, then during *Enhanced Access Channel Processing*, the base station monitors the Enhanced Access Channel to receive messages which the mobile station sends while the mobile station is in the *System Access State*.

Each Enhanced Access Channel is associated with a Forward Common Control Channel. Up to 32 Enhanced Access Channels can be associated with a Forward Common Control Channel. The number of Enhanced Access Channels associated with a particular Forward Common Control Channel is specified in the *Enhanced Access Parameters Message* sent on the Primary Broadcast Control Channel.

If the base station supports Enhanced Access Channel, the base station shall continually monitor all Enhanced Access Channels associated with each Forward Common Control Channel that the base station transmits.

3.6.3.1 Reserved

3.6.3.2 Reserved

3.6.3.3 Response to Page Response Message and Reconnect Message

If the base station receives a *Page Response Message* or a *Reconnect Message* with the ORIG_IND field set to '0', the base station should send a *Channel Assignment Message* (if in response to a *Page Response Message*), an *Extended Channel Assignment Message*, or a *Release Order*. The base station may also start authentication procedures (see 2.3.12), start TMSI assignment procedures (see 2.3.15), send a *Data Burst Message*, or request status information records with the *Status Request Message*. If the base station is operating with the mobile station in Band Class 0, the base station may also request the status information records with the *Status Request Order*.

If the base station sends the *Extended Channel Assignment Message*, the base station may include more than one pilot to be in the Active Set.

If the base station sends a *Channel Assignment Message* or an *Extended Channel Assignment Message*, the base station shall perform the following:

- If the message directs the mobile station to a CDMA Traffic Channel, the base station shall begin *Traffic Channel Processing* (see 3.6.4) for the mobile station.
- If the message directs the mobile station to an 800 MHz wide analog voice channel, the base station shall follow the procedure described in [6].
- If the message directs the mobile station to an 800 MHz narrow analog voice channel, the base station shall follow the procedure described in [22].
• Layer 3 shall send a mobile station inactive on common channel indication to Layer 2 (see [4]).

The base station may instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) by setting the GRANTED_MODE field of the Extended Channel Assignment Message to ‘11’.

3.6.3.4 Response to Orders

No requirements.

3.6.3.5 Response to Origination Message and Reconnect Message

If the base station receives an Origination Message or a Reconnect Message with the ORIG_IND field set to ‘1’, the base station should send a Channel Assignment Message (if in response to an Origination Message), an Extended Channel Assignment Message, an Intercept Order, a Reorder Order, a Release Order, a Retry Order, a PACA Message, a Service Redirection Message or a Service Status Order. The base station may also commence authentication procedures (see 2.3.12) or TMSI assignment procedures (see 2.3.15). The base station may also request status information records with the Status Request Message. If the base station is operating with the mobile station in Band Class 0, the base station may also request status information records with the Status Request Order.

If the base station sends the Extended Channel Assignment Message, the base station may include more than one pilot to be in the Active Set.

If the base station sends a Channel Assignment Message or an Extended Channel Assignment Message, the base station shall perform the following:

• If the message directs the mobile station to a CDMA Traffic Channel, the base station shall begin Traffic Channel Processing (see 3.6.4) for the mobile station.

• If the message directs the mobile station to an 800 MHz wide analog voice channel, the base station shall follow the procedure described in [2].

• If the message directs the mobile station to an 800 MHz narrow analog voice channel, the base station shall follow the procedure described in [22].

• The base station shall raise a mobile station inactive on common channel indication for the mobile station.

If the base station sends a Channel Assignment Message, the base station shall not set RESPOND equal to ‘0’ when ASSIGN_MODE = ‘001’, ASSIGN_MODE = ‘010’, or ASSIGN_MODE = ‘101’. If the base station sends an Extended Channel Assignment Message, the base station shall not set RESPOND equal to ‘0’ when ASSIGN_MODE = ‘001’ or ASSIGN_MODE = ‘010’.

The base station may instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record) by setting the GRANTED_MODE field of the Extended Channel Assignment Message to ‘11’.

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If the base station receives an *Origination Message* and the GLOBAL_EMERGENCY_CALL indicator is set to ‘1’ and the service associated with this origination is a voice service, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If the base station receives an *Origination Message* and the GLOBAL_EMERGENCY_CALL indicator is set to ‘1’ and the service associated with this origination is not a voice service, the base station may recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.

### 3.6.3.6 Response to Registration Message

If the base station receives a *Registration Message*, the base station may send a *Registration Accepted Order*, a *Registration Rejected Order*, or a *Service Redirection Message*. The base station may also start authentication procedures (see 2.3.12), may start TMSI assignment procedures (see 2.3.15), or may request status information records with the *Status Request Message*. If the base station is operating with the mobile station in Band Class 0, the base station may also request the status information records with a *Status Request Order*.

If the *Registration Message* specifies a power-down registration, Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

When responding to a *Registration Message* that requests extended encryption, if the base station decides to turn on extended encryption and the CMEAKEY is available at the base station, the base station shall send a *Registration Accepted Order* with encryption information. Before the CMEAKEY is available, the base station may send a *Registration Accepted Order* without any encryption information. When the CMEAKEY becomes available, if the base station decides to turn on extended encryption, the base station shall send a *Registration Accepted Order* with encryption information.

### 3.6.3.7 Response to Data Burst Message

If the base station receives a *Data Burst Message* with BURST_TYPE indicating Short Data Burst (see [30]), the base station may send a *Retry Order*.

### 3.6.3.8 Reserved

### 3.6.3.9 Reserved

### 3.6.3.10 Service Redirection

If the base station sends a *Service Redirection Message* to the mobile station, Layer 3 shall send a *mobile station inactive on common channel* indication to Layer 2 (see [4]).

### 3.6.4 Traffic Channel Processing

During *Traffic Channel Processing*, the base station uses the Forward and Reverse Traffic Channels to communicate with the mobile station while the mobile station is in the *Mobile Station Control on the Traffic Channel State*.

Traffic Channel processing consists of the following substates:
• **Traffic Channel Initialization Substate** - In this substate, the base station begins transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic Channel.

• **Traffic Channel Substate** - In this substate, the base station exchanges Traffic Channel frames with the mobile station in accordance with the current service configuration. While in this substate, one or more Call Control instances can be activated (see 3.6.8).

• **Release Substate** - In this substate, the base station disconnects the calls and the physical channels.

3.6.4.1 Special Functions and Actions

The base station performs the following special functions and actions in one or more of the Traffic Channel processing substates:

3.6.4.1.1 Forward Traffic Channel Power Control

Forward Traffic Channel Power Control procedures do not apply to Forward Packet Data Channel.

When the base station enables Forward Traffic Channel power control, the mobile station reports frame error rate statistics to the base station using the *Power Measurement Report Message*.

The base station may enable Forward Traffic Channel power control using the *System Parameters Message* sent on the Paging Channel and the *Power Control Parameters Message* sent on the Forward Traffic Channel. The base station may enable Forward Traffic Channel power control using the *MC-RR Parameters Message* sent on the Primary Broadcast Control Channel and the *Power Control Parameters Message* sent on the Forward Traffic Channel. The base station may enable periodic reporting which causes the mobile station to report frame error rate statistics at specified intervals. The base station may also enable threshold reporting which causes the mobile station to report frame error rate statistics when the frame error rate reaches a specified threshold.\(^2\)

The base station may use the reported frame error rate statistics to adjust the transmit power of the Forward Traffic Channel.

3.6.4.1.2 Service Configuration and Negotiation

During Traffic Channel operation, the mobile station and base station communicate through the exchange of Forward and Reverse Traffic Channel Configurations. The mobile station and base station use a common set of attributes for building and interpreting Traffic Channel frames. This set of attributes, referred to as a service configuration, consists of both negotiable and non-negotiable parameters.

\(^2\)In this section the term base station may imply multiple cells or sectors.
The set of negotiable service configuration parameters consists of the following:

1. **Forward and Reverse Multiplex Options**: These control the way in which the information bits of the Forward and Reverse Traffic Channel frames, respectively, are divided into various types of traffic, such as signaling traffic, primary traffic and secondary traffic. A multiplex option together with a radio configuration specifies the frame structures and transmission rates (see [3]). The Multiplex Options which support Supplemental Code Channel transmission and Supplemental Channel transmission on the Forward and Reverse Traffic Channels are included in [3]. Invocation of Supplemental Code Channel operation on the Forward or Reverse Traffic Channels occurs by transmission of the *Supplemental Channel Request Message*, the *Supplemental Channel Assignment Message*, and the *General Handoff Direction Message*. The Multiplex Options which support Supplemental Code Channel transmission and Supplemental Channel transmission on the Forward and Reverse Traffic Channels are included in [3]. The multiplex option used for the Forward Traffic Channel can be the same as that used for the Reverse Traffic Channel, or it can be different.

2. **Forward and Reverse Traffic Channel Configurations**: These include the radio configurations and other necessary attributes for the Forward and Reverse Traffic Channels. The Traffic Channel Configuration used can be different for the Forward and Reverse Traffic Channels or it can be the same.

3. **Forward and Reverse Traffic Channel Transmission Rates**: These are the transmission rates actually used for the Forward and Reverse Traffic Channels, respectively. The transmission rates for the Forward Traffic Channel can include all of the transmission rates supported by the radio configuration associated with the Forward Traffic Channel multiplex option, or a subset of the supported rates. Similarly, the transmission rates used for the Reverse Traffic Channel can include all rates supported by the radio configuration associated with the Reverse Traffic Channel multiplex option, or a subset of the supported rates. The transmission rates used for the Forward Traffic Channel can be the same as those used for the Reverse Traffic Channel, or they can be different.

4. **Service Option Connections**: These are the services in use on the Traffic Channel. There can be multiple service option connections. It is also possible that there is no service option connection, in which case the base station uses the Forward Traffic Channel as follows:
   - Sends signaling traffic and null traffic on the Forward Fundamental Channel.
   - Sends signaling traffic on the Forward Dedicated Control Channel.
   - If F-CPCCH is assigned, sends power control bits on the F-CPCCH; otherwise, sends power control bits on the Forward Fundamental Channel if FPC_PRI_CHAN is set to ‘0’; sends power control bits on the Forward Dedicated Control Channel if FPC_PRI_CHAN is set to ‘1’.
Associated with each service option connection are a service option, a Forward
Traffic Channel traffic type, a Reverse Traffic Channel traffic type, and a service
option connection reference. The associated service option formally defines the
way in which traffic bits are processed by the mobile station and base station. The
associated Forward and Reverse Traffic Channel traffic types specify the types of
traffic used to support the service option. A service option can require the use of a
particular type of traffic, such as primary or secondary, or it can accept more than
one traffic type. A service option can be one-way, in which case it can be
supported on the Forward Traffic Channel only or the Reverse Traffic Channel
only. Alternatively, a service option can be two-way, in which case it can be
supported on the Forward and Reverse Traffic Channels simultaneously.

Connected service options can also invoke operation on Supplemental Code
Channels in either one or both of the Forward and Reverse Traffic Channels by
negotiating a multiplex option that supports operation on Supplemental Code
Channels (see [3] for Multiplex Options applicable to Supplemental Code
Channels), and by using the appropriate Supplemental Code Channel related
messages (i.e., the Supplemental Channel Request Message, the Supplemental
Channel Assignment Message, and the General Handoff Direction Message). After
Supplemental Code Channels have been assigned by the base station, the
connected service option can transmit primary and/or secondary traffic on
Supplemental Code Channels. Connected service options can also invoke
operation on Supplemental Channels in either one or both of the Forward and
Reverse Traffic Channels by negotiating a multiplex option that supports operation
on Supplemental Channels (see [3] for Multiplex Options applicable to
Supplemental Channels) and by using the appropriate Supplemental Channel
related messages (i.e., the Supplemental Channel Request Message, the Universal
Handoff Direction Message, the Supplemental Channel Request Mini Message, the
Extended Supplemental Channel Assignment Message, the Forward Supplemental
Channel Assignment Mini Message, and the Reverse Supplemental Channel
Assignment Mini Message). After Supplemental Channels have been assigned by
the base station, the connected service option can transmit primary and/or
secondary traffic on Supplemental Channels. The associated service option
connection reference provides a means for uniquely identifying the service option
connection. The reference serves to resolve ambiguity when there are multiple
service option connections in use.

The non-negotiable service configuration parameters are sent from the base station to the
mobile stations only, and consist of the following:

1. Reverse Pilot Gating Rate: This controls the way in which the reverse pilot is gated
on the Reverse Pilot Channel. The base station specifies the reverse pilot gating rate
to be used in the Service Connect Message, the General Handoff Direction Message,
and the Universal Handoff Direction Message.
2. **Forward and Reverse Power Control Parameters**: These consist of forward power control operation mode, outer loop power control parameters (e.g. target frame error rate, minimum $E_b/N_t$ setpoint, and maximum $E_b/N_t$ setpoint) for the Forward Fundamental Channel and Forward Dedicated Control Channel, and Power Control Subchannel indicator which indicates where the mobile station is to perform the primary inner loop estimation and the base station is to multiplex the Power Control Subchannel.

3. **Logical to Physical Mapping**: This is a table of logical to physical mapping entries, consisting of service reference identifier, logical resource, physical resource, forward flag, reverse flag, and priority.

4. **Partition Table**: The base station may include this table to specify the number of bits allocated for each service in the Fundamental Channel or Dedicated Control Channel.

5. **SCH LTU Size Table**: The base station may include this table to specify the number of bits per supplemental channel LTU.

6. Information related to Variable Rate feature (the capability to support rate determination) on Forward and Reverse Supplemental Channels

7. Information related to Flexible Rate feature (the capability to support non-listed rates) on Forward and Reverse Fundamental Channel, Dedicated Control Channel, and Supplemental Channels

The mobile station can request a default service configuration associated with a service option at call origination, and can request new service configurations during Traffic Channel operation. A requested service configuration can differ greatly from its predecessor or it can be very similar. For example, the mobile station can request a service configuration in which all of the service option connections are different from those of the existing configuration; or the mobile station can request a service configuration in which the existing service option connections are maintained with only minor changes, such as a different set of transmission rates or a different mapping of service option connections to Forward and Reverse Traffic Channel traffic types.

If the mobile station requests a service configuration that is acceptable to the base station, they both begin using the new service configuration. If the mobile station requests a service configuration that is not acceptable to the base station, the base station can reject the requested service configuration or propose an alternative service configuration. If the base station proposes an alternative service configuration, the mobile station can accept or reject the base station’s proposed service configuration, or propose yet another service configuration. This process, called service negotiation, ends when the mobile station and base station find a mutually acceptable service configuration, or when either the mobile station or base station rejects a service configuration proposed by the other.

It is also possible for the base station to request a default service configuration, associated with a service option, when paging the mobile station and to request new service configurations during Traffic Channel operation. The service negotiation proceeds as described above, but with the roles of the mobile station and base station reversed.
For CDMA mode operation in Band Class 0, the mobile station and base station can also
use an alternative method for negotiating a service configuration known as service option
negotiation. Service option negotiation is similar to service negotiation, but offers less
flexibility for specifying the attributes of the service configuration. During service option
negotiation, the base station or mobile station specifies only which service option is to be
used. There is no facility for explicitly specifying the multiplex options, traffic types or
transmission rates to be used on the Forward and Reverse Traffic Channels in conjunction
with the service option. Instead, implicit service configuration attributes are assumed. In
particular, the Forward and Reverse Multiplex Options and transmission rates are
assumed to be the default multiplex options and transmission rates associated with the
requested service option, and the traffic type for both the Forward and Reverse Traffic
Channels is assumed to be primary traffic. Furthermore, a service configuration
established using service option negotiation is restricted to having only a single service
option connection.

At mobile station origination and termination, the type of negotiation to use, either service
negotiation or service option negotiation, is indicated in the Channel Assignment Message.
Service negotiation is always used with the Extended Channel Assignment Message. If a
CDMA-to-CDMA hard handoff occurs during the call, the type of negotiation to use
following the handoff is indicated in the Extended Handoff Direction Message, General
Handoff Direction Message, or Universal Handoff Direction Message.

For CDMA mode operation in band classes other than Band Class 0, only service
negotiation is to be used.

The following messages are used to support service negotiation:

1. **Service Request Message**: The mobile station can use this message to propose a
   service configuration, or to accept or reject a service configuration proposed in a
   Service Response Message. The base station can use this message to propose a
   service configuration, or to reject a service configuration proposed in a Service
   Response Message.

2. **Service Response Message**: The mobile station can use this message to accept or
   reject a service configuration proposed in a Service Request Message, or to propose
   an alternative service configuration. The base station can use this message to
   reject a service configuration proposed in a Service Request Message, or to propose
   an alternative service configuration.

3. **Service Connect Message**: The base station can use this message to accept a
   service configuration proposed in a Service Request Message or Service Response
   Message, and instruct the mobile station to begin using the service configuration.
   The base station may use this message to instruct the mobile station to use the
   stored service configuration (that is, both the Service Configuration information
   record and the Non-negotiable Service Configuration information record) based on
   the value of the SYNC_ID that the mobile station has reported in the Origination
   Message or Page Response Message. If P_REV_IN_USE is greater than or equal to
   11, the base station can use this message to instruct the mobile station to use the
   stored service configuration (that is, both the Service Configuration information
record and the Non-negotiable Service Configuration information record) based on the value of the SYNC_ID that the base station has included in this message.

4. **Service Connect Completion Message:** The mobile station can use this message to acknowledge the transition to a new service configuration.

5. **Service Option Control Message:** The mobile station and base station can use this message to invoke service option specific functions.

6. **Extended Channel Assignment Message:** The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an *Origination Message* or a *Page Response Message*.

The following messages are used to support service option negotiation:

1. **Service Option Request Order:** The mobile station and base station can use this message either to request a service option or suggest an alternative service option.

2. **Service Option Response Order:** The mobile station and base station can use this message to accept or reject a service option request.

3. **Service Option Control Order:** The mobile station and base station can use this message to invoke service option specific functions.

The following messages are used to support both service negotiation and service option negotiation:

1. **Origination Message:** The mobile station can use this message to propose an initial service configuration.

2. **Channel Assignment Message:** The base station can use this message to accept or reject the initial service configuration proposed by the mobile station in an *Origination Message* or a *Page Response Message*, and to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used during the call.

3. **Extended Handoff Direction Message:** The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff.

4. **General Handoff Direction Message:** The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a *Service Request Message* or *Service Response Message*. The base station can also use this message to instruct the mobile station to begin using the service configuration.

5. **General Page Message** or **Universal Page Message:** The base station can use a mobile-station-addressed page in a *General Page Message* or *Universal Page Message* to propose an initial service configuration.

6. **Page Response Message:** The mobile station can use this message to accept or reject the initial service configuration proposed by the base station in a mobile-station-addressed page, or to propose an alternative initial service configuration.
7. **Status Request Message**: The base station can use this message to request service capability information from the mobile station.

8. **Status Response Message**: The mobile station can use this message to return the service capability information requested by the base station in a Status Request Message.

9. **Extended Status Response Message**: The mobile station can use this message to return the service capability information requested by the base station in a Status Request Message.

10. **Universal Handoff Direction Message**: The base station can use this message to indicate which type of negotiation, either service negotiation or service option negotiation, is to be used following a CDMA-to-CDMA hard handoff. The base station can use this message to accept a service configuration proposed in a Service Request Message or Service Response Message. The base station can also use this message to instruct the mobile station to begin using the service configuration.

3.6.4.1.2.1 Use of Variables

3.6.4.1.2.1.1 Maintaining the Service Request Sequence Number

The base station shall maintain a service request sequence number variable, SERV_REQ_NUM, for use with service negotiation. Upon beginning Traffic Channel processing, the base station shall set SERV_REQ_NUM to 0. Each time the base station sends a new Service Request Message, it shall set the SERV_REQ_SEQ field of the message to the current value of SERV_REQ_NUM and shall then set SERV_REQ_NUM equal to (SERV_REQ_NUM + 1) modulo 8.

3.6.4.1.2.1.2 Maintaining the Service Connect Sequence Number

The base station shall maintain a service connect sequence number variable, SERV_CON_NUM, for use with service negotiation. Upon beginning Traffic Channel processing, the base station shall set SERV_CON_NUM to 0. Each time the base station sends a new Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record, it shall set the SERV_CON_SEQ field of the message to the current value of SERV_CON_NUM and shall then set SERV_CON_NUM equal to (SERV_CON_NUM + 1) modulo 8.

3.6.4.1.2.1.3 Assigning Service Option Connection References

When the base station assigns a service option connection reference for use in identifying a new service option connection during service negotiation, the base station shall use the following criteria:

1. The base station shall not assign a reference equal to '00000000'; and
2. The base station shall not assign a reference that is associated with a service option connection of the current service configuration; and
3. If there was a previous service configuration, the base station shall not assign a reference that was associated with a service option connection of the previous service configuration.

3.6.4.1.2.1.4 Maintaining the Service Negotiation Indicator Variable

The base station shall maintain a service negotiation indicator variable, SERV_NEG, to indicate which type of negotiation to use, either service negotiation or service option negotiation. The base station shall set SERV_NEG to enabled whenever service negotiation is to be used, and shall set SERV_NEG to disabled whenever service option negotiation is to be used. The precise rules for setting SERV_NEG are specified in 3.6.4.2 and 3.6.6.2.2.2. For CDMA operation in band classes other than Band Class 0, the base station shall set SERV_NEG to enabled.

3.6.4.1.2.1.5 Maintaining the Service Option Request Number

The base station shall maintain a service option request number variable, SO_REQ, for use with service option negotiation. The base station shall set SO_REQ to a special value, NULL, if the base station does not have an outstanding service option request. If the base station has an outstanding service option request, the base station shall set SO_REQ to the number of the service option associated with the outstanding request.

3.6.4.1.2.2 Service Subfunctions

As illustrated in Figure 3.6.4.1.2.2-1, the base station supports service configuration and negotiation by performing the following set of service subfunctions.

- **Normal Service Subfunction** - While this subfunction is active, the base station processes service configuration requests from the mobile station and sends service configuration requests to the mobile station.

- **Waiting for Service Request Message Subfunction** - While this subfunction is active, the base station waits to receive a Service Request Message.

- **Waiting for Service Response Message Subfunction** - While this subfunction is active, the base station waits to receive a Service Response Message.

- **Waiting for Service Action Time Subfunction** - While this subfunction is active, the base station waits for the action time associated with a new service configuration.

- **Waiting for Service Connect Completion Message Subfunction** - While this subfunction is active, the base station waits to receive a Service Connect Completion Message, a Handoff Completion Message, or an Extended Handoff Completion Message.

- **SO Negotiation Subfunction** - While this subfunction is active and the base station is operating in Band Class 0, the base station supports service option negotiation with the mobile station.

The **SO Negotiation Subfunction** supports service option negotiation. All of the other service subfunctions support service negotiation.
At any given time during Traffic Channel processing, only one of the service subfunctions is active. For example, when the base station first begins Traffic Channel processing, either the Normal Service Subfunction or the SO Negotiation Subfunction is active. Each of the other service subfunctions may become active in response to various events which occur during the Traffic Channel substates. Typically, the base station processes events pertaining to service configuration and negotiation in accordance with the requirements for the active service subfunction. However, some Traffic Channel substates do not allow for the processing of certain events pertaining to service configuration and negotiation, or specify requirements for processing such events which supersede the requirements of the active service subfunction.
Figure 3.6.4.1.2.2-1. Base Station Service Subfunctions

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.
3.6.4.1.2.2.1 Normal Service Subfunction

While this subfunction is active, the base station processes service configuration requests from the mobile station and sends service configuration requests to the mobile station.

While the Normal Service Subfunction is active, the base station shall perform the following:

- The base station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The base station shall discard any Reverse Traffic Channel frame which has a format that is not supported by the base station. The base station may discard any type of Reverse Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

- To initiate service negotiation for a new service configuration, the base station shall send a Service Request Message to propose the new service configuration and shall activate the Waiting for Service Response Message Subfunction.

- For any service option connection that is part of the current service configuration, the base station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.

- The base station may send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record. If the base station sends this message, the base station shall activate the Waiting for Service Action Time Subfunction.

- If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the SO Negotiation Subfunction.

- If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:

  1. Service Connect Completion Message

  2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.

  3. Service Request Message: The base station shall process the message as follows:

     • If the purpose of the message is to propose a service configuration, the base station shall process the message as follows:
If the base station accepts the proposed service configuration, the base station shall send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction.

- If the base station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the base station shall send a Service Response Message to reject the proposed service configuration.

If the base station does not accept the proposed service configuration and has an alternative service configuration to propose, the base station shall perform one of the following actions:

  o Send a Service Response Message to propose the alternative service configuration and shall activate the Waiting for Service Request Message Subfunction, or
  o Send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction.

4. Service Response Message

  • If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:
    1. Service Option Request Order
    2. Service Option Response Order
    3. Service Option Control Order

3.6.4.1.2.2.2 Waiting for Service Request Message Subfunction

While this subfunction is active, the base station waits to receive a Service Request Message.

While the Waiting for Service Request Message Subfunction is active, the base station shall perform the following:

  • If the base station does not receive a Service Request Message, the base station shall activate the Normal Service Subfunction.
• The base station shall process Forward and Reverse Traffic Channel frames in
  accordance with the current service configuration. The base station shall discard
  any Reverse Traffic Channel frame which has a format that is not supported by the
  base station. The base station may discard any type of Reverse Traffic Channel
  traffic that is not signaling traffic and is not part of the current service
  configuration.

• For any service option connection that is part of the current service configuration,
  the base station may send a Service Option Control Message to invoke a service
  option specific function in accordance with the requirements for the associated
  service option.

• If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
  3.6.6.2.2.11), the base station shall activate the SO Negotiation Subfunction.

• If the base station receives one of the following service negotiation messages, the
  base station shall process the message according to the specified requirements, if
  any:

  1. Service Connect Completion Message

  2. Service Option Control Message: If the service option connection specified by the
     message is part of the current service configuration, and the service option
     specified by the message is the same as the service option associated with the
     service option connection, the base station shall process the message in
     accordance with the requirements for the service option.

  3. Service Request Message: The base station shall process the message as follows:
     • If the purpose of the message is to accept a proposed service configuration,
       the base station shall perform one of the following actions:
         – The base station shall send a Service Connect Message, General Handoff
           Direction Message, or Universal Handoff Direction Message and shall
           activate the Waiting for Service Action Time Subfunction.
         – The base station shall send a Service Request Message to propose an
           alternative service configuration and shall activate the Waiting for Service
           Response Message Subfunction.
     • If the purpose of the message is to reject a proposed service configuration,
       the base station shall activate the Normal Service Subfunction.
     • If the purpose of the message is to propose a service configuration, the base
       station shall process the message as follows:
       – If the base station accepts the proposed service configuration, the base
         station shall send a Service Connect Message, a General Handoff Direction
         Message, or a Universal Handoff Direction Message containing a service
         configuration record and shall activate the Waiting for Service Action Time
         Subfunction.
– If the base station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the base station shall send a Service Response Message to reject the proposed service configuration. The base station shall activate the Normal Service Subfunction.

– If the base station does not accept the proposed service configuration and has an alternative service configuration to propose, the base station shall perform one of the following actions:

  o Send a Service Response Message to propose the alternative service configuration, or

  o Send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction.

4. Service Response Message

• If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:

  1. Service Option Request Order

  2. Service Option Response Order

  3. Service Option Control Order

3.6.4.1.2.2.3 Waiting for Service Response Message Subfunction

While this subfunction is active, the base station waits to receive a Service Response Message.

While the Waiting for Service Response Message Subfunction is active, the base station shall perform the following:

• If the base station does not receive a Service Response Message, the base station shall activate the Normal Service Subfunction.

• The base station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The base station shall discard any Reverse Traffic Channel frame which has a format that is not supported by the base station. The base station may discard any type of Reverse Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

• For any service option connection that is part of the current service configuration, the base station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the associated service option.
• If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the SO Negotiation Subfunction.

• If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:

1. Service Connect Completion Message

2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.

3. Service Request Message: The base station should not process the Layer 3 fields of the message.

4. Service Response Message: The base station shall process the message as follows:

   • If the service request sequence number (SERV_REQ_SEQ) from the message does not match the sequence number of the Service Request Message for which the base station is expecting a response, the base station shall not process the Layer 3 fields of the message.

   • If the purpose of the message is to accept a proposed service configuration, the base station shall perform one of the following actions:

     – The base station shall send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction. Or

     – The base station shall send a Service Request Message to propose an alternative service configuration.

   • If the purpose of the message is to reject a proposed service configuration, the base station shall activate the Normal Service Subfunction.

   • If the purpose of the message is to propose a service configuration, the base station shall process the message as follows:

     – If the base station accepts the proposed service configuration, the base station shall send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction.
– If the base station does not accept the proposed service configuration and does not have an alternative service configuration to propose, the base station shall send a Service Request Message to reject the proposed service configuration. The base station shall activate the Normal Service Subfunction.

– If the base station does not accept the proposed service configuration and has an alternative service configuration to propose, the base station shall perform one of the following actions:
  o Send a Service Request Message to propose the alternative service configuration, or
  o Send a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message containing a service configuration record and shall activate the Waiting for Service Action Time Subfunction

• If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. Service Option Request Order
  2. Service Option Response Order
  3. Service Option Control Order

3.6.4.1.2.2.4 Waiting for Service Action Time Subfunction
While this subfunction is active, the base station waits for the action time associated with a new service configuration.

While the Waiting for Service Action Time Subfunction is active, the base station shall perform the following:

• Prior to the action time associated with the Service Connect Message, a General Handoff Direction Message, or Universal Handoff Direction Message containing a service configuration record, the base station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The base station shall discard any Reverse Traffic Channel frame which has a format that is not supported by the base station. The base station may discard any type of Reverse Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.
• At the action time associated with the Service Connect Message, General Handoff Direction Message, or Universal Handoff Direction Message containing a service configuration record, the base station shall begin to use the service configuration specified by the Service Connect Message, the General Handoff Direction Message, or the Universal Handoff Direction Message containing a service configuration record, as the current service configuration and shall begin to process Forward and Reverse Traffic Channel frames accordingly. The base station shall activate the Waiting for Service Connect Completion Message Subfunction.

• If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the SO Negotiation Subfunction.

• If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. Service Connect Completion Message
  2. Service Option Control Message: If the service option connection specified by the message is part of the current or pending service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.
  3. Service Request Message
  4. Service Response Message

• If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. Service Option Request Order
  2. Service Option Response Order
  3. Service Option Control Order

3.6.4.1.2.2.5 Waiting for Service Connect Completion Message Subfunction

While this subfunction is active, the base station waits to receive a Service Connect Completion Message, a Handoff Completion Message, or an Extended Handoff Completion Message.

While the Waiting for Service Connect Completion Message Subfunction is active, the base station shall perform the following:

• If the base station has sent a Service Connect Message and does not receive a Service Connect Completion Message, or if the base station has sent a General Handoff Direction Message or a Universal Handoff Direction Message containing a Service Configuration record and does not receive a Handoff Completion Message, or an Extended Handoff Completion Message, the base station shall activate the Normal Service Subfunction.
• The base station shall process Forward and Reverse Traffic Channel frames in accordance with the current service configuration. The base station shall discard any Reverse Traffic Channel frame which has a format that is not supported by the base station. The base station may discard any type of Reverse Traffic Channel traffic that is not signaling traffic and is not part of the current service configuration.

• The base station shall not initiate service negotiation for a new service configuration.

• If SERV_NEG changes from enabled to disabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and 3.6.6.2.2.11), the base station shall activate the SO Negotiation Subfunction.

• If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:

  1. Service Connect Completion Message, Handoff Completion Message, or Extended Handoff Completion Message: The base station shall activate the Normal Service Subfunction.

  2. Service Option Control Message: If the service option connection specified by the message is part of the current service configuration, and the service option specified by the message is the same as the service option associated with the service option connection, the base station shall process the message in accordance with the requirements for the service option.

  3. Service Request Message

  4. Service Response Message

• If the base station receives one of the following service option negotiation messages, the base station shall process the message according to the specified requirements, if any:

  1. Service Option Request Order

  2. Service Option Response Order

  3. Service Option Control Order

3.6.4.1.2.2.6 SO Negotiation Subfunction

While this subfunction is active, the base station supports service option negotiation with the mobile station.

Upon activating the SO Negotiation Subfunction, the base station shall set SO_REQ to NULL. The base station shall delete from the current service configuration any service option connection which does not use primary traffic on both the Forward and Reverse Traffic Channels.

While the SO Negotiation Subfunction is active, the base station shall perform the following:
• If the current service configuration includes a service option connection, the base
station shall process the received primary traffic bits in accordance with the
requirements for the service option associated with the service option connection;
otherwise, the base station shall discard the received primary traffic bits.

• If the current service configuration includes a service option connection, the base
station shall transmit primary traffic bits in accordance with the requirements for
the service option associated with the service option connection; otherwise, the base
station shall transmit null traffic and power control bits on the Forward
Fundamental Channel, if the Fundamental channel is present to transmit power
control bits on the Forward Dedicated Control Channel, if only the Dedicated
Control Channel is present.

• If the current service configuration includes a service option connection, the base
station may send a Service Option Control Order to invoke a service option specific
function in accordance with the requirements for the service option associated with
the service option connection.

• To initiate service option negotiation, the base station shall set SO_REQ to the
number of the requested service option and shall send a Service Option Request
Order containing the requested service option number.

• If SERV_NEG changes from disabled to enabled (see 3.6.6.2.2.2, 3.6.6.2.2.10, and
3.6.6.2.2.11), the base station shall activate the Normal Service Subfunction.

• The base station shall process a service option request received in an Origination
Message, a Page Response Message, or a Service Option Request Order as follows:
  – If the base station accepts the requested service option, the base station shall
    set SO_REQ to NULL and shall send a Service Option Response Order accepting
    the requested service option within T4b seconds. The base station shall begin
    using the service configuration implied by the requested service option in
    accordance with the requirements for the requested service option. The implied
    service configuration shall include the default Forward and Reverse Multiplex
    Options and transmission radio configurations associated with the requested
    service option. This implied service configuration shall include one service
    option connection for which the service option connection reference is 1, for
    which the service option is the requested service option, and for which the
    Forward and Reverse Traffic Channel types are both primary traffic.
  – If the base station does not accept the requested service option and has an
    alternative service option to request, the base station shall set SO_REQ to the
    alternative service option number and shall send a Service Option Request Order
    requesting the alternative service option within T4b seconds.
  – If the base station does not accept the requested service option and does not
    have an alternative service option to request, the base station shall set SO_REQ
    to NULL and shall send a Service Option Response Order to reject the request
    within T4b seconds. The base station shall continue to use the current service
    configuration.
• If the base station receives a Service Option Response Order, it shall process the order as follows:
  – If the service option number specified in the order is equal to SO_REQ, the base station shall set SO_REQ to NULL and shall begin using the service configuration implied by the specified service option in accordance with the requirements for the service option. The implied service configuration shall include the default Forward and Reverse Multiplex Options and radio configurations associated with the requested service option. This implied service configuration shall include one service option connection for which the service option connection reference is 1, for which the service option is the requested service option, and for which the Forward and Reverse Traffic Channel types are both primary traffic.
  – If the order indicates a service option rejection, the base station shall set SO_REQ to NULL. The base station shall continue to use the current service configuration.
  – If the order does not indicate a service option rejection and the service option specified in the order is not equal to SO_REQ, the base station shall set SO_REQ to NULL, should send a Release Order (ORDQ = ‘00000010’), and should enter the Release Substate.
• If the base station receives a Service Option Control Order, the base station shall process the order as follows:
  – If the current service configuration includes a service option connection, the base station shall process the received Service Option Control Order in accordance with the requirements for the service option associated with the service option connection.
• If the base station receives one of the following service negotiation messages, the base station shall process the message according to the specified requirements, if any:
  1. Service Connect Completion Message
  2. Service Option Control Message
  3. Service Request Message
  4. Service Response Message

3.6.4.1.3 Ordering of Messages
The Layer 2 protocol does not guarantee delivery of messages in any order. If the base station requires that the mobile station receive a set of messages in a certain order, the base station shall send each message in assured mode requiring confirmation of delivery and shall wait for the confirmation of delivery of each message before transmitting the next message in the set.
3.6.4.1.4 Message Action Times

A Forward Traffic Channel message without a USE_TIME field or with a USE_TIME field set to ‘0’ has an implicit action time. A message that has its USE_TIME field set to ‘1’ has an explicit action time that is specified in the ACTION_TIME field of the message.

A message with an explicit action time is called a pending message.

Unless otherwise specified, a message having an implicit action time shall take effect no later than the first 80 ms boundary (relative to System Time plus FRAME_OFFSET_s × 1.25 ms) occurring at least 80 ms after the end of the frame containing the last bit of the message. A message with an explicit action time, except for a Power Up Function Message, shall take effect when System Time minus FRAME_OFFSET_s × 1.25 ms (in 80 ms units) modulo 64 becomes equal to the message’s ACTION_TIME field. A Power Up Function Message shall take effect ACTION_TIME_FRAME frames after the time when System Time minus FRAME_OFFSET_s × 1.25 ms (in 80 ms units) modulo 64 becomes equal to the message’s ACTION_TIME field. The difference in time between ACTION_TIME and the end of the frame containing the last bit of the message shall be at least 80 ms.

The base station shall support two pending messages at any given time, not including pending Service Option Control Orders, Service Option Control Messages, or Power Up Function Messages. The number of pending Service Option Control Orders or Service Option Control Messages that the base station is required to support is specific to the service option (see the relevant service option descriptions). In addition, the base station shall support one pending Power Up Function Message.

3.6.4.1.5 Long Code Transition Request Processing

If a request for voice privacy is specified in the Origination Message or Page Response Message, the base station may send a Long Code Transition Request Order (ORDQ = ‘00000001’) requesting a transition to the private long code.

The base station shall process the Long Code Transition Request Order as follows:

- If the Long Code Transition Request Order requests a transition to the private long code and the base station accepts the request, the base station shall send a Long Code Transition Request Order (ORDQ = ‘00000001’). If the base station does not accept the private long code transition request, the base station shall send a Long Code Transition Request Order (ORDQ = ‘00000000’).

- If the Long Code Transition Request Order requests a transition to the public long code and the base station accepts the request, the base station shall send a Long Code Transition Request Order (ORDQ = ‘00000000’). If the base station does not accept the public long code transition request, the base station shall send a Long Code Transition Request Order (ORDQ = ‘00000001’).

The base station shall process the Long Code Transition Response Order as follows:
• If the Long Code Transition Response Order indicates that the mobile station accepts the long code transition requested in the Long Code Transition Request Order sent by the base station, the base station shall use the requested long code mask on both the Forward Traffic Channel and the Reverse Traffic Channel. The base station shall specify an explicit action time in the Long Code Transition Request Order. The base station shall begin using the requested long code mask using the explicit action time (see 3.6.4.1.4).

3.6.4.1.6 Processing Resource Request Messages

The base station shall process Resource Request Message and Resource Request Mini Message, as follows:

• The base station may send one of the messages that assign appropriate resources (e.g. Extended Supplemental Channel Assignment Message, Resource Allocation Message, Resource Allocation Mini Message, Universal Handoff Direction Message, Retry Order, etc) to the mobile station. If the base station sends one of these messages and a Forward Packet Data Channel is not assigned, the base station shall set PILOT_GATING_USE_RATE to ‘0’ and start transmitting the Forward Power Control Subchannel with the maximum rate at the action time of the message.

• The base station may send a Retry Order to the mobile station.

3.6.4.1.7 Response to Enhanced Origination Message

If the base station receives an Enhanced Origination Message, the base station should perform the following:

• If the base station does not accept this call request from the mobile station, the base station should send one of the following messages:

  + A Call Assignment Message to the mobile station, with the RESPONSE_IND field set to ‘1’, the ACCEPT_IND field set to ‘0’, and the TAG field set to the value of the TAG or ADD_TAG field of the Enhanced Origination Message.

  + A Retry Order if the Enhanced Origination Message is for a packet data service option.

• If the base station accepts this call request from the mobile station, the base station should send a Call Assignment Message, Service Connect Message, or Universal Handoff Direction Message (with the Service Configuration information record included) to assign the call:

  − If the GLOBAL_EMERGENCY_CALL indicator is set to ‘1’ and the service associated with this origination is a voice service, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If the base station receives an Origination Message and the GLOBAL_EMERGENCY_CALL indicator is set to ‘1’ and the service associated with this origination is not a voice service, the base station may recognize this
as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.

- If the Enhanced Origination Message includes a SYNC_ID field, then based on the value of the SYNC_ID received, the base station may instruct the mobile station to restore one or more of the service option connections from the stored service configuration, and if so, the base station shall send a Call Assignment Message, Universal Handoff Direction Message, or Service Connect Message to the mobile station as follows:

  + If the base station sends a Call Assignment Message, the base station shall perform the following:
    
    o The base station shall set the RESPONSE_IND field to ‘1’, the ACCEPT_IND field to ‘1’, and the TAG field to the value of the TAG or ADD_TAG field of the Enhanced Origination Message.
    
    o The base station shall set the USE_OLD_SERV_CONFIG field to ‘1’.

  + If the base station sends a Service Connect Message, the base station shall perform the following:
    
    o The base station shall set the USE_OLD_SERV_CONFIG field to ‘11’.

  + If the mobile station is to restore all remaining service option connections from the stored service configuration, the base station shall set the SR_ID field to ‘111’; if the mobile station is to restore more than one but not all remaining service option connections from the stored service configuration, the base station shall set the SR_ID field to ‘000’ and the SR_ID_RESTORE_BITMAP field to the bitmap of service reference identifiers corresponding to the service option connections to be restored; otherwise, the base station shall set the SR_ID field to the service reference identifier corresponding to the service option connection to be restored.

  + At the action time corresponding to this message, the base station shall restore the indicated service option connection(s) from the stored service configuration; Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8) for each of the restored service option connections with a ‘restore indication’ and Layer 3 shall identify each of these Call Control instances by the value of the CON_REF field corresponding to the restored service option connection.

- If the base station sends a Call Assignment Message to assign the call, the base station shall perform the following:

  + The base station shall set the RESPONSE_IND field to ‘1’, the ACCEPT_IND field to ‘1’, and the TAG field to the value of the TAG or ADD_TAG field of the Enhanced Origination Message. The base station shall set the CON_REF_INCL field of the message to ‘1’ and the CON_REF field of the message to the value of the connection reference of the service option connection corresponding to this call.
A service option connection corresponding to this call (if not already established) shall be established by performing service negotiation; the base station should initiate service negotiation to establish the service option connection, if permitted by the current service negotiation subfunction.

At the action time corresponding to this message, the Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall identify this Call Control instance by the value of the CON_REF field included in the Call Assignment Message.

If the base station sends a Service Connect Message or a Universal Handoff Direction Message (with the Service Configuration information record included), to assign the call, the base station shall perform the following:

+ The base station shall set the call control parameters corresponding to this call included in the message as follows: The base station shall set the RESPONSE_IND field to ‘1’, and the TAG field to the value of the TAG or ADD_TAG field of the Enhanced Origination Message.

At the action time corresponding to this message, the Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall identify this Call Control instance by the value of the CON_REF assigned to the service option connection corresponding to this call.

3.6.4.1.8 Processing Resource Release Request Message and Resource Release Request Mini Message

The base station may perform the following in response to receiving a Resource Release Request Message or a Resource Release Request Mini Message from the mobile station:

- If the mobile station requests to release a service option connection, the base station may send a Service Connect Message, General Handoff Direction Message, or a Universal Handoff Direction Message to release the service option connection.

- If the mobile station requests to commence reverse pilot gating operation, the base station may send a Extended Release Message, Extended Release Mini Message, or a Universal Handoff Direction Message to instruct the mobile station to commence the reverse pilot gating operation.

3.6.4.1.9 Processing Base Station Status Request Message

If the requested RECORD_TYPE equals ‘00000000’ (Pilot Information), the base station should send a Base Station Status Response Message with a RECORD_TYPE of ‘00000000’ (Pilot Information) to the mobile station:

- For each pilot being requested by the mobile station, the base station shall include the corresponding Base Station Identification number.
• If SID and NID information is being requested by the mobile station, the base station shall include the SID and NID information corresponding to these pilots.

• If LAT and LONG information is being requested by the mobile station, the base station should include the LAT and LONG information corresponding to these pilots.

3.6.4.1.10 Base Station assigned PLCM

If PLCM_TYPE field is included in Extended Channel Assignment Message or Universal Handoff Direction Message and is set to ‘0001’, the base station shall include PLCM_39 field in the message and shall set it as follows:

P38 P37 are set as specified in the Table 3.6.4.1.10-1:

<table>
<thead>
<tr>
<th>P38 P37 (binary)</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Proprietary Approach</td>
</tr>
<tr>
<td>01</td>
<td>Latitude-Longitude Approach</td>
</tr>
<tr>
<td>10</td>
<td>Reserved</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

If P38 P37 is equal to ‘01’; the base station shall set the fields as follows:

\[ P_{36}, P_{35}, P_{34}, P_{33}, P_{32}, P_{31}, P_{30}, P_{29}, P_{28}, P_{27}, P_{26} = (\text{BASE\_LONG} >> 5) \times \cos|\text{BASE\_LAT}| \mod 2^{11}, \]

\[ P_{25}, P_{24}, P_{23}, P_{22}, P_{21}, P_{20}, P_{19}, P_{18}, P_{17}, P_{16}, P_{15} = (\text{BASE\_LAT} >> 5) \mod 2^{11}, \]

\[ P_{14}, P_{13}, \ldots, P_{2}, P_1, P_0 = \text{identifiers assigned by the base station,} \]

where:

BASE_LONG is the longitude of the base station in units of 0.25 seconds, expressed as a two’s complement signed number with positive numbers signifying East longitude, and,

BASE_LAT is the latitude of the base station in units of 0.25 seconds, expressed as a two’s complement signed number with positive numbers signifying North latitudes.
3.6.4.2 Traffic Channel Initialization Substate

In this substate, the base station begins transmitting on the Forward Traffic Channel and acquires the Reverse Traffic Channel.

Upon entering the Traffic Channel Initialization Substate, the base station shall perform the following:

- Layer 3 shall send an L2-Supervision.Request primitive to Layer 2 to reset the message acknowledgment procedures as specified in [4].
- The base station shall set its Forward and Reverse Traffic Channel long code masks to the public long code mask (see [2]).
- The base station shall set its Forward and Reverse Traffic Channel frame offsets (see [2]) to the frame offset assigned to the mobile station.
- If the base station set the ASSIGN_MODE field of the Channel Assignment Message to ‘000’, the base station shall set SERV_NEG to disabled. If the base station set the ASSIGN_MODE field of the Channel Assignment Message to ‘100’, the base station shall set SERV_NEG to enabled. For operation in band classes other than Band Class 0, SERV_NEG is always equal to enabled.
- If the base station uses the Extended Channel Assignment Message, the base station shall set the SERV_NEG to enabled.
- The base station shall determine the initial service configuration as follows:
  - If SERV_NEG is equal to disabled, the initial service configuration shall include Multiplex Option 1 and Radio Configuration 1 for both the Forward and Reverse Traffic Channels, and shall include no service option connections.
  - If SERV_NEG is equal to enabled and the base station sets the GRANTED_MODE field of the Channel Assignment Message or the Extended Channel Assignment Message to ‘00’, the initial service configuration shall include the multiplex option and radio configuration for the Forward and Reverse Traffic Channels as specified by the DEFAULT_CONFIG field, and shall include no service option connections.
  - If SERV_NEG is equal to enabled and the base station sets the GRANTED_MODE field of the Extended Channel Assignment Message to ‘01’ or ‘10’, the initial service configuration shall include the default Forward and Reverse Traffic Channel multiplex options that are derived from the radio configurations corresponding to Table 3.7.2.3.2.21-3 and shall include no service option connections.
- If SERV_NEG is equal to enabled and the base station sets the
  GRANTED_MODE field of the Channel Assignment Message to ‘01’ or ‘10’, the
  initial service configuration shall include the default Forward and Reverse
  Traffic Channel multiplex options and transmission rates corresponding to the
  service option requested by the mobile station in the Origination Message, in the
  case of a mobile station originated call, or the Page Response Message, in the
  case of a mobile station terminated call, and shall include no service option
  connections.

- If SERV_NEG is equal to enabled and the base station sets the
  GRANTED_MODE field of the Extended Channel Assignment Message to ‘11’, the
  base station shall begin to use the stored service configuration corresponding to
  the SYNC_ID conveyed to the mobile station as the current service configuration
  and shall begin to process Forward and Reverse Traffic Channel frames
  accordingly. The set of service option connections to be restored are determined
  as follows:

  + If the base station sets the SR_ID_RESTORE field of the Extended Channel
    Assignment Message to ‘111’, the base station shall restore all the service
    option connections from the stored service configuration.
  + If the base station sets the SR_ID_RESTORE field of the Extended Channel
    Assignment Message to ‘000’, the base station shall restore the service
    option connections indicated by the SR_ID_RESTORE_BITMAP field of the
    Extended Channel Assignment Message from the stored service
    configuration.
  + Otherwise, the base station shall restore the service option connection
    corresponding to the SR_ID field of the Extended Channel Assignment
    Message from the stored service configuration.

- If SERV_NEG is equal to disabled, the base station shall activate the SO Negotiation
  Subfunction (see 3.6.4.1.2.2.6); otherwise, the base station shall activate the Normal
  Service Subfunction (see 3.6.4.1.2.2.1).

  The base station shall set PILOT_GATING_USE_RATE to ‘0’.

While in the Traffic Channel Initialization Substate, the base station shall perform the
following:

- If the Forward Fundamental Channel is assigned, the base station shall transmit
  null Traffic Channel data on the Forward Fundamental Channel, except when
  transmitting signaling traffic.

- If F-CPCCH is assigned, the base station shall transmit power control bits on the F-
  CPCCH; otherwise, if FPC_PRI_CHAN is set to ‘0’, the base station shall transmit
  power control bits on the Forward Fundamental Channel. If FPC_PRI_CHAN is set
  to ‘1’, the base station shall transmit power control bits on the Forward Dedicated
  Control Channel.
• If the base station acquires the Reverse Traffic Channel, Layer 3 shall send a reverse dedicated channel acquired indication to Layer 2 (see [4]). The base station shall perform the following:
  - If SERV_NEG is equal to enabled and the base station sets the GRANTED_MODE field of the Extended Channel Assignment Message to ‘11’, the base station shall perform the following:
    + For each service option connection (with corresponding connection reference CON_REF_i) in the stored service configuration record, Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8) with a ‘restore indication’. The base station shall identify each of these Call Control instances by the corresponding CON_REF_i. Furthermore, the base station shall also identify the Call Control instance corresponding to the first service option connection listed in this restored Service Configuration information record by the NULL identifier.

  - Otherwise, the base station shall perform the following:
    + The Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall assign the default identifier of NULL to this Call Control instance. The Layer 3 shall enter the Traffic Channel Substate.

• If the base station fails to acquire the Reverse Traffic Channel, the base station should perform one of the following:
  - retransmit the Channel Assignment Message or the Extended Channel Assignment Message on the Paging Channel and remain in the Traffic Channel Initialization Substate
  - retransmit the Extended Channel Assignment Message on the Forward Common Control Channel and remain in the Traffic Channel Initialization Substate, or
  - disable transmission on the Forward Traffic Channel and discontinue the Traffic Channel Processing for the mobile station.

3.6.4.3 Traffic Channel Substate
In this substate, the base station may exchange Traffic Channel frames with the mobile station in accordance with the current service configuration.
Upon entering the Traffic Channel Substate, the base station shall perform the following:
  • If SERV_NEG is equal to enabled and the base station sets the GRANTED_MODE field of the Extended Channel Assignment Message to ‘11’, the base station should not send a Service Connect Message to the mobile station.

  • If the call is a mobile station terminated call and the base station set BYPASS_ALERT_ANSWER to ‘0’, the base station shall perform the following:
If SERVNEG is equal to disabled, the base station shall process the service option request specified in the Page Response Message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

If SERVNEG is equal to enabled and the base station sets the GRANTED_MODE field of the Channel Assignment Message or the Extended Channel Assignment Message to ‘00’ or ‘01’, the base station should initiate service negotiation to request a service configuration in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

If SERVNEG is equal to enabled and the base station sets the GRANTED_MODE field of the Channel Assignment Message or the Extended Channel Assignment Message to ‘10’, the base station should send a Service Connect Message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

Otherwise, the base station shall perform the following:

- If SERVNEG equals enabled, the call is mobile-station-originated and the base station sets the GRANTED_MODE field of the Channel Assignment Message or the Extended Channel Assignment Message to ‘10’, the base station should send a Service Connect Message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

- If SERVNEG equals disabled and the call is mobile-station-originated, the base station shall process the service option request specified in the Origination Message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

While in the Traffic Channel Substate, the base station shall perform the following:

- The base station shall transmit the power control subchannel as specified in [2].

- The base station shall process Forward and Reverse Traffic Channel frames in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

- When PILOT_GATING_USE_RATE is equal to ‘0’ and the base station is to establish a Forward or Reverse Fundamental Channel or a Forward or Reverse Dedicated Control Channel, or a Forward Packet Data Channel, the base station shall send a Universal Handoff Direction Message to the mobile station.

- When a Forward Packet Data Channel is not assigned, PILOT_GATING_USE_RATE is equal to ‘1’ and the base station has data to send, the base station may send a Resource Allocation Message, Resource Allocation Mini Message, Extended Supplemental Channel Assignment Message, Forward Supplemental Channel Assignment Mini Message, Reverse Supplemental Channel Assignment Mini Message, or Universal Handoff Direction Message and set PILOT_GATING_USE_RATE to ‘0’ to start transmitting the Forward Power Control Subchannel with the maximum rate at the action time of the message and start the exchange of user information.
• When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is equal to ‘1’, and the base station has data or signaling messages to send, the base station may transition to the Active Mode. If the base station determines to transition to the Active Mode, the base station shall perform the following:
  – If a Forward Dedicated Control Channel is assigned, the base station shall perform one of the following:
    + The base station shall send a Resource Allocation Message, Resource Allocation Mini Message, Extended Supplemental Channel Assignment Message, Forward Supplemental Channel Assignment Mini Message, Reverse Supplemental Channel Assignment Mini Message, or Universal Handoff Direction Message and set PILOT_GATING_USE_RATE to ‘0’ at the action time of the message, or
    + The base station shall set PILOT_GATING_USE_RATE to ‘0’ (see [3]).
  – Otherwise (i.e., Forward Dedicated Control Channel is not assigned), the base station shall set PILOT_GATING_USE_RATE to ‘0’.
• When a Forward Packet Data Channel is assigned, PILOT_GATING_USE_RATE is equal to ‘1’, and the base station has detected continuous reverse pilot channel or a valid Reverse Fundicated Channel frame is received, the base station shall set PILOT_GATING_USE_RATE to ‘0’.
• If the base station is to release any but not all traffic channels, the base station shall send a Universal Handoff Direction Message, Extended Release Message, or an Extended Release Mini Message to the mobile station.
• If the base station is to assign R-FCH, the base station may send a Universal Handoff Direction Message or Shared Channel Configuration Order (ORDQ = 00000000) to the mobile station. If the base station is to release R-FCH, the base station may send a Universal Handoff Direction Message, Extended Release Message, Extended Release Mini Message, or Shared Channel Configuration Order (ORDQ = 00000001) to the mobile station.
• When PILOT_GATING_USE_RATE is equal to ‘0’, the base station does not have any data to send, and the base station has determined that the mobile station does not have any data to send, then the base station may send an Extended Release Message, Extended Release Mini Message or Universal Handoff Direction Message. At the action time of the message, the base station may perform the following:
  – Set PILOT_GATING_USE_RATE to ‘1’.
  – If the channel configuration in the message does not include a Forward Packet Data Channel, start transmitting the Forward Power Control Subchannel with the specified rate and stop the exchange of user information.
  – If the channel configuration in the message includes a Forward Packet Data Channel, stop the exchange of user information and signaling messages.
• If the base station declares a loss of Reverse Traffic Channel continuity (see 3.4), the base station should send a *Release Order* to the mobile station. If the base station sends a *Release Order*, the Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the *Release Substate*.

• The base station may perform Forward Traffic Channel power control as specified in 3.6.4.1.1.

• The base station may request a new service configuration by initiating service negotiation or service option negotiation in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

• The base station may send a *Service Option Control Message* or *Service Option Control Order* to invoke a service option specific function in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

• The base station may request a long code transition, as specified in 3.6.4.1.5, either autonomously or in response to a request for voice privacy specified in the *Origination Message* or *Page Response Message*.

• The base station may perform authentication procedures as specified in 3.3.1.

• The base station may perform TMSI assignment procedures (see 2.3.15).

• For the first call, if the call is mobile-station-originated and the PACA_REORIG field of the *Origination Message* is equal to ‘1’, the Layer 3 shall send a “paca reorig indication” to the Call Control instance.

• The base station may control operation of the Forward or Reverse Supplemental Code Channels by including Supplemental Code Channel assignment information in the *Supplemental Channel Assignment Message*, or the *General Handoff Direction Message*.

• If neither a Forward Fundamental Channel, nor a Forward Dedicated Control Channel is assigned, the base station shall not assign a Forward Supplemental Channels to the mobile station.

• If a Reverse Packet Data Channel is assigned, the base station shall not assign a Reverse Supplemental Channel to the mobile station.

• The base station may control operation of the Forward or Reverse Supplemental Channels by including Supplemental Channel assignment information in the *Extended Supplemental Channel Assignment Message*, the *Forward Supplemental Channel Assignment Mini Message*, or the *Reverse Supplemental Channel Assignment Mini Message*.

• The base station may assign a new call by sending a *Call Assignment Message*, *Service Connect Message*, or *Universal Handoff Direction Message* (with the Service Configuration information record included) to assign the call:

  – If the base station sends a *Call Assignment Message* to assign the call, the base station shall perform the following:
The base station shall set the RESPONSE_IND field to ‘0’.

The base station shall set the CON_REF_INCL field of the message to ‘1’ and the CON_REF field of the message to the value of the connection reference of the service option connection corresponding to this call.

A service option connection corresponding to this call (if not already established) shall be established by performing service negotiation; the base station should initiate service negotiation to establish the service option connection, if permitted by the current service negotiation subfunction.

At the action time corresponding to this message, the Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall identify this Call Control instance by the value of the CON_REF field included in the Call Assignment Message.

If the base station sends a Service Connect Message or Universal Handoff Direction Message (with the Service Configuration information record included) to assign the call, the base station shall perform the following:

+ The base station shall set the call control parameters corresponding to this call included in the message as follows: The base station shall set the RESPONSE_IND field to ‘0’, and the BYPASS_ALERT_ANSWER field as required.

+ At the action time corresponding to this message, the Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8). The Layer 3 shall identify this Call Control instance by the value of the CON_REF assigned to the service option connection corresponding to this call.

The base station may instruct the mobile station to restore one or more of the service option connection records from the stored service configuration by sending a Call Assignment Message or Service Connect Message as follows:

If the base station sends a Call Assignment Message, the base station shall perform the following:

+ The base station shall set the RESPONSE_IND field to ‘1’, the ACCEPT_IND field to ‘1’, and the TAG field to the value of the TAG field of the Enhanced Origination Message.

+ The base station shall set the USE_OLD_SERV_CONFIG field to ‘1’.

If the base station sends a Service Connect Message, the base station shall perform the following:

+ The base station shall set the USE_OLD_SERV_CONFIG field to ‘11’.
If the mobile station is to restore all remaining service option connection records from the stored service configuration, the base station shall set the SR_ID field to ‘111’; otherwise, the base station shall set the SR_ID field to the service reference identifier corresponding to the service option connection record to be restored.

At the action time corresponding to this message, the base station shall restore the indicated service option connection record(s) from the stored service configuration; Layer 3 shall instantiate a Call Control instance (as specified in 3.6.8) for each of the restored service option connections with a ‘restore indication’ and Layer 3 shall identify each of these Call Control instances by the value of the CON_REF field corresponding to the restored service option connection.

- If the Layer 3 receives a ‘call release request’ from a Call Control instance, the Layer 3 shall perform the following:
  - If the service option connection corresponding to this call is the only one connected, the base station should send the mobile station a Release Order and enter the Release Substate.
  - If the service option connection corresponding to this call is not the only one connected, the base station should release this service option connection. At the action time of the message, the Layer 3 shall terminate this Call Control instance.

- The base station may send the following messages. Some of these messages are generated by the Call Control Instance. If the base station sends a message, the base station shall comply with the specified requirements for sending the message, if any:
  1. Alert With Information Message:
  2. Analog Handoff Direction Message: The base station shall perform the following:
     - If the CON_REF_INCL field was set to ‘0’, the Layer 3 shall terminate all Call Control instances (if there are any) except the one identified by NULL; otherwise, the Layer 3 shall terminate all Call Control instances (if there are any) except the one identified by CON_REF field set in the message. The base station shall perform the following (see [6] for handoff to a wide analog channel and [22] for handoff to an 800 MHz narrow analog channel):
       + If this Call Control instance is in the Waiting for Order Substate, the base station shall enter the Waiting for Order Task.
       + If this Call Control instance is in the Waiting for Answer Substate, the base station shall enter the Waiting for Answer Task.
       + If this Call Control instance is in the Conversation Substate, the base station shall enter the Conversation Task.
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Audit Order</td>
</tr>
<tr>
<td>4</td>
<td>Authentication Challenge Message</td>
</tr>
<tr>
<td>5</td>
<td>Base Station Challenge Confirmation Order</td>
</tr>
<tr>
<td>6</td>
<td>Base Station Status Response Message</td>
</tr>
<tr>
<td>7</td>
<td>Call Assignment Message</td>
</tr>
<tr>
<td>8</td>
<td>Candidate Frequency Search Request Message</td>
</tr>
<tr>
<td>9</td>
<td>Candidate Frequency Search Control Message</td>
</tr>
<tr>
<td>10</td>
<td>Continuous DTMF Tone Order</td>
</tr>
<tr>
<td>11</td>
<td>Data Burst Message</td>
</tr>
<tr>
<td>12</td>
<td>Extended Alert With Information Message</td>
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<tr>
<td>13</td>
<td>Extended Flash With Information Message</td>
</tr>
<tr>
<td>14</td>
<td>Extended Handoff Direction Message</td>
</tr>
<tr>
<td>15</td>
<td>Extended Neighbor List Update Message</td>
</tr>
<tr>
<td>16</td>
<td>Extended Release Message: If the physical channels indicated in CH_IND field of this message includes all the physical channels currently being processed by the mobile station, the Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the Release Substate.</td>
</tr>
<tr>
<td>17</td>
<td>Extended Release Mini Message: If the physical channels indicated in CH_IND field of this message includes all the physical channels currently being processed by the mobile station, the Layer 3 shall send a “release indication” to all Call Control instances, and shall enter the Release Substate.</td>
</tr>
<tr>
<td>18</td>
<td>Extended Supplemental Channel Assignment Message</td>
</tr>
<tr>
<td>19</td>
<td>Forward Supplemental Channel Assignment Mini Message</td>
</tr>
<tr>
<td>20</td>
<td>General Handoff Direction Message</td>
</tr>
<tr>
<td>21</td>
<td>Flash With Information Message</td>
</tr>
<tr>
<td>22</td>
<td>In-Traffic System Parameters Message</td>
</tr>
<tr>
<td>23</td>
<td>Local Control Order</td>
</tr>
<tr>
<td>24</td>
<td>Lock Until Power-Cycled Order: The base station should send this order in unassured mode.</td>
</tr>
<tr>
<td>25</td>
<td>Long Code Transition Request Order</td>
</tr>
</tbody>
</table>

3 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.
26. Maintenance Order:

27. Maintenance Required Order

28. Message Encryption Mode Order

29. Mobile Assisted Burst Operation Parameters Message

30. Mobile Station Registered Message

31. Neighbor List Update Message: The base station shall not send this message if 
   \( P_{REV\_IN\_USE} \) is greater than or equal to eight.

32. Parameter Update Order (see 2.3.12.1.3).

33. Periodic Pilot Measurement Request Order

34. Pilot Measurement Request Order

35. Power Control Message

36. Power Control Parameters Message

37. Power Up Function Message

38. Power Up Function Completion Message

39. Resource Allocation Message

40. Resource Allocation Mini Message

41. Release Order: The Layer 3 shall send a “release indication” to all Call Control 
   instances, and shall enter the Release Substate.

42. Retrieve Parameters Message

43. Retry Order

44. Reverse Supplemental Channel Assignment Mini Message

45. Security Mode Command Message

46. Send Burst DTMF Message

47. Service Connect Message: The base station shall send the message in 
   accordance with the requirements for the active service subfunction (see 
   3.6.4.1.2.2).

48. Service Option Control Message: The base station shall send the message in 
   accordance with the requirements for the active service subfunction (see 
   3.6.4.1.2.2).

49. Service Option Control Order

50. Service Option Request Order

51. Service Option Response Order

52. Service Redirection Message: The Layer 3 shall send a “release indication” to all 
   Call Control instances, and shall enter the Release Substate.
53. **Service Request Message:** The base station shall send the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

54. **Service Response Message:** The base station shall send the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

55. **Set Parameters Message**

56. **SSD Update Message**

57. **Status Request Message**

58. **Status Request Order:** The base station shall not send this message if P_REV_IN_USE is greater than or equal to eight.

59. **Supplemental Channel Assignment Message**

60. **TMSI Assignment Message**

61. **Universal Handoff Direction Message**

62. **User Zone Reject Message**

63. **User Zone Update Message**

• If the base station receives one of the following messages from the mobile station, the base station shall process the message according to the specified requirements, if any:

1. **Base Station Challenge Order:** The base station shall process the message as described in 2.3.12.1.5.

2. **Base Station Status Request Message:** The base station shall process the message as described in 3.6.4.1.9

3. **Call Cancel Message**

4. **Candidate Frequency Search Report Message:** The base station shall process the message as described in 3.6.6.2.2.6.

5. **Candidate Frequency Search Response Message:** The base station shall process the message as described in 3.6.6.2.2.4.

6. **CDMA Off Time Report Message**

7. **Connect Order:** If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

8. **Continuous DTMF Tone Order:** If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.
9. **Data Burst Message**: The base station may respond with a *Retry Order*.

10. **Enhanced Origination Message**: The base station shall process the message as described in 3.6.4.1.7.

11. **Extended Flash With Information Message**: If CON_REF_INCL equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

12. **Extended Handoff Completion Message**: The base station shall process the message as described in 3.6.6.2.2.7.

13. **Extended Pilot Strength Measurement Message**: The base station shall process the message as described in 3.6.6.2.2.1.

14. **Extended Release Response Message**.

15. **Extended Release Response Mini Message**.

16. **Flash With Information Message**: The Layer 3 shall deliver this message to the Call Control instance identified by NULL.

17. **Handoff Completion Message**: The base station shall process the message as described in 3.6.6.2.2.7.

18. **Local Control Response Order**

19. **Long Code Transition Request Order**: The base station shall process the message as described in 3.6.4.1.5.

20. **Long Code Transition Response Order**

21. **Mobile Station Reject Order**: If the CON_REF_INCL field is included in this message, Layer 3 shall perform the following: if the CON_REF_INCL field equals '0', Layer 3 shall send a 'messages rejected indication' to the Call Control instance identified by NULL; otherwise, Layer 3 shall send a 'messages rejected indication' to the Call Control instance identified by CON_REF.

22. **Origination Continuation Message**: The Layer 3 shall deliver this message to the Call Control instance identified by NULL.

23. **Outer Loop Report Message**

24. **Parameters Response Message**

25. **Parameter Update Confirmation Order**

26. **Periodic Pilot Strength Measurement Message**

27. **Pilot Strength Measurement Message**: The base station shall process the message as described in 3.6.6.2.2.1.

28. **Pilot Strength Measurement Mini Message**

29. **Power Measurement Report Message**: The base station may process the message as described in 3.6.4.1.1.
30. **Release Order**: The base station shall send the mobile station a *Release Order* within T2b seconds, and the Layer 3 shall send a “release indication” to all Call Control instances, and enter the *Release Substate*; otherwise, the Layer 3 shall send a “send alert with info message indication” to all Call Control instances.

31. **Resource Release Request Message**: The base station shall process the message as described in 3.6.4.1.8.

32. **Resource Release Request Mini Message**: The base station shall process the message as described in 3.6.4.1.8.

33. **Resource Request Message**: The base station shall process the message as described in 3.6.4.1.6.

34. **Resource Request Mini Message**: The base station shall process the message as described in 3.6.4.1.6.

35. **Request Analog Service Order**: The base station may respond with an *Analog Handoff Direction Message*.

36. **Request Narrow Analog Service Order**: The base station may respond with an *Analog Handoff Direction Message*.

37. **Request Wide Analog Service Order**: The base station may respond with an *Analog Handoff Direction Message*.

38. **Send Burst DTMF Message**: If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals ‘0’, the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

39. **Service Connect Completion Message**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

40. **Service Option Control Message**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

41. **Service Option Control Order**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

42. **Service Option Request Order**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

43. **Service Option Response Order**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

44. **Service Request Message**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).
45. **Service Response Message**: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

46. **SSD Update Confirmation Order**

47. **SSD Update Rejection Order**

48. **Status Response Message**

49. **Status Message**

50. **Supplemental Channel Request Message**: The base station may respond with a Supplemental Channel Assignment Message, an Extended Supplemental Channel Assignment Message, or a Retry Order.

51. **Supplemental Channel Request Mini Message**: The base station may respond with a Forward Supplemental Channel Assignment Mini Message or a Reverse Supplemental Channel Assignment Mini Message, or both. The base station may also respond with a Retry Order.

52. **TMSI Assignment Completion Message**

53. **User Zone Update Request Message**: The base station shall process this message as specified in 3.6.7.2.

### 3.6.4.4 Release Substate

In this substate, the base station disconnects all calls and physical channels.

While in the **Release Substate**, the base station shall perform the following:

- The base station shall transmit the power control subchannel as specified in [2].

- The base station shall transmit on the Forward Traffic Channel for at least $T_{3b}$ seconds. The base station shall transmit null traffic and power control bits on the Forward Fundamental Channel, except when transmitting signaling traffic, if the Fundamental Channel is present or transmit power control bits on the Forward Dedicated Control Channel, if only the dedicated Control Channel is present. After $T_{3b}$ seconds, the base station should stop transmitting on the Forward Traffic Channel.

- When a Forward Packet Data Channel and a Forward Common Power Control Channel subchannel are assigned to this mobile station, the base station shall transmit on the Forward Common Power Control Channel subchannel for at least $T_{3b}$ seconds. After $T_{3b}$ seconds, the base station should stop transmitting on the Forward Common Power Control Channel subchannel. If no response is received to the Layer 3 message sent to the mobile station to release the call, the base station should wait $T_{5b}$ before assigning this Forward Common Power Control Channel subchannel to another mobile station.

- The base station shall process Reverse Traffic Channel signaling traffic and may discard other types of Reverse Traffic Channel traffic.

- The base station may perform TMSI assignment procedures (see 2.3.15).
• The base station may perform Forward Traffic Channel power control as specified in 3.6.4.1.1.

• The base station may send a Service Option Control Message to invoke a service option specific function in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

• The base station may send the following messages. Some of these messages are generated by the Call Control Instance. If the base station sends a message, the base station shall comply with the specified requirements for sending the message, if any.

  1. Alert With Information Message
  2. Audit Order
  3. Candidate Frequency Search Request Message
  4. Candidate Frequency Search Control Message
  5. Data Burst Message
  6. Extended Alert With Information Message
  7. Extended Handoff Direction Message
  8. Extended Neighbor List Update Message
  9. Extended Release Message
 10. Extended Supplemental Channel Assignment Message
 11. Forward Supplemental Channel Assignment Mini Message
 12. General Handoff Direction Message
 13. In-Traffic System Parameters Message
 14. Local Control Order
 15. Lock Until Power-Cycled Order: The base station should send this order in unassured mode.
 16. Maintenance Order
 17. Maintenance Required Order
 18. Mobile Assisted Burst Operation Parameters Message
 19. Mobile Station Registered Message

4 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.
20. **Neighbor List Update Message**: The base station shall not send this message if **P_REV_IN_USE** is greater than or equal to eight.

21. **Parameter Update Order** (see 2.3.12.1.3 or 3.7.4).

22. **Power Control Message**

23. **Power Control Parameters Message**

24. **Power Up Function Message**

25. **Power Up Function Completion Message**

26. **Release Order**

27. **Resource Allocation Message**

28. **Resource Allocation Mini Message**

29. **Resource Release Request Message**

30. **Resource Release Request Mini Message**

31. **Resource Request Message**

32. **Resource Request Mini Message**

33. **Retrieve Parameters Message**

34. **Reverse Supplemental Channel Assignment Mini Message**

35. **Service Option Control Message**: The base station shall send the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

36. **Service Option Control Order**

37. **Status Request Message**

38. **Status Request Order**: The base station shall not send this message if **P_REV_IN_USE** is greater than or equal to eight.

39. **Supplemental Channel Assignment Message**

40. **TMSI Assignment Message**

41. **Universal Handoff Direction Message**

42. **User Zone Reject Message**

43. **User Zone Update Message**

• If the base station receives one of the following messages from the mobile station, the base station shall process the message according to the specified requirements, if any:

   1. **Base Station Challenge Order**: The base station shall process the message as described in 2.3.12.1.5.

   2. **Call Cancel Message**
3. **Candidate Frequency Search Report Message**: The base station shall process the message as described in 3.6.6.2.2.6.

4. **Candidate Frequency Search Response Message**: The base station shall process the message as described in 3.6.6.2.2.4.

5. **Connect Order**: If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals ‘0’, the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

6. **Continuous DTMF Tone Order**: If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals ‘0’, the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

7. **Data Burst Message**

8. **Enhanced Origination Message**

9. **Extended Flash With Information Message**: If CON_REF_INCL equals ‘0’, the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

10. **Extended Handoff Completion Message**: The base station shall process the message as described in 3.6.6.2.2.7.

11. **Extended Pilot Strength Measurement Message**: The base station shall process the message as described in 3.6.6.2.2.1.

12. **Extended Release Response Message**

13. **Flash With Information Message**: The Layer 3 shall deliver this message to the Call Control instance identified by NULL.

14. **Handoff Completion Message**: The base station shall process the message as described in 3.6.6.2.2.7.

15. **Local Control Response Order**

16. **Long Code Transition Request Order**

17. **Long Code Transition Response Order**

18. **Mobile Station Reject Order**: If the CON_REF_INCL field is included in this message, Layer 3 shall perform the following: if the CON_REF_INCL field equals ‘0’, Layer 3 shall send a ‘messages rejected indication’ to the Call Control instance identified by NULL; otherwise, Layer 3 shall send a ‘messages rejected indication’ to the Call Control instance identified by CON_REF.

19. **Origination Continuation Message**: The Layer 3 shall deliver this message to the Call Control instance identified by NULL.

20. **Parameter Update Confirmation Order**
21. Parameters Response Message

22. Periodic Pilot Strength Measurement Message

23. Pilot Strength Measurement Message: The base station shall process the message as described in 3.6.6.2.2.1.


25. Release Order

26. Request Analog Service Order

27. Request Narrow Analog Service Order

28. Request Wide Analog Service Order

29. Send Burst DTMF Message: If the CON_REF_INCL field is not included in this message or if the CON_REF_INCL field equals '0', the Layer 3 shall deliver this message to the Call Control instance identified by NULL; otherwise, the Layer 3 shall deliver this message to the Call Control instance identified by CON_REF.

30. Service Connect Completion Message

31. Service Option Control Message: The base station shall process the message in accordance with the requirements for the active service subfunction (see 3.6.4.1.2.2).

32. Service Option Control Order

33. Service Option Request Order

34. Service Option Response Order

35. Service Request Message

36. Service Response Message:

37. SSD Update Confirmation Order

38. SSD Update Rejection Order

39. Status Response Message

40. Status Message

41. TMSI Assignment Completion Message

42. User Zone Update Request Message: The base station shall process this message as specified in 3.6.7.2.

3.6.5 Registration

Registration is the process by which a mobile station notifies the base station of its location, status, identification, slot cycle, and other characteristics. The base station can make use of location information to efficiently page the mobile station when establishing a mobile station terminated call. Registration also provides the mobile station's SLOT_CYCLE_INDEX parameter so that the base station can determine which Paging Channel or Forward Common Control Channel slots a mobile station operating in the
slotted mode is monitoring. Registration also provides the protocol revision number so that the base station knows the capabilities of the mobile station.

The CDMA system supports eleven different forms of registration:

1. Power-up registration. The mobile station registers when it powers on, or switches from using the analog system.
2. Power-down registration. The mobile station registers when it powers off if previously registered in the current serving system.
3. Timer-based registration. The mobile station registers when a timer expires.
4. Distance-based registration. The mobile station registers when the distance between the current base station and the base station in which it last registered exceeds a threshold.
5. Zone-based registration. The mobile station registers when it enters a new zone.
6. Parameter-change registration. The mobile station registers when certain of its stored parameters change or when it enters a new system.
7. Ordered registration. The mobile station registers when the base station requests it.
8. Implicit registration. When a mobile station successfully sends an *Origination Message*, *Reconnect Message*, or *Page Response Message*, the base station can infer the mobile station’s location. This is considered an implicit registration.
9. Traffic Channel registration. Whenever the base station has registration information for a mobile station that has been assigned to a Traffic Channel, the base station can notify the mobile station that it is registered.
10. User Zone Registration. The mobile station registers when it selects an active User Zone (see 2.6.9.1.2).
11. Encryption/Message Integrity re-sync required registration. The mobile station registers when extended encryption is turned on and the mobile station determines that it can not decrypt any messages from the base station (see 2.3.12.4.1.3) or the mobile station registers when message integrity is supported and the mobile station determines that it can not validate the MACI of any messages from the base station.

The first five forms of registration, User Zone Registration, and Encryption/Message Integrity re-sync required registration, as a group, are called autonomous registration and are conditioned, in part, by roaming status and by indicators contained in the *System Parameters Message* and ANSI-41 *System Parameters Message* (see 2.6.5.3). The base station may initiate ordered registration through the *Registration Request Order*.

The base station can obtain registration information by sending the *Status Request Message* to the mobile station on the Paging Channel, the Forward Common Control Channel, or the Forward Traffic Channel. If the base station is operating with the mobile station in Band Class 0, the base station can also obtain registration information by sending the *Status Request Order* to the mobile station on the Forward Traffic Channel.
The base station may notify the mobile station that it is registered through the *Mobile Station Registered Message*.

3.6.5.1 Registration on the Common Channels

The base station shall specify the forms of registration that are enabled, the corresponding registration parameters, and the roaming status conditions for which registration is enabled in the *System Parameters Message* and *ANSI-41 System Parameters Message*. If any of the autonomous registration forms are enabled, the base station should also enable parameter-change registration.

The base station should process an *Origination Message*, *Reconnect Message*, or *Page Response Message* sent on the r-csch as an implicit registration of the mobile station sending the message. The base station can obtain complete registration information about the mobile station at any time by sending a *Registration Request Order* to the mobile station.

3.6.5.2 Registration on the Traffic Channels

The base station can obtain registration information from a mobile station on the Traffic Channel by means of the *Status Request Message* or the *Status Request Order*. When the base station has registration information for a mobile station, the base station may send a *Mobile Station Registered Message* to the mobile station, specifying the base station’s registration system, zone, and location information.

3.6.6 Handoff Procedures

3.6.6.1 Overview

3.6.6.1.1 Types of Handoff

The base station supports the following three handoff procedures:

- **Soft Handoff**: A handoff in which a new base station commences communications with the mobile station without interrupting the communications with the old base station. The base station can direct the mobile station to perform a soft handoff only when all Forward Traffic Channels assigned to the mobile station have identical band classes, frequency assignments and frame offsets. Soft handoff provides diversity of Forward Traffic Channels and Reverse Traffic Channel paths on the boundaries between base stations.

- **CDMA-to-CDMA Hard Handoff**: A handoff in which the base station directs the mobile station to transition between disjoint sets of base stations, different band classes, different frequency assignments, different long code masks or different frame offsets.

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5In this section the term base station may imply multiple cells or sectors.
CDMA-to-Analog Handoff: A handoff in which the base station directs the mobile station from a Forward Traffic Channel to an analog voice channel.

Base station support of CDMA-to-CDMA hard handoff between different band classes and support of CDMA-to-analog handoff is optional.

Section 2.6.6 describes the mobile station requirements during handoff.

3.6.6.1.2 Active Set
The Active Set contains the pilots (see 2.6.6.1.2) associated with the Forward Traffic Channels assigned to the mobile station. Initially the base station informs the mobile station of the contents of the Active Set using the Channel Assignment Message or the Extended Channel Assignment Message; subsequent changes to the contents of the Active Set are provided using the Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message.

3.6.6.2 Requirements

3.6.6.2.1 Overhead Information
The base station sends the following messages governing the pilot search procedures performed by the mobile station:
- System Parameters Message
- In-Traffic System Parameters Message
- Neighbor List Message
- Extended Neighbor List Message
- Neighbor List Update Message
- Extended Neighbor List Update Message
- General Neighbor List Message
- General Handoff Direction Message
- Extended Handoff Direction Message
- Candidate Frequency Search Request Message
- Candidate Frequency Search Control Message
- Universal Handoff Direction Message
- Universal Neighbor List Message
- MC-RR Parameters Message

3.6.6.2.1.1 System Parameters
The base station sends handoff related parameters on the Paging Channel in the System Parameters Message and the Extended System Parameters Message, and on the Primary Broadcast Control Channel in the MC-RR Parameters Message.
The base station may revise handoff related parameters for a mobile station operating on the Traffic Channel by sending the In-Traffic System Parameters Message.

The base station may modify the values of the parameters SRCH_WIN_A, T_ADD, T_DROP, T.COMP, and T_TDROP through the Extended Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff Direction Message. In addition, the base station may also modify the values of the parameters SRCH_WIN_N, SRCH_WIN_R, SOFT_SLOPE, ADD_INTERCEPT, DROP_INTERCEPT, and T_TDROP_RANGE through the General Handoff Direction Message or the Universal Handoff Direction Message.

3.6.6.2.1.2 Neighbor List

The base station sends a Neighbor List on the Paging Channel in the Neighbor List Message, the Extended Neighbor List Message, or the General Neighbor List Message. The base station should list the pilots in the Neighbor List Message in descending priority order (see 2.6.6.2.6.3).

The base station may revise the Neighbor List for a mobile station operating on the Traffic Channel by sending a Neighbor List Update Message or an Extended Neighbor List Update Message.

The base station shall not include a pilot that is a member of the mobile station’s Active Set in a Neighbor List Update Message or an Extended Neighbor List Update Message. The base station shall not specify more than $N_{8m}$ pilots in the Neighbor List Message, Extended Neighbor List Message, General Neighbor List Message, or in the Extended Neighbor List Update Message. The base station shall not specify more than 20 pilots in the Neighbor List Update Message. The base station should list the pilots in the Neighbor List Update Message in descending priority order (see 2.6.6.2.6.3).

The base station may also indicate the availability of neighboring analog systems in the General Neighbor List Message to assist the mobile station in performing system reselection (see 2.6.2.1.6).

3.6.6.2.1.3 Candidate Frequency Neighbor List

The base station sends a Candidate Frequency Neighbor List and inter-frequency hard handoff related parameters in the Candidate Frequency Search Request Message. The base station shall not specify more than $N_{8m}$ pilots in the Candidate Frequency Search Request Message.

3.6.6.2.1.4 Candidate Frequency Search List

The base station designates a subset of the Candidate Frequency Neighbor List included in the Candidate Frequency Search Request Message as the Candidate Frequency Search List. For each pilot belonging to the Candidate Frequency Search List, the base station shall set the corresponding SEARCH_SET field of the Candidate Frequency Search Request Message to ‘1’.

3.6.6.2.2 Call Processing During Handoff

When a mobile station performs a handoff from a base station with a P_REV lower than the
mobile station’s MOB_P_REV to a base station with a P_REV greater than the P_REV of the
previous base station, the base station should send the service configuration to the mobile
station.

3.6.6.2.2.1 Processing the Pilot Strength Measurement Message
The base station should use the pilot strength measurements in the Pilot Strength
Measurement Message or the Extended Pilot Strength Measurement Message to determine a
new Active Set.

The base station may also use the PN phase measurements in the Pilot Strength
Measurement Message or the Extended Pilot Strength Measurement Message to estimate the
propagation delay to the mobile station. This estimate can be used to reduce Reverse
Traffic Channel acquisition time.

The base station may respond to a Pilot Strength Measurement Message or an Extended Pilot
Strength Measurement Message received from the mobile station by sending the Extended
Handoff Direction Message, the General Handoff Direction Message, or the Universal Handoff
Direction Message.

3.6.6.2.2.2 Processing the Extended Handoff Direction Message
The base station shall maintain a handoff message sequence number. If the base station
specifies that the mobile station is to use service negotiation, the base station shall set the
SERV_NEG variable (see 3.6.4.1.2.1.4) to be enabled at the action time of the message.
The sequence number shall be initialized to zero prior to the transmission of the first
Extended Handoff Direction Message, General Handoff Direction Message (see 3.6.6.2.2.10),
or the Universal Handoff Direction Message to the mobile station. The base station shall
increment the sequence number modulo 4 each time the base station modifies the pilot list
(including the order in which pilots are specified within the list) or the code channels
(including a change in the ordering such that the first code channel occurrence for any
pilot is changed) sent to the mobile station in an Extended Handoff Direction Message, a
General Handoff Direction Message, or a Universal Handoff Direction Message.

Following a hard handoff, the base station should set the handoff message sequence
number to the value of the LAST_HDM_SEQ field of the Handoff Completion Message or
Extended Handoff Completion Message and should use the pilot order contained in the
Handoff Completion Message or Extended Handoff Completion Message to interpret the

The base station shall set the contents of an Extended Handoff Direction Message according
to the following rules:

• An Extended Handoff Direction Message shall list no more than $N_{6m}$ pilots in the
  new Active Set.

• An Extended Handoff Direction Message shall identify the identical power control
  subchannels (i.e., those carrying identical power control bits).

• An Extended Handoff Direction Message may change the code channel associated
  with an Active Set pilot that remains in the new Active Set.
• The base station specifies the long code mask to be used on the new Forward Traffic Channel by using the PRIVATE_LCM field of the **Extended Handoff Direction Message**. The base station may change the long code mask to be used on the new Forward Traffic Channel via the PRIVATE_LCM field of the **Extended Handoff Direction Message** only for CDMA-to-CDMA hard handoffs. If a change of long code mask is specified and the base station does not specify an explicit action time in the **Extended Handoff Direction Message**, the base station shall begin using the new long code mask on the first 80 ms boundary (relative to System Time) occurring at least 80 ms after the end of the frame containing the last bit of the message.

• For CDMA-to-CDMA handoffs, the base station may require the mobile station to perform a reset of the acknowledgment procedures by using the RESET_L2 field of the **Extended Handoff Direction Message**. If the base station requires the mobile station to reset the acknowledgment procedures, Layer 3 shall send an indication to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment procedures shall be reset immediately after the action time of the **Extended Handoff Direction Message**.

• For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by setting the FRAME_OFFSET field to a new value. If the base station specifies a new frame offset and does not specify an explicit action time, the base station shall change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms boundary (relative to System Time) after the end of transmission of the **Extended Handoff Direction Message**, unless the end of transmission of the message coincides with an 80 ms boundary, in which case the change in frame offsets shall occur 80 ms after the end of transmission.

• For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting the NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA hard handoffs to band classes other than Band Class 0 and Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting both the NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.

• The base station may specify a different band class by setting the BAND_CLASS and CDMA_FREQ fields to the band class and CDMA frequency assignment respectively. The base station shall not specify a band class not supported by the mobile station.

• If the base station sends the **Extended Handoff Direction Message** in assured mode, the base station should set the action time of the message such that there is sufficient time for the mobile station to transmit a message containing the acknowledgment prior to the action time.
• For CDMA-to-CDMA hard handoffs, the base station may specify whether the mobile station is to use service negotiation or service option negotiation by setting the SERV_NEG_TYPE field of the Extended Handoff Direction Message. If the base station specifies that the mobile station is to use service negotiation, the base station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action time of message. If the base station specifies that the mobile station is to use service option negotiation, the base station shall set SERV_NEG to disabled at the action time of the message.

3.6.6.2.2.3 Processing the Candidate Frequency Search Request Message

The base station may send a Candidate Frequency Search Request Message to direct the mobile station to perform a single or periodic search on the Candidate Frequency.

The base station may request the mobile station to perform an aligned search of the Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile station to perform an aligned search, the base station shall specify an explicit action time for the Candidate Frequency Search Request Message.

The base station shall maintain a search message sequence number. The sequence number shall be initialized to zero prior to the transmission of the first Candidate Frequency Search Request Message to the mobile station. Each time the base station sends a new Candidate Frequency Search Request Message to the mobile station, it shall set the CFSRM_SEQ field to the current value of the sequence number, and increment the sequence number modulo 4.

3.6.6.2.2.4 Processing the Candidate Frequency Search Response Message

The base station should use the mobile station’s search capabilities as reported in the Candidate Frequency Search Response Message to determine an appropriate period for the mobile station’s periodic search on the Candidate Frequency.

3.6.6.2.2.5 Processing the Candidate Frequency Search Control Message

The base station may send a Candidate Frequency Search Control Message to direct the mobile station to perform a single search, or to start or stop a periodic search on the Candidate Frequency.

The base station may request the mobile station to perform an aligned search of the Candidate Frequency Search Set (see 2.6.6.2.8.3). If the base station requests the mobile station to perform an aligned search, the base station shall specify an explicit action time for the Candidate Frequency Search Control Message.

Each time the base station sends a new Candidate Frequency Search Control Message to the mobile station, it shall set the CFSCM_SEQ field to the current value of the sequence number, and increment the sequence number modulo 4.
3.6.6.2.2.6 Processing the Candidate Frequency Search Report Message

The base station should use the value of the LAST_SRCH_MSG field and of the
LAST_SRCH_MSG_SEQ field of the Candidate Frequency Search Report Message to interpret
the contents of the message.

If the SEARCH_MODE field of the Candidate Frequency Search Report Message is equal to
‘0000’, the base station should use the pilot strength measurements in the message to
determine whether to direct the mobile station to perform a CDMA-to-CDMA inter-
frequency handoff, and to determine the new Active Set. If the SEARCH_MODE field of the
Candidate Frequency Search Report Message is equal to ‘0001’, the base station should use
the analog frequency strength measurements in the message to determine whether to
direct the mobile station to perform a CDMA-to-Analog handoff.

3.6.6.2.2.7 Transmitting During Handoff

The base station shall continue transmission to the mobile station on the Fundamental
Channel or the Dedicated Control Channel of a Forward Traffic Channel removed from the
Active Set until it receives the Handoff Completion Message or Extended Handoff Completion
Message from the mobile station or determines that the call has been released.

The base station should discontinue transmission to the mobile station on the
Fundamental Channel or the Dedicated Control Channel of a Forward Traffic Channel
removed from the Active Set after it receives the Handoff Completion Message or Extended
Handoff Completion Message.

For Forward Multiplex Options 3 through 16, the base station should discontinue
transmission of Forward Supplemental Code Channels removed from the Code Channel
List according to the following rules:

• If a General Handoff Direction Message is used to remove one or more Forward
  Supplemental Code Channels, the base station should discontinue transmission on
  those code channels no later than the action time of the General Handoff Direction
  Message.

• If a Supplemental Channel Assignment Message is used to remove one or more
  Forward Supplemental Code Channels, the base station should discontinue
  transmission on those Forward Supplemental Code Channels no later than the
  implicit action time of the Supplemental Channel Assignment Message.

3.6.6.2.2.8 Ordering Pilot Measurements From the Mobile Station

The base station may direct the mobile station to send a Pilot Strength Measurement
Message by sending a Pilot Measurement Request Order.

The base station may send a Periodic Pilot Measurement Request Order to direct the mobile
station to send pilot strength measurements one time or periodically. In response to the
order, the mobile station reports the pilot strength measurements using the Periodic Pilot
Strength Measurement Message.
3.6.6.2.9 Processing the Supplemental Channel Assignment Message

The base station may use this message to specify Supplemental Code Channel assignment parameters for the mobile station’s Forward Traffic Channel, Reverse Traffic Channel, or both. This information includes the parameters that control the timing of the Supplemental Code Channel assignment (e.g., starting time and duration), and parameters that control the number of Supplemental Code Channels which will be used during the assignment (e.g., the number of Reverse Supplemental Code Channels on which the mobile station may transmit and the set of Walsh codes on which the mobile station receives Forward Supplemental Code Channels for each pilot in the mobile station’s Active Set).

The Supplemental Channel Assignment Message shall be used only with Multiplex Options 3 through 16.

The base station shall set the content of a Supplemental Channel Assignment Message according to the following rules:

- The base station may set USE_RETRY_DELAY to ‘1’ and RETRY_DELAY to a delay in 320 ms units starting at the next 80 ms system time boundary during which the mobile station is to refrain from sending subsequent Supplemental Channel Request Messages. The base station may set RETRY_DELAY to ‘11111111’ to indicate that the mobile station is to refrain from transmitting Supplemental Channel Request Messages indefinitely. Otherwise, the base station shall set USE_RETRY_DELAY to ‘0’ and omit RETRY_DELAY in which case the mobile station is to reset any previously set RETRY_DELAY indication.

- The base station shall set REV_DTX_DURATION to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Code Channel before resuming transmission on the Reverse Supplemental Code Channel within the reverse assignment duration. The base station shall set this field to ‘0000’ if the mobile station is to stop using a Reverse Supplemental Code Channel once it has stopped transmitting on that Reverse Supplemental Code Channel. The base station shall set this field to ‘1111’ if the mobile station is allowed to resume transmission on a Reverse Supplemental Code Channel at any time within the reverse assignment duration.

- A Supplemental Channel Assignment Message may specify Reverse Supplemental Code Channel assignments. If Reverse Supplemental Code Channel assignment information is included, the base station shall set REV_INCLUDED to ‘1’ and include the appropriate Reverse Supplemental Code Channel assignment information. Otherwise, the base station shall set REV_INCLUDED to ‘0’.

- The base station shall indicate the implicit, explicit, or linked start time for a Reverse Supplemental Code Channel assignment as follows:
  - The base station may set EXPL_REV_START_TIME to ‘1’ and set REV_START_TIME to the System Time, in units of 80 ms (modulo 64), at which the mobile station is to start transmitting on the Reverse Supplemental Code Channels.
– The base station may set USE_REV_HDM_SEQ to ‘1’ and set REV_LINKED_HDM_SEQ to the sequence number of the General Handoff Direction Message (HDM_SEQ) with which this message is linked to indicate that the mobile station is to start processing the Reverse Supplemental Code Channels at the action time of the linked General Handoff Direction Message.

– The base station may set EXPL_REV_START_TIME to ‘0’ and USE_REV_HDM_SEQ to ‘0’ to indicate that the mobile station is to start processing Reverse Supplemental Code Channels at the implicit action time of this message.

– The base station shall not set both EXPL_REV_START_TIME and USE_REV_HDM_SEQ to ‘1’.

• The base station may set USE_REV_DURATON to ‘1’ and REV_DURATON to the time interval, in units of 80 ms, after the implicit, explicit, or linked action time for the message (as specified in 2.6.6.2.5.1), during which the mobile station is to transmit on the specified Reverse Supplemental Code Channels. The base station may set USE_REV_DURATON to ‘0’ to indicate an infinite duration for the assignment of Reverse Supplemental Code Channels. If NUM_REV_CODES is ‘000’, then the base station shall set USE_REV_DURATON to ‘0’.

• If Reverse Supplemental Code Channel assignment information is included, the base station shall set NUM_REV_CODES to the number of Reverse Supplemental Code Channels to be used in this Reverse Supplemental Code Channel assignment. The base station shall not set NUM_REV_CODES to be greater than the number of codes supported by the currently negotiated multiplex option.

• The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Code Channel assignment T_ADD abort indicator, to ‘1’ to indicate that the mobile station is to abort Reverse Supplemental Code Channel assignments implicitly when a T_ADD trigger occurs. Otherwise, the base station shall set USE_T_ADD_ABORT to ‘0’. If NUM_REV_CODES is set to ‘000’, the base station shall set USE_T_ADD_ABORT to ‘0’.

• If the base station is sending this message in response to a Supplemental Channel Request Message which includes a Supplemental Channel Request Message sequence number and the mobile station is to clear the IGNORE_SCAM field, the base station shall set USE_SCRM_SEQ_NUM to ‘1’ and set SCRM_SEQ_NUM to the sequence number corresponding to the SCRM_SEQ_NUM field in a Supplemental Channel Request Message to which the mobile station is to match this message. Otherwise, the base station shall set USE_SCRM_SEQ_NUM to ‘0’ and omit SCRM_SEQ_NUM.

• A Supplemental Channel Assignment Message may specify Forward Supplemental Code Channel assignments. If Forward Supplemental Code Channel assignment information is included, the base station shall set FOR_INCLUDED to ‘1’ and include the appropriate Forward Supplemental Code Channel assignment information. Otherwise, the base station shall set FOR_INCLUDED to ‘0’.
• The base station shall set FOR_SUP_CONFIG to ‘00’ if the mobile station is to stop processing the forward supplemental code after the action time of the Supplemental Channel Assignment Message. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels after the message takes effect.

• The base station shall set FOR_SUP_CONFIG to ‘01’ if the mobile station is to start processing the Forward Supplemental Code Channels in the Code Channel List at the implicit, explicit, or linked action time for the message as specified in 2.6.6.2.5.1.

• The base station shall set FOR_SUP_CONFIG to ‘10’ if the Forward Supplemental Code Channels associated with the pilots in the Active set are specified in the Supplemental Channel Assignment Message and is to stop processing Forward Supplemental Code Channels at the implicit action time of the message. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels after the message takes effect.

• The base station shall set FOR_SUP_CONFIG to ‘11’ if the Forward Supplemental Code Channels associated with the pilots in the Active set are specified in the Supplemental Channel Assignment Message and the mobile station is to start processing the Forward Supplemental Code Channels at the implicit, explicit, or linked action time for the message as specified in 2.6.6.2.5.1.

• The base station shall set FOR_DURATION to the time interval, in units of 80 ms, after the implicit, explicit, or linked action time for the message (as specified in 2.6.6.2.5.1), during which the mobile station is to process the specified Forward Supplemental Code Channels. The base station may set USE_FOR_DURATION to ‘0’ to indicate an infinite duration for the allocation of Forward Supplemental Code Channels. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels outside the time interval specified by FOR_DURATION.

• The base station may set EXPL_FOR_START_TIME to ‘1’ and set FOR_START_TIME to the System Time, in units of 80 ms (modulo 64), at which the mobile station is to start processing the Forward Supplemental Code Channels.

• The base station may set USE_FOR_HDM_SEQ to ‘1’ and set FOR_LINKED_HDM_SEQ to the sequence number of the General Handoff Direction Message (HDM_SEQ) with which this message is linked to indicate that the mobile station is to start processing the Forward Supplemental Code Channels at the action time of the linked General Handoff Direction Message.

• The base station shall not set both USE_FOR_HDM_SEQ and EXPL_FOR_START_TIME within a Supplemental Channel Assignment Message to ‘1’.

• The number of Supplemental Code Channels assigned by Supplemental Channel Assignment Message shall not exceed the maximum number of Supplemental Code Channels for the negotiated Forward Multiplex Option.
• The base station may set EXPL_FOR_START_TIME to ‘0’ and USE_FOR_HDM_SEQ to ‘0’ to indicate that the mobile station is to start processing Forward Supplemental Code Channels at the implicit action time of this message.

3.6.6.2.2.10 Processing the General Handoff Direction Message

The base station shall maintain a handoff message sequence number. The sequence number shall be initialized to zero prior to the transmission of the first Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message (see 3.6.6.2.2.11) to the mobile station (see 2.6.6.2.2.2). The base station shall increment the sequence number modulo 4 each time the base station modifies the pilot list (including the order in which pilots are specified within the list) or the code channels (including a change in the ordering such that the first code channel occurrence for any pilot is changed) sent to the mobile station in an Extended Handoff Direction Message, General Handoff Direction Message, or Universal Handoff Direction Message.

Following a hard handoff, the base station should set the handoff message sequence number to the value of the LAST_HDM_SEQ field of the Handoff Completion Message or Extended Handoff Completion Message and should use the pilot order contained in the Handoff Completion Message or Extended Handoff Completion Message to interpret the contents of subsequent Power Measurement Report Messages.

The base station shall set the contents of a General Handoff Direction Message according to the following rules:

• A General Handoff Direction Message shall list no more than $N_{6m}$ pilots in the new Active Set.

• The base station may include a Service Configuration Information Record in the General Handoff Direction Message to accept a service configuration proposed in a Service Request Message or Service Response Message, and instruct the mobile station to begin using the service configuration.

• A General Handoff Direction Message shall identify the identical power control subchannels (i.e., those carrying identical power control bits).

• A General Handoff Direction Message shall identify the transmit power level of the power control subchannels to the transmit power level of 20 ms frames at a 9600 bps or 14400 bps rate on their respective associated channels (Forward Fundamental Channel or Forward Dedicated Control Channel).

• For CDMA-to-CDMA handoffs, the base station may specify Power Control Subchannel Gain action time [PC_ACTION_TIME]. If PC_ACTION_TIME is included in this message, the base station shall apply the new FPC_SUBCHAN_GAIN at the time specified by PC_ACTION_TIME. If the PC_ACTION_TIME is not included in this message but the explicit action time is included, the base station shall apply the new FPC_SUBCHAN_GAIN at the action time of the General Handoff Direction Message. If the implicit action time is used, the base station should gradually apply any change in FPC_SUBCHAN_GAIN.
• A General Handoff Direction Message may change the code channel associated with an Active Set pilot that remains in the new Active Set.

• The base station specifies the long code mask to be used on the new Forward Traffic Channel by using the PRIVATE_LCM field of the General Handoff Direction Message. The base station may change the long code mask to be used on the new Forward Traffic Channel via the PRIVATE_LCM field of the General Handoff Direction Message only for CDMA-to-CDMA hard handoffs. If a change of long code mask is specified and the base station does not specify an explicit action time in the General Handoff Direction Message, the base station shall begin using the new long code mask on the first 80 ms boundary (relative to System Time) occurring at least 80 ms after the end of the frame containing the last bit of the message.

• For CDMA-to-CDMA handoffs, the base station may require the mobile station to perform a reset of the acknowledgment procedures by using the RESET_L2 field of the General Handoff Direction Message. If the base station requires the mobile station to reset the acknowledgment procedures, Layer 3 shall send an indication to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment procedures of the base station that the mobile station is to handoff to shall be reset immediately after the action time of the General Handoff Direction Message.

• For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by setting the FRAME_OFFSET field to a new value. If the base station specifies a new frame offset and does not specify an explicit action time, the base station shall change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms boundary (relative to System Time) after the end of transmission of the General Handoff Direction Message, unless the end of transmission of the message coincides with an 80 ms boundary, in which case the change in frame offsets shall occur 80 ms after the end of transmission.

• For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting the NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA hard handoffs to band classes other than Band Class 0 and Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting both the NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.

• The base station may specify a different band class by setting the BAND_CLASS and CDMA_FREQ fields to the band class and CDMA frequency assignment respectively. The base station shall not specify a band class not supported by the mobile station.

• If the base station sends the General Handoff Direction Message in assured mode, the base station should set the action time of the message such that there is sufficient time for the mobile station to transmit a message containing the acknowledgment prior to the action time.
• For CDMA-to-CDMA hard handoffs, the base station may specify whether the mobile station is to use service negotiation or service option negotiation by setting the SERV_NEG_TYPE field of the *General Handoff Direction Message*. If the base station specifies that the mobile station is to use service negotiation, the base station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action time of message. If the base station specifies that the mobile station is to use service option negotiation, the base station shall set SERV_NEG to disabled at the action time of the message.

• The base station may specify whether the mobile station is to restore its configuration to what it was before the handoff attempt, if it fails in the handoff attempt using criteria specified in the *Candidate Frequency Search Request Message*, by using the RETURN_IF_HANDOFF_FAIL field of the *General Handoff Direction Message*. The base station may specify whether the mobile station is to periodically search a CDMA Candidate Frequency for useable pilots, using criteria specified in the *Candidate Frequency Search Request Message*, by using the PERIODIC_SEARCH field of the *General Handoff Direction Message*.

• The base station may include Forward Supplemental Code Channel assignment information in the *General Handoff Direction Message* if the Forward Multiplex Option for the currently connected service option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, or 16. If Forward Supplemental Code Channel assignment information is included, the base station shall include FOR_INCLUDED, set FOR_INCLUDED to ‘1’, and include the appropriate Forward Supplemental Code Channel assignment information.

• The number of Forward Supplemental Code Channels assigned by the *General Handoff Direction Message* shall not exceed the maximum number of Forward Supplemental Code Channels for the negotiated Forward Multiplex Option.

• The base station shall set FOR_SUP_CONFIG to ‘00’ if the mobile station is to stop processing the Forward Supplemental Code Channel after the action time of *General Handoff Direction Message*. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels after the message takes effect.

• The base station shall set FOR_SUP_CONFIG to ‘01’ if the mobile station is to start processing the Forward Supplemental Code Channels in the Code Channel List at the action time of the message.

• The base station shall set FOR_SUP_CONFIG to ‘10’ if the Forward Supplemental Code Channels associated with the pilots in the Active set are specified in the *General Handoff Direction Message* and the mobile station is to stop processing Forward Supplemental Code Channels at the implicit action time of the message. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels after the message takes effect.

• The base station shall set FOR_SUP_CONFIG to ‘11’ if the Forward Supplemental Code Channels associated with the pilots in the Active set are specified in the *General Handoff Direction Message* and the mobile station is to start processing the Forward Supplemental Code Channels at the action time of the message.
• The base station shall set FOR_DURATION to the time interval after the action time of the message, in units of 80 ms, during which the mobile station is to process the specified Forward Supplemental Code Channels. The base station may set USE_FOR_DURATION to ‘0’ to indicate an infinite duration for the allocation of Forward Supplemental Code Channels. The base station should not transmit to the mobile station on the Forward Supplemental Code Channels outside the time interval specified by FOR_DURATION.

• If FOR_INCLUDED is included in the message, the base station shall include EXPL_CODE_CHAN for each pilot included in the message. If EXPL_CODE_CHAN is included and set to ‘1’ for a pilot, the code channels associated with the pilot in the General Handoff Direction Message shall be ordered such that the first code channel occurrence is associated with the Forward Fundamental Channel and the successive occurrences are associated with Forward Supplemental Code Channels. If EXPL_CODE_CHAN is included and is set to ‘0’, for each pilot in the new Active Set, the base station shall include BASE_CODE_CHAN and set it to the base code channel index in the range of 1 to (63 - NUM_FOR_SUP + 1), inclusive, that the mobile station is to use as the first Forward Supplemental Code Channel associated with this pilot. The mobile station is to use NUM_FOR_SUP adjacent code channels beginning with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN through BASE_CODE_CHAN + NUM_FOR_SUP - 1) for the Forward Supplemental Code Channels associated with this pilot.

• The base station may include Reverse Supplemental Code Channel assignment information in the General Handoff Direction Message if the Reverse Multiplex Option is 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, or 16. If Reverse Supplemental Code Channel assignment information is included, the base station shall include REV_INCLUDED, set REV_INCLUDED to ‘1’, and include the appropriate Reverse Supplemental Code Channel assignment information in the additional fields.

• If Reverse Supplemental Code Channel assignment information is included, the base station shall set NUM_REV_CODES to the number of Reverse Supplemental Code Channels to be used by the mobile station. The base station shall not set NUM_REV_CODES to be greater than the number of codes supported by the currently negotiated multiplex option.

• The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Code Channel assignment T_ADD abort indicator, to ‘1’ to indicate that the mobile station is to abort Reverse Supplemental Code Channel assignments implicitly when a T_ADD trigger occurs. Otherwise, the base station shall set USE_T_ADD_ABORT to ‘0’. If NUM_REV_CODES is set to ‘000’, the base station shall set USE_T_ADD_ABORT to ‘0’.
• The base station shall set REV_DTX_DURATION to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Code Channel before resuming transmission on the Reverse Supplemental Code Channel. The base station shall set this field to ‘0000’ if the mobile station is to stop using a Reverse Supplemental Code Channel once it has stopped transmitting on that Reverse Supplemental Code Channel. The base station shall set this field to ‘1111’ if the mobile station is allowed to resume transmission on a Reverse Supplemental Code Channel at any time within the reverse assignment duration.

• The base station may set CLEAR_RETRY_DELAY to ‘1’ to indicate that the mobile station is to cancel any previously stored retry delay. Otherwise, the base station shall set CLEAR_RETRY_DELAY to ‘0’ to indicate that the mobile station is to continue to honor any previously stored retry delay (see 2.6.6.2.5.1).

• The base station may indicate a duration for the Reverse Supplemental Code Channel assignment (in 80 ms superframes) by setting USE_REV_DURATION to ‘1’ and indicating the desired duration in the REV_DURATION field. If USE_REV_DURATION is set to ‘0’, a duration of infinity is indicated, and the base station shall set the REV_DURATION to ‘00000000’. If NUM_REV_CODES is ‘000’, then the base station shall set USE_REV_DURATION to ‘0’ and shall set REV_DURATION to ‘00000000’.

• The base station may set USE_REV_DURATION to ‘1’ and REV_DURATION to the time interval after the action time of the message, in units of 80 ms, during which the mobile station may transmit on the assigned Reverse Supplemental Code Channels. The base station may set USE_REV_DURATION to ‘0’ to indicate an infinite duration for the allocation of Forward Supplemental Code Channels.

• The base station may specify a closed loop power control step size by setting USE_PWR_CNTL_STEP to ‘1’ and indicating the desired power control step size in the PWR_CNTL_STEP field (see 2.1.2.3.2). Otherwise, the base station shall set USE_PWR_CNTL_STEP to ‘0’. The base station shall not specify a power control step size not supported by the mobile station.

3.6.6.2.2.11 Processing the Universal Handoff Direction Message

The base station shall maintain a handoff message sequence number. The sequence number shall be initialized to zero prior to the transmission of the first Extended Handoff Direction Message (see 3.6.6.2.2.2), General Handoff Direction Message (see 3.6.6.2.2.10), or Universal Handoff Direction Message to the mobile station. The base station shall increment the sequence number modulo 4 each time the base station modifies the pilot list (including the order in which pilots are specified within the list) or the code channels (including a change in the ordering such that the first code channel occurrence for any pilot is changed) sent to the mobile station in an Extended Handoff Direction Message, a General Handoff Direction Message, or an Universal Direction Message.

Following a hard handoff, the base station should set the handoff message sequence number to the value of the LAST_HDM_SEQ field of the Handoff Completion Message or

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Extended Handoff Completion Message and should use the pilot order contained in the Handoff Completion Message or Extended Handoff Completion Message to interpret the contents of subsequent Power Measurement Report Messages.

The base station shall set the contents of a Universal Handoff Direction Message according to the following rules:

- A Universal Handoff Direction Message shall list no more than $N_{6m}$ pilots in the new Active Set.
- The base station may include a Service Configuration Information Record in the Universal Handoff Direction Message to accept a service configuration proposed in a Service Request Message or Service Response Message, and instruct the mobile station to begin using the service configuration.
- A Universal Handoff Direction Message shall identify the identical power control subchannels (i.e., those carrying identical power control bits).
- A Universal Handoff Direction Message shall identify the transmit power level of the power control subchannels to the transmit power level of 20 ms frames at a 9600 bps or 14400 bps rate on their respective associated channels (Forward Fundamental Channel or Forward Dedicated Control Channel).
- For CDMA-to-CDMA handoffs, the base station may specify Power Control Subchannel Gain action time (PC_ACTION_TIME). If PC_ACTION_TIME is included in this message, the base station shall apply the new FPC_SUBCHAN_GAIN at the time specified by PC_ACTION_TIME. If the PC_ACTION_TIME is not included in this message but the explicit action time is included, the base station shall apply the new FPC_SUBCHAN_GAIN at the action time of the Universal Handoff Direction Message. If the implicit action time is used, the base station should gradually apply any change in FPC_SUBCHAN_GAIN.
- A Universal Handoff Direction Message may change the code channel associated with an Active Set pilot that remains in the new Active Set.
- A Universal Handoff Direction Message may delete the code channel associated with an Active Set pilot that remains in the new Active Set.
- A Universal Handoff Direction Message may add the code channel associated with an Active Set pilot that remains in the new Active Set.
- The base station specifies the long code mask to be used on the new Forward Traffic Channel by using the PRIVATE_LCM and PLCM_TYPE fields of the Universal Handoff Direction Message. The base station may change the contents of the PRIVATE_LCM this field only for CDMA-to-CDMA hard handoffs. If a change of long code mask is specified and the base station does not specify an explicit action time in the Universal Handoff Direction Message, the base station shall begin using the new long code mask on the first 80 ms boundary (relative to System Time) occurring at least 80 ms after the end of the frame containing the last bit of the message.
• For CDMA-to-CDMA handoffs, the base station may require the mobile station to perform a reset of the acknowledgment procedures by using the RESET_L2 field of the *Universal Handoff Direction Message*. If the base station requires the mobile station to reset the acknowledgment procedures, Layer 3 shall send an indication to Layer 2 to reset the acknowledgment procedures (see [4]). The acknowledgment procedures of the base station that the mobile station is to handoff to shall be reset immediately after the action time of the *General Handoff Direction Message*.

• For CDMA-to-CDMA hard handoffs, the base station may alter the frame offset by setting the FRAME_OFFSET field to a new value. If the base station specifies a new frame offset and does not specify an explicit action time, the base station shall change its Forward and Reverse Traffic Channel frame offsets at the second 80 ms boundary (relative to System Time) after the end of transmission of the *Universal Handoff Direction Message*, unless the end of transmission of the message coincides with an 80 ms boundary, in which case the change in frame offsets shall occur 80 ms after the end of transmission.

• For CDMA-to-CDMA hard handoffs to Band Class 0 or Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting the NOM_PWR field to the new nominal transmit power offset. For CDMA-to-CDMA hard handoffs to band classes other than Band Class 0 and Band Class 3, the base station may alter the nominal transmit power offset after handoff by setting both the NOM_PWR and NOM_PWR_EXT fields to the new nominal transmit power offset.

• The base station may specify a different band class by setting the BAND_CLASS and CDMA_FREQ fields to the band class and CDMA frequency assignment respectively. The base station shall not specify a band class not supported by the mobile station.

• If the base station sends the *Universal Handoff Direction Message* in assured mode, the base station should set the action time of the message such that there is sufficient time for the mobile station to transmit a message containing the acknowledgment prior to the action time.

• For CDMA-to-CDMA handoffs, the base station may specify whether the mobile station is to use service negotiation or service option negotiation by setting the SERV_NEG_TYPE field of the *Universal Handoff Direction Message*. If the base station specifies that the mobile station is to use service negotiation, the base station shall set the SERV_NEG variable (see 3.6.4.1.2.1.4) to enabled at the action time of message. If the base station specifies that the mobile station is to use service option negotiation, the base station shall set SERV_NEG to disabled at the action time of the message.
• The base station may specify whether the mobile station is to restore its configuration to what it was before the handoff attempt, if it fails in the handoff attempt using criteria specified in the Candidate Frequency Search Request Message, by using the RETURN_IF_HANDOFF_FAIL field of the Universal Handoff Direction Message. The base station may specify whether the mobile station is to periodically search a CDMA Candidate Frequency for useable pilots, using criteria specified in the Candidate Frequency Search Request Message, by using the PERIODIC_SEARCH field of the Universal Handoff Direction Message.

• The base station specifies Active Set for the Fundamental Channel only, the Dedicated Control Channel only, or both. The Active Set of the Dedicated Control Channel shall be the same as the Active Set of the Fundamental Channel when both the Fundamental Channel and Dedicated Control Channel are assigned.

• The base station may specify the Active Set of the Supplemental Channels. The Active Set of the Supplemental Channels shall be a subset of the Active Set of the Fundamental Channel or the Dedicated Control Channel.

• If a Reverse Packet Data Channel assignment is not included, a Universal Handoff Direction Message may specify a Reverse Supplemental Channel assignment. If Reverse Supplemental Channel assignment information is included, this message contains information that specifies the start time, duration, and the data transfer rate associated with this Reverse Supplemental Channel assignment.

• If a Reverse Packet Data Channel assignment is included, a Universal Handoff Direction Message shall not specify a Reverse Supplemental Channel assignment.

• A Universal Handoff Direction Message may specify a Forward Supplemental Channel assignment. If Forward Supplemental Channel assignment information is included, this message contains the start time, duration, and SCCL_INDEX associated with this Forward Supplemental Channel assignment.

• A Universal Handoff Direction Message may update the mapping between a particular SCCL_INDEX and a set of fields that specifies the data transfer rate, QOF index, Forward Supplemental Channel Walsh code for each PILOT_PN, and the active set for the Forward Supplemental Channel associated with FOR_SCH_ID.

• A Universal Handoff Direction Message may update REV_WALSH_ID field which specifies the Reverse Supplemental Walsh cover.

• The base station may set CLEAR_RETRY_DELAY to ‘1’ to indicate that the mobile station is to cancel any previously stored retry delay. Otherwise, the base station shall set CLEAR_RETRY_DELAY to ‘0’ to indicate that the mobile station is to continue to honor any previously stored retry delay (see 2.6.6.2.5.1).

3.6.6.2.2.12 Processing of Extended Supplemental Channel Assignment Message

If the Reverse Packet Data Channel is not assigned, the base station may use this message to carry Forward Supplemental Channel assignment information or Reverse Supplemental Channel assignment information.

If the Reverse Packet Data Channel is assigned, the base station may use this message to
carry Forward Supplemental Channel assignment information, and the base station shall
not use this message to carry Reverse Supplemental Channel assignment information.

If Forward Supplemental Channel assignment information is included, this message
contains the start time, duration, and SCCL_INDEX associated with this Forward
Supplemental Channel assignment. If Reverse Supplemental Channel assignment
information is included, this message contains information that specifies the start time,
duration, and the number of information bits per frame (or set of number of bits per frame
if RSCH_VAR_TABLE_IDs[REV_SCH_ID] is not equal to '000') associated with this Reverse
Supplemental Channel assignment.

This message may specify the mapping between a particular SCCL_INDEX and a set of
fields that specifies the number of information bits per frame (or set of number of bits per frame
if FSCH_VAR_TABLE_IDs[FOR_SCH_ID] is not equal to '000'), QOF index, Forward
Supplemental Channel Walsh code for each PILOT_PN, and the active set for the Forward
Supplemental Channel associated with FOR_SCH_ID.

This message may also include REV_WALSH_ID field which specifies the Reverse
Supplemental Walsh cover.

This message also includes START_TIME_UNIT for this message, Forward Supplemental
Channel Assignment Mini Messages, or Reverse Supplemental Channel Assignment Mini
Messages, or Universal Handoff Direction Message.

The base station shall set the contents of an Extended Supplemental Channel Assignment
Message according to the following rules:

- An Extended Supplemental Channel Assignment Message may specify a Reverse
Supplemental Channel assignment. The base station shall set NUM_REV_SCH to
the number of Reverse Supplemental Channels to be assigned. If the Reverse Packet
Data Channel is assigned, the base station shall set NUM REV_SCH to 0.

- An Extended Supplemental Channel Assignment Message may specify a Forward
Supplemental Channel assignment. The base station shall set NUM_FOR_SCH to
the number of Forward Supplemental Channels to be assigned.

- The base station shall set the START_TIME_UNIT field to indicate the unit of the
FOR_SCH_START_TIME included in this message, and the Forward Supplemental
Channel Assignment Mini Messages and the Universal Handoff Direction Message
and REV_SCH_START_TIME included in this message, and the Reverse
Supplemental Channel Assignment Mini Messages and the Universal Handoff
Direction Message. The base station shall set this field to one less than the number
of 20 ms intervals that is to be used by the mobile station for calculating the start
time included in Forward Supplemental Channel assignments or Reverse
Supplemental Channel assignments.

- An Extended Supplemental Channel Assignment Message may specify Forward
Supplemental Channel configuration information. The base station shall set
NUM_FOR_SCH_CFG to the number of Forward Supplemental Channel to be
configured.
• The base station shall set the NUM_REC field to the number of instances of the
following record minus one included in this message. The base station shall set the
fields within each record as follows:
  – The base station shall set the SCCL_INDEX field to the index of the
    Supplemental Channel Code Information Record in the Supplemental Channel
    Code List Table.
  – The base station shall set the FOR_SCH_NUM_BITS_IDX field to the Forward
    Supplemental Channel number of information bits index associated with
    SCCL_INDEX.
  – The base station shall set the NUM_SUP_SHO field to the number of Forward
    Supplemental Channels minus one, corresponding to the FOR_SCH_ID and the
    SCCL_INDEX, for which the frames are to be soft-combined by the mobile
    station. The base station shall set the fields within each record as follows:
    + The base station shall set the PILOT_PN field to the pilot PN sequence offset
      for this pilot in units of 64 PN chips.
    + The base station shall set the QOF_MASK_ID_SCH field to the ID of the
      Quasi Orthogonal Function mask ID corresponding to the Forward
      Supplemental Channel Code index.
    + The base station shall set the CODE_CHAN_SCH field to the code channel
      on the Supplemental Channel corresponding to the PILOT_PN.
• REV_SCH_DTX_DURATI0N: The base station shall set REV_SCH_DTX_DURATION
  to the maximum duration of time in units of 20 ms that the mobile station is
  allowed to stop transmission on a Reverse Supplemental Channel before resuming
  transmission on the Reverse Supplemental Channel within the reverse assignment
duration. The base station shall set this field to ‘0000’ if the mobile station is to
  stop using a Reverse Supplemental Channel once it has stopped transmitting on
  that Reverse Supplemental Channel. The base station shall set this field to ‘1111’ if
  the mobile station is allowed to resume transmission on a Reverse Supplemental
  Channel at any time within the reverse assignment duration.
• The base station may set USE_T_ADD_ABORT, the Reverse Supplemental Channel
  assignment T_ADD abort indicator, to ‘1’ to indicate that the mobile station is to
  abort Reverse Supplemental Channel assignments when a T_ADD trigger occurs.
  Otherwise, the base station shall set USE_T_ADD_ABORT to ‘0’.
• If the base station is sending this message in response to a Supplemental Channel
  Request Message which includes a Supplemental Channel Request Message
  sequence number and the mobile station is to clear the IGNORE_ESCAM field, the
  base station shall set USE_SCRM_SEQ_NUM to ‘1’ and set SCRM_SEQ_NUM to the
  sequence number corresponding to the SCRM_SEQ_NUM field in a Supplemental
  Channel Request Message to which the mobile station is to match this message.
  Otherwise, the base station shall set USE_SCRM_SEQ_NUM to ‘0’ and omit
  SCRM_SEQ_NUM.
If Forward Supplemental Channel burst assignment is included, the base station may include additional Forward Supplemental Channel configuration information including radio configuration, multiplex option, coding type, frame length, and maximum supplemental channel rate; if so, the base station shall set \( \text{FOR\_SCH\_CC\_INCL} \) to ‘1’.  

If Reverse Supplemental Channel burst assignment is included, the base station may include additional Reverse Supplemental Channel configuration information including radio configuration, multiplex option, coding type, frame length, and maximum supplemental channel rate; if so, the base station shall set \( \text{REV\_SCH\_CC\_INCL} \) to ‘1’.

### 3.6.6.2.2.13 Processing of Forward Supplemental Channel Assignment Mini Message

The base station may use this message to specify Forward Supplemental Channel assignment parameters for the mobile station’s Forward Supplemental Channel. This information includes the \( \text{FOR\_SCH\_ID} \), duration, start time, and the index to the previously specified Forward Supplemental Channel Code List, which determines number of information bits per frame (or set of number of bits per frame if \( \text{FSCH\_VAR\_TABLE\_IDS}[\text{FOR\_SCH\_ID}] \) is not equal to ‘000’), code channel index, and the identifier of the Quasi Orthogonal Function corresponding to the assignment.

The base station shall set the content of a Forward Supplemental Channel Assignment Mini Message according to the following rules:

- The base station shall set the \( \text{FOR\_SCH\_ID} \) to Forward Supplemental Channel identifier of the burst assignment that this message carries.

- The base station shall set the \( \text{FOR\_SCH\_DURATION} \) field to ‘0000’ to indicate that the mobile station should stop processing the Forward Supplemental Channel starting at the explicit start time of the message specified by \( \text{FOR\_SCH\_START\_TIME} \). The base station shall set the \( \text{FOR\_SCH\_DURATION} \) field to ‘1111’ to indicate that the mobile station should process the Forward Supplemental Channel, starting at the explicit start time of the message specified by \( \text{FOR\_SCH\_START\_TIME} \), until a subsequent Forward Supplemental Channel Assignment Mini Message or an Extended Supplemental Channel Assignment Message with the same \( \text{FOR\_SCH\_ID} \) field is received. The base station shall set the \( \text{FOR\_SCH\_DURATION} \) field to the duration in units of 20 ms (see Table 33.7.3.3.2.37-3), starting at the explicit start time of the message specified by \( \text{FOR\_SCH\_START\_TIME} \), during which the mobile station is to process the Forward Supplemental Channel.

- The base station shall set the \( \text{FOR\_SCH\_START\_TIME} \) field to the System Time, in units of time specified by \( \text{START\_TIME\_UNIT} \) (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:

\[
\left\lfloor \frac{t}{(\text{START\_TIME\_UNIT}+1)} \right\rfloor - \text{FOR\_SCH\_START\_TIME} \mod 32 = 0,
\]
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:

\[
\lfloor t/(\text{START\_TIME\_UNIT}+1) \rfloor - \text{REV\_SCH\_START\_TIME} \mod 32 = 0,
\]

where \( t \) is the System Time in units of 20 ms.

- The base station shall set the REV_SCH_BITS_IDX (see Table 3.7.3.3.2.37-2) to indicate the Reverse Supplemental Channel number of information bits per frame index.
• 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.

3.6.6.2.15 Processing of the Mobile Assisted Burst Operation Parameters Message

The base station may use this message to specify the operating parameters in the mobile
station for Mobile Assisted Burst Operation procedures.

• A Mobile Assisted Burst Operation Parameters Message may specify pilot strength
  order change reporting information. If order change reporting information is
  included, the base station shall set ORDER_FLAG to ‘1’ and include the appropriate
  order change reporting fields. Otherwise, the base station shall set ORDER_FLAG
to ‘0’. If ORDER_FLAG is set to ‘1’, the base station shall perform the following
  procedures:

  – The base station shall set PS_MIN_DELTA to one less than the minimum pilot
    strength measurement difference between any two pilots in the Active Set (in
    units of 0.5 dB) that must be measured in order for the mobile station to send a
    Pilot Strength Measurement Mini Message.

  – The base station shall set ORDER_INTERVAL to the minimum interval (in 20 ms
    units) during which the indicated pilot strength measurement difference (greater
    than or equal to PS_MIN_DELTA + 1, in units of 0.5 dB) must be measured by
    the mobile station in order for the mobile station to send a Pilot Strength
    Measurement Mini Message.

• A Mobile Assisted Burst Operation Parameters Message may specify periodic pilot
  strength reporting. If periodic reporting information is included, the base station
  shall set PERIODIC_FLAG to ‘1’ and include the appropriate periodic reporting
  fields. Otherwise, the base station shall set PERIODIC_FLAG to ‘0’. If
  PERIODIC_FLAG is set to ‘1’, the base station shall perform the following
  procedures:

  – The base station shall set NUM_PILOTS to the number of pilots for which the
    mobile station is to send Pilot Strength Measurement Mini Messages.

  – The base station shall set PERIODIC_INTERVAL to the interval (in 20 ms units)
    between Pilot Strength Measurement Mini Messages.

• A Mobile Assisted Burst Operation Parameters Message may specify threshold based
  pilot strength reporting. If threshold based reporting information is included, the
  base station shall set THRESHOLD_FLAG to ‘1’ and include the appropriate
  threshold based reporting fields. Otherwise, the base station shall set
  THRESHOLD_FLAG to ‘0’. If THRESHOLD_FLAG is set to ‘1’, the base station shall
  perform the following procedures:

  – The base station shall set PS_FLOOR_HIGH to the high water mark for lower
    limit threshold for which the mobile station is to send Pilot Strength
    Measurement Mini Messages.
– The base station shall set PS_FLOOR_LOW to the low water mark for lower limit threshold for which the mobile station is to send *Pilot Strength Measurement Mini Messages*.

– The base station shall set PS_CEILING_HIGH to the high water mark for upper limit threshold for which the mobile station is to send *Pilot Strength Measurement Mini Messages*.

– The base station shall set PS_CEILING_LOW to the low water mark for upper limit threshold for which the mobile station is to send *Pilot Strength Measurement Mini Messages*.

– The base station shall set THRESHOLD_INTERVAL to the interval (in 20 ms units) between *Pilot Strength Measurement Mini Messages*.

### 3.6.6.2.3 Active Set Maintenance

The base station shall maintain an Active Set for each mobile station under its control as follows:

- When the base station sends the *Channel Assignment Message*, it shall initialize the Active Set to contain only the pilot associated with the assigned Forward Traffic Channel.

- When the base station sends the *Extended Channel Assignment Message*, it shall initialize the Active Set to contain all pilots included in the message.

- When the base station sends an *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message*, it shall add to the Active Set, before the action time of the message, all pilots included in the message, if they are not already in the Active Set.

- The base station shall delete the pilots that were not included in the most recent *Extended Handoff Direction Message*, *General Handoff Direction Message*, or *Universal Handoff Direction Message*, from the Active Set upon receipt of the *Handoff Completion Message* or *Extended Handoff Completion Message*.

### 3.6.6.2.4 Soft Handoff

The base station should use soft handoff when directing a mobile station from one Forward Traffic Channel to another Forward Traffic Channel having the same frequency assignment.

#### 3.6.6.2.4.1 Receiving During Soft Handoff

Each base station in the Active Set shall demodulate the Reverse Traffic Channel. The base station should provide diversity combining of the demodulated signals obtained by each base station in the Active Set.

#### 3.6.6.2.4.2 Transmitting During Soft Handoff

The base station shall begin transmitting identical modulation symbols on all Forward Traffic Channels specified in an *Extended Handoff Direction Message* or *General Handoff Direction Message*.
Direction Message, or Universal Handoff Direction Message (with the possible exception of the power control subchannel) by the action time of the message.

The base station shall transmit identical power control bits on all identical power control subchannels that were identified as such in the last Extended Handoff Direction Message, or General Handoff Direction Message, or Universal Handoff Direction Message.

The base station shall use the same long code mask on all Forward Traffic Channels whose associated pilots are in the Active Set.

3.6.6.2.4.3 Call Rescue Soft Handoff

The base station shall support the call rescue feature.

The call rescue feature can be enabled or disabled by the base station. If the call rescue feature is enabled and the base station detects that a mobile station having MOB_P_REV greater than seven has disabled its transmitters, then the base station shall initiate call rescue procedures.

A base station that is configured with a Rescue Channel shall allocate a Walsh Code for the Rescue Channel. If the base station is designated as a rescue cell candidate, then the base station shall monitor the Reverse Traffic Channel in order to acquire a mobile station attempting call rescue soft handoff. If the base station acquires the mobile station, then it should begin immediately transmitting to the mobile station using the Rescue Channel Walsh Code.

3.6.6.2.5 CDMA-to-Analog Hard Handoff

The base station may direct the mobile station to perform a handoff from the CDMA system to an analog system in a band class that the mobile station supports by sending an Analog Handoff Direction Message.

3.6.7 CDMA Tiered Services

3.6.7.1 Overview

3.6.7.1.1 Definition

The base station may support Tiered Services to provide individual users or groups of users with custom services and special features based upon their location. The base station may also support Tiered Services to provide private network support. Important to the operation of CDMA Tiered Services is the concept of User Zones. It is via User Zones by which the base station offers custom services based upon the mobile station location.

User Zones are associated with a set of features and services, plus a geographic area in which the User Zone features/services are made available to the customers that have subscribed to that User Zone. The boundary of the User Zone Geographic area may be established based on the coverage area of a public or private base station, or it may be established independent of RF topology.

User Zones may be supported by the public system on the same frequency as the serving base station, or they may be supported on a private system operating on a different
3.6.7.2 Types of User Zones

User Zones may be of two basic types:

• **Broadcast User Zones**: Broadcast User Zones are identified to the mobile station using the Paging Channel or the Primary Broadcast Control Channel. In this case, the base station broadcasts messages on the Paging Channel or the Primary Broadcast Control Channel identifying the User Zones that fall within the coverage area of the particular cell/sector. A mobile station, as part of its monitoring of the Paging Channel or the Primary Broadcast Control Channel, will identify the presence of a particular User Zone.

• **Mobile Specific User Zones**: Mobile Specific User Zones are not broadcast by the base station. A mobile station may use other overhead message parameters and compare them with internally stored User Zone parameters to identify the presence of a particular User Zone. These parameters may include: SID, NID, BASE_ID, BASE_LAT, and BASE_LONG.

3.6.7.2 Requirements

If the base station supports CDMA Tiered Services, the base station sends the following messages to assist the mobile station in identifying the presence of User Zones and to validate the User Zone requested by a mobile station:

• **User Zone Identification Message**

• **Private Neighbor List Message**

• **User Zone Reject Message**

• **User Zone Update Message**

3.6.7.2.1 User Zone Identification Message

The base station identifies Broadcast User Zones supported by the base station by sending the **User Zone Identification Message** on the Paging Channel or the Primary Broadcast Control Channel. The base station should list the UZID of each Broadcast User Zone supported by the base station.

3.6.7.2.2 Private Neighbor List Message

The base station sends a Private Neighbor List and identifies the User Zones supported by its private neighbor base stations by sending the **Private Neighbor List Message** on the Paging Channel or the Primary Broadcast Control Channel. The **Private Neighbor List Message** shall list no more than Nₜₘ 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.

- Waiting for Answer Substate - In this substate, the Call Control instance waits for the Connect Order from the mobile station.

- Conversation Substate - In this substate, the parties involved in this call exchanges Traffic Channel frames in accordance with the current service configuration.

- Call Release Substate - In this substate, the Call Control instance waits for the call to be disconnected.

The following messages are processed by the Call Control:

- Alert With Information Message
- Extended Alert with Information Message
- Flash With Information Message
- Extended Flash With Information Message
- Send Burst DTMF Message
- Origination Continuation Message

The following orders are processed by the Call Control:

- Continuous DTMF Tone Order
Upon instantiation, the Call Control instance shall perform the following:

- If the call is a mobile station terminated call and the base station set BYPASS_ALERT_ANSWER to ‘1’, the Call Control instance shall enter the Conversation Substate (see 3.6.8.2). If the call is a mobile station terminated call and the base station set BYPASS_ALERT_ANSWER to ‘0’, the Call Control instance shall enter the Waiting for Order Substate (see 3.6.8.1.1).

- If the call is a mobile-station-originated call, the Call Control instance shall enter the Conversation Substate (see 3.6.8.2).

3.6.8.1 Alerting

3.6.8.1.1 Waiting for Order Substate

In this substate, the Call Control instance sends an Alert With Information Message or an Extended Alert With Information Message to the mobile station.

While in the Waiting for Order Substate, the Call Control instance shall perform the following:

- If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the Call Release Substate.

- If the Call Control instance receives a “send alert with info message indication” from the Layer 3, the Call Control instance shall send an Alert with Information Message or an Extended Alert With Information Message to the mobile station within T2b seconds, and enter the Waiting for Answer Substate.

- The Call Control instance may send the following messages:

  1. Alert With Information Message: The Call Control instance shall enter the Waiting for Answer Substate.

  2. Extended Alert With Information Message: The Call Control instance shall enter the Waiting for Answer Substate.

  3. Maintenance Order: The Call Control instance shall enter the Waiting for Answer Substate.

3.6.8.1.2 Waiting for Answer Substate

In this substate, the Call Control instance waits for a Connect Order from the mobile station.

While in the Waiting for Answer Substate, the Call Control instance shall perform the
If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the Call Release Substate.

If the Call Control instance receives a “send alert with info message indication” from the Layer 3, the Call Control instance shall send an Alert with Information Message or an Extended Alert with Information Message to the mobile station, within T2b seconds, and enter the Waiting for Answer Substate.

The Call Control instance may send the following messages:

1. Alert With Information Message
2. Extended Alert With Information Message
3. Maintenance Order

If the Call Control instance receives one of the following messages from the Layer 3, the Call Control instance shall process the message according to the specified requirements, if any:

1. Connect Order: The Call Control instance shall enter the Conversation Substate.
2. Flash With Information Message: If the message contains a Keypad Facility record with feature codes indicating User Selective Call Forwarding with a pre-registered number, a stored number, or voice mail, the Call Control instance may send a ‘call release request’ to the Layer 3. If this message contains the Global Emergency Call information record and the call associated with this Call Control instance is a voice call, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If this message contains the Global Emergency Call information record and the call associated with this Call Control instance is not a voice call, the base station may recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.
3. Extended Flash With Information Message: If the message contains a Keypad Facility record with feature codes indicating User Selective Call Forwarding with a pre-registered number, a stored number, or voice mail, the Call Control instance may send a ‘call release request’ to the Layer 3. If this message contains the Global Emergency Call information record and the call associated with this Call Control instance is a voice call, the base station shall recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits. If this message contains the Global Emergency Call information record
and the call associated with this Call Control instance is not a voice call, the base station may recognize this as an emergency call and should process the message using an implementation-dependent procedure which may include ignoring the dialed digits.

4. **Origination Continuation Message**

3.6.8.2 **Conversation Substate**

While in the **Conversation Substate**, the Call Control instance shall perform the following:

- If the Call Control instance receives a “release indication” from the Layer 3, the Call Control instance shall enter the **Call Release Substate**.

- If the Call Control instance receives a “paca reorig indication” from the Layer 3, the Call Control instance should send either an **Alert With Information Message/Extended Alert With Information Message** which contains a signal information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or an **Alert With Information Message/Extended Alert With Information Message** which does not contain a signal information record.

- If the Call Control instance receives a “send alert with info message indication” from Layer 3, the Call Control instance shall send an **Alert with Information Message** or an **Extended Alert With Information Message** to the mobile station within T2b seconds, and enter the **Waiting for Answer Substate**.

- The Call Control instance may send the following messages:

  1. **Alert With Information Message**: If the message contains a signal information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a signal information record, the Call Control instance shall enter the **Waiting for Answer Substate**.

  2. **Extended Alert With Information Message**: If the message contains a signal information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a signal information record, the Call Control instance shall enter the **Waiting for Answer Substate**.

  3. **Continuous DTMF Tone Order**

  4. **Flash With Information Message**

  5. **Extended Flash With Information Message**

  6. **Maintenance Order**: The Call Control instance shall enter the **Waiting for Answer Substate**.

  7. **Send Burst DTMF Message**
• If the Call Control instance receives one of the following messages from Layer 3, the
Call Control instance shall process the message according to the specified
requirements, if any:

1. **Continuous DTMF Tone Order**

2. **Flash With Information Message**: If this message contains the Global Emergency
Call information record and the call associated with this Call Control instance is
a voice call, the base station shall recognize this as an emergency call and
should process the message using an implementation-dependent procedure
which may include ignoring the dialed digits. If this message contains the Global
Emergency Call information record and the call associated with this Call Control
instance is not a voice call, the base station may recognize this as an emergency
call and should process the message using an implementation-dependent
procedure which may include ignoring the dialed digits.

3. **Extended Flash With Information Message**: If this message contains the Global
Emergency Call information record and the call associated with this Call Control
instance is a voice call, the base station shall recognize this as an emergency
call and should process the message using an implementation-dependent
procedure which may include ignoring the dialed digits. If this message contains
the Global Emergency Call information record and the call associated with this
Call Control instance is not a voice call, the base station may recognize this as
an emergency call and should process the message using an implementation-dependent
procedure which may include ignoring the dialed digits.

4. **Origination Continuation Message**

5. **Send Burst DTMF Message**

3.6.8.3 Call Release Substate

• The Call Control instance may send the following messages:

1. **Alert With Information Message**: If the message contains a signal information
record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the message does not
contain a signal information record, the base station shall enter the Waiting for
Answer Substate.

2. **Extended Alert With Information Message**: If the message contains a signal
information record with the SIGNAL_TYPE field set to ‘01’ or ‘10’, or if the message does not contain a signal information record, the base station shall enter the Waiting for Answer Substate.

3. **Maintenance Order**: The Call Control instance shall enter the Waiting for Answer Substate.
• If the Call Control instance receives one of the following messages from Layer 3, the
  Call Control instance shall process the message according to the specified
  requirements, if any:

  1. *Connect Order*

  2. *Continuous DTMF Tone Order*

  3. *Flash With Information Message:* If this message contains the Global Emergency
    Call information record and the call associated with this Call Control instance is
    a voice call, the base station shall recognize this as an emergency call and
    should process the message using an implementation-dependent procedure
    which may include ignoring the dialed digits. If this message contains the Global
    Emergency Call information record and the call associated with this Call Control
    instance is not a voice call, the base station may recognize this as an emergency
    call and should process the message using an implementation-dependent
    procedure which may include ignoring the dialed digits.

  4. *Extended Flash With Information Message:* If this message contains the Global
    Emergency Call information record and the call associated with this Call Control
    instance is a voice call, the base station shall recognize this as an emergency
    call and should process the message using an implementation-dependent
    procedure which may include ignoring the dialed digits. If this message contains
    the Global Emergency Call information record and the call associated with this
    Call Control instance is not a voice call, the base station may recognize this as
    an emergency call and should process the message using an implementation-
    dependent procedure which may include ignoring the dialed digits.

  5. *Origination Continuation Message*

  6. *Send Burst DTMF Message*

   3.6.9 MEID procedures when communicating with MOB_P_REV 6, 7, 8, 9, 10 Mobile
   Stations

   The base station shall conform to the requirements in [47] when communicating with a
   MOB_P_REV 6, 7, 8, 9, or 10 mobile station equipped with an MEID.
1. No text.
3.7 PDU Formats for Messages

The following sections specify the requirements on the PDU formats transmitted on the f-csch, and the f-dsch.

In any multi-bit field in the following messages, the most significant bit (MSB) shall be transmitted first.

3.7.1 Reserved

3.7.2 f-csch

The f-csch is used to send control information to mobile stations that have not been assigned to a Traffic Channel.

3.7.2.1 Reserved

3.7.2.2 Reserved
3.7.2.3 PDU Formats for Messages on the f-csch

The messages sent on the f-csch are summarized in Table 3.7.2.3-1.

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>Primary BCCH</th>
<th>F-CCCH</th>
<th>PCH</th>
<th>P_REV_IN_USE^6</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Parameters Message</td>
<td>SPM</td>
<td>3.7.2.3.2.1</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Access Parameters Message</td>
<td>APM</td>
<td>3.7.2.3.2.2</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Neighbor List Message (Band Class 0 only)</td>
<td>NLM</td>
<td>3.7.2.3.2.3</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>CDMA Channel List Message</td>
<td>CCLM</td>
<td>3.7.2.3.2.4</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Order Message</td>
<td>ORDM</td>
<td>3.7.2.3.2.7</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Channel Assignment Message</td>
<td>CAM</td>
<td>3.7.2.3.2.8</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>&lt;8</td>
</tr>
<tr>
<td>Data Burst Message^7</td>
<td>DBM</td>
<td>3.7.2.3.2.9</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Authentication Challenge Message</td>
<td>AUCM</td>
<td>3.7.2.3.2.10</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>SSD Update Message</td>
<td>SSDUM</td>
<td>3.7.2.3.2.11</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Feature Notification Message</td>
<td>FNM</td>
<td>3.7.2.3.2.12</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Extended System Parameters Message</td>
<td>ESPM</td>
<td>3.7.2.3.2.13</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Extended Neighbor List Message (band classes other than Band Class 0)</td>
<td>ENLM</td>
<td>3.7.2.3.2.14</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>1, ≥3</td>
</tr>
<tr>
<td>Status Request Message</td>
<td>STRQM</td>
<td>3.7.2.3.2.15</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥3</td>
</tr>
<tr>
<td>Service Redirection Message</td>
<td>SRDM</td>
<td>3.7.2.3.2.16</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>General Page Message</td>
<td>GPM</td>
<td>3.7.2.3.2.17</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>All</td>
</tr>
</tbody>
</table>

^6 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.

^7 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).
Table 3.7.2.3-1. f-csch Messages (Part 2 of 2)

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>Primary BCCH</th>
<th>F-CCCH</th>
<th>PCH</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Service Redirection Message</td>
<td>GSRDM</td>
<td>3.7.2.3.2.18</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>TMSI Assignment Message</td>
<td>TASM</td>
<td>3.7.2.3.2.19</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>1, ≥ 4</td>
</tr>
<tr>
<td>PACA Message</td>
<td>PACAM</td>
<td>3.7.2.3.2.20</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Extended Channel Assignment Message</td>
<td>ECAM</td>
<td>3.7.2.3.2.21</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>General Neighbor List Message</td>
<td>GNLM</td>
<td>3.7.2.3.2.22</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>User Zone Identification Message</td>
<td>UZIM</td>
<td>3.7.2.3.2.23</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Private Neighbor List Message</td>
<td>PNLM</td>
<td>3.7.2.3.2.24</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Sync Channel Message</td>
<td>SCHM</td>
<td>3.7.2.3.2.26</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td>Extended Global Service Redirection Message</td>
<td>EGSRDM</td>
<td>3.7.2.3.2.27</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended CDMA Channel List Message</td>
<td>ECCLM</td>
<td>3.7.2.3.2.28</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td>User Zone Reject Message</td>
<td>UZRM</td>
<td>3.7.2.3.2.29</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td>ANSI-41 System Parameters Message</td>
<td>A41SPM</td>
<td>3.7.2.3.2.30</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>MC-RR Parameters Message</td>
<td>MCRRPM</td>
<td>3.7.2.3.2.31</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>ANSI-41 RAND Message</td>
<td>A41RANDM</td>
<td>3.7.2.3.2.32</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Enhanced Access Parameters Message</td>
<td>EAPM</td>
<td>3.7.2.3.2.33</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Universal Neighbor List Message</td>
<td>UNLM</td>
<td>3.7.2.3.2.34</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Security Mode Command Message</td>
<td>SMCM</td>
<td>3.7.2.3.2.35</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Universal Page Message</td>
<td>UPM</td>
<td>3.7.2.3.2.36</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Authentication Request Message</td>
<td>AUREQGM</td>
<td>3.7.2.3.2.37</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
</tr>
<tr>
<td>BCSC Service Parameters Message</td>
<td>BSPM</td>
<td>3.7.2.3.2.38</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
</tr>
<tr>
<td>MEID Extended Channel Assignment Message</td>
<td>MECAM</td>
<td>See [47]</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>≥ 6 but &lt; 9</td>
</tr>
</tbody>
</table>
3.7.2.3.1 Reserved

3.7.2.3.2 Message Body Contents

The following sections specify the contents of message body for each message that may be sent on the f-csch.
3.7.2.3.2.1 System Parameters Message

MSG_TAG: SPM

<table>
<thead>
<tr>
<th>Field</th>
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<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>REG_ZONE</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL_ZONES</td>
<td>3</td>
</tr>
<tr>
<td>ZONE_TIMER</td>
<td>3</td>
</tr>
<tr>
<td>MULT_SIDS</td>
<td>1</td>
</tr>
<tr>
<td>MULT_NIDS</td>
<td>1</td>
</tr>
<tr>
<td>BASE_ID</td>
<td>16</td>
</tr>
<tr>
<td>BASE_CLASS</td>
<td>4</td>
</tr>
<tr>
<td>PAGE_CHAN</td>
<td>3</td>
</tr>
<tr>
<td>MAX_SLOT_CYCLE_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>HOME_REG</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SID_REG</td>
<td>1</td>
</tr>
<tr>
<td>FOR_NID_REG</td>
<td>1</td>
</tr>
<tr>
<td>POWER_UP_REG</td>
<td>1</td>
</tr>
<tr>
<td>POWER_DOWN_REG</td>
<td>1</td>
</tr>
<tr>
<td>PARAMETER_REG</td>
<td>1</td>
</tr>
<tr>
<td>REG_PRD</td>
<td>7</td>
</tr>
<tr>
<td>BASE_LAT</td>
<td>22</td>
</tr>
<tr>
<td>BASE_LONG</td>
<td>23</td>
</tr>
<tr>
<td>REG_DIST</td>
<td>11</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>4</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRCH_WIN_N</td>
<td>4</td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_MAX_AGE</td>
<td>4</td>
</tr>
<tr>
<td>PWR_REP_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>PWR_REP_FRAMES</td>
<td>4</td>
</tr>
<tr>
<td>PWR_THRESH_ENABLE</td>
<td>1</td>
</tr>
<tr>
<td>PWR_PERIOD_ENABLE</td>
<td>1</td>
</tr>
<tr>
<td>PWR_REP_DELAY</td>
<td>5</td>
</tr>
<tr>
<td>RESCAN</td>
<td>1</td>
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<tr>
<td>T_ADD</td>
<td>6</td>
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<tr>
<td>T_DROP</td>
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</tr>
<tr>
<td>T_COMP</td>
<td>4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>4</td>
</tr>
<tr>
<td>EXT_SYS_PARAMETER</td>
<td>1</td>
</tr>
<tr>
<td>EXT_NGHBR_LST</td>
<td>1</td>
</tr>
<tr>
<td>GEN_NGHBR_LST</td>
<td>1</td>
</tr>
<tr>
<td>GLOBAL_REDIRECT</td>
<td>1</td>
</tr>
<tr>
<td>PRI_NGHBR_LST</td>
<td>1</td>
</tr>
<tr>
<td>USER_ZONE_ID</td>
<td>1</td>
</tr>
<tr>
<td>EXT_GLOBAL_REDIRECT</td>
<td>1</td>
</tr>
<tr>
<td>EXT_CHAN_LST</td>
<td>1</td>
</tr>
<tr>
<td>T_TDROP_RANGE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>T_TDROP_RANGE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NEG_SLOT_CYCLE_INDEX_SUP</td>
<td>1</td>
</tr>
</tbody>
</table>

2

PILOT_PN - Pilot PN sequence offset index.
3
4 The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.
5
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 SID - System identification.
The base station shall set this field to the system identification number for this system (see 2.6.5.2).

NID - Network identification.

This field serves as a sub-identifier of a system as defined by the owner of the SID.

The base station shall set this field to the network identification number for this network (see 2.6.5.2).

REG_ZONE - Registration zone.

The base station shall set this field to its registration zone number (see 2.6.5.1.5).

TOTAL_ZONES - Number of registration zones to be retained.

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).

If zone-based registration is to be disabled, the base station shall set this field to ‘000’.

ZONE_TIMER - Zone timer length.

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.

MULT_SIDS - Multiple SID storage indicator.

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’.

<table>
<thead>
<tr>
<th>ZONE TIMER Value (binary)</th>
<th>Timer Length (Minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>1</td>
</tr>
<tr>
<td>001</td>
<td>2</td>
</tr>
<tr>
<td>010</td>
<td>5</td>
</tr>
<tr>
<td>011</td>
<td>10</td>
</tr>
<tr>
<td>100</td>
<td>20</td>
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<tr>
<td>101</td>
<td>30</td>
</tr>
<tr>
<td>110</td>
<td>45</td>
</tr>
<tr>
<td>111</td>
<td>60</td>
</tr>
</tbody>
</table>

Table 3.7.2.3.2.1-1. Value of Zone Timer
MULT_NIDS - Multiple NID storage indicator.
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’.

BASE_ID - Base station identification.
The base station shall set this field to its identification number.

BASE_CLASS - Base station class.
The base station shall set this field as follows:
For Band Class 1 and 4, the base station shall set this field to ‘0001’; otherwise, the base station shall set this field to ‘0000’.

PAGE_CHAN - Number of Paging Channels.
The base station shall set this field to the number of Paging Channels on this CDMA Channel. The base station shall not set this field to ‘000’.

MAX_SLOT_CYCLE_INDEX - Maximum slot cycle index.
The base station shall set this field to the SLOT_CYCLE_INDEX value corresponding to the maximum slot cycle length permitted (see 2.6.2.1.1).

HOME_REG - Home registration indicator.
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’.

FOR_SID_REG - SID roamer registration indicator.
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’.

FOR_NID_REG - NID roamer registration indicator.
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’.

POWER_UP_REG - Power-up registration indicator.
If mobile stations enabled for autonomous registration are to register immediately after powering on and receiving the system overhead messages, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**POWER_DOWN_REG** - Power-down registration indicator.

If mobile stations enabled for autonomous registration are to register immediately before powering down, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PARAMETER_REG** - Parameter-change registration indicator.

If mobile stations are to register on parameter change events as specified in 2.6.5.1.6, the base station shall set this field to ‘1’. If not, the base station shall set this field to ‘0’.

**REG_PRD** - Registration period.

If mobile stations are not to perform timer-based registration, the base station shall set this field to ‘0000000’. If mobile stations are to perform timer-based registration, the base station shall set this field to the value in the range 29 to 85 inclusive, such that the desired timer value is

\[ \left\lfloor \frac{2^{REG_PRD/4}}{4} \right\rfloor \times 0.08 \text{ seconds}. \]

**BASE_LAT** - Base station latitude.

The base station shall set this field to its latitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range -1296000 to 1296000 inclusive (corresponding to a range of -90° to +90°).

**BASE_LONG** - Base station longitude.

The base station shall set this field to its longitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range -2592000 to 2592000 inclusive (corresponding to a range of -180° to +180°).

**REG_DIST** - Registration distance.

If mobile stations are to perform distance-based registration, the base station shall set this field to the non-zero “distance” beyond which the mobile station is to re-register (see 2.6.5.1.4). If mobile stations are not to perform distance-based registration, the base station shall set this field to 0.

**SRCH_WIN_A** - Search window size for the Active Set and Candidate Set.

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 the Active Set and Candidate Set.

**SRCH_WIN_N** - Search window size for the Neighbor Set.
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 the Neighbor Set.

**SRCH_WIN_R** - Search window size for the Remaining Set.

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 the Remaining Set.

**NGHBR_MAX_AGE** - Neighbor Set maximum AGE.

The base station shall set this field to the maximum AGE value beyond which mobile stations are to drop members from the Neighbor Set (see 2.6.6.2.6.3).

**PWR_REP_THRESH** - Power control reporting threshold.

The base station shall set this field to the number of bad frames (see [2]) to be received in a measurement period on the channel which carries the Power Control Subchannel before mobile stations are to generate a *Power Measurement Report Message* (see 2.6.4.1.1). If the base station sets **PWR_THRESH_ENABLE** to ‘1’, it shall not set this field to ‘00000’.

**PWR_REP_FRAMES** - Power control reporting frame count.

The base station shall set this field to the value such that the number given by

\[ \left\lfloor \frac{2(\text{PWR_REP_FRAMES}/2) \times 5}{\text{frames}} \right\rfloor \]

is the number of frames over which mobile stations are to count frame errors.

**PWR_THRESH_ENABLE** - Threshold report mode indicator.

If mobile stations are to generate threshold *Power Measurement Report Messages*, the base station shall set this field to ‘1’. If mobile stations are not to generate threshold *Power Measurement Report Messages*, the base station shall set this field to ‘0’.

**PWR_PERIOD_ENABLE** - Periodic report mode indicator.

If mobile stations are to generate periodic *Power Measurement Report Messages*, the base station shall set this field to ‘1’. If mobile stations are not to generate periodic *Power Measurement Report Messages*, the base station shall set this field to ‘0’.

**PWR_REP_DELAY** - Power report delay.

The period that mobile stations wait following a *Power Measurement Report Message* before restarting frame counting for power control purposes.

The base station shall set this field to the power report delay value, in units of 4 frames (see 2.6.4.1.1).

**RESCAN** - Rescan indicator.
If mobile stations are to re-initialize and re-acquire the system upon receiving this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

T_ADD - Pilot detection threshold.

This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message initiating the handoff process (see 2.6.6.2.5.2).

The base station shall set this field to the pilot detection threshold, expressed as an unsigned binary number equal to \[ \lfloor -2 \times 10 \times \log_{10} \left(\frac{E_c}{I_o}\right) \rfloor. \]

T_DROP - Pilot drop threshold.

This value is used by mobile stations to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

The base station shall set this field to the pilot drop threshold, expressed as an unsigned binary number equal to \[ \lfloor -2 \times 10 \times \log_{10} \left(\frac{E_c}{I_o}\right) \rfloor. \]

T_COMP - Active Set versus Candidate Set comparison threshold.

Mobile stations transmit a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

The base station shall set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.

T_TDROP - Drop timer value.

Timer value after which an action is taken by mobile stations for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

The base station shall set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by mobile stations.

EXT_SYS_PARAMETER - Extended System Parameters Message indicator.

The base station shall set this field to ‘1’.

EXT_NGHBR_LST - Extended Neighbor List Message indicator.

The base station sets this field to ‘1’ when it sends the Extended Neighbor List Message on the Paging Channel; otherwise the base station sets this field to ‘0’.
If the base station is operating in Band Class 1, Band Class 3, or Band Class 4 with MIN_P_REV less than seven, it shall set this field to ‘1’. If the base station is operating in Band Class 0, it shall set this field to ‘0’.

**GEN_NGHBR_LST** - General Neighbor List Message indicator.

If the base station is sending the General Neighbor List Message on the Paging Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

If the base station is operating in Band Class 1, Band Class 3, or Band Class 4 with MIN_P_REV greater than or equal to seven, and if EXT_NGHBR_LST is set to ‘0’, the base station shall set this field to ‘1’.

If the base station is operating in Band Class 0 with MIN_P_REV greater than or equal to seven and if the Neighbor List Message is not sent, the base station shall set this field to ‘1’.

If the base station is operating in a band class other than Band Class 1, Band Class 3, or Band Class 4, and if EXT_NGHBR_LST is set to ‘0’, the base station shall set this field to ‘1’.

**GLOBAL_REDIRECT** - Global Service Redirection Message indicator.

If the base station is sending the Global Service Redirection Message on the Paging Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

**PRI_NGHBR_LST** - Private Neighbor List Message indicator.

If the base station is sending the Private Neighbor List Message on the Paging Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

**USER_ZONE_ID** - User Zone Identification Message indicator.

If the base station is sending the User Zone Identification Message on the Paging Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

**EXT_GLOBAL_REDIRECT** - Extended Global Service Redirection Message indicator.

If the base station is sending the Extended Global Service Redirection Message on the Paging Channel, it shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**EXT_CHAN_LST** - Extended CDMA Channel List Message indicator.

The base station shall set this field to ‘1’, if the Extended Channel List Message is sent on the Paging Channel, otherwise, it shall set this field to ‘0’.

**T_TDROP_RANGE_INCL** - Drop timer range value included indicator.

The base station shall set this field to ‘1’ if the T_TDROP_RANGE field is included in this message; otherwise, the base station shall set this field to ‘0’.
T_TDROP_RANGE - Drop timer range value.

Timer range value to use in association with the T_TDROP parameter when determining the drop timer expiration.

If T_TDROP_RANGE_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2 corresponding to the timer expiration range value to be used by the mobile station.

NEG_SLOT_CYCLE_INDEX_SUP - Negative slot cycle index supported indicator.

The base station shall set this field to the '1' if it supports negative values of the preferred slot cycle index (SLOT_CYCLE_INDEXp); otherwise, the base station shall set this field to '0'.
3.7.2.3.2.2 Access Parameters Message

MSG_TAG: APM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ACC_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>ACC_CHAN</td>
<td>5</td>
</tr>
<tr>
<td>NOM_PWR</td>
<td>4</td>
</tr>
<tr>
<td>INIT_PWR</td>
<td>5</td>
</tr>
<tr>
<td>PWR_STEP</td>
<td>3</td>
</tr>
<tr>
<td>NUM_STEP</td>
<td>4</td>
</tr>
<tr>
<td>MAX_CAP_SZ</td>
<td>3</td>
</tr>
<tr>
<td>PAM_SZ</td>
<td>4</td>
</tr>
<tr>
<td>PSIST(0-9)</td>
<td>6</td>
</tr>
<tr>
<td>PSIST(10)</td>
<td>3</td>
</tr>
<tr>
<td>PSIST(11)</td>
<td>3</td>
</tr>
<tr>
<td>PSIST(12)</td>
<td>3</td>
</tr>
<tr>
<td>PSIST(13)</td>
<td>3</td>
</tr>
<tr>
<td>PSIST(14)</td>
<td>3</td>
</tr>
<tr>
<td>PSIST(15)</td>
<td>3</td>
</tr>
<tr>
<td>MSG_PSIST</td>
<td>3</td>
</tr>
<tr>
<td>REG_PSIST</td>
<td>3</td>
</tr>
<tr>
<td>PROBE_PN_RAN</td>
<td>4</td>
</tr>
<tr>
<td>ACC_TMO</td>
<td>4</td>
</tr>
<tr>
<td>PROBE_BKOFF</td>
<td>4</td>
</tr>
<tr>
<td>BKOFF</td>
<td>4</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAX_REQ_SEQ</td>
<td>4</td>
</tr>
<tr>
<td>MAX_RSP_SEQ</td>
<td>4</td>
</tr>
<tr>
<td>AUTH</td>
<td>2</td>
</tr>
<tr>
<td>RAND</td>
<td>0 or 32</td>
</tr>
<tr>
<td>NOM_PWR_EXT</td>
<td>1</td>
</tr>
<tr>
<td>PSIST_EMG_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PSIST_EMG</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ACCT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ACCT_INCL_EMG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCT_AOC_BITMAP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCT_SO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ACCT_SO</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

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_GRP + 1 occurrences of the following record:

```
{ (NUM_ACCT_SO_GRP + 1)
  ACCT_SO_GRP_INCL                 0 or 1
  NUM_ACCT_SO_GRP                  0 or 3
}
```

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.

ACC_MSG_SEQ - Access parameters message sequence number.

The base station shall set this field to ACC_CONFIG_SEQ (see 3.6.2.2).
ACC_CHAN - Number of Access Channels.
The base station shall set this field to one less than the number of Access Channels associated with this Paging Channel.

NOM_PWR - Nominal transmit power offset.
The base station shall set this field to the correction factor to be used by mobile stations in the open loop power estimate, expressed as a two’s complement value in units of 1 dB (see [2]).

INIT_PWR - Initial power offset for access.
The base station shall set this field to the correction factor to be used by mobile stations in the open loop power estimate for the initial transmission on an Access Channel, expressed as a two’s complement value in units of 1 dB (see [2]).

PWR_STEP - Power increment.
The base station shall set this field to the value by which mobile stations are to increase their transmit power between successive access probes in an access probe sequence, in units of 1 dB.

NUM_STEP - Number of access probes.
The base station shall set this field to one less than the maximum number of access probes mobile stations are to transmit in a single access probe sequence.

MAX_CAP_SZ - Maximum Access Channel message capsule size.
The base station shall set this field to the value in the range 0 to 7, three less than the maximum number of Access Channel frames in an Access Channel message capsule.

PAM_SZ - Access Channel preamble length.
The base station shall set this field to one less than the number of Access Channel frames that mobile stations are to transmit in each Access Channel preamble.

PSIST(0-9) - Persistence value for access overload classes 0 through 9.
If mobile stations in access overload classes 0 through 9 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111111’.

PSIST(10) - Persistence value for access overload class 10 (test mobile stations).
If mobile stations in access overload class 10 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.
PSIST(11)  - Persistence value for access overload class 11 (emergency mobile stations).

If mobile stations in access overload class 11 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.

PSIST(12)  - Persistence value for access overload class 12.

If mobile stations in access overload class 12 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.

PSIST(13)  - Persistence value for access overload class 13.

If mobile stations in access overload class 13 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.

PSIST(14)  - Persistence value for access overload class 14.

If mobile stations in access overload class 14 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.

PSIST(15)  - Persistence value for access overload class 15.

If mobile stations in access overload class 15 are permitted to transmit requests on the Access Channel, the base station shall set this field to the persistence value to be used. If such mobile stations are not permitted to transmit requests on the Access Channel, the base station shall set this field to ‘111’.

MSG_PSIST  - Persistence modifier for Access Channel attempts for message transmissions.

A mobile station multiplies its transmission probability by $2^{-\text{MSG\_PSIST}}$ for such attempts.

The base station shall set this field to the persistence modifier for Access Channel attempts for message transmissions.

REG_PSIST  - Persistence modifier for Access Channel attempts for registrations which are not responses to the Registration Request Order.

A mobile station multiplies its transmission probability by $2^{-\text{REG\_PSIST}}$ for such attempts.

The base station shall set this field to the persistence modifier for Access Channel attempts for registrations which are not responses to the Registration Request Order.
PROBE_PN_RAN - Time randomization for Access Channel probes.

A mobile station delays its transmission from System Time by RN PN chips, where RN is a number determined by hashing between 0 and $2^{\text{PROBE_PN_RAN}} - 1$ PN chips.

The base station shall set this field to the value in the range 0 to 9 inclusive such that the time randomization range is $2^{\text{PROBE_PN_RAN}} - 1$ PN chips.

ACC_TMO - Acknowledgment timeout.

The base station shall set this field to two less than the length of time mobile stations are to wait after the end of an Access Channel transmission before determining that the base station did not receive the transmission, in units of 80 ms.

PROBE_BKOFF - Access Channel probe backoff range.

The base station shall set this field to one less than the maximum number of slots mobile stations are to delay due to random backoff between consecutive access probes.

BKOFF - Access Channel probe sequence backoff range.

The base station shall set this field to one less than the maximum number of slots mobile stations are to delay due to random backoff between successive access probe sequences and before the first access probe sequence of a response.

MAX_REQ_SEQ - Maximum number of access probe sequences for an Access Channel request.

The base station shall set this field to the maximum number of access probe sequences mobile stations are to transmit for an Access Channel request. The base station shall set this field to a value greater than 0.

MAX_RSP_SEQ - Maximum number of access probe sequences for an Access Channel response.

The base station shall set this field to the maximum number of access probe sequences mobile stations are to transmit for an Access Channel response. The base station shall set this field to a value greater than 0.

AUTH - Authentication mode.

If mobile stations are to include standard authentication data in Access Channel messages, the base station shall set this field to ‘01’. If mobile stations are not to include authentication data in Access Channel messages, the base station shall set this field to ‘00’. All other values are reserved.

RAND - Random challenge value.
If the AUTH field is set to ‘01’, the base station shall set this field to the random challenge value to be used by mobile stations for authentication. If the AUTH field is set to any other value, the base station shall omit this field.

**NOM_PWR_EXT** - Extended nominal transmit power.

If the base station is operating in Band Class 0 or Band Class 3, it shall set this field to ‘0’; otherwise, it shall set this field as follows:

If the correction factor to be used by mobile stations in the open loop power estimate is between -24 dB and -9 dB inclusive, the base station shall set this field to ‘1’; otherwise (the correction factor is in the range -8 dB to 7 dB inclusive), the base station shall set this field to ‘0’.

**PSIST_EMG_INCL** - Emergency persistence included indicator.

If PSIST_EMG is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’. The base station shall not include PSIST_EMG in this message if the base station supports the Enhanced Access Channel.

**PSIST_EMG** - Persistence value for emergency call for access overload classes 0 through 9.

If PSIST_EMG_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload classes 0 through 9 is permitted to transmit emergency requests on the Access Channel, the base station shall set this field to the persistence value to be used for the emergency calls. If such a mobile station is not permitted to transmit emergency requests on the Access Channel, the base station shall set this field to ‘111’.

**ACCT_INCL** - Access Control based on Call Type (ACCT) information included indicator.

If the base station enables ACCT for at least one service option, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If the base station sets this field to ‘1’, then the base station shall also set at least one of ACCT_SO_INCL or ACCT_SO_GRP_INCL to ‘1’.

**ACCT_INCL_EMG** - Access Control based on Call Type (ACCT) includes emergency calls indicator.

If ACCT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to ‘0’ if the mobile station
is not to apply ACCT to a call that is recognized by the mobile
station to be an emergency call; otherwise, the base station
shall set this field to ‘1’.

ACCT_AOC_BITMAP_INCL - Access Control based on Call Type (ACCT) access overload
class bitmap included indicator.

If ACCT_INCL is set to ‘0’, the base station shall omit this
field; otherwise, the base station shall include this field and
set it as follows:

The base station shall set this field to ‘0’ if all mobile stations
are to apply ACCT regardless of their access overload classes;
otherwise, the base station shall set this field to ‘1’ to indicate
that the mobile station is to apply ACCT according to its
access overload class.

ACCT_SO_INCL - Access Control based on Call Type (ACCT) service option
included indicator.

If ACCT_INCL is set to ‘0’, the base station shall omit this
field; otherwise, the base station shall include this field and
set it as follows:

The base station shall set this field to ‘1’ if at least one
occurrence of the ACCT_SO field is included in this message;
otherwise, the base station shall set this field to ‘0’.

NUM_ACCT_SO - Number of service options for Access Control based on Call
Type (ACCT).

If ACCT_SO_INCL is not included, or is included and set to ‘0’,
then the base station shall omit this field; otherwise, the base
station shall include this field and set it to one less than the
number of occurrences of the ACCT_SO field included in this
message.

If ACCT_SO_INCL is included and set to ‘1’, then the base station shall include
NUM_ACCT_SO + 1 occurrences of the following variable-field record:

ACCT_AOC_BITMAP1 - Access Control based on Call Type (ACCT) access overload
class bitmap.

If ACCT_AOC_BITMAP_INCL is set to ‘0’, then the base station
shall omit this field; otherwise, the base station shall include
this field and set it as follows:

This field consists of the subfields defined in Table 3.7.2.3.2.2-1.
**Table 3.7.2.3.2-1. ACCT Access Overload Class Bitmap**

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOLC_0_1</td>
<td>1</td>
<td>Access overload classes 0 and 1</td>
</tr>
<tr>
<td>ACCOLC_2_3</td>
<td>1</td>
<td>Access overload classes 2 and 3</td>
</tr>
<tr>
<td>ACCOLC_4_5</td>
<td>1</td>
<td>Access overload classes 4 and 5</td>
</tr>
<tr>
<td>ACCOLC_6_7</td>
<td>1</td>
<td>Access overload classes 6 and 7</td>
</tr>
<tr>
<td>ACCOLC_8_9</td>
<td>1</td>
<td>Access overload classes 8 and 9</td>
</tr>
</tbody>
</table>

The base station shall set a subfield to ‘1’ to indicate that mobile stations having the corresponding access overload class are not permitted to perform access attempts using the associated service option ACCT_SO; otherwise, the base station shall set the subfield to ‘0’.

ACCT_SO - Access Control based on Call Type (ACCT) service option number.

The base station shall set this field to the value of the service option number (as specified in [30]) that has ACCT enabled.

ACCT_SO_GRP_INCL - Access Control based on Call Type (ACCT) service option group included indicator.

If ACCT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if at least one occurrence of the ACCT_SO_GRP field is included in this message; otherwise, the base station shall set this field to ‘0’.

NUM_ACCT_SO_GRP - Number of service option groups for Access Control based on Call Type (ACCT).

If ACCT_SO_GRP_INCL is not included, or is included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it to one less than the number of occurrences of the ACCT_SO_GRP field included in this message.

If ACCT_SO_GRP_INCL is included and set to ‘1’, then the base station shall include NUM_ACCT_SO_GRP + 1 occurrences of the following variable-field record:

ACCT_AOC_BITMAP2 - Access Control based on Call Type (ACCT) access overload class bitmap.

If ACCT_AOC_BITMAP_INCL is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
This field consists of the subfields defined in Table 3.7.2.3.2.2-1. The base station shall set a subfield to ‘1’ to indicate that mobile stations having the corresponding access overload class are not permitted to perform access attempts using a service option specified by the associated ACCT_SO_GRP field; otherwise, the base station shall set the subfield to ‘0’.

ACCT_SO_GRP - Access Control based on Call Type (ACCT) service option group number.

The base station shall set this field to the value of the service option group number (as specified in [30]) whose members all have ACCT enabled.
3.7.2.3.2.3 Neighbor List Message

MSG_TAG: NLM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following record:

```
{
    NGHBR_CONFIG 3
    NGHBR_PN 9
}
```

3

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.

The base station shall 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.

The base station shall include one occurrence of the following two-field record for each member mobile stations are to place in their Neighbor Sets. The base station may include zero or more occurrences of the following record.

NGHBR_CONFIG - Neighbor configuration.

The base station shall set this field to the value shown in Table 3.7.2.3.2.3-1 corresponding to the configuration of this neighbor.
Table 3.7.2.3.2.3-1. Neighbor Configuration Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Neighbor Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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. The position of the neighbor CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.</td>
</tr>
<tr>
<td>001</td>
<td>The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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. The position of the neighbor CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station. This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.</td>
</tr>
<tr>
<td>010</td>
<td>The neighbor base station may have a different number of frequencies having Paging Channels as the current base station. The neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>011</td>
<td>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.</td>
</tr>
<tr>
<td>100-111</td>
<td>Reserved.</td>
</tr>
</tbody>
</table>

1. **NGHBR_PN** - Neighbor pilot PN sequence offset index.
2. The base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips.
3.7.2.3.2.4 CDMA Channel List Message

MSG_TAG: CCLM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```
{ CDMA_FREQ 11 }
```

- **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).

- **CDMA_FREQ** - CDMA Channel frequency assignment.
  
  The order in which occurrences of this field are included gives the designations of the supported CDMA Channels as CDMA Channel 1 through CDMA Channel N.
  
  Each occurrence of this field shall correspond to a CDMA Channel containing a Paging Channel that is supported by this base station. If the supported CDMA Channels are in the preferred set of CDMA frequency assignments (see [2]), the base station shall include their occurrences of this field first.
  
  The base station shall set each occurrence of this field to the CDMA channel number corresponding to the CDMA frequency assignment for that CDMA Channel (see [2]).
1. 3.7.2.3.2.5 Reserved
2. No text.
1  3.7.2.3.2.6 Reserved
2  No text.
3.7.2.3.2.7 Order Message

MSG_TAG: ORDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDER</td>
<td>6</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Order-specific fields (if used)</td>
<td>8 \times ADD_RECORD_LEN</td>
</tr>
</tbody>
</table>

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.
3.7.2.3.2.8 Channel Assignment Message

MSG_TAG: CAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGN_MODE</td>
<td>3</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Additional record fields</td>
<td>$8 \times$ ADD_RECORD_LEN</td>
</tr>
</tbody>
</table>

If ASSIGN_MODE = ‘000’, the additional record fields shall be:

- 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_MODE_INCL 1
- C_SIG_ENCRYPT_MODE 0 or 3
- RESERVED 0 - 7 (as needed)

If ASSIGN_MODE = ‘001’, the additional record fields shall be:

- 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)
If ASSIGN_MODE = ‘010’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPOND</td>
<td>1</td>
</tr>
<tr>
<td>ANALOG_SYS</td>
<td>1</td>
</tr>
<tr>
<td>USE_ANALOG_SYS</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
</tbody>
</table>

If ASSIGN_MODE = ‘011’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>VMAC</td>
<td>3</td>
</tr>
<tr>
<td>ANALOG_CHAN</td>
<td>11</td>
</tr>
<tr>
<td>SCC</td>
<td>2</td>
</tr>
<tr>
<td>MEM</td>
<td>1</td>
</tr>
<tr>
<td>AN_CHAN_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>DSCC_MSB</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
</tbody>
</table>
If ASSIGN_MODE = ‘100’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>1</td>
</tr>
<tr>
<td>DEFAULT_CONFIG</td>
<td>3</td>
</tr>
<tr>
<td>GRANTED_MODE</td>
<td>2</td>
</tr>
<tr>
<td>CODE_CHAN</td>
<td>8</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>2</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

If ASSIGN_MODE = ‘101’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPOND</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```
;
PILOT_PN 9
```

; RESERVED 0 - 7 (as needed)

ASSIGN_MODE - Assignment mode.

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

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Assignment Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Traffic Channel Assignment (Band Class 0 only)</td>
</tr>
<tr>
<td>001</td>
<td>Paging Channel Assignment (Band Class 0 only)</td>
</tr>
<tr>
<td>010</td>
<td>Acquire Analog System</td>
</tr>
<tr>
<td>011</td>
<td>Analog Voice Channel Assignment</td>
</tr>
<tr>
<td>100</td>
<td>Extended Traffic Channel Assignment</td>
</tr>
<tr>
<td>101</td>
<td>Extended Paging Channel Assignment</td>
</tr>
</tbody>
</table>

All other values are reserved.

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.
FRAME_OFFSET - Frame offset.

The Forward and Reverse Traffic Channel frames are delayed \( \text{FRAME_OFFSET} \times 1.25 \text{ ms} \) relative to system timing (see [2]).

The base station shall set this field to the Forward and Reverse Traffic Channel frame offset.

ENCRIPT_MODE - Message encryption mode.

The base station shall set this field to the ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2 corresponding to the encrypting mode that is to be used for signaling messages, as specified in 2.3.12.2.

Table 3.7.2.3.2.8-2. Message Encryption Modes

<table>
<thead>
<tr>
<th>ENCRYPT_MODE Field (binary)</th>
<th>Encryption Mode Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Encryption disabled</td>
</tr>
<tr>
<td>01</td>
<td>Basic encryption of call control messages</td>
</tr>
<tr>
<td>10</td>
<td>Enhanced encryption of call control messages</td>
</tr>
<tr>
<td>11</td>
<td>Extended encryption of call control messages</td>
</tr>
</tbody>
</table>

D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.

If ENCRYPT_MODE is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

ENC_KEY_SIZE - Encryption key size indication.

If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

C_SIG_ENCRYPT_MODE_INCL - Common channel signaling encryption mode included indicator.

If common channel signaling encryption 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’.

C_SIG_ENCRYPT_MODE - Common channel signaling encryption mode indicator.
If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise, the base station shall omit this field.

**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:

**RESPOND** - Respond on new Access Channel indicator.

If the mobile station is to retransmit an *Origination Message* or *Page Response Message* after processing this channel assignment, the base station shall set this field to ‘1’. The base station may set this field to ‘0’ only in response to a *Page Response Message*.

**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’.

**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 Paging Channel the mobile station is to use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

**PILOT_PN** - Pilot PN sequence offset index.

The base station shall include one occurrence of this field for each base station whose Paging Channel may be monitored by the mobile station. For each occurrence, the base station shall set this field to the pilot PN sequence offset for a base station, in units of 64 PN chips. The base station having this pilot PN sequence offset should support a Primary Paging Channel with the same Paging Channel rate as the current base station.

**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 ‘010’, the base station shall include the following fields:

**RESPOND** - Respond on analog control channel indicator.
If the mobile station is to retransmit an **Origination Message** or **Page Response Message** on the analog control channel (see [6]) after processing this channel assignment, the base station shall set this field to ‘1’. The base station may set this field to ‘0’ only in response to a **Page Response Message**.

**ANALOG_SYS** - System indicator.

If USE_ANALOG_SYS is equal to ‘0’, the base station shall set this field to ‘0’. Otherwise, the base station shall set this field to ‘0’ if the mobile station is to use analog system A, or to ‘1’ if the mobile station is to use analog system B.

**USE_ANALOG_SYS** - Use analog system indicator.

The base station shall set this field to ‘1’ to direct the mobile station to the analog system specified by ANALOG_SYS; otherwise, the base station shall set this field to ‘0’.

**BAND_CLASS** - Band class.

The base station shall set this field according to values defined in [30].

If the ASSIGN.MODE field is set to ‘011’, the base station shall include the following fields:

**SID** - System identification of the analog system.

The base station shall set this field to the system identification of the analog system supporting the assigned voice channel for this assignment (see [6]).

**VMAC** - Voice mobile station attenuation code.

The base station shall set this field to the mobile station power level associated with the assigned voice channel for this assignment (see [6]).

**ANALOG_CHAN** - Voice channel number.

The base station shall set this field to the voice channel number for this assignment (see [6]).

**SCC** - SAT color code.

The base station shall set this field to the supervisory audio tone color code associated with the assigned voice channel. If the assignment is to a narrow analog channel, the base station shall set this field to the two least significant bits of the DSCC.

**MEM** - Message encryption mode indicator.

If analog control message encryption is to be enabled on the assigned forward and reverse analog voice channels, the base station shall set this bit to ‘1’; otherwise, the base station shall set this bit to ‘0’.

**AN_CHAN_TYPE** - Analog voice channel type.
The base station shall set this field to the analog channel type as specified in Table 3.7.3.3.2.6-1. If the mobile station does not have narrow analog capability, the base station shall set this field to ‘00’.

**DSCC_MSB** - Digital supervisory audio tone color code most significant bit.

The base station shall set this field to ‘0’ when directing handoff to a wide analog channel. The base station shall set this field to the most significant bit of the DSCC when directing handoff to a narrow analog channel.

**BAND_CLASS** - Band class.

The base station shall set this field according to values defined in [30].

If the ASSIGN_MODE field is set to ‘100’, the base station shall include the following fields:

**FREQ_INCL** - Frequency included indicator.

If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.

**RESERVED** - Reserved bits.

The base station shall set this field to ‘000’.

**BYPASS_ALERT_ANSWER** - Bypass alert indicator.

If the MOB_P_REV of the current band class of the mobile station is less than or equal to three, the base station shall set this field to ‘0’; otherwise, the base station shall set this field as follows:

If the mobile station is to bypass the *Waiting for Order Substate* and the *Waiting for Mobile Station Answer Substate*, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**DEFAULT_CONFIG** - Default Configuration.

If the GRANTED_MODE field is set to ‘00’, the base station shall set this field as specified in Table 3.7.2.3.2.8-3 to indicate an initial multiplex option and radio configuration for the Forward and Reverse Traffic Channels.
### Table 3.7.2.3.2.8-3. Default Configuration

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Default Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Multiplex Option 1 and Radio Configuration 1 for both the Forward Traffic Channel and the Reverse Traffic Channel</td>
</tr>
<tr>
<td>001</td>
<td>Multiplex Option 2 and Radio Configuration 2 for both the Forward Traffic Channel and the Reverse Traffic Channel</td>
</tr>
<tr>
<td>010</td>
<td>Multiplex Option 1 and Radio Configuration 1 for the Forward Traffic channel; Multiplex Option 2 and Radio Configuration 2 for the Reverse Traffic channel</td>
</tr>
<tr>
<td>011</td>
<td>Multiplex Option 2 and Radio Configuration 2 for the Forward Traffic channel; Multiplex Option 1 and Radio Configuration 1 for the Reverse Traffic channel</td>
</tr>
<tr>
<td></td>
<td>All other values are reserved.</td>
</tr>
</tbody>
</table>

**GRANTED_MODE** - Granted mode.

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.

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.
The base station shall set this field to ‘10’ 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 not to take place before the base station sends the first *Service Connect Message*.

**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.

**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.

**ENCRIPT_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.

**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, in the specified CDMA band class, 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.

**D_SIG_ENCRYPT_MODE** - Dedicated channel signaling encryption mode indicator.

If ENCRYPT_MODE is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

**ENC_KEY_SIZE** - Encryption key size indication.
If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

C_SIG_ENCRYPT_MODE_INCL - Common channel signaling encryption mode included indicator.

If common channel signaling encryption 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’.

C_SIG_ENCRYPT_MODE - Common channel signaling encryption mode indicator.

If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise, the base station shall omit this field.

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 ‘101’, the base station shall include the following fields:

RESPOND - Respond on new Access Channel indicator.

If the mobile station is to retransmit an Origination Message or Page Response Message after processing this channel assignment, the base station shall set this field to ‘1’. The base station may set this field to ‘0’ only in response to a Page Response Message.

FREQ_INCL - Frequency included indicator.

If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.

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 Paging Channel the mobile station is to use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

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, 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 use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

PILOT_PN - Pilot PN sequence offset index.

The base station shall include one occurrence of this field for each base station whose Paging Channel may be monitored by the mobile station. For each occurrence, the base station shall set this field to the pilot PN sequence offset for a base station, in units of 64 PN chips. The base station having this pilot PN sequence offset should support a Primary Paging Channel with the same Paging Channel rate as the current base station.

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’.
3.7.2.3.2.9 Data Burst Message

MSG_TAG: DBM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_NUMBER</td>
<td>8</td>
</tr>
<tr>
<td>BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>NUM_MSGS</td>
<td>8</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
( NUM_FIELDS )
CHARI          8
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_NUMBER</td>
<td>Message number. The base station shall set this field to the number of this message within the data burst stream.</td>
</tr>
<tr>
<td>BURST_TYPE</td>
<td>Data burst type. The base 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 CHARI fields of this message equal to EXTENDED_BURST_TYPE INTERNATIONAL as described in the definition of CHARI below. If the base station sets this field equal to ‘111111’, it shall set the first two CHARI fields of this message equal to the EXTENDED_BURST_TYPE as described in the definition of CHARI below.</td>
</tr>
<tr>
<td>NUM_MSGS</td>
<td>Number of messages in the data burst stream. The base station shall set this field to the number of messages in this data burst stream.</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>Number of characters in this message. The base station shall set this field to the number of occurrences of the CHARI field included in this message.</td>
</tr>
<tr>
<td>CHARI</td>
<td>Character. The base station shall include NUM_FIELDS occurrences of this field. The base station shall set these fields to the corresponding octet of the data burst stream.</td>
</tr>
</tbody>
</table>
If the BURST_TYPE field of this message is equal to '111110', the first two CHARi octets shall represent a 16 bit EXTENDED_BURST_TYPETERNATIONAL 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_TYPEINTERNATIONAL 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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Country Code</td>
<td>10</td>
</tr>
<tr>
<td>COUNTRY_BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 \times (NUM_FIELDS - 2)</td>
</tr>
</tbody>
</table>

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].

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED_BURST_TYPE (first two CHARi fields)</td>
<td>16</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 \times (NUM_FIELDS - 2)</td>
</tr>
</tbody>
</table>
3.7.2.3.2.10 Authentication Challenge Message

MSG_TAG: AUCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDU</td>
<td>24</td>
</tr>
<tr>
<td>GEN_CMEAKEY</td>
<td>1</td>
</tr>
</tbody>
</table>

RANDU - Random challenge data.

The base station shall set this field to the random challenge data (as specified in 2.3.12.1.4).

GEN_CMEAKEY - Generate CMEAKEY indicator.

The base station shall set this field to ‘1’ if it wants the MS to generate the CMEAKEY during the Unique Challenge-Response procedure (see 2.3.12.1.4); otherwise, the base station shall set this field to ‘0’.
3.7.2.3.2.11 SSD Update Message

MSG_TAG: SSDUM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDSSD</td>
<td>56</td>
</tr>
</tbody>
</table>

RANDSSD - Random data for the computation of SSD.
The base station shall set this field as specified in 2.3.12.1.5.
3.7.2.3.2.12 Feature Notification Message

MSG_TAG: FNM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELEASE</td>
<td>1</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

```
/   
  RECORD_TYPE  8
  RECORD_LEN  8
Type-specific fields  8 × RECORD_LEN
```

RELEASE - Origination completion indicator.

The base station shall set this field to ‘1’ if this message is used to complete an origination request from the mobile station (see 2.6.3.5); otherwise, the base station shall set this field to ‘0’.

The base station shall include occurrences of the following three-field record as specified in 3.7.5.

RECORD_TYPE - Information record type.

The base station shall set this field as specified in 3.7.5.

RECORD_LEN - Information record length.

The base station shall set this field to the number of octets in the type-specific fields included in this record.

Type-specific fields - Type-specific fields.

The base station shall include type-specific fields as specified in 3.7.5.
### 3.7.2.3.2.13 Extended System Parameters Message

**MSG_TAG:** ESPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>DELETE_FOR_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>USE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>PREF_MSID_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>MCC</td>
<td>10</td>
</tr>
<tr>
<td>IMSI_11_12</td>
<td>7</td>
</tr>
<tr>
<td>TMSI_ZONE_LEN</td>
<td>4</td>
</tr>
<tr>
<td>TMSI_ZONE</td>
<td>$8 \times \text{TMSI_ZONE_LEN}$</td>
</tr>
<tr>
<td>BCAST_INDEX</td>
<td>3</td>
</tr>
<tr>
<td>IMSI_T_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>P_REV</td>
<td>8</td>
</tr>
<tr>
<td>MIN_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SOFT_SLOPE</td>
<td>6</td>
</tr>
<tr>
<td>ADD_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>DROP_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>PACKET_ZONE_ID</td>
<td>8</td>
</tr>
<tr>
<td>MAX_NUM_ALT_SO</td>
<td>3</td>
</tr>
<tr>
<td>RESELECTINCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>EC_THRESH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>EC_{\theta} THRESH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PILOT_REPORT</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_SET_ENTRY_INFO</td>
<td>1</td>
</tr>
<tr>
<td>ACC_ENT_HO_ORDER</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_SET_ACCESS_INFO</td>
<td>1</td>
</tr>
<tr>
<td>ACCESS_HO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCESS_HO_MSG_RSP</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESS_PROBE_HO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACC_HO_LIST_UPD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACC_PROBE_HO_OTHER_MSG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MAX_NUM_PROBE_HO</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NGHBR_SET_SIZE</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

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)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOB_QOS</td>
<td>1</td>
</tr>
<tr>
<td>ENC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>USE_SYNC_ID</td>
<td>1</td>
</tr>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>BCCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_INFO_REQ_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>QPCH_BI_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_POWER_LEVEL_BCAST</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BAND_CLASS_INFO_REQ</td>
<td>1</td>
</tr>
<tr>
<td>ALT_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD_UNIT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD</td>
<td>0 or 3</td>
</tr>
<tr>
<td>CHM_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>RELEASE_TO_IDLE_IND</td>
<td>1</td>
</tr>
<tr>
<td>RECONNECT_MSG_IND</td>
<td>1</td>
</tr>
<tr>
<td>MSG_INTEGRITY_SUP</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_CHM_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PDCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_ACKCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_CQICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>PDCH_SOFT_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PDCH_SOFTER_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>WALSH_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PDCCH</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_PDCCH+1 occurrences of the following record:

/ (NUM_PDCCH+1)

| FOR_PDCCH_WALSH                                 | 0 or 6        |

/ (NUM_PDCCH+1)

<p>| IMSI_10_INCL                                     | 1             |
| IMSI_10                                          | 0 or 4        |
| MAX_ADD_SERV_INSTANCE                            | 0 or 3        |
| RER_MODE_SUPPORTED                               | 1             |
| TKZ_MODE_SUPPORTED                               | 1             |
| TKZ_ID                                           | 0 or 8        |
| PZ_HYST_ENABLED                                  | 0 or 1        |
| PZ_HYST_INFO_INCL                                | 0 or 1        |
| PZ_HYST_LIST_LEN                                 | 0 or 4        |
| PZ_HYST_ACT_TIMER                                | 0 or 8        |
| PZ_HYST_TIMER_MUL                                | 0 or 3        |
| PZ_HYST_TIMER_EXP                                | 0 or 5        |
| EXT_PREF_MSID_TYPE                               | 2             |
| MEID_REQD                                        | 0 or 1        |
| AUTO_FCSO_ALLOWED                                | 1             |
| REV_PDCH_SUPPORTED                               | 0 or 1        |
| REV_PDCH_PARMS_INCL                              | 0 or 1        |
| REV_PDCH_RLGAIN_INCL                             | 0 or 1        |
| RLGAIN_SPICH_PILOT                               | 0 or 6        |
| RLGAIN_REQCH_PILOT                               | 0 or 6        |
| RLGAIN_PDCCH_PILOT                               | 0 or 6        |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_PARMS_1_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_TABLE_SEL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_AUTO_TPR</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCH_NUM_ARQ_ROUNDS_NORMAL</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_PDCH_OPER_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCH_DEFAULT_PERSISTENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_RESET_PERSISTENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_GRANT_PRECEDENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MSIB_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SDB_IN_RCNM_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SENDING_BSPM</td>
<td>1</td>
</tr>
<tr>
<td>BSPM_PERIOD_INDEX</td>
<td>0 or 4</td>
</tr>
<tr>
<td>CAND_BAND_INFO_REQ</td>
<td>1</td>
</tr>
<tr>
<td>NUM_CAND_BAND_CLASS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_CAND_BAND_CLASS + 1 occurrences of the following record:

```plaintext
{ [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
```
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

<table>
<thead>
<tr>
<th>USE_TMSI (binary)</th>
<th>PREF_MSID_TYPE (binary)</th>
<th>EXT_PREF_MSID_TYPE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00</td>
<td>N/A</td>
<td>IMSI_S and ESN</td>
</tr>
<tr>
<td>0</td>
<td>10</td>
<td>N/A</td>
<td>IMSI</td>
</tr>
<tr>
<td>0</td>
<td>11</td>
<td>N/A</td>
<td>IMSI and ESN</td>
</tr>
<tr>
<td>1</td>
<td>10</td>
<td>N/A</td>
<td>TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)</td>
</tr>
<tr>
<td>1</td>
<td>11</td>
<td>N/A</td>
<td>TMSI (valid TMSI is assigned); IMSI and ESN (TMSI not assigned)</td>
</tr>
</tbody>
</table>
Table 3.7.2.3.2.13-1a. Preferred MSID Types for P_REV_IN_USE >= 11

<table>
<thead>
<tr>
<th>USE_TMSI (binary)</th>
<th>PREF_MSID_TYPE (binary)</th>
<th>EXT_PREF_MSID_TYPE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 00 00</td>
<td>IMSI, ESN and MEID</td>
<td>IMSI and ESN</td>
<td>For Origination, Page Response and Registration messages when P_REV_IN_USE &gt;= 11, MEID REQD='1', mobile station has a R-UIM which indicates that UIM ID is to be used.</td>
</tr>
<tr>
<td>0 10 00</td>
<td>IMSI and MEID</td>
<td>IMSI</td>
<td>All other cases with P_REV_IN_USE &gt;= 11.</td>
</tr>
<tr>
<td>0 11 00</td>
<td>IMSI, ESN and MEID</td>
<td>IMSI and ESN</td>
<td>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</td>
</tr>
<tr>
<td>1 10 00</td>
<td>TMSI (valid TMSI is assigned); IMSI and MEID (TMSI not assigned)</td>
<td>TMSI (valid TMSI is assigned); IMSI (TMSI not assigned)</td>
<td>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</td>
</tr>
<tr>
<td>1 11 00</td>
<td>TMSI (valid TMSI is assigned); IMSI, ESN, and MEID (TMSI not assigned)</td>
<td>TMSI (valid TMSI is assigned); IMSI and ESN (TMSI not assigned)</td>
<td>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</td>
</tr>
<tr>
<td>0 00 01</td>
<td>IMSI, ESN, and MEID</td>
<td>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</td>
<td></td>
</tr>
<tr>
<td>0 10 01</td>
<td>IMSI and MEID</td>
<td>IMSI</td>
<td></td>
</tr>
</tbody>
</table>
| 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 |
| 0 | 00 | 11 | IMSI, ESN and MEIDN/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 | IMSI, ESN and MEID/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) |
| 1 | 11 | 11 | TMSI (valid TMSI is assigned);
IMSI, ESN, and MEID (TMSI not assigned)/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.

   The base station shall set this field to the MCC (see 2.3.1).

2. **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).

3. **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.

4. **TMSI_ZONE** - TMSI zone.
   The base station shall set this field to the TMSI zone number as specified in [27].
BCAST_INDEX - Broadcast slot cycle index.
To enable periodic broadcast paging, the base station shall set this field to an unsigned 3-bit number in the range 1-7, equal to the broadcast slot cycle index as defined in 2.6.2.1.1.3.3.
To disable periodic broadcast paging, the base station shall set this field to ‘000’.

IMSI_T_SUPPORTED - IMSI_T support indicator.
The base station shall set this field to ‘1’ to indicate support for a 15-digit IMSI_T addressing according to [18].
P_REV - Protocol revision level.
The base station shall set this field to ‘0001011’.
MIN_P_REV - Minimum protocol revision level.
The base station sets this field to prevent mobile stations which cannot be supported by the base station from accessing the system.
The base station shall set this field to the minimum protocol revision level that it supports.
SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the Active Set, or dropping a pilot from the Active Set (see 2.6.6.2.3 and 2.6.6.2.5.2).
The base station shall set this field as an unsigned binary number.
ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to the Active Set (see 2.6.6.2.5.2).
The base station shall set this field as a two’s complement signed binary number, in units of 0.5 dB.
DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot from the Active Set (see 2.6.6.2.3).
The base station shall set this field as a two’s complement signed binary number, in units of 0.5 dB.
PACKET_ZONE_ID - Packet data services zone identifier.
If the base station supports a packet data service zone, the base station shall set this field to its non-zero packet data services zone identifier.
If the base station does not support a packet data service zone, the base station shall set this field to ‘00000000’.
MAX_NUM_ALT_SO - Maximum number of alternative service options.
The base station shall set this field to the maximum number of alternative service option numbers that the mobile station is allowed to include in the Origination Message or the Page Response Message.
For mobile stations with MOB_P_REVS less than seven, the alternative service options are those service options defined in [30] and related to SERVICE_OPTION in Origination Message and the Page Response Message.
For mobile stations with MOB_P_REVs equal to or greater than seven, the alternative service options are those service options defined in [30] without service option group number assigned and related to SERVICE_OPTION in Origination Message and the Page Response Message.

If the base station sets this field to a value greater than zero, in addition, the base station shall allow the mobile station with MOB_P_REV equal to or greater than seven to include:

- a 4 or 8-bit service option bitmap in the Origination Message and the Page Response Message;
- alternate service option numbers, not limited to MAX_ALT_SO_NUM, in the Enhanced Origination Message.

RESELECT_INCLUDED - System reselection parameters included.

If the base station is including system reselection parameters, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

EC_THRESH - Pilot power threshold.

If RESELECT_INCLUDED is set to ‘1’, the base station shall include the field EC_THRESH and set this field to:

\[
\left\lfloor \frac{\text{pilot_power_threshold} + 115}{2}\right\rfloor
\]

where \(\text{pilot_power_threshold}\) is the pilot power, \(E_c\), in dBm/1.23 MHz, below which the mobile station is to perform system reselection; otherwise, the base station shall omit this field.

EC_I00_THRESH - Pilot \(E_c/I_0\) threshold.

If RESELECT_INCLUDED is set to ‘1’, the base station shall include the field EC_I00_THRESH and set this field to:

\[
\left\lfloor -20 \times \log_{10} (\text{pilot_threshold}) \right\rfloor
\]

where \(\text{pilot_threshold}\) is the pilot \(E_c/I_0\) below which the mobile station is to perform system reselection; otherwise, the base station shall omit this field.

PILOT_REPORT - Pilot reporting indicator.

The base station shall set this field to ‘1’ if the mobile station is to report the additional pilots which have pilot strengths exceeding \(T_{ADD}\) in all Access Channel messages. The base station shall set this field to ‘0’ if the mobile station is to report the additional pilots which have pilot strengths exceeding \(T_{ADD}\) only in the Origination Message, the Reconnect Message, and the Page Response Message.

NGHBR_SET_ENTRY_INFO - Neighbor Set access entry handoff information included indicator.

If the base station is including information on the Neighbor Set access entry handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ACC_ENT_HO_ORDER - Access entry handoff permitted indicator.
If NGHBR_SET_ENTRY_INFO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access entry handoff after receiving a message while performing the Mobile Station Order and Message Processing Operation in the Mobile Station Idle State (see 2.6.2.4); otherwise, the base station shall set this field to ‘0’.

NGHBR_SET_ACCESS_INFO - Neighbor Set access handoff included indicator.

If the base station is including information on the Neighbor Set access handoff or access probe handoff, the base station shall set this field to ‘1’, otherwise, the base station shall set this field to ‘0’.

ACCESS_HO - Access handoff permitted indicator.

If NGHBR_SET_ACCESS_INFO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2); otherwise, the base station shall set this field to ‘0’.

ACCESS_HO_MSG_RSP - Access handoff permitted for message response indicator.

If ACCESS_HO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff after receiving a message and before responding to that message in the System Access State; otherwise, the base station shall set this field to ‘0’.

ACCESS_PROBE_HO - Access probe handoff permitted indicator.

If NGHBR_SET_ACCESS_INFO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access probe handoff (see 2.6.3.1.3.3); otherwise, the base station shall set this field to ‘0’.

ACC_HO_LIST_UPD - Access handoff list update permitted indicator.

If ACCESS_PROBE_HO is included and is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to update the access handoff list during an access attempt (see 2.6.3.1.7.2); otherwise, the base station shall set this field to ‘0’.
ACC_PROBE_HO_OTHER_MSG - Access probe handoff permitted for messages other than the Origination Message, the Reconnect Message, and the Page Response Message.

If ACCESS_PROBE_HO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access probe handoff for messages other than the Origination Message, the Reconnect Message, and the Page Response Message. The base station shall set this field to ‘0’ if the mobile station is permitted to perform an access probe handoff only for the Origination Message, the Reconnect Message, and the Page Response Message. See 2.6.3.1.3.3.

MAX_NUM_PROBE_HO - Maximum number of times that the mobile station is permitted to perform an access probe handoff.

If ACCESS_PROBE_HO is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the maximum number of times the mobile station is allowed to perform an access probe handoff within an access attempt minus one.

NGHBR_SET_SIZE - Size of the Neighbor Set.

If NGHBR_SET_ENTRY_INFO or NGHBR_SET_ACCESS_INFO is equal to ‘1’, the base station shall set this field to the number of pilots included in the Neighbor List Message, Extended Neighbor List Message, or General Neighbor List Message; otherwise, the base station shall omit this field.

If NGHBR_SET_ENTRY_INFO is equal to ‘1’, the base station shall include NGHBR_SET_SIZE occurrences of the following field:

ACCESS_ENTRY_HO - Access entry handoff permitted when entering the System Access State.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access entry handoff to the base station associated with the corresponding pilot between the time it receives a message on the Paging Channel when in the Mobile Station Idle State and it enters the System Access State to respond to the message; otherwise, the base station shall set this field to ‘0’. The base station shall use the same order for the ACCESS_ENTRY_HO fields in this message as is used for pilots which are listed in the Neighbor List Message, Extended Neighbor List Message, or General Neighbor List Message. Specifically, the $i^{th}$ occurrence of the ACCESS_ENTRY_HO field shall correspond the $i^{th}$ pilot in the Neighbor List Message, Extended Neighbor List Message, or General Neighbor List Message.

If NGHBR_SET_ACCESS_INFO is equal to ‘1’, the base station shall include NGHBR_SET_SIZE occurrences of the following field:
ACCESS_HO_ALLOWED - Access handoff and access probe handoff permitted for the corresponding pilot while in the System Access State.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff or access probe handoff to the base station associated with the corresponding pilot when the mobile station is in the System Access State (see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall set this field to ‘0’. The base station shall use the same order for the ACCESS_HO_ALLOWED fields in this message as is used for pilots which are listed in the Neighbor List Message, Extended Neighbor List Message, or General Neighbor List Message. Specifically, the \( i \)th occurrence of the ACCESS_HO_ALLOWED field shall correspond the \( i \)th pilot in the Neighbor List Message, Extended Neighbor List Message, or General Neighbor List Message.

The base station shall set this field to ‘0’ if this pilot does not support a Reverse Access Channel (R-ACH).

BROADCAST_GPS_ASST - Broadcast GPS Assist Indicator.

The base station shall set this field to ‘1’ if it supports Broadcast GPS Assist capability; otherwise, the base station shall set this field to ‘0’.

QPCH_SUPPORTED - Quick Paging Channel Supported Indication.

If the base station supports Quick Paging Channel operation, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

NUM_QPCH - Number of Quick Paging Channels.

If the base station sets QPCH_SUPPORTED to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the number of Quick Paging Channels on this CDMA Channel. The base station shall not set this field to ‘00’.

QPCH_RATE - Quick Paging Channel indicator rate.

If the base station sets QPCH_SUPPORTED to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the QPCH_RATE field value shown in Table 3.7.2.3.2.13-2 corresponding to the indicator rate used by the Quick Paging Channel in the system.
Table 3.7.2.3.2.13-2. QPCH Indicator Data Rate

<table>
<thead>
<tr>
<th>QPCH_RATE Field (binary)</th>
<th>QPCH indicator data rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>4800 bps</td>
</tr>
<tr>
<td>1</td>
<td>9600 bps</td>
</tr>
</tbody>
</table>

QPCH_POWER_LEVEL_PAGE - Quick Paging Channel paging indicator transmit power level.

If the base station sets QPCH_SUPPORTED to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel paging indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.13-3.

Table 3.7.2.3.2.13-3 Quick Paging Channel Transmit Power Level

<table>
<thead>
<tr>
<th>QPCH_POWER_LEVEL_PAGE</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>QPCH_POWER_LEVEL_CONFIG (binary)</td>
<td></td>
</tr>
<tr>
<td>000</td>
<td>5 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>001</td>
<td>4 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>010</td>
<td>3 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>011</td>
<td>2 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>100</td>
<td>1 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>101</td>
<td>Same as the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>110</td>
<td>1 dB above the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>111</td>
<td>2 dB above the Pilot Channel Transmit Power</td>
</tr>
</tbody>
</table>
QPCH_CCI_SUPPORTED - Quick Paging Channel configuration change indicator supported.

If QPCH_SUPPORTED is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the base station supports configuration change indicators on the Quick Paging Channel, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

QPCH_POWER_LEVEL_CONFIG - Quick Paging Channel configuration change indicator transmit power level.

If the base station includes the QPCH_CCI_SUPPORTED field and sets it to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel configuration change indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.13-3.

SDB_SUPPORTED - Short Data Burst supported indicator.

The base station shall set this field to ‘1’ if the mobile station is permitted to send a Short Data Burst; otherwise, the base station shall set this field to ‘0’.

RLGAIN_TRAFFIC_PILOT - Gain adjustment of the Reverse Traffic Channel relative to the Reverse Pilot Channel for Radio Configurations greater than 2.

The base station shall set this field to the correction factor to be used by mobile stations in setting the power of a reverse traffic channel, expressed as a two’s complement value in units of 0.125 dB (see [2]).

REV_PWR_CNTL_DELAY_INCL - Reverse Power Control Delay included indicator.

The base station shall set this field to ‘1’ if the base station includes the REV_PWR_CNTL_DELAY field in this message; otherwise, the base station shall set this field to ‘0’.

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:

The base station shall set this field to the closed-loop reverse power control delay minus one (the closed-loop reverse power control delay is the time between the end of a gated-on 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.

AUTO_MSG_SUPPORTED - Autonomous message supported indicator.
If the base station allows the autonomous delivery of the *Device Information Message* on the r-csch, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**AUTO_MSG_-INTERVAL** - Autonomous message interval.

If **AUTO_MSG_SUPPORTED** is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set this field to the **AUTO_MSG_INTERVAL** value shown in Table 3.7.2.3.2.13-4 to indicate the minimum time interval between autonomous messages sent by a mobile station to the infrastructure. This parameter is intended to allow the infrastructure to limit the frequency of autonomous messages sent by a mobile station on the r-csch.

Table 3.7.2.3.2.13-4. **AUTO_MSG_INTERVAL** Values

<table>
<thead>
<tr>
<th><strong>AUTO_MSG_INTERVAL</strong> (binary)</th>
<th>Interval Length (milliseconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>200</td>
</tr>
<tr>
<td>001</td>
<td>500</td>
</tr>
<tr>
<td>010</td>
<td>1000</td>
</tr>
<tr>
<td>011</td>
<td>1500</td>
</tr>
<tr>
<td>100</td>
<td>2000</td>
</tr>
<tr>
<td>101</td>
<td>5000</td>
</tr>
<tr>
<td>110</td>
<td>10000</td>
</tr>
<tr>
<td>111</td>
<td>15000</td>
</tr>
</tbody>
</table>

**MOB_QOS** - Indicator granting permission to the mobile station to request QoS parameter settings in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*.

The base station shall set this field to ‘1’, if the mobile station is allowed to include a QoS record in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*; otherwise, the base station shall set this field to ‘0’.

**ENC_SUPPORTED** - Encryption fields included.

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’.

**SIG_ENCRYPT_SUP** - Signaling encryption supported indicator.

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.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

If this field is included, the base station shall set the subfields as follows:

The base station shall set the CMEA subfield to ‘1’.

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’.

The base station shall set the RESERVED subfield to ‘00000’.

**UI_ENCRYPT_SUP** – User information encryption supported indicator.

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.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The base station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.

**USE_SYNC_ID** – Sync ID supported indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is permitted to include the SYNC_ID field in the Page Response Message, the Reconnect Message, the Origination Message, and the Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

**CS_SUPPORTED** – Concurrent Services supported indicator.

If the base station supports concurrent services, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**BCCH_SUPPORTED** – Primary Broadcast Control Channel Supported Indicator.

If the base station supports Primary Broadcast Control Channel, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**MS_INIT_POS_LOC_SUP_IND** – Mobile station initiated position location determination supported indicator.

If the base station supports mobile station initiated position determination, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PILOT_INFO_REQ_SUPPORTED** – Pilot information request supported indicator.
If the base station supports mobile station request for pilot information using the “Pilot Information” record in the Base Station Status Request Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QPCH_BI_SUPPORTED – Quick Paging Channel broadcast indicator supported.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the base station supports broadcast indicators on the Quick Paging Channel, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

QPCH_POWER_LEVEL_BCAST – Quick Paging Channel broadcast indicator transmit power level.

If QPCH_BI_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel broadcast indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.

BAND_CLASS_INFO_REQ – Band class information request indicator.

The base station shall set this field to ‘1’ if the ALT_BAND_CLASS field is included in this message; otherwise, the base station shall set this field to ‘0’.

ALT_BAND_CLASS – Alternate band class.

If BAND_CLASS_INFO_REQ is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to an alternate CDMA band class (see [30]) supported by the base station. The mobile station is to indicate its capability to support the alternate band class in the Origination Message and Page Response Message.

CDMA_OFF_TIME_REP_SUP_IND – CDMA off time report supported indicator.

If the base station supports mobile station report for CDMA off time information using the CDMA Off Time Report Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit

If CDMA_OFF_TIME_REP_SUP_IND is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time unit used in CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table 3.7.2.3.2.13-5.
Table 3.7.2.3.2.13-5. CDMA Off Time Report Threshold Unit

<table>
<thead>
<tr>
<th>CDMA_OFF_TIME_REP_UNIT (binary)</th>
<th>Time Unit (decimal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>80 ms</td>
</tr>
<tr>
<td>1</td>
<td>0.5 sec</td>
</tr>
</tbody>
</table>

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’.
SIG_INTEGRITY_SUP_INCL - Signaling message integrity information included indicator.
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.
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’.

SIG_INTEGRITY_SUP - Signaling integrity algorithm supported by the base station.
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.
The base 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 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’.
The base station shall set the RESERVED subfield to ‘00000000’.

FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.
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’.

PDCH_CHM_SUPPORTED - PDCH Control Hold Mode supported indicator.
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:
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’.

PDCH_PARMS_INCL - Forward Packet Data Channel related parameters included indicator.
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:
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’.

FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.
If PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following F-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'.

RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Acknowledgment Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Channel Quality Indicator Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.

If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups (see [3]).

NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer switching.

If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group (see [3]).

NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.

If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

**NUM_SOFTER_SWITCHING_SLOTS** - Number of slots per frame for R-CQICH softer switching.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

**PDCH_SOFT_SWITCHING_DELAY** - F-PDCH soft switching delay.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups (see [3]).

**PDCH_SOFTER_SWITCHING_DELAY** - F-PDCH softer switching delay.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group (see [3]).

**WALSH_TABLE_ID** - The index of the Walsh Table used.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the index of the Walsh Table being used by the Packet Data Channel. (See [3]).

**NUM_PDCCH** - The number of Packet Data Control Channels supported.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to '000' if the pilot supports one Packet Data Control Channel. The base station shall set this field to '001' if the pilot supports two Packet Data Control Channels. The base station shall not set this field to any other value.

The base station shall include \textit{NUM\_PDCCH+1} occurrences of the field \textit{FOR\_PDCCH\_WALSH}:

- \textit{FOR\_PDCCH\_WALSH} - Forward Packet Data Control Channel Walsh code assignment.

  If \textit{PDCH\_PARMS\_INCL} is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

  The base station shall set this field to the Walsh code assignment for the Forward Packet Data Control Channel.

  If \textit{NUM\_PDCCH} is set to '001', the Walsh code of PDCCH0 shall be included first, followed by the Walsh code for PDCCH1.

- \textit{IMSI\_10\_INCL} - IMSI_10 included.

  If the MNC is a 3-digit number and the base station wants to convey the third digit of the MNC to the mobile station, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

- \textit{IMSI\_10} - The least significant digit of MNC when the MNC is a 3-digit number.

  If \textit{IMSI\_10\_INCL} is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the least significant digit of MNC converted to binary by the standard decimal-to-binary conversion as shown in Table 2.3.1.1-1.

- \textit{MAX\_ADD\_SERV\_INSTANCE} - Maximum number of additional service reference identifiers allowed in origination.

  If the \textit{CS\_SUPPORTED} 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:

  The base station shall set this field to the maximum number of additional service reference identifiers that can be included in the \textit{Origination Message} or \textit{Enhanced Origination Message}.

- \textit{RER\_MODE\_SUPPORTED} - Radio environment reporting mode supported indicator.

  If the base station supports radio environment reporting mode, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

- \textit{TKZ\_MODE\_SUPPORTED} - Tracking zone mode supported indicator.

  The base station shall set this field to '1' if the tracking zone mode is supported; otherwise, the base station shall set this field to '0'.
TKZ_ID - Tracking zone identifier. If TKZ_MODE_SUPPORTED is set to ‘1’, the base station shall set this field to its tracking zone identifier; otherwise, the base station shall omit this field.

PZ_HYST_ENABLED - Packet zone hysteresis enabled. If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis feature is to be enabled at the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_INFO_INCL - Packet zone hysteresis information included indicator. If the PZ_HYST_ENABLED field is included and is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

If the base includes the PZ_HYST_LIST_LEN, PZ_HYST_ACT_TIMER and PZ_HYST_TIMER fields, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_LIST_LEN - Packet zone hysteresis list length. If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 length of the packet zone hysteresis list. This field shall be within the range ‘0001’ through ‘1111’, inclusive.

PZ_HYST_ACT_TIMER - Packet zone hysteresis activation timer. If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 to the value of the packet zone hysteresis activation timer (in units of seconds). This field shall be within the range ‘00000001’ through ‘11111111’, inclusive.

PZ_HYST_TIMER_MUL - Packet zone hysteresis timer multiplier. If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to x, where \( x \times 8^y \) seconds is the value of the hysteresis timer and y is the value indicated in the PZ_HYST_TIMER_EXP field. The base station shall set this field to a value that is between 1 and 7 inclusive. The value 0 is reserved.

PZ_HYST_TIMER_EXP - Packet zone hysteresis timer exponent.
If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to \( y \), where \( x \times 8^y \) seconds is the value of the hysteresis timer and \( x \) is the value indicated in the PZ_HYST_TIMER_MUL field. The base station shall set this field to a value that is between 0 and 4 inclusive. All the other values are reserved.

**EXT_PREF_MSID_TYPE** - Extended 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.

**MEID_REQD** - MEID Required Indicator.

If EXT_PREF_MSID_TYPE is set to ‘11’ and PREF_MSID_TYPE is set to either ‘00’ or ‘11’, 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’ to indicate that network requires MEID (of mobile stations having R-UIM) in registrations; otherwise the base station shall set this field to ‘0’.

**AUTO_FCSO_ALLOWED** - Autonomous Fast Call Setup Order allowed indicator.

The base station shall set this field to ‘1’ if the mobile station is allowed to send an autonomous Fast Call Setup Order; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_SUPPORTED** - Reverse Packet Data Channel supported indicator.

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:

If the base station supports the Reverse Packet Data Channel (R-PDCH), the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_PARMS_INCL** - Reverse Packet Data Channel related parameters included indicator.

If REV_PDCH_SUPPORTED is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_RLGAIN_INCL** - Reverse Packet Data Channel parameters related to reverse link adjustment gains included indicator.
If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to ‘1’ if the following R-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to ‘0’.

**RLGAIN_SPICH_PILOT** - Reverse Secondary Pilot Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Secondary Pilot Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

**RLGAIN_REQCH_PILOT** - Reverse Request Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Request Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

**RLGAIN_PDCCH_PILOT** - Reverse Packet Data Control Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

**REV_PDCH_PARMS_1_INCL** - Reverse Packet Data Channel parameters subset included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to ‘1’ if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_TABLE_SEL** - Reverse Packet Data Channel Table selector.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel Table selector (see [2]).

**REV_PDCH_MAX_AUTO_TPR** - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.
If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

REV_PDCH_OPER_PARMS_INCL - Reverse Packet Data Channel operational parameters included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following R-PDCH operational parameters are included in this message; otherwise, the base station shall set this field to '0'.

REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET - Maximum Allowed Reverse PDCH encoder packet size.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum size encoder packet that the mobile station is allowed to use. (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and 18456 bits respectively.

REV_PDCH_DEFAULT_PERSISTENCE - Reverse Packet Data Channel default initial persistence.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to ‘1’ if the mobile station is to be persistent at the call setup; otherwise, the base station shall set this field to ‘0’ (See [3]).

REV_PDCH_RESET_PERSISTENCE - Reverse Packet Data Channel reset persistence indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if, at the end of a persistent grant, the mobile station shall reset its persistent indicator to persistent; otherwise, the base station shall set this field to ‘0’ if the mobile station shall reset its persistent indicator to non-persistent (See [3]).

REV_PDCH_GRANT_PRECEDENCE - Reverse Packet Data Channel Grant Precedence Indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if unicast Forward Grant Channel messages have precedence over Rate Control commands; otherwise, the base station shall set this field to ‘0’ to indicate that Rate Control down commands from non-serving sectors have precedence over Forward Grant Channel messages (see [3]).

REV_PDCH_MSIB_SUPPORTED - Reverse PDCH MSIB usage indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to use the MSIB bit on the Reverse Packet Data Control Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND - Reverse Packet Data Channel soft handoff switching reset indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to initialize RPDCHCF when soft selection occurs in the FPDCHCF; otherwise, the base station shall set this field to ‘0’ (see [3]).

SDB_IN_RCNM_IND - Short Data Burst allowed in Reconnect Message indicator.
If RECONNECT_MSG_IND is set to ‘0’ or SDB_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:

The base station shall set this field to ‘1’ if the mobile station is allowed to include a Short Data Burst (see [30]) in the *Reconnect Message*; otherwise, the base station shall set this field to ‘0’.

**SENDING_BSPM** - *BCMC Service Parameters Message* indicator.

If the base station is sending the *BCMC Service Parameters Message* on the Paging Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

**BSPM_PERIOD_INDEX** - *BSPM Transmission Periodicity Index*.

If the SENDING_BSPM 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:

The base station shall set this field to the BSPM transmission periodicity index corresponding to the periodicity with which the BSPM with DIFF_BSPM equal to ‘0’ is transmitted on the paging channel as specified in Table 2.7.3.5-1.

The base station shall start transmitting a *BCMC Service Parameters Message* within four F-PCH slots of the F-PCH BSPM slot given by

\[ \left\lfloor \frac{t}{4} \right\rfloor \mod (B + 1) = 0, \]

where \( t \) represents system time in frames and \( B \) is given by

\[ B = 2^{\text{BSPM_PERIOD_INDEX}} \times 16 \]

**CAND_BAND_INFO_REQ** - Candidate band class information request indicator

The base station shall set this field to ‘1’ when requesting mobiles to report whether various candidate band class and band subclass (if applicable) combinations are supported; otherwise, the base station shall set this field to ‘0’.

The base station shall not include more than 16 band class-band subclass queries in this message.

**NUM_CAND_BAND_CLASS** - Number of candidate band classes

If CAND_BAND_INFO_REQ 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 number of candidate band classes included in the record minus one.

If CAND_BAND_INFO_REQ is set to ‘1’, the base station shall include NUM_CAND_BAND_CLASS + 1 occurrences of the following record:

CAND_BAND_CLASS - Candidate band class

The base station shall set this field (see [30]) to a band class for which the mobile is to report its capabilities upon system access. It may be used in conjunction with the BAND_SUBCLASS_IND fields to specify band subclass(es) for which the mobile is to report its capabilities upon system access.

SUBCLASS_INFO_INCL - Band subclass information included

The base station shall set this field to ‘0’ when no band subclasses are associated with CAND_BAND_CLASS or if the base station requires only the band class capabilities of the mobile station. Otherwise, the base station shall set this field to ‘1’.

SUBCLASS_REC_LEN - Band subclass subrecord length

If SUBCLASS_INFO_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 number of band subclass indicator fields included in the subrecord minus one. The number of subclass indicator fields included depends on the highest band subclass being queried for mobile support for the associated CAND_BAND_CLASS (i.e. if the highest band subclass being queried is K, then SUBCLASS_REC_LEN = K).

If the SUBCLASS_REC_LEN field is included, the base station shall include SUBCLASS_REC_LEN +1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the Nth field included corresponds to band subclass ‘N-1’.

BAND_SUBCLASS_IND - Band subclass indicator

The base station shall set this field to ‘1’ if it requires the mobile to report whether it supports this band subclass for the associated CAND_BAND_CLASS; otherwise, the base station shall set this field to ‘0’.

The mobile station is to indicate its capability to support the candidate band class and band subclass (if applicable) combination in the Registration Message, Origination Message, and Page Response Message.

TX_PWR_LIMIT_INCL - Transmit Power Limit Inclusion for the current base station

If the transmit power limit field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
TX_PWR_LIMIT - Transmit Power Limit for the current base station

If TX_PWR_LIMIT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.

BYPASS_REG_IND - Indication to bypass the power up registration upon the change of bands, serving systems and frequency blocks.

The base station shall set this field to ‘00’ if the mobile station is to perform a power up registration upon band, frequency block or serving system change.

The base station shall set this field to ‘01’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system changes due to processing the Extended CDMA Channel List Message.

The base station shall set this field to ‘10’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change when the SID remains the same.

The base station shall set this field to ‘11’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change.
3.7.2.3.2.14 Extended Neighbor List Message

MSG_TAG: ENLM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following record:

```
/

NGHBR_CONFIG 3
NGHBR_PN 9
SEARCH_PRIORITY 2
FREQ_INCL 1
NGHBR_BAND 0 or 5
NGHBR_FREQ 0 or 11

/```

PILOT_PN - Pilot PN sequence offset index.

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.

The base station shall 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.
The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set.

NGHBR_CONFIG - Neighbor configuration.

The base station shall set this field to the value shown in Table 3.7.2.3.2.14-1 corresponding to the configuration of this neighbor.

### Table 3.7.2.3.2.14-1. Neighbor Configuration Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Neighbor Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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:</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘0’ for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘1’ for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ.</td>
</tr>
<tr>
<td></td>
<td>The position of the neighbor CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.</td>
</tr>
</tbody>
</table>
001 The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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:

- 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.

The position of the neighbor CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.

This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.

010 The neighbor base station may have a different number of frequencies having Paging Channels as the current base station. The neighbor base station has a Primary Paging Channel on the following CDMA frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.
- If FREQ_INCL equals ‘1’ for this record, the neighbor base station has a Primary Paging Channel on the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ.
The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.
- If FREQ_INCL equals ‘1’ for this record, the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ has a Pilot Channel.

### Table 3.7.2.3.2.14-2. Search Priority Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Search Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Low</td>
</tr>
<tr>
<td>01</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Very high</td>
</tr>
</tbody>
</table>

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.

If the FREQ_INCL bit is set to '1', 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 set to '0', the base station shall omit this field.
3.7.2.3.2.15 Status Request Message

MSG_TAG: STRQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{QUAL_INFO_LEN}$</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

\[
/ (\text{NUM_FIELDS})
\]

<table>
<thead>
<tr>
<th>RECORD_TYPE</th>
<th>8</th>
</tr>
</thead>
</table>

\[
/ (\text{NUM_FIELDS})
\]

3

RESERVED - Reserved bits.

The base station shall set this field to ‘0000’.

6

QUAL_INFO_TYPE - Qualification information type.

The base station shall set this field to the value shown in Table 3.7.2.3.2.15-1 to show the inclusion of qualification information in the type-specific fields. The base station shall include the required qualification information in this message.

Table 3.7.2.3.2.15-1. Qualification Information Type

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Included Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000000</td>
<td>None</td>
</tr>
<tr>
<td>00000001</td>
<td>BAND_CLASS</td>
</tr>
<tr>
<td>00000010</td>
<td>BAND_CLASS and OP_MODE</td>
</tr>
</tbody>
</table>

All other values are reserved.

14

QUAL_INFO_LEN - Qualification information length.

The base station shall set this field to the number of octets included in the type-specific fields of the qualification information.

18

Type-specific fields - Type-specific fields.

The base station shall set these fields to the qualification information according to the QUAL_INFO_TYPE field.
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:

<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

If QUAL_INFO_TYPE is equal to ‘00000010’, the base station shall use the following fixed-length format for the type-specific fields:

<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>OP_MODE</td>
<td>8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

BAND_CLASS - Band class.

The base station shall set this field as defined in [30] to specify the band class qualification information.

OP_MODE - Operating mode.

The base station shall set this field as shown in Table 3.7.2.3.2.15-2 to specify the operating mode qualification information if MOB_P_REV of the current band class is less than or equal to three. The base station shall set this field as shown in Table 3.7.2.3.2.15-3 to specify the operating mode qualification information if MOB_P_REV of the current band class is greater than three.
Table 3.7.3.2.15-2. Operating Mode for MOB_P_REV

### Less Than or Equal to Three

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMA mode in Band Class 1 or Band Class 4</td>
<td>00000000</td>
</tr>
<tr>
<td>CDMA mode in Band Class 0 or Band Class 3</td>
<td>00000001</td>
</tr>
<tr>
<td>analog mode [6]</td>
<td>00000010</td>
</tr>
<tr>
<td>wide analog mode [22]</td>
<td>00000011</td>
</tr>
<tr>
<td>Narrow analog mode [22]</td>
<td>00000100</td>
</tr>
</tbody>
</table>

All other values are reserved.

Table 3.7.3.2.15-3. Operating Mode for MOB_P_REV

### Greater Than Three

<table>
<thead>
<tr>
<th>Description</th>
<th>Standards</th>
<th>Value (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDMA mode</td>
<td></td>
<td>00000000 or 00000001</td>
</tr>
<tr>
<td>Analog mode</td>
<td>[6]</td>
<td>00000010</td>
</tr>
<tr>
<td>Wide analog mode</td>
<td>[22]</td>
<td>00000011</td>
</tr>
<tr>
<td>Narrow analog mode</td>
<td>[22]</td>
<td>00000100</td>
</tr>
<tr>
<td>DS-41 mode</td>
<td>[32]</td>
<td>00000101</td>
</tr>
<tr>
<td>MC-MAP mode</td>
<td>[31]</td>
<td>00000110</td>
</tr>
</tbody>
</table>

All other values are reserved.

**NUM_FIELDS** - Number of requested fields in this message.

The base station shall set this field to the number of occurrences of RECORD_TYPE in this message.

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.
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).
### 3.7.2.3.2.16 Service Redirection Message

**MSG_TAG:** SRDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETURN_IF_FAIL</td>
<td>1</td>
</tr>
<tr>
<td>DELETE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>REDIRECT_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 x RECORD_LEN</td>
</tr>
</tbody>
</table>

**RETURN_IF_FAIL** - Return if fail indicator.

The base station shall set this field to ‘1’ if the mobile station is required to return to the system from which it is being redirected upon failure to obtain service using the redirection criteria specified in this message; otherwise, the base station shall set this field to ‘0’.

**DELETE_TMSI** - Delete TMSI indicator.

The base station shall set this field to ‘1’ if the mobile station is required to delete the TMSI assigned to the mobile station; otherwise, the base station shall set this field to ‘0’.

**REDIRECT_TYPE** - Redirect indicator.

The base station shall set this field to the REDIRECT_TYPE value shown in table 3.7.2.3.2.16-1 corresponding to the redirection type.

#### Table 3.7.2.3.2.16-1. Redirection Types

<table>
<thead>
<tr>
<th>Description</th>
<th>REDIRECT_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal redirection</td>
<td>0</td>
</tr>
<tr>
<td>NDSS redirection</td>
<td>1</td>
</tr>
</tbody>
</table>

**RECORD_TYPE** - Redirection record type.

The base station shall set this field to the RECORD_TYPE value shown in Table 3.7.2.3.2.16-2 corresponding to the type of redirection specified by this record.
### Table 3.7.2.3.2.16-2. Redirection Record Types

<table>
<thead>
<tr>
<th>Description</th>
<th>RECORD_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDSS off indication</td>
<td>00000000</td>
</tr>
<tr>
<td>Redirection to an analog system as defined in [12], [21], [22], [25], [24], and [6]</td>
<td>00000001</td>
</tr>
<tr>
<td>Redirection to a CDMA system as defined in [24] and [2]</td>
<td>00000010</td>
</tr>
<tr>
<td>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.</td>
<td>00000011</td>
</tr>
<tr>
<td>Redirection to a JTACS analog system as defined in ARIB's RCR STD-36.</td>
<td>00000100</td>
</tr>
<tr>
<td>Redirection to a DS-41 system as defined in [32].</td>
<td>00000101</td>
</tr>
</tbody>
</table>

All other RECORD_TYPE values are reserved.

**RECORD LEN** - Redirection record length.

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.

**Type-specific fields** - Redirection record type-specific fields.

The base station shall include type-specific fields based on the RECORD TYPE of this redirection record.

If RECORD_TYPE is equal to ‘00000000’, the base station shall not include the type-specific fields.

If RECORD_TYPE is equal to ‘00000001’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>IGNORE_CDMA</td>
<td>1</td>
</tr>
<tr>
<td>SYS_ORDERING</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>
EXPECTED_SID - Expected SID.

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.

IGNORE_CDMA - Ignore CDMA Available indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is to ignore the CDMA Capability Message on the analog system to which it is being redirected. The base station shall set this field to ‘0’ to indicate that the mobile station may discontinue service on the system to which it is being redirected if the mobile station receives a CDMA Capability Message with CDMA_AVAIL equal to ‘1’, and the preferred mode of the mobile station is CDMA.

SYS_ORDERING - System ordering.

The base station shall set this field to the SYS_ORDERING value shown in Table 3.7.2.3.2.16-3 corresponding to the order in which the mobile station is to attempt to obtain service on an analog system.
Table 3.7.2.3.2.16-3. SYS_ORDERING

<table>
<thead>
<tr>
<th>Description</th>
<th>SYS_ORDERING (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attempt to obtain service on either System A or B in accordance with the</td>
<td>000</td>
</tr>
<tr>
<td>custom system selection process (see 2.6.1.1.1).</td>
<td></td>
</tr>
<tr>
<td>Attempt to obtain service on System A only.</td>
<td>001</td>
</tr>
<tr>
<td>Attempt to obtain service on System B only.</td>
<td>010</td>
</tr>
<tr>
<td>Attempt to obtain service on System A first. If unsuccessful, attempt to</td>
<td>011</td>
</tr>
<tr>
<td>obtain service on System B.</td>
<td></td>
</tr>
<tr>
<td>Attempt to obtain service on System B first. If unsuccessful, attempt to</td>
<td>100</td>
</tr>
<tr>
<td>obtain service on System A.</td>
<td></td>
</tr>
<tr>
<td>Attempt to obtain service on either System A or System B. If unsuccessful,</td>
<td>101</td>
</tr>
<tr>
<td>attempt to obtain service on the alternate system (System A or System B).</td>
<td></td>
</tr>
</tbody>
</table>

All other SYS_ORDERING values are reserved

RESERVED - Reserved bits.
The base station shall set this field to ‘00000’.

If RECORD_TYPE is equal to ‘00000010’, the base station shall include the following fields:
1

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>EXPECTED_NID</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>NUM_CHANS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_CHANS occurrences of the following field:

\{' (NUM_CHANS)

| CDMA_CHAN        | 11            |

\}' (NUM_CHANS)

2

3 BAND_CLASS - Band class.
4 The base station shall set this field to the CDMA band class,
5 as specified in [30].

6 EXPECTED_SID - Expected SID.
7 If the base station is redirecting the mobile station to a
8 specific system, the base station shall set this field to the SID
9 of that system; otherwise, the base station shall set this field
10 to 0.

11 EXPECTED_NID - Expected NID.
12 If the base station is redirecting the mobile station to a
13 specific network, the base station shall set this field to the
14 NID of that network; otherwise, the base station shall set this
15 field to 65535.

16 RESERVED - Reserved bits.
17 The base station shall set this field to ‘0000’.

18 NUM_CHANS - Number of CDMA Channels.
19 The base station shall set this field to the number of
20 occurrences of the CDMA_CHAN field in this record.

21 CDMA_CHAN - CDMA Channel number.
22 For each CDMA Channel on which the mobile station is to
23 attempt to acquire a CDMA system, the base station shall
24 include one occurrence of this field specifying the associated
25 CDMA Channel number.

26 RESERVED - Reserved bits.
The base station shall add reserved bits as needed in order to make the length of the record equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.2.3.2.17 General Page Message

MSG_TAG: GPM

When Layer 3 at the base station sends a PDU corresponding to the General Page Message to Layer 2, it also sends the GPM Common fields to Layer 2. These GPM Common fields and PDUs are used by Layer 2 to assemble a Layer 2 PDU corresponding to the General Page Message (see [4]).

GPM Common Fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>ACC_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>CLASS_0_DONE</td>
<td>1</td>
</tr>
<tr>
<td>CLASS_1_DONE</td>
<td>1</td>
</tr>
<tr>
<td>TMSI_DONE</td>
<td>1</td>
</tr>
<tr>
<td>ORDERED_TMSIS</td>
<td>1</td>
</tr>
<tr>
<td>BROADCAST_DONE</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>ADD_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>ADD_PFIELD</td>
<td>$8 \times ADD_LENGTH$</td>
</tr>
</tbody>
</table>

PDU Format for a mobile station-addressed page:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICE_OPTION</td>
<td>0 or 16</td>
</tr>
</tbody>
</table>

PDU Format for a broadcast page: There are no Layer 3 fields associated with this record.

PDU Format for an enhanced broadcast page:
### Field Length (bits)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCCH_INDEX_BCN</td>
<td>3</td>
</tr>
<tr>
<td>TIME_OFFSET</td>
<td>10</td>
</tr>
<tr>
<td>REPEAT_TIME_OFFSET</td>
<td>0 or 5</td>
</tr>
<tr>
<td>ADD_BCAST_RECORD</td>
<td>0 or 8 × extinction_BCAST_−SDU_LENGTH (see [4])</td>
</tr>
</tbody>
</table>

1

1. **CONFIG_MSG_SEQ** - Configuration message sequence number.
   - The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).

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).

3. **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’.

4. **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’.

5. **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’.

6. **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’.

7. **BROADCAST_DONE** - Broadcast pages are done.
If all broadcast page records (PAGE_CLASS equal to ‘11’) 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’.

**RESERVED** - Reserved bits.

The base station shall set this field to ‘0000’.

**ADD_LENGTH** - Number of octets in the page message specific fields.

If there are no additional page message specific fields, the base station shall set this field to ‘000’.

**ADD_PFIELD** - Additional page message specific fields.

The base station shall not include any additional page message specific fields, if ADD_LENGTH is ‘000’.

**SERVICE_OPTION** - Service option.

If the base station requests a special service option (i.e., the SDU_INCLUDED field, see [4], is set to ‘1’), the base station shall set this field to the service option code shown in [30], corresponding to the requested service option; otherwise, the base station shall omit this field.

**BCCH_INDEX** - BCCH index

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.

Otherwise, The base station shall set this field to one less than Broadcast Control Channel Number (BCN) to which the mobile station is being redirected.

The base station shall not set this field to ‘000’ (reserved) or ‘001’.

**TIME_OFFSET** - BCCH time offset.

If NUM_BCCH_BCAST is equal to ‘000’, base station shall set this field to one less than the time offset, in units of 40 ms, from the beginning of the slot in which this message began to the beginning of the Forward Common Control Channel slot to which the mobile station is being directed.

Otherwise, The base station shall set this field to one less than the time offset, in units of 40 ms, from the beginning of the slot in which this message began to the beginning of the Broadcast Control Channel slot to which the mobile station is being directed.

**REPEAT_TIME_OFFSET** - BCCH offset of repeat.

If EXT_BCCH_SDU_LENGTH_IND (see [4]) is set to ‘01’ or ‘11’, the base station shall set this field as follows:
• If NUM_BCCH_BCAST is equal to ‘000’, the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by TIME_OFFSET to the beginning of the Forward Common Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message.

• Otherwise, the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by TIME_OFFSET to the beginning of the Broadcast Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message;

Otherwise, the base station shall omit this field.

ADD_BCAST_RECORD - Additional broadcast information record.

The base station shall omit this field if EXT_BCAST_SDU_LENGTH_IND (see [4]) is set to ‘00’ or ‘01’; otherwise, the base station shall include EXT_BCAST_SDU_LENGTH (see [4]) octets in this field.
3.7.2.3.2.18 Global Service Redirection Message

**MSG_TAG: GSRDM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>REDIRECT_ACCOLC</td>
<td>16</td>
</tr>
<tr>
<td>RETURN_IF_FAIL</td>
<td>1</td>
</tr>
<tr>
<td>DELETE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>EXCL_P_REV_MS</td>
<td>1</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{RECORD_LEN}$</td>
</tr>
</tbody>
</table>

- **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).
REDIRECT_ACCOLC - Redirected access overload classes.

This field consists of the following subfields:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOLC_0</td>
<td>1</td>
<td>Access overload class 0</td>
</tr>
<tr>
<td>ACCOLC_1</td>
<td>1</td>
<td>Access overload class 1</td>
</tr>
<tr>
<td>ACCOLC_2</td>
<td>1</td>
<td>Access overload class 2</td>
</tr>
<tr>
<td>ACCOLC_3</td>
<td>1</td>
<td>Access overload class 3</td>
</tr>
<tr>
<td>ACCOLC_4</td>
<td>1</td>
<td>Access overload class 4</td>
</tr>
<tr>
<td>ACCOLC_5</td>
<td>1</td>
<td>Access overload class 5</td>
</tr>
<tr>
<td>ACCOLC_6</td>
<td>1</td>
<td>Access overload class 6</td>
</tr>
<tr>
<td>ACCOLC_7</td>
<td>1</td>
<td>Access overload class 7</td>
</tr>
<tr>
<td>ACCOLC_8</td>
<td>1</td>
<td>Access overload class 8</td>
</tr>
<tr>
<td>ACCOLC_9</td>
<td>1</td>
<td>Access overload class 9</td>
</tr>
<tr>
<td>ACCOLC_10</td>
<td>1</td>
<td>Access overload class 10</td>
</tr>
<tr>
<td>ACCOLC_11</td>
<td>1</td>
<td>Access overload class 11</td>
</tr>
<tr>
<td>ACCOLC_12</td>
<td>1</td>
<td>Access overload class 12</td>
</tr>
<tr>
<td>ACCOLC_13</td>
<td>1</td>
<td>Access overload class 13</td>
</tr>
<tr>
<td>ACCOLC_14</td>
<td>1</td>
<td>Access overload class 14</td>
</tr>
<tr>
<td>ACCOLC_15</td>
<td>1</td>
<td>Access overload class 15</td>
</tr>
</tbody>
</table>

The base station shall set the subfields corresponding to the access overload classes of mobile stations which are to be redirected to ‘1’, and shall set the remaining subfields to ‘0’.

RETURN_IF_FAIL - Return if fail indicator.

The base station shall set this field to ‘1’ if the mobile station is required to return to the system from which it is being redirected upon failure to obtain service using the redirection criteria specified in this message; otherwise, the base station shall set this field to ‘0’.

DELETE_TMSI - Delete TMSI indicator.

The base station shall set this field to ‘1’ if the mobile station, which the corresponding REDIRECT_ACCOLC subfield is set to ‘1’, is required to delete the TMSI assigned to the mobile station; otherwise, the base station shall set this field to ‘0’.

EXCL_P_REV_MS - Exclude redirection indicator.
If this message does not apply to mobile stations with MOB_P_REV greater than or equal to six, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RECORD_TYPE** - Redirection record type.

The base station shall set this field to the RECORD_TYPE value shown in Table 3.7.2.3.2.16-2 corresponding to the type of redirection specified by this record.

**RECORD_LEN** - Redirection record length.

The base station shall set this field to the number of octets in the type-specific fields of this redirection record.

**Type-specific fields** - Redirection record type-specific fields.

The base station shall include type-specific fields based on the RECORD_TYPE of this redirection record.

If RECORD_TYPE is equal to ‘00000001’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>IGNORE_CDMA</td>
<td>1</td>
</tr>
<tr>
<td>SYS_ORDERING</td>
<td>3</td>
</tr>
<tr>
<td>MAX_REDIRECT_DELAY</td>
<td>5</td>
</tr>
</tbody>
</table>

**EXPECTED_SID** - Expected SID.

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.

**IGNORE_CDMA** - Ignore CDMA Available indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is to ignore the CDMA Capability Message on the analog system to which it is being redirected. The base station shall set this field to ‘0’ to indicate that the mobile station may discontinue service on the system to which it is being redirected if the mobile station receives a CDMA Capability Message with CDMA_AVAIL equal to ‘1’, and the preferred mode of the mobile station is CDMA.

**SYS_ORDERING** - System ordering.

The base station shall set this field to the SYS_ORDERING value shown in Table 3.7.2.3.2.16-3 corresponding to the order in which the mobile station is to attempt to obtain service on an analog system.

**MAX_REDIRECT_DELAY** - Maximum delay upon redirection.
The base station shall set this field to the maximum delay time, in units of 8 second increments, to be used by mobile stations in the event of a global redirection to analog mode. This operation can be invoked to avoid overloading an underlying analog cell’s reverse control channel.

If RECORD_TYPE is equal to ‘00000010’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>EXPECTED_NID</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>NUM_CHANS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_CHANS occurrences of the following field:

| CDMA_CHAN | 11 |

| RESERVED   | 0-7 (as needed) |

BAND_CLASS - Band class.
The base station shall set this field to the CDMA band class, as specified in [30].

EXPECTED_SID - Expected SID.
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.

EXPECTED_NID - Expected NID.
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.

RESERVED - Reserved bits.
The base station shall set this field to ‘0000’.

NUM_CHANS - Number of CDMA Channels.
The base station shall set this field to the number of occurrences of the CDMA_CHAN field in this record.

CDMA_CHAN - CDMA Channel number.
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.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the record equal to an integer number of octets. The base station shall set these bits to '0'.
3.7.2.3.2.19 TMSI Assignment Message

MSG_TAG: TASM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
<tr>
<td>TMSI_ZONE_LEN</td>
<td>4</td>
</tr>
<tr>
<td>TMSI_ZONE</td>
<td>$8 \times TMSI_ZONE_LEN$</td>
</tr>
<tr>
<td>TMSI_CODE</td>
<td>32</td>
</tr>
<tr>
<td>TMSI_EXP_TIME</td>
<td>24</td>
</tr>
</tbody>
</table>

1. **RESERVED** - Reserved bits. The base station shall set this field to ‘00000’.
2. **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.
3. **TMSI_ZONE** - TMSI zone. The base station shall set this field to the TMSI zone number, as specified in [27].
4. **TMSI_CODE** - Temporary mobile station identity code. The base station shall set this field to the 32-bit TMSI code assigned to the mobile station.
5. **TMSI_EXP_TIME** - TMSI expiration time. If the base station is to deassign the TMSI, the base station shall set all the bits in this field to ‘1’.
6. The base station shall set this field to the System Time in the units of $80 \text{ ms} \times 2^{12}$ when the TMSI is to expire.
1 3.7.2.3.2.20 PACA Message
2 MSG_TAG: PACAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>7</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>4</td>
</tr>
<tr>
<td>Q_POS</td>
<td>8</td>
</tr>
<tr>
<td>PACA_TIMEOUT</td>
<td>3</td>
</tr>
</tbody>
</table>

3 RESERVED - Reserved bits.

The base station shall set this field to ‘0000000’.

4 PURPOSE - Purpose of the PACA Message.

The base station shall set this field to the appropriate PURPOSE code from Table 3.7.2.3.2.20-1 to indicate the purpose of the message.

Table 3.7.2.3.2.20-1. Purpose of PACA Message

<table>
<thead>
<tr>
<th>PURPOSE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Indicates that the purpose of the message is to respond to an Origination Message.</td>
</tr>
<tr>
<td>0001</td>
<td>Indicates that the purpose of the message is to provide the queue position of the PACA call.</td>
</tr>
<tr>
<td>0010</td>
<td>Indicates that the purpose of the message is to instruct the mobile station to re-originate the PACA call.</td>
</tr>
<tr>
<td>0011</td>
<td>Indicates that the purpose of the message is to cancel the PACA call.</td>
</tr>
<tr>
<td>0100 – 1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

5 Q_POS - PACA queue position.
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 ‘11111111’. 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’.

PACA_TIMEOUT - PACA state timer duration.

The base station shall set this field to the PACA_TIMEOUT value shown in Table 3.7.2.3.2.20-2 corresponding to the length of the PACA state timer to be used by the mobile stations.

**Table 3.7.2.3.2.20-2. Value of PACA State Timer**

<table>
<thead>
<tr>
<th>PACA_TIMEOUT Value (binary)</th>
<th>Timer Length (Minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>1</td>
</tr>
<tr>
<td>001</td>
<td>2</td>
</tr>
<tr>
<td>010</td>
<td>5</td>
</tr>
<tr>
<td>011</td>
<td>10</td>
</tr>
<tr>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>101</td>
<td>30</td>
</tr>
<tr>
<td>110</td>
<td>45</td>
</tr>
<tr>
<td>111</td>
<td>60</td>
</tr>
</tbody>
</table>
1. **Extended Channel Assignment Message**

2. **MSG_TAG: ECAM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSIGN_MODE</td>
<td>3</td>
</tr>
<tr>
<td>DIRECT_CH_ASSIGN_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESERVED_2</td>
<td>4 or 5</td>
</tr>
<tr>
<td>Additional record fields</td>
<td>$8 \times (ADD_RECORD_LEN - 1)$ See [4]</td>
</tr>
</tbody>
</table>
1. If ASSIGN_MODE = ‘000’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DEFAULT_CONFIG</td>
<td>3</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>GRANTED_MODE</td>
<td>2</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>2</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

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
}
```
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_SIG_ENCRYPT_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CHANGE_KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PLCM_TYPE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PLCM_TYPE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PLCM_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>
1 If ASSIGN_MODE = ‘001’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPOND</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_PILOTS plus one occurrences of the following field:

```plaintext
{ (NUM_PILOTS+1) \\
  PILOT_PN  9 \\
} (NUM_PILOTS+1)
```

2

3 If ASSIGN_MODE = ‘010’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPOND</td>
<td>1</td>
</tr>
<tr>
<td>ANALOG_SYS</td>
<td>1</td>
</tr>
<tr>
<td>USE_ANALOG_SYS</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
</tbody>
</table>

4

5 If ASSIGN_MODE = ‘011’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>VMAC</td>
<td>3</td>
</tr>
<tr>
<td>ANALOG_CHAN</td>
<td>11</td>
</tr>
<tr>
<td>SCC</td>
<td>2</td>
</tr>
<tr>
<td>MEM</td>
<td>1</td>
</tr>
<tr>
<td>AN_CHAN_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>DSCC_MSB</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
</tbody>
</table>
If ASSIGN_MODE = ‘100’, the additional record fields shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>1</td>
</tr>
<tr>
<td>GRANTED_MODE</td>
<td>2</td>
</tr>
<tr>
<td>SR_ID_RESTORE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR_ID_RESTORE_BITMAP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>DEFAULT_CONFIG</td>
<td>3</td>
</tr>
<tr>
<td>FOR_RC</td>
<td>5</td>
</tr>
<tr>
<td>REV_RC</td>
<td>5</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>2</td>
</tr>
<tr>
<td>FPC_SUBCHAN_GAIN</td>
<td>5</td>
</tr>
<tr>
<td>RLGAIN_ADJ</td>
<td>4</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>CH_IND</td>
<td>2</td>
</tr>
<tr>
<td>CH_RECORD_LEN</td>
<td>5</td>
</tr>
<tr>
<td>CH_RECORD_FIELDS</td>
<td>$8 \times$ CH_RECORD_LEN</td>
</tr>
<tr>
<td>REV_FCH_GATING_MODE</td>
<td>1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>3XFL_1XRL_INCL</td>
<td>1</td>
</tr>
<tr>
<td>1XRL_FREQ_OFFSET</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CHANGE KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PLCM_TYPE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PLCM_TYPE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PLCM_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or ((8 \times \text{SYNC_ID_LEN}))</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RTC_NOM_PWR</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESPOND_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>DIRECT_CH_ASSIGN_RECOVER_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FIXED_PREAMBLE_TRANSMIT_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FIXED_NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>EARLY_RL_TRANSMIT_IND</td>
<td>1</td>
</tr>
<tr>
<td>TX_PWR_LIMIT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TX_PWR_LIMIT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>
If CH_IND = '01', the CH_RECORD_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_FCH_INIT_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_FCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_FCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_PILOTS plus one occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or (8 × RECORD_LEN)</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>2</td>
</tr>
</tbody>
</table>

NUM_PILOTS plus one occurrences of the following record if 3X_FCH_INFO_INCL is set to '1':

<table>
<thead>
<tr>
<th>Field</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_FCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_FCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_HIGH</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

RESERVED 0 – 7 (as needed)
If CH\_IND = ‘10’, the CH\_RECORD\_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_DCCH_INIT_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_DCCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_DCCH_MAX_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM\_PILOTS plus one occurrences of the following record:

\{(NUM\_PILOTS+1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or (8 × RECORD_LEN)</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH</td>
<td>2</td>
</tr>
</tbody>
</table>

\{(NUM\_PILOTS+1)\}

NUM\_PILOTS plus one occurrences of the following record if 3X\_DCCH\_INFO\_INCL is set to ‘1’:

\{(NUM\_PILOTS+1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_DCCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_DCCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_HIGH</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

\{(NUM\_PILOTS+1)\}

NUM\_PILOTS plus one occurrence of the following record if FUNDICATED\_BCMC\_IND is set to ‘1’:

\{(NUM\_PILOTS+1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_CPCCH_WALSH</td>
<td>7</td>
</tr>
<tr>
<td>FOR_CPCSCH</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>
If CH_IND = ‘11’, the CH_RECORD_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_FCH_INIT_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_DCCH_INIT_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>1</td>
</tr>
<tr>
<td>FPC_FCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_FCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_DCCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_DCCH_MAX_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_PILOTS plus one occurrences of the following record:

> (NUM_PILOTS+1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or (8 × RECORD_LEN)</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH</td>
<td>2</td>
</tr>
</tbody>
</table>

> (NUM_PILOTS+1)

NUM_PILOTS plus one occurrence of the following record if 3X_FCH_INFO_INCL is set to ‘1’:

> (NUM_PILOTS+1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_FCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_LOW</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

(continues on next page)
```plaintext
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_FCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOFMASK_ID_FCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_HIGH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>( (NUM_PILOTS+1) )</td>
<td></td>
</tr>
<tr>
<td>3X_DCCH_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_PILOTS plus one occurrence of the following record if 3X_DCCH_INFO_INCL is set to ‘1’: ( (NUM_PILOTS+1) )</td>
<td></td>
</tr>
<tr>
<td>3X_DCCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_DCCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_HIGH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>( (NUM_PILOTS+1) )</td>
<td></td>
</tr>
<tr>
<td>FUNDICATED_BCMC_IND</td>
<td>1</td>
</tr>
<tr>
<td>REV_FCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>FOR_CPCCH_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_PILOTS plus one occurrence of the following record if FOR_CPCCH_INFO_INCL is set to ‘1’: ( (NUM_PILOTS+1) )</td>
<td></td>
</tr>
<tr>
<td>FOR_CPCCH_WALSH</td>
<td>7</td>
</tr>
<tr>
<td>FOR_CPCSCH</td>
<td>5</td>
</tr>
<tr>
<td>( (NUM_PILOTS+1) )</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>
```
If ASSIGN_MODE = ‘101’, the additional record fields shall be:
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>1</td>
</tr>
<tr>
<td>GRANTED_MODE</td>
<td>2</td>
</tr>
<tr>
<td>SR_ID_RESTORE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR_ID_RESTORE_BITMAP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>2</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CHANGE_KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PLCM_TYPE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PLCM_TYPE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PLCM_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>RLGAIN_ADJ</td>
<td>4</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>5</td>
</tr>
<tr>
<td>FPC_SUBCHAN_GAIN</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_FCH_GATING_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FULL_CI_FEEDBACK_IND</td>
<td>1</td>
</tr>
<tr>
<td>FOR_CPCCH_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_CPCCH_UPDATE_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_CQICH_FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>REV_CQICH_REPS</td>
<td>2</td>
</tr>
<tr>
<td>REV_ACKCH_REPS</td>
<td>2</td>
</tr>
<tr>
<td>FOR_PDCH_RC</td>
<td>5</td>
</tr>
<tr>
<td>REV_PDCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>Parameter</td>
<td>Options</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>FOR_FCH_DCCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_FCH_DCCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_FCH_INIT_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_FCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_FCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_DCCH_INIT_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_DCCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_DCCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PDCH_GROUP_IND_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_PDCH_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_ACKCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_CQICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CHM_SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS_CHM</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS_CHM</td>
<td>0 or 2</td>
</tr>
<tr>
<td>PDCH_SOFT_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PDCH_SOFTER_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TX_DISABLED_TIMER_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TX_DISABLED_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_GCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_DRC_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_REPETITION</td>
<td>0 or 2</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>FOR_RCCH_UPDATE_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_ACKCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_ACKCH_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_ACKCH_COMB_SEL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_SPICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_REQCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_PDCCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_1_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_TABLE_SEL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_AUTO_TPR</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**NUM_PILOTs** plus one occurrence of the following record:

\[
\{(NUM_PILOTS+1)
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOTREC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or (8 \times RECORD_LEN)</td>
</tr>
<tr>
<td>FOR_PDCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>WALSH_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PDCCH</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

**NUM_PDCCH+1** occurrences of the following record:

\[
\{(NUM_PDCCH+1)
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_PDCCH_WALSH</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

\[
\{(NUM_PDCCH+1)
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC_ID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_CQICH_COVER</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FOR_CPCCH_WALSH</td>
<td>0 or 7</td>
</tr>
<tr>
<td>FOR_CPCCH_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_CPCSCH</td>
<td>0 or 7</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_GROUP_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Field</td>
<td>Value</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_ACKCH_WALSH_INDEX</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FOR_ACKSCH_INDEX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_RCCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_WALSH_INDEX</td>
<td>0 or 7</td>
</tr>
<tr>
<td>FOR_RCSCH_INDEX</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NUM_FOR_GCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

NUM_FOR_GCH occurrences of the following record:

```plaintext
{(NUM_FOR_GCH)
FOR_GCH_WALSH_INDEX 0 or 8
}
```

} (NUM_PILOTS+1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 × SYNC_ID_LEN)</td>
</tr>
<tr>
<td>RTC_NOM_PWR</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESPOND_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>DIRECT_CH_ASSIGN_RECOVER_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>EARLY_RL_TRANSMIT_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FUNDICATED_BCMC_IND</td>
<td>1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>FIXED_PREAMBLE_TRANSMIT_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FIXED_NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>TX_PWR_LIMIT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TX_PWR_LIMIT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0~7 (as needed)</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Assignment Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Traffic Channel Assignment</td>
</tr>
<tr>
<td>001</td>
<td>Paging Channel Assignment</td>
</tr>
<tr>
<td>010</td>
<td>Acquire Analog System</td>
</tr>
<tr>
<td>011</td>
<td>Analog Voice Channel Assignment</td>
</tr>
<tr>
<td>100</td>
<td>Enhanced Traffic Channel Assignment</td>
</tr>
<tr>
<td>101</td>
<td>Packet Data Traffic Channel Assignment</td>
</tr>
</tbody>
</table>

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:
FREQ_INCL - Frequency included indicator.
If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.

DEFAULT_CONFIG - Default Configuration.
If the GRANTED_MODE field is set to ‘00’, the base station shall set this field as specified in Table 3.7.2.3.2.21-2 to indicate an initial multiplex option and radio configuration for the Forward and Reverse Traffic Channels.
If MOB_P_REV is less than six, the base station shall not set this field to ‘100’.

Table 3.7.2.3.2.21-2. Default Configuration

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Default Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Multiplex Option 1 and Radio Configuration 1 for both the Forward Traffic Channel and the Reverse Traffic Channel</td>
</tr>
<tr>
<td>001</td>
<td>Multiplex Option 2 and Radio Configuration 2 for both the Forward Traffic Channel and the Reverse Traffic Channel</td>
</tr>
<tr>
<td>010</td>
<td>Multiplex Option 1 and Radio Configuration 1 for the Forward Traffic channel; Multiplex Option 2 and Radio Configuration 2 for the Reverse Traffic channel</td>
</tr>
<tr>
<td>011</td>
<td>Multiplex Option 2 and Radio Configuration 2 for the Forward Traffic channel; Multiplex Option 1 and Radio Configuration 1 for the Reverse Traffic channel</td>
</tr>
<tr>
<td>100</td>
<td>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.</td>
</tr>
</tbody>
</table>

All other values are reserved.
BYPASS_ALERT_ANSWER - Bypass alert indicator.
If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESERVED - Reserved bit.
The base station shall set this field to ‘0’.

NUM_PILOTS - Number of pilots in the Active Set.
The base station shall set this field to number of pilots that are to be in the mobile station’s Active Set on the Traffic Channel minus one. The base station shall set this field to the value in the range 0 to N6m-1 inclusive.

GRANTED_MODE - Granted mode.
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 may take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

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 that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation may take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

The base station shall set this field to ‘10’ to indicate that the mobile station is to use an initial service configuration consisting of the default multiplex option that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation is not to take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).
<table>
<thead>
<tr>
<th>Multiplex Option</th>
<th>Radio Configuration</th>
</tr>
</thead>
</table>
| Multiplex Option 1 | Forward link: RC1, RC3, RC4, RC6, or RC7  
Reverse Link: RC1, RC3 or RC5 |
| Multiplex Option 2 | Forward link: RC2, RC5, RC 8, or RC9  
Reverse Link: RC2, RC4 or RC 6 |
| Multiplex Option 0xf00 | Forward link: RC10  
Reverse Link: RC7 |

**Table 3.7.2.3.2.21-3. Mapping between Multiplex Options and Radio Configurations**

- **FRAME_OFFSET** - Frame offset.  
The Forward and Reverse Traffic Channel frames are delayed FRAME_OFFSET × 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.
The base station shall include NUM_PILOTS plus one occurrences of the following three-field record, one for each member of the mobile station’s Active Set on the 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, in the specified CDMA band class, 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.

The base station shall include NUM_PILOTS plus one occurrences of the following three-field record, one for each member of the mobile station’s Active Set on the Traffic Channel.

**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 on the Forward Traffic 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 or 8 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.

**FOR_FCH_RC** - Forward Fundamental 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 Fundamental Channel before the first *Service Connect Message* is sent to the mobile station.

If GRANTED_MODE is set to ‘00’, and DEFAULT_CONFIG is not set to ‘100’ (see Table 3.7.2.3.2.21-2), the base station shall set this field to either ‘00001’ or ‘00010’ (see Table 3.7.2.3.2.21-4).

**REV_FCH_RC** - Reverse Fundamental Channel radio configuration

The base station shall set this field to the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Reverse Fundamental Channel before the first *Service Connect Message* is sent to the mobile station.
If GRANTED_MODE is set to ‘00’, and DEFAULT_CONFIG is not set to ‘100’ (see Table 3.7.2.3.2.21-2), the base station shall set this field to either ‘00001’ or ‘00010’ (see Table 3.7.2.3.2.21-4).

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Radio Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>00001</td>
<td>RC 1</td>
</tr>
<tr>
<td>00010</td>
<td>RC 2</td>
</tr>
<tr>
<td>00011</td>
<td>RC 3</td>
</tr>
<tr>
<td>00100</td>
<td>RC 4</td>
</tr>
<tr>
<td>00101</td>
<td>RC 5</td>
</tr>
<tr>
<td>00110</td>
<td>RC 6</td>
</tr>
<tr>
<td>00111</td>
<td>RC 7</td>
</tr>
<tr>
<td>01000</td>
<td>RC 8</td>
</tr>
<tr>
<td>01001</td>
<td>RC 9</td>
</tr>
<tr>
<td>01010</td>
<td>RC 10</td>
</tr>
</tbody>
</table>

All other values are reserved.

FPC_FCH_INIT_SETPT - Initial Fundamental Channel outer loop $E_b/N_t$ setpoint. The base station shall set this field to initial Fundamental Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.

FPC_SUBCHAN_GAIN - Forward power control subchannel relative gain. The base station shall set FPC_SUBCHAN_GAIN equal to the power level of the forward link power control subchannel relative to the power level of 20 ms frames at a 9600 bps or 14400 bps rate of the Forward Fundamental Channel that the Forward Power Control Subchannel is punctured on. The base station shall set the value in units of 0.25 dB.

RLGAIN_ADJ - Reverse Traffic Channel power relative to access power. The base station shall set this field to adjust the initial Traffic Channel transmission power relative to the Access Channel or Enhanced Access Channel transmission power. The base station shall set this field as a two’s complement signed binary number, in units of 1 dB.

FPC_FCH_FER - Fundamental Channel target Frame Error Rate. The base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2.
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1 FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint.
2 The base station shall set this field to minimum Fundamental
3 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.
4
5 FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint.
6 The base station shall set this field to maximum Fundamental
7 Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.
8
9 REV_FCH_GATING_MODE - Reverse eighth gating mode indicator.
10 The base station shall set this field to ‘1’ if the mobile station
11 is allowed to perform the reverse eighth gating mode where
12 the 1/8th rate frames on the Reverse Fundamental Channel
13 are gated off for 10 ms per frame (see [2]); otherwise, the base
14 station shall set this field to ‘0’.
15
16 REV_PWR_CNTL_DELAY_INCL - Reverse power control delay included indicator.
17 If REV_FCH_GATING_MODE is set 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
21 REV_PWR_CNTL_DELAY - The reverse power control delay.
22 If REV_PWR_CNTL_DELAY_INCL 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
26 D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.
27 If ENCRYPT_MODE is set to ‘11’, the base station shall include
28 this field and shall set it to the dedicated channel signaling
29 encryption mode, as shown in Table 3.7.4.5-1; otherwise the base
30 station shall omit this field.
31
32 ENC_KEY_SIZE - Encryption key size indication.
If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

**C_SIG_ENCRYPT_MODE_INCL** - Common channel signaling encryption mode included indicator.

If common channel signaling encryption 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’.

**C_SIG_ENCRYPT_MODE** - Common channel signaling encryption mode indicator.

If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; 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’. If this field is set to ‘1’, the base station shall require the LAC Layer to include a MACI in this message; otherwise, the base station shall require the LAC Layer not to include a MACI in this message.

**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.
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>
<thead>
<tr>
<th>PLCM_TYPE (binary)</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>PLCM derived from ESN or MEID</td>
</tr>
<tr>
<td>0001</td>
<td>PLCM specified by the base station</td>
</tr>
<tr>
<td>0010</td>
<td>PLCM derived from IMSI_O_S when IMSI_O is derived from IMSI_M</td>
</tr>
<tr>
<td>0011</td>
<td>PLCM derived from IMSI_O_S when IMSI_O is derived from IMSI_T</td>
</tr>
<tr>
<td>0100</td>
<td>PLCM derived from MEID</td>
</tr>
<tr>
<td>All other values</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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 3.6.4.1.5.

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:

RESPOND - Respond on new Access Channel indicator.

If the mobile station is to retransmit an Origination Message or Page Response Message after processing this channel assignment, the base station shall set this field to ‘1’. The base station may set this field to ‘0’ only in response to a Page Response Message.
FREQ_INCL - Frequency included indicator.

If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.

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 Paging Channel the mobile station is to use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

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, 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 use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

NUM_PILOTS - Number of pilots whose Paging Channel may be monitored.

The base station shall set this field to the number of pilots whose Paging Channel may be monitored by the mobile station minus one. The base station shall set this field to the value in the range 0 to N8m – 1 inclusive.

PILOT_PN - Pilot PN sequence offset index.

The base station shall include one occurrence of this field for each base station whose Paging Channel may be monitored by the mobile station. For each occurrence, the base station shall set this field to the pilot PN sequence offset for a base station, in units of 64 PN chips. The base station having this pilot PN sequence offset should support a Primary Paging Channel with the same Paging Channel rate as the current base station.

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 ‘010’, the base station shall include the following fields:

RESPOND - Respond on analog control channel indicator.
If the mobile station is to retransmit an *Origination Message* or *Page Response Message* on the analog control channel (see [6]) after processing this channel assignment, the base station shall set this field to ‘1’. The base station may set this field to ‘0’ only in response to a *Page Response Message*.

**ANALOG_SYS** - System indicator.

If USE_ANALOG_SYS is equal to ‘0’, the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘0’ if the mobile station is to use analog system A, or to ‘1’ if the mobile station is to use analog system B.

**USE_ANALOG_SYS** - Use analog system indicator.

The base station shall set this field to ‘1’ to direct the mobile station to the analog system specified by ANALOG_SYS; otherwise, the base station shall set this field to ‘0’.

**BAND_CLASS** - Band class.

The base station shall set this field according to values defined in [30].

If the ASSIGN_MODE field is set to ‘011’, the base station shall include the following fields:

**SID** - System identification of the analog system.

The base station shall set this field to the system identification of the analog system supporting the assigned voice channel for this assignment (see [6]).

**VMAC** - Voice mobile station attenuation code.

The base station shall set this field to the mobile station power level associated with the assigned voice channel for this assignment (see [6]).

**ANALOG_CHAN** - Voice channel number.

The base station shall set this field to the voice channel number for this assignment (see [6]).

**SCC** - SAT color code.

The base station shall set this field to the supervisory audio tone color code associated with the assigned voice channel. If the assignment is to a narrow analog channel, the base station shall set this field to the two least significant bits of the DSCC.

**MEM** - Message encryption mode indicator.

If analog control message encryption is to be enabled on the assigned forward and reverse analog voice channels, the base station shall set this bit to ‘1’; otherwise, the base station shall set this bit to ‘0’.

**AN_CHAN_TYPE** - Analog voice channel type.
The base station shall set this field to the analog channel type as specified in Table 3.7.3.3.2.6-1. If the mobile station does not have narrow analog capability, the base station shall set this field to ‘00’.

DSCC_MSB - Digital supervisory audio tone color code most significant bit. The base station shall set this field to ‘0’ when directing handoff to a wide analog channel. The base station shall set this field to the most significant bit of the DSCC when directing handoff to a narrow analog channel.

BAND_CLASS - Band class.

The base station shall set this field according to values defined in [30].

If the ASSIGN_MODE field is set to ‘100’, the base station shall include the following fields:

FREQ_INCL - Frequency included indicator.

If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.

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(s) the mobile station is to use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

CDMA_FREQ - Frequency assignment.

If the FREQ_INCL bit 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 FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the FREQ_INCL bit is set to ‘1’, 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 Forward Traffic Channel(s) the mobile station is to use. If FOR_RC is set to a Radio Configuration associated with Spreading Rate 3, the base station shall set this field to the center SR3 frequency assignment containing the Forward Traffic Channel(s) the mobile station is to use.

BYPASS_ALERT_ANSWER - Bypass alert indicator.

If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
GRANTED_MODE - Granted mode.

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 may take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

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 that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation may take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

The base station shall set this field to ‘10’ to indicate that the mobile station is to use an initial service configuration consisting of the default multiplex option that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation is not to take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

The base station shall set this field to ‘11’ to instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record).

SR_ID_RESTORE - Service reference identifier to be restored.

If the GRANTED_MODE 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:

- If the mobile station is to restore all the service option connections from the stored service configuration, the base station shall set this field to ‘111’.
- If the mobile station is to restore more than one but not all the service option connections from the stored service configuration, the base station shall set this field to ‘000’.
- Otherwise, the base station shall set this field to the service reference identifier corresponding to the service option connection to be restored.
SR_ID_RESTORE_BITMAP – Bitmap of service reference identifiers to be restored.

If the SR_ID_RESTORE field is included and set to ‘000’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

This field consists of the subfields defined in Table 3.7.2.3.2.21-6. The base station shall set a subfield to ‘1’ to indicate that the mobile station is to restore the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to ‘0’.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR_ID_1</td>
<td>1</td>
<td>sr_id 1 to be restored</td>
</tr>
<tr>
<td>SR_ID_2</td>
<td>1</td>
<td>sr_id 2 to be restored</td>
</tr>
<tr>
<td>SR_ID_3</td>
<td>1</td>
<td>sr_id 3 to be restored</td>
</tr>
<tr>
<td>SR_ID_4</td>
<td>1</td>
<td>sr_id 4 to be restored</td>
</tr>
<tr>
<td>SR_ID_5</td>
<td>1</td>
<td>sr_id 5 to be restored</td>
</tr>
<tr>
<td>SR_ID_6</td>
<td>1</td>
<td>sr_id 6 to be restored</td>
</tr>
</tbody>
</table>

DEFAULT_CONFIG - Default Configuration.

If the GRANTED_MODE field is set to ‘00’, the base station shall set this field as specified in Table 3.7.2.3.2.21-2 to indicate an initial multiplex option and Radio Configuration for the Forward and Reverse Traffic Channels.

FOR_RC - Forward Traffic Channel radio configuration.

The base station shall set this field to the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Forward Traffic (Fundamental and Dedicated Control) Channel before the first Service Connect Message is sent to the mobile station.

If GRANTED_MODE is set to ‘00’, and DEFAULT_CONFIG is not set to ‘100’ (see Table 3.7.2.3.2.21-2), the base station shall set this field to either ‘00001’ or ‘00010’ (see Table 3.7.2.3.2.21-4).

REV_RC - Reverse Traffic Channel radio configuration.

The base station shall set this field to the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Reverse Traffic (Fundamental and Dedicated Control) Channel before the first Service Connect Message is sent to the mobile station.
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 ‘0001’ or ‘0010’ (see Table 3.7.2.3.21-3).

FRAME_OFFSET - Frame offset.
The Forward and Reverse Traffic Channel frames are delayed FRAME_OFFSET × 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.

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 on the Forward Fundamental Channel or the Forward Dedicated Control Channel indicated by FPC_PRI_CHAN. The base station shall set the value in units of 0.25 dB.

RLGAIN_ADJ - Reverse Traffic Channel power.
If DIRECT_CH_ASSIGN_IND field is set to ‘0’, 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.
If DIRECT_CH_ASSIGN_IND field is set to ‘1’, the base station shall set this field to adjust the initial Traffic Channel transmission power as specified 2.6.4.2. The base station shall set this field as a two’s complement signed binary number, in units of 1 dB.

NUM_PILOTS - Number of pilots in the Active Set.
The base station shall set this field to number of pilots that are to be in the mobile station’s Active Set on the Traffic Channel minus one. The base station shall set this field to the value in the range 0 to N_{6m}-1 inclusive.

CH_IND - Channel indicator.
The base station shall set this field as shown in Table 3.7.2.3.2.21-7.
Table 3.7.2.3.21-7. Channel Indicator

<table>
<thead>
<tr>
<th>Value (Binary)</th>
<th>Channels Being Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Reserved</td>
</tr>
<tr>
<td>01</td>
<td>Fundamental Channel only</td>
</tr>
<tr>
<td>10</td>
<td>Dedicated Control Channel only</td>
</tr>
<tr>
<td>11</td>
<td>Both Fundamental Channel and Dedicated Control Channel</td>
</tr>
</tbody>
</table>

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:
The base station shall set this field to the closed-loop reverse power control delay minus one (the closed-loop reverse power control delay is the time between the end of a gated-on 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.

D_SIG_ENCRYPT_MODE - Dedicated channel encryption mode indicator.

If ENCRYPT_MODE is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

ENC_KEY_SIZE - Encryption key size indication.

If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

C_SIG_ENCRYPT_MODE_INCL - Common channel signaling encryption mode included indicator.

If common channel signaling encryption 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’.

C_SIG_ENCRYPT_MODE - Common channel signaling encryption mode indicator.

If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise, the base station shall omit this field.

3XFL_1XRL_INCL - 3X Forward Link and 1X Reverse Link indicator.

The base station shall set this field to ‘1’ if the base station is assigning 3X traffic channel on the Forward Link and 1X traffic channel on the Reverse Link; otherwise, the base station shall set this field to ‘0’.

1XRL_FREQ_OFFSET - 1X Reverse Link frequency offset.

If 3XFL_1XRL_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the value shown in Table 3.7.2.3.2.21-8 corresponding to the frequency offset of the 1X reverse link.
Table 3.7.2.3.2.21-8. 1X Reverse Link Frequency Offset

<table>
<thead>
<tr>
<th>1XRL_FREQ_OFFSET (Binary)</th>
<th>1X Reverse Link frequency offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>The Reverse Link is on the lowest SR3 frequency</td>
</tr>
<tr>
<td>01</td>
<td>The Reverse Link is on the center SR3 frequency</td>
</tr>
<tr>
<td>10</td>
<td>The Reverse Link is on the highest SR3 frequency</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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’.

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).

PLCM_39 - The 39 LSB 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.

SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

The base station shall omit this field if the GRANTED_MODE field is not set to '11'; otherwise, the base station shall include this field and set it as follows:

If DIRECT_CH_ASSIGN_IND field is set to ‘1’ or if DIRECT_CH_ASSIGN_IND field is set to ‘0’ and the mobile station is to use a different stored service configuration corresponding to SYNC_ID field included in this message then indicated by the mobile station in the Origination Message, the Reconnect Message, or Page Response Message, the base station shall set this field to ‘1’, otherwise, the base station shall set this field to ‘0’.

SYNC_ID_LEN - Service Configuration synchronization identifier length indicator.

If the SYNC_ID_INCL field is not included or is included and is set to '0', the 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 length of the SYNC_ID field included in this message.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is not included or is included and 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 Service Configuration synchronization identifier corresponding to the stored service configuration that the mobile station is to use.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONFIG_MSG_SEQ</strong></td>
<td>Configuration message sequence number. If the DIRECT_CH_ASSIGN_IND is to ‘0’, the base station</td>
</tr>
<tr>
<td></td>
<td>shall omit this field; otherwise the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).</td>
</tr>
<tr>
<td><strong>RTC_NOM_PWR</strong></td>
<td>Reverse Traffic Channel Nominal Power. If DIRECT_CH_ASSIGN_IND is set to ‘0’, the base station</td>
</tr>
<tr>
<td></td>
<td>shall omit this field; otherwise, the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the value of the nominal power correction to be used by the</td>
</tr>
<tr>
<td></td>
<td>mobile station when transmitting on the Reverse Traffic Channel after the Direct Channel Assignment</td>
</tr>
<tr>
<td></td>
<td>call setup procedure as specified in 2.6.4.2. The base station shall set this field as a two’s</td>
</tr>
<tr>
<td></td>
<td>complement signed binary number, in units of 1 dB.</td>
</tr>
<tr>
<td><strong>RESPOND_IND</strong></td>
<td>Response requested indicator. If DIRECT_CH_ASSIGN_IND is set to ‘0’, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field; otherwise, the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the mobile station is to respond to the **Extended</td>
</tr>
<tr>
<td></td>
<td>Channel Assignment Message** with a <strong>Page Response Message</strong> or <strong>Reconnect Message</strong> in unassured</td>
</tr>
<tr>
<td></td>
<td>mode on the r-csch; otherwise, the base station shall set this field to ‘0’ to indicate that the</td>
</tr>
<tr>
<td></td>
<td>mobile station is not to respond on the r-csch.</td>
</tr>
<tr>
<td><strong>DIRECT_CH_ASSIGN_RECOVERY</strong></td>
<td>Direct Channel Assignment Recover Indicator. If DIRECT_CH_ASSIGN_IND is set to ‘0’, the base station</td>
</tr>
<tr>
<td><strong>IND</strong></td>
<td>shall omit this field; otherwise, the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the mobile station is to transmit a **Page Response</td>
</tr>
<tr>
<td></td>
<td>Message** or a <strong>Reconnect Message</strong> after failing to acquire the forward traffic channel assigned in</td>
</tr>
<tr>
<td></td>
<td>this message; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td><strong>FIXED_PREAMBLE_TRANSMIT</strong></td>
<td>Fixed Preamble Length Transmission Indicator. If GRANTED_MODE is not set to ‘11’, the base station</td>
</tr>
<tr>
<td><strong>IND</strong></td>
<td>shall omit this field; otherwise, the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ to indicate if the mobile station is allowed to enter</td>
</tr>
<tr>
<td></td>
<td>the <strong>Traffic Channel Substate</strong> of the <strong>Mobile Station Control on the Traffic Channel State</strong> after</td>
</tr>
<tr>
<td></td>
<td>sending the number of preambles specified in this message; otherwise, the base station shall set</td>
</tr>
<tr>
<td></td>
<td>this field to ‘0’.</td>
</tr>
</tbody>
</table>
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’. The base station shall set this field to ‘0’ if GRANTED_MODE is not set to ‘11’.

**FIXED_NUM_PREAMBLE** - Traffic Channel preamble length.

If FIXED_PREAMBLE_TRANSMIT_IND is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the minimum length of Traffic Channel preamble that the mobile station is to transmit, before entering the Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State without having received a forward dedicated channel acquired indication from Layer 2 (see [4]).

The base station shall set FIXED_NUM_PREAMBLE to the value shown in Table 3.7.2.3.2.21-13 corresponding to the Traffic Channel preamble length in 1.25 ms units.

**Table 3.7.2.3.2.21-13 Traffic Channel Preamble Length**

<table>
<thead>
<tr>
<th>FIXED_NUM_PREAMBLE (binary)</th>
<th>Preamble Length in ms</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0</td>
</tr>
<tr>
<td>001</td>
<td>20</td>
</tr>
<tr>
<td>010</td>
<td>40</td>
</tr>
<tr>
<td>011</td>
<td>60</td>
</tr>
<tr>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>101</td>
<td>100</td>
</tr>
<tr>
<td>110</td>
<td>200</td>
</tr>
<tr>
<td>111</td>
<td>300</td>
</tr>
</tbody>
</table>

**EARLY_RL_TRANSMIT_IND** - Early Reverse Link Transmission indicator.

The base station shall set this field to ‘1’ if, upon channel assignment, the mobile station is to enable the transmitter prior to receiving sufficient signal quality on the forward link; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT_INCL** - Transmit Power Limit Inclusion for the current base station

If the transmit power limit field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT** - Transmit Power Limit for the current base station
If TX_PWR_LIMIT_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to '0' to make the entire record octet-aligned.

If the CH_IND field is set to '01', the base station shall include the following fields:

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_FCH_FER - Fundamental Channel target Frame Error Rate.

The base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2.

FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

The base station shall include NUM_PILOTS plus one occurrences of the following record, one for each member of the mobile station’s Active Set on the Traffic Channel.

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.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.

The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.3.3.2.21-9 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.
Table 3.7.2.3.21-9. Pilot Record Types

<table>
<thead>
<tr>
<th>Description</th>
<th>PILOT_REC_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1X Common Pilot with Transmit Diversity</td>
<td>000</td>
</tr>
<tr>
<td>1X Auxiliary Pilot</td>
<td>001</td>
</tr>
<tr>
<td>1X Auxiliary Pilot with Transmit Diversity</td>
<td>010</td>
</tr>
<tr>
<td>3X Common Pilot</td>
<td>011</td>
</tr>
<tr>
<td>3X Auxiliary Pilot</td>
<td>100</td>
</tr>
<tr>
<td>All other PILOT_REC_TYPE values are reserved</td>
<td></td>
</tr>
</tbody>
</table>

RECORD_LEN - Pilot record length.

If ADD_PILOT_REC_INCL is set to '1', the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to '0', the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to '1', the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If ADD_PILOT_REC_INCL is set to '0', the base station shall omit this field.

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'.

CODE_CHAN_FCH - Code channel index for the Fundamental Channel.

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.
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 or 8 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.

QOF_MASK_ID_FCH - Quasi-Orthogonal Function Mask Identifier for the Fundamental Channel.

If FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the quasi-orthogonal function mask identifier (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 quasi-orthogonal function mask identifier that the mobile station is to use on the Forward Fundamental Channel on the center SR3 frequency.

3X_FCH_INFO_INCL – 3X Fundamental Channel information included indicator.

If the 3X Fundamental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_PILOTS plus one occurrences of the following record if 3X_FCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

3X_FCH_LOW_INCL – FCH code channel on the lowest SR3 frequency included indicator.

If the Fundamental Channel on the lowest SR3 frequency has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_FCH_LOW – QOF index for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the lowest SR3 frequency.

CODE_CHAN_FCH_LOW - Code channel for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_FCH_HIGH_INCL – FCH code channel on the highest SR3 frequency included indicator.

If the Fundamental Channel on the highest SR3 frequency has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_FCH_HIGH – QOF index for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 index of the Quasi-orthogonal function (see [2] corresponding to the QOF index for the Fundamental Channel on the highest SR3 frequency.

CODE_CHAN_FCH_HIGH – Code channel for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

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 CH_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 CH_IND field is set to ‘10’, the base station shall include the following fields:

FPC_DCCH_INIT_SETPT - Initial Dedicated Control Channel outer loop Eb/Nt setpoint.

The base station shall set this field to initial Dedicated Control Channel outer loop Eb/Nt setpoint, in units of 0.125 dB.

FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.
The base station shall set this field to the target Frame Error Rate on the Dedicated Control Channel, as specified in Table 3.7.3.3.2.25-2.

**FPC_DCCH_MIN_SETPT** - Minimum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to minimum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

**FPC_DCCH_MAX_SETPT** - Maximum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to maximum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

The base station shall include NUM_PILOTS plus one occurrences of the following three-field record for each member of the mobile station’s Active Set on the Traffic Channel.

- **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.

- **ADD_PILOT_REC_INCL** - Additional pilot information included indicator. The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

- **PILOT_REC_TYPE** - Pilot record type. If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.

- **RECORD_LEN** - Pilot record length. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

- **Type-specific fields** - Pilot record type-specific fields. If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record.
PWR_COMB_IND - Power control symbol combining indicator.

If 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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

CODE_CHAN_DCCH - Code channel index for the Dedicated Control Channel.

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]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Forward Dedicated Control 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 in the range of 1 to 255 inclusive, that the mobile station is to use on the Forward Dedicated Control Channel on the center SR3 frequency.

If Radio Configuration 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 or 8 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.

QOF_MASK_ID_DCCH - Quasi-Orthogonal Function Mask Identifier for the Dedicated Control Channel.

If FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the quasi-orthogonal function mask identifier (see [2]) that the mobile station is to use on the Forward Dedicated Control 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 quasi-orthogonal function mask identifier (see [2]) that the mobile station is to use on the Forward Dedicated Control Channel on the center SR3 frequency.

3X_DCCH_INFO_INCL - 3X Dedicated Control Channel information included indicator.

If the 3X Dedicated Control Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_PILOTS plus one occurrences of the following record if 3X_DCCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

3X_DCCH_LOW_INCL - DCCH code channel on the lowest SR3 frequency included indicator.
If the Dedicated Control Channel on the lowest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to '1'; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_LOW – QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

If 3X_DCCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the lowest SR3 frequency.

If 3X_DCCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_DCCH_HIGH_INCL – DCCH code channel on the highest SR3 frequency included indicator.

If the Dedicated Control Channel on the highest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_HIGH – QOF index for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the highest SR3 frequency.

CODE_CHAN_DCCH_HIGH - Code channel for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

FUNDICATED_BCMC_IND – BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If FUNDICATED_BCMC_IND is set to ‘1’, the base station shall include NUM_PILOT plus 1 occurrences of the following record:

FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code assignment.

The base station shall set this field to the Walsh code assignment for the Forward Common Power Control Channel.

FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.

The base station shall set this field to the Forward Common Power Control Channel Subchannel associated with this base station.

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 CH_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 CH_IND field is set to ‘11’, the base station shall include the following fields:

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_DCCH_INIT_SETPT - Initial Dedicated Control Channel outer loop E_{b}/N_{t} setpoint.

The base station shall set this field to initial Dedicated Control Channel outer loop E_{b}/N_{t} setpoint, in units of 0.125 dB.

FPC_PRI_CHAN - Power Control Subchannel indicator.

The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.
If the F-CPCCH is assigned, the base station shall multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to ‘0’, the base station shall multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station shall multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

FPC_FCH_FER - Fundamental Channel target Frame Error Rate.

The base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel.

FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to minimum Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to maximum Fundamental Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.

The base station shall set this field to the target Frame Error Rate on the Dedicated Control Channel.

FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to minimum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

FPC_DCCH_MAX_SETPT - Maximum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint.

The base station shall set this field to maximum Dedicated Control Channel Outer Loop $E_b/N_t$ setpoint, in units of 0.125 dB.

The base station shall include NUM_PILOTS plus one occurrences of the following three-field record, one for each member of the mobile station’s Active Set on the Traffic Channel.

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.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.

The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**RECORD_LEN** - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**Type-specific fields** - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**PWR_COMB_IND** - Power control symbol combining indicator.

If 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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

**CODE_CHAN_FCH** - Code channel index for the Fundamental Channel.

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 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 Channel on the center SR3 frequency.

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 or 8 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.

**QOF_MASK_ID_FCH** - Quasi-Orthogonal Function Mask Identifier for the Fundamental Channel.
If FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the quasi-orthogonal function mask identifier (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 quasi-orthogonal function mask identifier that the mobile station is to use on the Forward Fundamental Channel on the center SR3 frequency.

**CODE_CHAN_DCCH** - Code channel index for the Dedicated Control Channel.

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]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Dedicated Control 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 in the range of 1 to 255 inclusive, that the mobile station is to use on the Dedicated Control Channel on the center SR3 frequency.

If Radio Configuration 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 or 8 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.

**QOF_MASK_ID_DCCH** - Quasi-Orthogonal Function Mask Identifier for the Dedicated Control Channel.

If FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the quasi-orthogonal function mask identifier (see [2]) that the mobile station is to use on the Forward Dedicated Control Channel associated with this pilot. If FOR_RC is set to a Radio Configuration associated with Spreading Rate 1, the base station shall set this field to the quasi-orthogonal function mask identifier that the mobile station is to use on the Forward Dedicated Control Channel on the center SR3 frequency.

**3X_FCH_INFO_INCL** - 3X Fundamental Channel information included indicator.

If the 3X Fundamental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_PILOTS plus one occurrences of the following record if 3X_FCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

**3X_FCH_LOW_INCL** - FCH code channel on the lowest SR3 frequency included indicator.
If the Fundamental Channel on the lowest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_FCH_LOW – QOF index for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the lowest SR3 frequency.

CODE_CHAN_FCH_LOW - Code channel for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_FCH_HIGH_INCL – FCH code channel on the highest SR3 frequency included indicator.

If the Fundamental Channel on the highest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_FCH_HIGH – QOF index for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the highest SR3 frequency.

CODE_CHAN_FCH_HIGH - Code channel for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_DCCH_INFO_INCL – 3X Dedicated Control Channel information included indicator. If the 3X Dedicated Control Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_PILOTS plus one occurrences of the following record if 3X_DCCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

3X_DCCH_LOW_INCL – DCCH code channel on the lowest SR3 frequency included indicator. If the Dedicated Control Channel on the lowest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_LOW – QOF index for the Dedicated Control Channel on the lowest SR3 frequency. If 3X_DCCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the lowest SR3 frequency. If 3X_DCCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_DCCH_HIGH_INCL – DCCH code channel on the highest SR3 frequency included indicator.
If the Dedicated Control Channel on the highest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_HIGH – QOF index for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the highest SR3 frequency.

CODE_CHAN_DCCH_HIGH – Code channel for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) that the mobile station is to use on the Dedicated Control Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

FUNDICATED_BCMC_IND – BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_FCH_ASSIGNED – Reverse FCH channel assigned indicator.

If the FUNDICATED_BCMC_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:

If the reverse FCH is assigned in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_INCL – Additional PLCM for forward FCH included indicator.

If the FUNDICATED_BCMC_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:

If the additional PLCM for forward FCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH type indicator.

If ADD_PLCM_FOR_FCH_INCL is not included or is included and 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’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask for forward FCH.

If ADD_PLCM_FOR_FCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 39 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.

FOR_CPCCH_INFO_INCL - CPCCH information included indicator.

If the FUNDICATED_BCMC_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:

If the F-CPCCH 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’.

If the ASSIGN_MODE field is set to ‘101’, the base station shall include the following fields:

FREQ_INCL - Frequency included indicator.

If the BAND_CLASS and CDMA_FREQ fields are included in this assignment record, the base station shall set this bit to ‘1’. If the BAND_CLASS and CDMA_FREQ fields are not included in this assignment record, the base station shall set this bit to ‘0’.
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(s) the mobile station is to use. If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field.

CDMA_FREQ - Frequency assignment.

If the FREQ_INCL bit is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the FREQ_INCL bit is set to ‘1’, 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 Forward Traffic Channel(s) the mobile station is to use.

BYPASS_ALERT_ANSWER - Bypass alert indicator.

If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

GRANTED_MODE - Granted mode.

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 that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation may take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

The base station shall set this field to ‘10’ to indicate that the mobile station is to use an initial service configuration consisting of the default multiplex option that is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3, and to indicate that service negotiation is not to take place before the base station sends one of the following messages: Service Connect Message, General Handoff Direction Message (with SCR) or Universal Handoff Direction Message (with SCR).

The base station shall set this field to ‘11’ to instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record).

The base station shall not set this field to ‘00’. 
SR_ID_RESTORE – Service reference identifier to be restored.

If the GRANTED_MODE 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:

- If the mobile station is to restore all the service option connections from the stored service configuration, the base station shall set this field to ‘111’.
- If the mobile station is to restore more than one but not all the service option connections from the stored service configuration, the base station shall set this field to ‘000’.
- Otherwise, the base station shall set this field to the service reference identifier corresponding to the service option connection to be restored.

SR_ID_RESTORE_BITMAP – Bitmap of service reference identifiers to be restored.

If the SR_ID_RESTORE field is included and set to ‘000’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

This field consists of the subfields defined in Table 3.7.2.3.2.21-6. The base station shall set a subfield to ‘1’ to indicate that the mobile station is to restore the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to ‘0’.

FRAME_OFFSET - Frame offset.

The Forward and Reverse Traffic Channel frames are delayed \( \text{FRAME_OFFSET} \times 1.25 \text{ ms} \) relative to system timing (see [2]).

The base station shall set this field to the Forward and Reverse Traffic Channel frame offset (the frame offset does not apply to the F-PDCH).

ENCRIPT_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.

D_SIG_ENCRYPT_MODE - Dedicated channel encryption mode indicator.

If ENCRYPT_MODE is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling message mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

ENC_KEY_SIZE - Encryption key size indication.
If ENCRYPT_MODE is set to ‘10’ or ‘11’, the base station shall include this field and shall set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

C_SIG_ENCRYPT_MODE_INCL - Common channel signaling encryption mode included indicator.

If common channel signaling encryption 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’.

C_SIG_ENCRYPT_MODE - Common channel signaling encryption mode indicator.

If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; 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’. 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.

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.

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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).

PLCM_39 - The 39 LSB 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.

RLGAIN_ADJ - Reverse Traffic Channel power.

If DIRECT_CH_ASSIGN_IND field is set to ‘0’, 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.

If DIRECT_CH_ASSIGN_IND field is set to ‘1’, the base station shall set this field to adjust the initial Traffic Channel transmission power. The base station shall set this field as a two’s complement signed binary number, in units of 1 dB.

NUM_PILOTS - Number of pilots in the Active Set.

The base station shall set this field to number of pilots that are to be in the mobile station’s Active Set on the Traffic Channel minus one. The base station shall set this field to the value in the range 0 to N_{6m-1} inclusive.

EXT_CH_IND - Extended Channel Indicator.

The base station shall set this field as shown in Table 2.7.1.3.2.4-11.

FPC_SUBCHAN_GAIN - Forward Power Control Subchannel relative gain.

If EXT_CH_IND signals the allocation of a F-FCH, or a F-DCCH, 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 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 on the Forward Fundamental Channel or the Forward Dedicated Control Channel indicated by FPC_PRI_CHAN_s.

The base station shall set the value in units of 0.25 dB.

REV_FCH_GATING_MODE - Reverse eighth gating mode indicator.
If EXT_CH_IND signals the allocation of R-FCH, 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 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 not included, or is included
and set to ‘0’, then the base station shall omit this field;
otherwise, the base station shall include this field and set it
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 not included, or is
included and set to ‘0’, then the base station shall omit this
field; otherwise, the base station shall include this field and
set it as follows:

The base station shall set this field to the closed-loop reverse
power control delay minus one (the closed-loop reverse power
control delay is the time between the end of a gated-on
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.

FULL_CI_FEEDBACK_IND -  Full C/I feedback rate indicator.

If the mobile station is to send full C/I feedback every 1.25
ms, the base station shall set this field to ‘1’. If the mobile
station is to transmit full C/I feedback every 20 ms, the base
station shall set this field to ‘0’.

FOR_CPCCH_RATE -  The Forward Common Power Control Channel 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 rate of the Forward
Common Power Control Channel as specified in Table
3.7.2.3.2.21-12.
Table 3.7.2.3.21-12 Rate of the Forward Common Power Control Channel.

<table>
<thead>
<tr>
<th>FOR_CPCCH_RATE (binary)</th>
<th>Rate of the F-CPCCH (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>800</td>
</tr>
<tr>
<td>01</td>
<td>400</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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 3.7.2.3.21-13 (see [2]).

Table 3.7.2.3.21-13 CPCCH/RCCH Update rate.

<table>
<thead>
<tr>
<th>Encoded update rate (binary)</th>
<th>CPCCH/RCCH Update rate (Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>800</td>
</tr>
<tr>
<td>01</td>
<td>400</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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 \( \times 1.25 \) 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.

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 the radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Reverse Packet Data Channel.

**FOR_FCH_DCCH_RC** - Forward Fundamental Channel or Forward Dedicated Control Channel radio configuration.

If EXT_CH_IND signals the allocation of a F-FCH, or a F-DCCH, 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 radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Forward Fundamental Channel, or on the Forward Dedicated Control Channel, or on both.

The initial service configuration consisting of the default multiplex option that is to be used by the mobile station is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3.

**REV_FCH_DCCH_RC** - Reverse Fundamental Channel or Reverse Dedicated Control Channel radio configuration.

If EXT_CH_IND signals the allocation of a R-FCH, or a R-DCCH, 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 radio configuration (see Table 3.7.2.3.2.21-4) to be used by the mobile station on the Reverse Fundamental Channel, or on the Reverse Dedicated Control Channel, or on both.

The initial service configuration consisting of the default multiplex option that is to be used by the mobile station is derived from the radio configuration corresponding to Table 3.7.2.3.2.21-3.

**FPC_PRI_CHAN** - Power Control Subchannel indicator.

If EXT_CH_IND signals the allocation of a F-FCH and a F-DCCH, the base station shall set this field as follows; otherwise, the base station shall omit this field.

The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.
If the F-CPCCH is assigned, the base station shall multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

- If this field is set to ‘0’, the base station shall multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station shall multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

**FPC_FCH_INIT_SETPT** - Initial Fundamental Channel outer loop $E_b/N_t$ setpoint.

- If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
- 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_FCH_FER** - Fundamental Channel target Frame Error Rate.

- If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
- The base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2.

**FPC_FCH_MIN_SETPT** - Minimum Fundamental Channel outer loop $E_b/N_t$ setpoint.

- If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
- The base station shall set this field to minimum Fundamental Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.

**FPC_FCH_MAX_SETPT** - Maximum Fundamental Channel outer loop $E_b/N_t$ setpoint.

- If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
- The base station shall set this field to maximum Fundamental Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.

**FPC_DCCH_INIT_SETPT** - Initial Dedicated Control Channel outer loop $E_b/N_t$ setpoint.

- If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
- The base station shall set this field to initial Dedicated Control Channel outer loop $E_b/N_t$ setpoint, in units of 0.125 dB.

**FPC_DCCH_FER** - Dedicated Control Channel target Frame Error Rate.

- If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
The base station shall set this field to the target Frame Error Rate on the Dedicated Control Channel, as specified in Table 3.7.3.3.2.25-2.

FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

FPC_DCCH_MAX_SETPT - Maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

PDCH_GROUP_IND_INCL - Packet Data Channel Group Indicator included flag.

The base station shall set this field to ‘1’ if the PDCH_GROUP_IND fields are included; otherwise, the base station shall set this field to ‘0’.

If this field is set to ‘0’, the mobile station is to use PWR_COMB_IND to determine whether the softer or soft reselection parameters are used when re-pointing between pilots in its Active Set (see [3]).

FOR_PDCH_PARMS_INCL - Indicator of the inclusion of Forward Packet Data Channel configuration fields.

The base station shall set this field to ‘1’ if the Forward Packet Data Channel configuration fields are included; otherwise, the base station shall set this field to ‘0’.

FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.

If FOR_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to ‘1’ if the following F-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to ‘0’.

RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.
The base station shall set this field to the Reverse Acknowledgment Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

**RLGAIN_CQICH_PILOT** - Reverse Channel Quality Indicator Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows:

The base station shall set this field to the Reverse Channel Quality Indicator Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

**NUM_SOFT_SWITCHING_FRAMES** - Number of frames for R-CQICH soft switching.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_Group_IND; otherwise, they are indicated by PWR_COMB_IND.

**NUM_SOFTER_SWITCHING_FRAMES** - Number of frames for R-CQICH softer switching.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

**NUM_SOFT_SWITCHING_SLOTS** - Number of slots per frame for R-CQICH soft switching.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

<table>
<thead>
<tr>
<th>NUM_SOFT/SOFTER_SWITCHING_SLOTS (binary)</th>
<th>Number of slots per frame for R-CQICH switching.</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>2</td>
</tr>
<tr>
<td>01</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

CHM_SWITCHING_PARMS_INCL - Control Hold Mode fields included indicator.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the switching parameters for Control Hold Mode are included; otherwise, the base station shall set this field to ‘0’.
NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFT_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH soft switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station, while in Control Hold, is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH softer switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station, while in Control Hold, is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

**PDCH_SOFT_SWITCHING_DELAY** - F-PDCH Soft Switching Delay.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

**PDCH_SOFTER_SWITCHING_DELAY** - F-PDCH Soft Switching Delay.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

**TX_DISABLED_TIMER_INCL** - Transmitter disabled timer included flag.

The base station shall set this field to ‘1’ if the following **TX_DISABLED_TIMER** field is included; otherwise, the base station shall set this field to ‘0’.

**TX_DISABLED_TIMER** - Transmitter disabled timer.

If **TX_DISABLED_TIMER_INCL** FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the maximum time, in units of 20ms; the mobile station’s transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization. [See [3]].

FOR_GCH_ASSIGNED - Forward Grant 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 grants on the Forward Grant Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

FOR_RCCH_ASSIGNED - Forward Rate Control 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 follow rate control indicators on the Forward Rate Control Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

FOR_RCCH_DRC_MODE - Forward Rate Control Channel Dedicated Rate Control Mode Indicator.

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 ‘1’ if the dedicated rate control mode is being used on the Forward Rate Control Channel; otherwise, the base station shall set this field to ‘0’ if the common rate control mode is being used (see [3]).

FOR_RCCH_REPETITION - Forward Rate Control Subchannel repetition factor.

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 subchannel repetition factor of the Rate Control Subchannel on all pilots as specified in Table 3.7.2.3.2.21-11. [See [2]].

<table>
<thead>
<tr>
<th>FOR_RCCH_REPETITION (binary)</th>
<th>Repetition factor for the F-RCCH</th>
</tr>
</thead>
</table>

Table 3.7.2.3.2.21-11 Repetition factor for the F-RCCH.
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.

The base station shall set this field to ‘11’ if the mobile station is to combine the Forward Acknowledgment Channel from all sectors in the same combining indicator set as the serving sector.
| FOR_ACKCH_COMB_SEL- | Forward Acknowledgment Channel Combining method selector. If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_ACKCH_MODE is omitted, or if it is included and set to '00' or '10', or if PDCH_GROUP_IND_INCL is set to '0', the base station shall omit this field; otherwise, it shall include it and set it as follows. The base station shall set this field to '0' if the mobile station is to use PWR_COMB_IND as a combining indicator when receiving the Forward Acknowledgment Channel; otherwise, it shall set it to '1' if the mobile station is to use PDCH_GROUP_IND as the indicator for combining sectors. |
| REV_PDCH_PARMS_INCL | Reverse Packet Data Channel related parameters included 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 following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'. |
| REV_PDCH_RLGAIN_INCL | Reverse Packet Data Channel parameters related to reverse link adjustment gains included indicator. If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall include this field, and set it as follows. The base station shall set this field to '1' if the following R-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'. |
| RLGAIN_SPICH_PILOT | Reverse Secondary Pilot Channel to pilot adjustment gain. If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Secondary Pilot Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]). |
| RLGAIN_REQCH_PILOT | Reverse Request Channel to pilot adjustment gain. If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Request Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]). |
| RLGAIN_PDCCH_PILOT | Reverse Packet Data Control Channel to pilot adjustment gain. |

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If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

REV_PDCH_PARMS_1_INCL - Reverse Packet Data Channel parameters subset included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'.

REV_PDCH_TABLE_SEL - Reverse Packet Data Channel Table selector.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel Table selector (see [2]).

REV_PDCH_MAX_AUTO_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

The base station shall include NUM_PILOTS plus one occurrences of the following record, one for each member of the mobile station's Active Set on the Traffic Channel.

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.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.

The base station shall set this field to '1' if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to '0' if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

FOR_PDCH_INCL - Forward Packet Data Channel assignment included indicator.

The base station shall set this field to ‘1’ if the MS is assigned resources on the F-PDCH channel; otherwise, the base station shall set this field to ‘0’. This field shall be set to ‘1’ for at least one of the pilots included in this message.

WALSH_TABLE_ID - The index of the Walsh Table used.

The base station shall set this field to the index of the Walsh Table being used by the Packet Data Channel. (See [3]).

NUM_PDCCH - The number of Packet Data Control Channels supported.

The base station shall include NUM_PDCCH+1 occurrences of the following one-field record:
FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code assignment.

If FOR_PDCH_PARMS_INCL is set to ‘1’, and FOR_PDCH_INCL is set to ‘1’, 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 Walsh code assignment for the Forward Packet Data Control Channel.

If NUM_PDCCH is set to ‘001’, the Walsh code of PDCCH0 shall be included first, followed by the Walsh code for PDCCH1

MAC_ID - Medium Access Control index.

If FOR_PDCH_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 MAC index assigned to the mobile station by this pilot.

The base station shall set this field to an integer value larger than 63.

REV_CQICH_COVER - Reverse Channel Quality Indicator Channel cover.

If FOR_PDCH_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 index of the R-CQICH cover associated with this pilot (See [2]).

FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code assignment.

If EXT_CH_IND signals the allocation of a F-CPCCH, and either of the following conditions is true:

- EXT_CH_IND signals the allocation of a F-FCH or a F-DCCH

- all of the following conditions are true:
  + FOR_PDCH_INCL is set to ‘1’
  + EXT_CH_IND does not signal allocation of a F-FCH
  + EXT_CH_IND does not signal allocation of a F-DCCH

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 Walsh code assignment for the Forward Common Power Control Channel.
FOR_CPCCH_RATE - The Forward Common Power Control Channel Rate.

If FOR_PDCH_INCL is set to ‘1’, and 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 rate of the Forward Common Power Control Channel as specified in Table 3.7.2.3.2.21-12.

Table 3.7.2.3.2.21-12 Rate of the Forward Common Power Control Channel.

<table>
<thead>
<tr>
<th>FOR_CPCCH_RATE (binary)</th>
<th>Rate of the F-CPCCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>800</td>
</tr>
<tr>
<td>01</td>
<td>400</td>
</tr>
<tr>
<td>10</td>
<td>200</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.

If EXT_CH_IND signals the allocation of a F-CPCCH, and either of the following conditions is true:

- EXT_CH_IND signals the allocation of a F-FCH or a F-DCCH
- all of the following conditions are true:
  - FOR_PDCH_INCL is set to ‘1’
  - EXT_CH_IND does not signal allocation of a F-FCH
  - EXT_CH_IND does not signal allocation of a F-DCCH

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 Forward Common Power Control Channel Subchannel associated with this base station.

If FOR_CPCCH_RATE is omitted, or if it is included and set to ‘00’, the base station shall set this field to a value in the range 0 to 243 inclusive. If FOR_CPCCH_RATE is included and set to ‘01’, the base station shall set this field to a value in the range 0 to 487 inclusive. If FOR_CPCCH_RATE is included and set to ‘10’, the base station shall set this field to a value in the range 0 to 965 inclusive.

PWR_COMB_IND - Power control symbol combining indicator.
If 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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

PDCH_GROUP_IND - Packet Data Channel Group Indicator.

If PDCH_GROUP_IND_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 mobile station is to use the softer reselection parameters when re-pointing between this pilot and the previous pilot that has a F-PDCH assigned to this mobile station in this message (i.e. FOR_PDCH_INCL is set to ‘1’), the base station shall set this field to ‘1’ (see [3]).

If the mobile station is to use the soft reselection parameters when re-pointing between this pilot and the previous pilot in this message that has a F-PDCH assigned to this mobile station (i.e. FOR_PDCH_INCL is set to ‘1’), the base station shall set this field to ‘0’ (see [3]).

The base station shall set this field to ‘0’ in the first record in the pilot list that has a F-PDCH assigned to this mobile station (i.e. FOR_PDCH_INCL is set to ‘1’).

CODE_CHAN_FCH - Code channel on the Fundamental Channel.

If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Fundamental Channel of the Forward Traffic Channel.

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 is used, the base station shall set this field in the range 1 to 127 inclusive.

QOF_MASK_ID_FCH - Quasi-orthogonal function index on the Fundamental Channel.

If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

CODE_CHAN_DCCH - Code channel on the Dedicated Control Channel.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.
The base station shall set this field to the code channel index (see [2]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Dedicated Control Channel of the Forward Traffic Channel.

If Radio Configuration 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 is used, the base station shall set this field in the range 1 to 127 inclusive.

QOF_MASK_ID_DCCH - Quasi-orthogonal function index on the Dedicated Control Channel.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

FOR_ACKCH_WALSH_INDEX - Walsh Code for the Forward Acknowledgment Channel.

If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND does not signal the allocation of a R-PDCH, the base station shall omit this field; otherwise, it shall include it and set it as follows.

The base station shall set this field to the Walsh code of the Forward Acknowledgment Channel (see [2]).

FOR_ACKSCH_INDEX - Forward Acknowledgment Subchannel Index.

If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND does not signal the allocation of a R-PDCH, the base station shall omit this field; otherwise, it shall include it and set it as follows.

The base station shall set this field to the subchannel index of the Forward Acknowledgment Channel (see [2]). The base station should not use FOR_ACKSCH_INDEX = 0, 1, or \textsuperscript{97}, or \textsuperscript{98}.

FOR_RCCH_INCL - Forward Rate Control Subchannel included flag.

If FOR_PDCH_INCL is set to '0', or 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 '1' if a Forward Rate Control Channel Subchannel is allocated on this pilot (see [2]); otherwise, the base station shall set this field to '0'.

The base station shall set this field to a non zero value for at least one pilot in this message.

FOR_RCCH_WALSH_INDEX - Walsh Code for the Forward Rate Control Channel Subchannel.
If FOR_RCCH_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the Walsh code of the Forward Rate Control Channel Subchannel (see [2]).

FOR_RCSCH_INDEX - Forward Rate Control Subchannel.

If FOR_RCCH_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the subchannel index of the Rate Control Subchannel on this pilot (see [2]).

If FOR_RCCH_REPETITION is set to ‘00’, the base station shall set this field to a value in the range 0 to 95 inclusive. If FOR_RCCH_REPETITION is set to ‘01’, the base station shall set this field to a value in the range 0 to 47 inclusive. If FOR_RCCH_REPETITION is set to ‘10’, the base station shall set this field to a value in the range 0 to 23 inclusive.

The base station shall set this field to the subchannel offset of the Rate Control Subchannel on this pilot.

NUM_FOR_GCH - Number of Forward Grant Channels

If FOR_PDCH_INCL is set to ‘0’, or if FOR_GCH_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 number of assigned Forward Grant Channels on this pilot. The base station shall set this field to 0, 1, or 2.

The base station shall set this field to a non zero value for at least one pilot in this message.

If FOR_PDCH_INCL is set to ‘1’, and if FOR_GCH_ASSIGNED is included and set to ‘1’, the base station shall include NUM_FOR_GCH occurrences of the field

FOR_GCH_WALSH_INDEX: - Walsh Code for the Forward Grant Channel.

The base station shall set this field to the Walsh code of the Forward Grant Channels (see [2]).

SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

The base station shall omit this field if the GRANTED_MODE field is not set to ‘11’; otherwise, the base station shall include this field and set it as follows:
If `DIRECT_CH_ASSIGN_IND` field is set to ‘1’ or if `DIRECT_CH_ASSIGN_IND` field is set to ‘0’ and the mobile station is to use a different stored service configuration corresponding to `SYNC_ID` field included in this message, then indicated by the mobile station in the `Origination Message`, the `Reconnect Message`, or `Page Response Message`, the base station shall set this field to ‘1’, otherwise, the base station shall set this field to ‘0’.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYNC_ID_LEN</td>
<td>Service Configuration synchronization identifier length indicator.</td>
</tr>
<tr>
<td></td>
<td>If the <code>SYNC_ID_INCL</code> field is not included or is included and is set to ‘0’, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field; otherwise the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the length of the <code>SYNC_ID</code> field included in this message.</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>Service Configuration synchronization identifier.</td>
</tr>
<tr>
<td></td>
<td>If the <code>SYNC_ID_INCL</code> field is not included or is included and is set to ‘0’, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field; otherwise the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the Service Configuration synchronization identifier corresponding to the stored service configuration that the mobile station is to use.</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>Configuration message sequence number.</td>
</tr>
<tr>
<td></td>
<td>If the <code>DIRECT_CH_ASSIGN_IND</code> is set to ‘0’, the base station shall omit this field; otherwise the base</td>
</tr>
<tr>
<td></td>
<td>station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to <code>CONFIG_SEQ</code> (see 3.6.2.2).</td>
</tr>
<tr>
<td>RTC_NOM_PWR</td>
<td>Reverse Traffic Channel Nominal Power.</td>
</tr>
<tr>
<td></td>
<td>If <code>DIRECT_CH_ASSIGN_IND</code> is set to ‘0’, the base station shall omit this field; otherwise, the base</td>
</tr>
<tr>
<td></td>
<td>station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the value of the nominal power correction to be used by the</td>
</tr>
<tr>
<td></td>
<td>mobile station when transmitting on the Reverse Traffic Channel after the Direct Channel Assignment call</td>
</tr>
<tr>
<td></td>
<td>setup procedure. The base station shall set this field as a two’s complement signed binary number, in</td>
</tr>
<tr>
<td></td>
<td>units of 1 dB.</td>
</tr>
<tr>
<td>RESPOND_IND</td>
<td>Response requested indicator.</td>
</tr>
<tr>
<td></td>
<td>If <code>DIRECT_CH_ASSIGN_IND</code> is set to ‘0’, the base station shall omit this field; otherwise, the base</td>
</tr>
<tr>
<td></td>
<td>station shall include this field and set it as follows:</td>
</tr>
</tbody>
</table>
The base station shall set this field to ‘1’ if the mobile station is to respond to the
Extended Channel Assignment Message with a Page Response Message or Reconnect Message in unassured mode on the r-csch; otherwise, the base station shall set this field to ‘0’ to indicate that the mobile station is not to respond on the r-csch.

DIRECT_CH_ASSIGN_RECOVER_IND - Direct Channel Assignment Recover Indicator.

If DIRECT_CH_ASSIGN_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 ‘1’ if the mobile station is to transmit a Page Response Message or a Reconnect Message after failing to acquire the forward traffic channel assigned in this message; otherwise, the base station shall set this field to ‘0’.

EARLY_RL_TRANSMIT_IND - Early Reverse Link Transmission indicator.

If FOR_CPCCH_RATE is included and not set to ‘00’, 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, upon channel assignment, the mobile station is to enable the transmitter prior to receiving sufficient signal quality on the forward link; otherwise, the base station shall set this field to ‘0’.

FUNDICATED_BCMC_IND – BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_INCL – Additional PLCM for forward FCH included indicator.

If the FUNDICATED_BCMC_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:
If the additional PLCM for forward FCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH type indicator.

If ADD_PLCM_FOR_FCH_INCL is not included or is included and 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’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.
ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask for forward FCH.

If ADD_PLCM_FOR_FCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 39 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.

FIXED_PREAMBLE_TRANSMIT_IND - Fixed Number of Preambles Transmission Indicator.

If GRANTED_MODE 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:

The base station shall set this field to ‘1’ to indicate if the mobile station is allowed to enter Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State after sending the number of pre-ambles specified in this message; otherwise the base station shall set this field to ‘0’.

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’ if GRANTED_MODE is not set to ‘11’.

FIXED_NUM_PREAMBLE - Traffic Channel preamble length.

If FIXED_PREAMBLE_TRANSMIT_IND is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the minimum length of Traffic Channel preamble that the mobile station is to transmit, before entering the Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State without having received a forward dedicated channel acquired indication from Layer 2 (see [4]).

The base station shall set FIXED_NUM_PREAMBLE to the value shown in Table 3.7.2.3.2.17 corresponding to the Traffic Channel preamble length in 1.25 ms-units.

TX_PWR_LIMIT_INCL - Transmit Power Limit inclusion for the current base station

If the transmit power limit field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

TX_PWR_LIMIT - Transmit Power Limit for the current base station

If TX_PWR_LIMIT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.
1. **3.7.2.3.2.22 General Neighbor List Message**

2. **MSG_TAG: GNLM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_SRCH_MODE</td>
<td>2</td>
</tr>
<tr>
<td>NGHBR_CONFIG_PN_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_FIELDS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>USE_TIMING</td>
<td>1</td>
</tr>
<tr>
<td>GLOBAL_TIMING_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>GLOBAL_TX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>GLOBAL_TX_PERIOD</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NUM_NGHBR</td>
<td>6</td>
</tr>
</tbody>
</table>

**NUM_NGHBR occurrences of the following record:**

<table>
<thead>
<tr>
<th>(NUM_NGHBR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGHBR_CONFIG</td>
</tr>
<tr>
<td>NGHBR_PN</td>
</tr>
<tr>
<td>SEARCH_PRIORITY</td>
</tr>
<tr>
<td>SRCH_WIN_NGHBR</td>
</tr>
<tr>
<td>FREQ_INCL</td>
</tr>
<tr>
<td>NGHBR_BAND</td>
</tr>
<tr>
<td>NGHBR_FREQ</td>
</tr>
<tr>
<td>TIMING_INCL</td>
</tr>
<tr>
<td>NGHBR_TX_OFFSET</td>
</tr>
<tr>
<td>NGHBR_TX_DURATION</td>
</tr>
<tr>
<td>NGHBR_TX_PERIOD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(NUM_ANALOG_NGHBR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_ANALOG_NGHBR</td>
</tr>
</tbody>
</table>

**NUM_ANALOG_NGHBR occurrences of the following record:**

<table>
<thead>
<tr>
<th>(NUM_ANALOG_NGHBR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(continues on next page)</td>
</tr>
<tr>
<td>Field</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>BAND_CLASS</td>
</tr>
<tr>
<td>SYS_A_B</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>} (NUM_ANALOG_NGHBR)</td>
</tr>
<tr>
<td>SRCH_OFFSET_INCL</td>
</tr>
</tbody>
</table>

NUM_NGHBR occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>} (NUM_NGHBR)</td>
<td></td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
<tr>
<td>SRCH_OFFSET_NGHBR</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

If BCCH_IND_INCL is set to ‘1’, NUM_NGHBR occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>} (NUM_NGHBR)</td>
<td></td>
</tr>
<tr>
<td>BCCH_SUPPORT</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>} (NUM_NGHBR)</td>
<td></td>
</tr>
<tr>
<td>RESQ_ENABLED</td>
<td>1</td>
</tr>
<tr>
<td>RESQ_DELAY_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ALLOWED_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ATTEMPT_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_CODE_CHAN</td>
<td>0 or 11</td>
</tr>
<tr>
<td>RESQ_QOF</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_20MS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_5MS</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

(continues on next page)
### Field Length (bits)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESQ_NUM_PREAMBLE_RC1_RC2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESQ_NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESQ_POWER_DELTA</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

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_HRPD_NGHBR occurrences of the following subrecord:

```
{ (NUM_HRPD_NGHBR)
  HRPD_NGHBR_INCL 1
  NUM_HRPD_NGHBR 0 or 6
  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_NGHBRREC_RESERVED 0-7 (as needed)
} (NUM_HRPD_NGHBR)
```

1. **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.

2. **CONFIG_MSG_SEQ** - Configuration message sequence number.
   - The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).

3. **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.

**NGHBR_SRCH_MODE** - Search mode.

The base station shall set this field to the value shown in Table 3.7.2.3.2.22-1 corresponding to the search mode.

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No search priorities or search windows</td>
</tr>
<tr>
<td>01</td>
<td>Search priorities</td>
</tr>
<tr>
<td>10</td>
<td>Search windows</td>
</tr>
<tr>
<td>11</td>
<td>Search windows and search priorities</td>
</tr>
</tbody>
</table>

**NGHBR_CONFIG_PN_INCL** - Neighbor configuration and PN offset included.

If neighbor configuration and PN offset fields are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**FREQ_FIELDS_INCL** - Frequency fields included.

If frequency fields are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**USE_TIMING** - Use timing indicator.

If base station timing information is included for neighbor base stations, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**GLOBAL_TIMING_INCL** - Global timing included.

If USE_TIMING is set to ‘1’, the base station shall include the field GLOBAL_TIMING_INCL and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included globally for all neighbor base stations with TIMING_INCL equal to ‘1’, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**GLOBAL_TX_DURATION** - Global neighbor transmit time duration.
If GLOBAL_TIMING_INCL is included and is set to ‘1’, the base station shall include the field GLOBAL_TX_DURATION and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the duration of the base station transmit window, during each period, in units of 80 ms. The base station should set this field to a value of 3 or greater.

GLOBAL_TX_PERIOD - Global neighbor transmit time period.

If GLOBAL_TIMING_INCL is included and is set to ‘1’, the base station shall include the field GLOBAL_TX_PERIOD and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the duration of the period, in units of 80 ms.

NUM_NGHBR - Number of neighbor pilot PN sequences.

The base station shall set this field to the number of neighbors included in the message.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record in this message as is used for pilots which are listed in the Neighbor List Message or Extended Neighbor List Message. Specifically, the $i^{th}$ occurrence of the following record shall correspond the $i^{th}$ pilot in the Neighbor List Message or in the Extended Neighbor List Message.

NGHBR_CONFIG - Neighbor configuration.

If NGHBR_CONFIG_PN_INCL = ‘1’, the base station shall set this field to the value shown in Table 3.7.2.3.2.22-2 corresponding to the configuration of this neighbor; otherwise, the base station shall omit this field.
### Table 3.7.2.3.22-2. Neighbor Configuration Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Neighbor Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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:</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘0’ for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘1’ for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ.</td>
</tr>
<tr>
<td></td>
<td>The position of the neighbor CDMA frequency assignment in the <em>CDMA Channel List Message</em> or the <em>Extended CDMA Channel List Message</em> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <em>CDMA Channel List Message</em> or the <em>Extended CDMA Channel List Message</em> transmitted by the current base station.</td>
</tr>
<tr>
<td>001</td>
<td>The neighbor base station has the same number of frequencies having Paging Channels as the current base station. 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:</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘0’ for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</td>
</tr>
<tr>
<td></td>
<td>• If FREQ_INCL equals ‘1’ for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ.</td>
</tr>
<tr>
<td></td>
<td>The position of the neighbor CDMA frequency assignment in the <em>CDMA Channel List Message</em> or the <em>Extended CDMA Channel List Message</em> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <em>CDMA Channel List Message</em> or the <em>Extended CDMA Channel List Message</em> transmitted by the current base station.</td>
</tr>
<tr>
<td></td>
<td>This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel.</td>
</tr>
</tbody>
</table>
The neighbor base station may have a different number of frequencies having Paging Channels as the current base station.

The neighbor base station has a Primary Paging Channel on the following CDMA frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor base station has a Primary Paging Channel on the first CDMA Channel listed in the CDMA Channel List Message or the Extended CDMA Channel List Message transmitted by the current base station.
- If FREQ_INCL equals ‘1’ for this record, the neighbor base station has a Primary Paging Channel on the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ.

The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.
- If FREQ_INCL equals ‘1’ for this record, the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ has a Pilot Channel.

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 3.7.2.3.22-3. If NGHBR_SRCH_MODE is set to any other value, the base station shall omit this field.

100-111 Reserved.
Table 3.7.2.3.2.22-3. Search Priority Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Search Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Low</td>
</tr>
<tr>
<td>01</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Very High</td>
</tr>
</tbody>
</table>

SRCH_WIN_NGHBR - Neighbor pilot channel search window size.

If NGHBR_SRCH_MODE = ‘10’ or ‘11’, then the base station shall set this field to the value shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for this neighbor. If NGHBR_SRCH_MODE is set to any other value, the base station shall omit this field.

FREQ_INCL - Frequency included indicator.

If FREQ_FIELDDS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

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’.

NGHBR_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.

NGHBR_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.

**TIMING_INCL** - Timing included indicator.

If USE_TIMING is set to ‘1’, the base station shall include the field TIMING_INCL and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included for this neighbor base station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NGHBR_TX_OFFSET** - Neighbor transmit time offset.

If TIMING_INCL is included and is set to ‘1’, the base station shall include the field NGHBR_TX_OFFSET and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the time offset, in units of 80 ms, from the beginning of the neighbor timing period to the beginning of the first base station transmit window within the period. The beginning of the neighbor timing period occurs when $\left\lfloor t/4 \right\rfloor \mod (16384) = 0$.

**NGHBR_TX_DURATION** - Neighbor transmit time duration.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_DUR ATION and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to 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.

**NGHBR_TX_PERIOD** - Neighbor transmit time period.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_PERIOD and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to duration of the period, in units of 80 ms.

**NUM_ANALOG_NGHB**R - Number of neighboring analog systems.

The base station shall set this field to the number of neighboring analog systems included in the message.
The base station shall include one occurrence of the following record for each neighboring analog system included in the message:

- **BAND_CLASS** - Band class.
  The base station shall set this field to the CDMA band class, as specified in [30].

- **SYS_A_B** - System A/B.
  If **BAND_CLASS** is set to ‘00000’ or to ‘00011’, the base station shall set this field to the value shown in Table 3.7.2.3.2.22-4 corresponding to the availability of neighboring analog systems; otherwise, the base station shall set this field to ‘00’.

<table>
<thead>
<tr>
<th>Cellular System A/B</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>F dude</td>
<td>11</td>
</tr>
<tr>
<td>System A</td>
<td>01</td>
</tr>
<tr>
<td>System B</td>
<td>10</td>
</tr>
<tr>
<td>RESERVED</td>
<td>00</td>
</tr>
</tbody>
</table>

- **SRCH_OFFSET_INCL** - Neighbor pilot channel search window offset included.
  If **NGHBR_SRCH_MODE** = ‘10’ or ‘11’ and if the **SRCH_OFFSET_NGHBR** field is included in the following records, the base station shall set this bit to ‘1’; otherwise, the base station shall set this bit to ‘0’.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record in this message as is used for pilots which are listed in the Neighbor List Message or Extended Neighbor List Message. Specifically, the $i^{th}$ occurrence of the following record shall correspond the $i^{th}$ pilot in the Neighbor List Message or in the Extended Neighbor List Message.

- **ADD_PILOT_REC_INCL** - Additional pilot information included indicator.
  The base station shall set this field to ‘1’ if additional pilot information listed in the **NGHBR_PILOT_REC_TYPE** and **RECORD_LEN** fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

- **NGHBR_PILOT_REC_TYPE** - Neighbor Pilot record type
  If **ADD_PILOT_REC_INCL** is set to ‘1’, the base station shall set this field to the **NGHBR_PILOT_REC_TYPE** value shown in Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record specified by this record.
Table 3.7.2.3.22-5. Neighbor Pilot Record Types

<table>
<thead>
<tr>
<th>Description</th>
<th>NGHBR_PILOT_REC_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1X Common Pilot with Transmit Diversity</td>
<td>000</td>
</tr>
<tr>
<td>1X Auxiliary Pilot</td>
<td>001</td>
</tr>
<tr>
<td>1X Auxiliary Pilot with Transmit Diversity</td>
<td>010</td>
</tr>
<tr>
<td>3X Common Pilot</td>
<td>011</td>
</tr>
<tr>
<td>3X Auxiliary Pilot</td>
<td>100</td>
</tr>
</tbody>
</table>

All other NGHBR_PILOT_REC_TYPE values are reserved

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
</tbody>
</table>

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the NGHBR_PILOT_REC_TYPE of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

**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.

**Table 3.7.2.3.2.22-6. Walsh Code Length**

<table>
<thead>
<tr>
<th>WALSH_LENGTH (binary)</th>
<th>Length of the Walsh Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘000’</td>
<td>64</td>
</tr>
<tr>
<td>‘001’</td>
<td>128</td>
</tr>
<tr>
<td>‘010’</td>
<td>256</td>
</tr>
<tr>
<td>‘011’</td>
<td>512</td>
</tr>
<tr>
<td>‘100’–‘111’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Length (bits)</td>
<td>2</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot. The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

WALSH_LENGTH - Length of the Walsh Code. The base station shall set this field to the WALSH_LENGTH value shown in 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.

AUX_WALSH - Walsh Code for the Auxiliary Pilot. The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot Power Level. The base station shall set this field to the Auxiliary Transmit Diversity Pilot transmit power level relative to that of the Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.
Table 3.7.2.3.22-7. Auxiliary Transmit Diversity Pilot

Transmit Power Level

<table>
<thead>
<tr>
<th>AUX_TDPOWERLEVEL</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>01</td>
<td>6 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>10</td>
<td>3 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>11</td>
<td>Same as the Auxiliary Pilot Channel transmit power</td>
</tr>
</tbody>
</table>

TD_MODE - Transmit Diversity mode. The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.26-3.

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOTPOWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOTPOWER2</td>
<td>3</td>
</tr>
</tbody>
</table>

SR3_PRIMARY_PILOT - Primary SR3 pilot. The base station shall set this field to the value shown in Table 3.7.2.3.26-5 corresponding to the position of the primary SR3 pilot.

SR3_PILOTPOWER1 - 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 3.7.2.3.26-6 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_PILOTPOWER2 - 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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

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.

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 as the Auxiliary pilot on the frequency of the primary 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 on the frequency of the primary pilot.

ADD_INFO_INCL1 - Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.

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’.

QOF1 - Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

WALSH_LENGTH1 - Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

AUX_PILOT_WALSH1 - Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.
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:

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.

ADD_INFO_INCL2 - Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.

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’.

QOF2 - Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH2 - Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

The base station shall set this field to the WALSH_LENGTH value shown in Table 3.7.2.3.22–6 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.

AUX_PILOT_WALSH2 - Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.
SRCH_OFFSET_NGHBR - Neighbor pilot channel search window size offset.
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.

BCCH_IND_INCL - BCCH support included indicator.
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’.

If BCCH_IND_INCL is set to ‘1’, the base station shall include one occurrence of the following field for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record in this message as is used for pilots which are listed in the Neighbor List Message or Extended Neighbor List Message. Specifically, the $i^{th}$ occurrence of the following record shall correspond the $i^{th}$ pilot in the Neighbor List Message or in the Extended Neighbor List Message.

BCCH_SUPPORT - BCCH support indicator.
If this neighbor base station supports Broadcast Control Channel, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESQ_ENABLED – Call rescue feature enabled indicator.
The base station shall set this field to ‘1’ if the call rescue feature is enabled and there is at least one occurrence of NGHBR_RESQ_CONFIGURED set to ‘1’ in this message; otherwise, the base station shall set this field to ‘0’.

RESQ_DELAY_TIME – Call rescue delay timer value.
If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the value of the call rescue delay timer to be used by the mobile station, in units of 80 ms.

RESQ_ALLOWED_TIME – Call rescue allowed timer value.
If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the value of the call rescue allowed timer to be used by the mobile station, in units of 80 ms.

RESQ_ATTEMPT_TIME – Call rescue attempt timer value.
If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the value of the call rescue attempt timer to be used by the mobile station, in units of 40 ms.

**RESQ_CODE_CHAN** – Code channel index for the Rescue Channel.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 when attempting Call Rescue Soft Handoff with the associated neighbor 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 or 8 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.

**RESQ_QOF** – Quasi-Orthogonal Function mask identifier for the Rescue Channel.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the quasi-orthogonal function mask identifier (see [2]) that the mobile station is to use on the Forward Fundamental Channel when attempting Call Rescue Soft Handoff with the associated neighbor pilot.

**RESQ_MIN_PERIOD_INCL** – Minimum time between consecutive rescues included indicator.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if the RESQ_MIN_PERIOD field is included in this message; otherwise, the base station shall set this field to '0'.

This field is set to '0' if there is no minimum time restriction between consecutive rescues.

**RESQ_MIN_PERIOD** – Minimum time between consecutive rescues.

If RESQ_MIN_PERIOD_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less than the minimum time after a successful call rescue (i.e. receipt of $N_{3m}$ good frames by the mobile station after the rescue attempt timer is enabled) before any subsequent call rescue attempts can be initiated, in units of 2 seconds.
RESQ_NUM_TOT_TRANS_INCL – The required number of transmissions before declaring L2 Acknowledgment Failure when Call Rescue is enabled included indicator.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the required number of transmissions of a regular PDU and mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESQ_NUM_TOT_TRANS_20MS – The required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

If the RESQ_NUM_TOT_TRANS_INCL field is not included or is included and 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 required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

The base station shall not set this field to a value greater than N1m.

RESQ_NUM_TOT_TRANS_5MS – The required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

If the RESQ_NUM_TOT_TRANS_INCL field is not included or is included and 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 required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

The base station shall not set this field to a value greater than N15m.

RESQ_NUM_PREAMBLE_RC1_RC2 – The Traffic Channel preamble length for Call Rescue Soft Handoff when operating in Radio Configuration 1 or 2.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble, in 20 ms units, that the mobile station is to send when performing a call rescue soft handoff.

RESQ_NUM_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft Handoff when operating in Radio Configuration greater than 2.
If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a call rescue soft handoff, as follows:

The base station shall set this field 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.

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

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to a value by which mobile stations are to adjust the last closed-loop power level when re-enabling the transmitter for call rescue, expressed as a two’s complement value in units of 1 dB.

The base station shall include NUM_NGHBR occurrences of the following one-field record if RESQ_ENABLED is set to ‘1’. The base station shall use the same order for the following field as is used for the NGHBR_PN fields listed in this message.

**NGHBR_RESQ_CONFIGURED** – Neighbor Rescue Channel configured indicator.

The base station shall set this field to ‘1’ if a Rescue Channel is configured for this neighbor pilot; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_NGHBR occurrences of the following variable length record. The base station shall use the same order for the following field as is used for the NGHBR_PN fields listed in this message.

**NGHBR_PDCH_SUPPORTED** – Neighbor PDCH supported indicator.

The base station shall set this field to ‘1’ if PDCH is configured for this neighbor pilot; otherwise, the base station shall set this field to ‘0’.

**HRPD_NGHBR_INCL** – HRPD neighbor information included indicator.

If this message contains information on HRPD neighbors, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NUM_HRPD_NGHBR** – Number of HRPD neighbor pilot PN sequences.

If the HRPD_NGHBR_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of HRPD neighbors included in the message.
The base station shall include one occurrence of the following subrecord for each pilot that a mobile station is to place in its HRPD Neighbor Set.

**HRPD_NGHBR_REC_LEN** - HRPD neighbor record length

The base station shall set this field to one less than the number of octets included in this HRPD neighbor record including this field.

**NGHBR_PN** - Neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips.

**NGHBR_FREQ_INCL** - Neighbor frequency information included indicator.

The base station shall set this field to ‘1’ if the neighbor frequency information is included in this message; otherwise, the base station shall set this field to ‘0’.

**NGHBR_BAND** - Neighbor band class.

If the NGHBR_FREQ_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:

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 this neighbor.

**NGHBR_FREQ** - Neighbor frequency assignment.

If the NGHBR_FREQ_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:

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 this neighbor.

**PN_ASSOCIATION_IND** - Neighbor PN association indicator.

The base station shall set this field to ‘1’ if the system identified by this system record has the same PN assignment as the MC system to which this BS belongs; otherwise, the base station shall set this field to ‘0’.

**DATA_ASSOCIATION_IND** - Neighbor data association indicator.

The base station shall set this field to ‘1’ if the system identified by this system record can reach the same set of PDSNs as the MC system to which this BS belongs; otherwise, the base station shall set this field to ‘0’.
HRPD_NGHBR_REC_RESERVED - HRPD neighbor record reserved bits.

The base station shall add reserved bits as needed in order to make the length of this record equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.2.3.2.23 User Zone Identification Message

**MSG_TAG: UZIM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>UZ_EXIT</td>
<td>4</td>
</tr>
<tr>
<td>NUM_UZID</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_UZID occurrences of the following record:

```plaintext
[NUM_UZID]

UZID         16
UZ_REV       4
TEMP_SUB     1
```

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).

UZ_EXIT - User Zone Exit parameter.

The base station shall set this field to the User Zone exit parameter (see 2.6.9.2.1). The base station shall set this field to a value (in dB) in the range 0 to 15.

NUM_UZID - Number of User Zone identifiers.

The base station shall set this field to the number of user zone identifiers included in this message.

The base station shall include NUM_UZID occurrences of the following record.

UZID - User Zone identifier.

The base station shall set this field to the User Zone identifier (see 3.6.7) supported by the base station.

UZ_REV - User Zone update revision number.

The base station shall set this field to the User Zone update revision number.

TEMP_SUB - Temporary subscription flag.
1 If the corresponding User Zone allows for temporary
2 subscription, the base station shall set this field to ‘1’;
3 otherwise, the base station shall set this field to ‘0’.
3.7.2.3.2.24 Private Neighbor List Message

MSG_TAG: PNLM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>NUM_RADIO_INTERFACE</td>
<td>4</td>
</tr>
</tbody>
</table>

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)
```

3.7.2.3.2.24 Private Neighbor List Message

3.7.2.3.2.24 Private Neighbor List Message

1. 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.
2. CONFIG_MSG_SEQ - Configuration message sequence number. The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).
3. NUM_RADIO_INTERFACE - Number of interface types. The base station shall set this field to the number of radio interface types for which private neighbors are included in this message.
4. The base station shall include NUM_RADIO_INTERFACE occurrences of the following record, one occurrence for each radio interface for which private neighbors are included in this message.
5. RADIO_INTERFACE_TYPE - The radio interface type. The base station shall set this field to the radio interface type of this record as specified in Table 3.7.2.3.2.24-1.
Table 3.7.2.3.2.24-1. Radio Interface Type

<table>
<thead>
<tr>
<th>RADIO_INTERFACE_TYPE (binary)</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>MC system</td>
</tr>
<tr>
<td>0001-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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.
5 If RADIO_INTERFACE_TYPE is equal to ‘0000’, the base station shall set the radio interface type-specific fields as follows:

3-316
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMON_INCL</td>
<td>1</td>
</tr>
<tr>
<td>COMMON_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>COMMON_NGHBR_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>SRCH_WIN_PN</td>
<td>4</td>
</tr>
<tr>
<td>NUM_PRI_NGHBR</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_PRI_NGHBR occurrences of the following record:

\[
\{ (NUM_PRI_NGHBR) \\
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>PRI_NGHBR_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8× RECORD_LEN</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NGHBR_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>UZID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_UZID</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

(continues on next page)
### Field Length (bits)

NUM_UZID occurrences of the following subrecord:

\[
\{( \text{NUM_UZID or 0}) \\
\text{UZID} \quad 0 \text{ or } 16 \\
\text{UZ_REV} \quad 0 \text{ or } 4 \\
\text{TEMP_SUB} \quad 0 \text{ or } 1 \\
\}( \text{NUM_UZID or 0}) \\
\}( \text{NUM_PRI_NGHBR}) \\
\text{RESERVED} \quad 0 \text{ - 7 (as needed)}
\]

### COMMON_INCL - Common configuration included indicator.

- If all private neighbor base stations included in this message are on the same CDMA band class and CDMA Channel number as specified in the COMMON_BAND_CLASS and COMMON_NGHBR_FREQ fields, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

### COMMON_BAND_CLASS - Neighbor band class.

- If COMMON_INCL 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 or the Forward Common Control Channel for all private neighbors; otherwise, the base station shall omit this field.

### COMMON_NGHBR_FREQ - Neighbor frequency assignment.

- If the COMMON_INCL bit is set to ‘1’, 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 or the Forward Common Control Channel for all private neighbor base station; otherwise, the base station shall omit this field.

### SRCH_WIN_N - Search window size for the Private Neighbor Set.

- 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 the Private Neighbor Set.

### NUM_PRI_NGHBR - Number of private neighbor pilot PN sequences.

- The base station shall set this field to the number of private neighbors included in the message.
The base station shall include NUM_PRI_NGHBR occurrences of the following record.

**SID** - System Identification.

The base station shall set this field to the system identification number for this private neighbor system (see 2.6.5.2).

**NID** - Network Identification.

This field serves as a sub-identifier of a system as defined by the owner of the SID.

The base station shall set this field to the system identification number for this private neighbor network (see 2.6.5.2).

**PRI_NGHBR_PN** - Private neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this private neighbor, in units of 64 PN chips.

**ADD_PILOT_REC_INCL** - Additional pilot information included indicator.

The base station shall set this field to ‘1’ if additional pilot information listed in the NGHBR_PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

**NGHBR_PILOT_REC_TYPE** - Neighbor Pilot record type

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the NGHBR_PILOT_REC_TYPE value shown in Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**RECORD_LEN** - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**Type-specific fields** - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the NGHBR_PILOT_REC_TYPE of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:
Field | Length (bits)
---|---
TD_POWER_LEVEL | 2
TD_MODE | 2
RESERVED | 4

1
2 TD_POWER_LEVEL - TD Transmit Power Level.
3 The base station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel as specified in Table 3.7.2.3.2.26-4.
4
5 TD_MODE - Transmit Diversity mode.
6 The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.
7
8 RESERVED - Reserved bits.
9 The base station shall set this field to ‘0000’.
10
11 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 QOF - Quasi-orthogonal function index.
15 The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).
16
17 WALSH_LENGTH - Length of the Walsh Code.
18 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.
19
20 AUX_PILOT_WALSH - Walsh Code for the Auxiliary Pilot.
21 The base station shall set this field to the Walsh code corresponding to the Auxiliary pilot.
22
23 RESERVED - Reserved bits.
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 ‘010’, the base station shall include the following fields:
Field Length (bits)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot. The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

WALSH_LENGTH - Length of the Walsh Code. The base station shall set this field to the WALSH_LENGTH value shown in 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.

AUX_WALSH - Walsh Code for the Auxiliary Pilot. The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot Power Level. The base station shall set this field to the Auxiliary Transmit Diversity Pilot transmit power level relative to that of the Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.

TD_MODE - Transmit Diversity mode. The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

RESERVED - Reserved bits. The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

If NGHBR_PILOT_REC_TYPE is equal to ‘011’, the base station shall include the following fields:

Field Length (bits)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>
1

2 SR3_PRIMARY_PILOT – Primary SR3 pilot.

3 The base station shall set this field to the value shown in
4 Table 3.7.2.3.2.26-5 corresponding to the position of the
5 primary SR3 pilot.

6 SR3_PILOT_POWER1 – The primary SR3 pilot power level relative to that of the pilot
7 on the lower frequency of the two remaining SR3 frequencies.
8 The base station shall set this field to the value shown in
9 Table 3.7.2.3.2.26-6 corresponding to the power level of the
10 primary pilot with respect to the pilot on the lower frequency
11 of the two remaining SR3 frequencies.

12 SR3_PILOT_POWER2 – The primary SR3 pilot power level relative to that of the pilot
13 on the higher frequency of the two remaining SR3
14 frequencies.
15 The base station shall set this field to the value shown in
16 Table 3.7.2.3.2.26-6 corresponding to the power level of the
17 primary pilot with respect to the pilot on the higher frequency
18 of the two remaining SR3 frequencies.

19 QOF – Quasi-orthogonal function index.

20 The base station shall set this field to the index of the Quasi-
21 orthogonal function (see [2]) on the frequency of the primary
22 pilot.

23 WALSH_LENGTH – Length of the Walsh Code.

24 The base station shall set this field to the WALSH_LENGTH
25 value shown in Table 3.7.2.3.2.22–6 corresponding to the
26 length of the Walsh code for the pilot that is used as the
27 Auxiliary pilot on the frequency of the primary pilot.

28 AUX_PILOT_WALSH – Walsh Code for the Auxiliary Pilot.

29 The base station shall set this field to the Walsh code
30 corresponding to the Auxiliary pilot on the frequency of the
31 primary pilot.

32 ADD_INFO_INCL1 – Additional information included for the pilot on the lower
33 frequency of the two remaining SR3 frequencies.
34 If the additional information for the pilot on the lower
35 frequencies of the two remaining SR3 frequencies is the same
36 as pilot on the primary frequency, the base station shall set
37 this field to ‘0’; otherwise, the base station shall set this field
38 to ‘1’.

39 QOF1 – Quasi-orthogonal function index for the pilot on the lower
40 frequency of the two remaining SR3 frequencies.
41 If ADD_INFO_INCL1 is set to ‘0’, the base station shall omit
42 this field; otherwise, the base station shall set this field as
43 follows:
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.

**WALSH_LENGTH1** - Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

**AUX_PILOT_WALSH1** - Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

**ADD_INFO_INCL2** - Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.

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'.

**QOF2** - Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

**WALSH_LENGTH2** - Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.
AUX_PILOT_WALSH2 - Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

BAND_CLASS - Neighbor band class.

If COMMON_INCL is set to ‘0’, 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 for the private neighbor; otherwise, the base station shall omit this field.

NGHBR_FREQ - Neighbor frequency assignment.

If the COMMON_INCL bit is set to ‘0’, 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 for the private neighbor base station; otherwise, the base station shall omit this field.

UZID_INCL - User Zone identifier included indicator.

If the UZID information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

NUM_UZID - Number of User Zone identifiers.

If UZID_INCL is set to ‘1’, the base station shall set this field to the number of occurrences of UZID supported by the private neighbor base station; otherwise, the base station shall omit this field.

If UZID_INCL is set to ‘1’, the base station shall include NUM_UZID occurrences of the following three-field subrecord; otherwise, the base station shall omit this subrecord.

UZID - User Zone identifiers.

The base station shall set this field to the User Zone identifier supported by the private neighbor base station.

UZ_REV - User Zone update revision number.

The base station shall set this field to the User Zone update revision number.

TEMP_SUB - Temporary subscription flag.
If the corresponding User Zone allows for temporary subscription, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

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’.
1  3.7.2.3.2.25 Reserved
### 3.7.2.3.2.26 Sync Channel Message

**MSG_TAG:** SCHM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P_REV</td>
<td>8</td>
</tr>
<tr>
<td>MIN_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>LC_STATE</td>
<td>42</td>
</tr>
<tr>
<td>SYS_TIME</td>
<td>36</td>
</tr>
<tr>
<td>LP_SEC</td>
<td>8</td>
</tr>
<tr>
<td>LTM_OFF</td>
<td>6</td>
</tr>
<tr>
<td>DAYLT</td>
<td>1</td>
</tr>
<tr>
<td>PRAT</td>
<td>2</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>11</td>
</tr>
<tr>
<td>EXT_CDMA_FREQ</td>
<td>11</td>
</tr>
<tr>
<td>SR1_BCCH_NON_TD_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SR1_NON_TD_FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR1_CDMA_FREQ_NON_TD</td>
<td>0 or 11</td>
</tr>
<tr>
<td>SR1_BRAT_NON_TD</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_CRAT_NON_TD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR1_BCCH_CODE_CHAN_NON_TD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>SR1_TD_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SR1_CDMA_FREQ_TD</td>
<td>0 or 11</td>
</tr>
<tr>
<td>SR1_BRAT_TD</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_CRAT_TD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR1_BCCH_CODE_CHAN_TD</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1_TD_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_TDPOWER_LEVEL</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR3_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SR3_CENTER_FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR3_CENTER_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>SR3_BRAT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR3_BCCH_CODE_CHAN</td>
<td>0 or 7</td>
</tr>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>DS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DS_BLOB</td>
<td>0 or 24</td>
</tr>
</tbody>
</table>

1. **P_REV** - Protocol revision level.
   The base station shall set this field to '00001011'.

2. **MIN_P_REV** - Minimum protocol revision level.
   The base station sets this field to prevent mobile stations which cannot be supported by the base station from accessing the system.
   The base station shall set this field to the minimum protocol revision level that it supports.

3. **SID** - System identification.
   The base station shall set this field to the system identification number for this system (see 2.6.5.2).

   This field serves as a sub-identifier of a system as defined by the owner of the SID.
   The base station shall set this field to the network identification number for this network (see 2.6.5.2).

5. **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.

   The base station shall set this field to the long code state at the time given by the SYS_TIME field of this message.

7. **SYS_TIME** - System time.
The base station shall set this field to the System Time as of four Sync Channel superframes (320 ms) after the end of the last superframe containing any part of this Sync Channel Message, minus the pilot PN sequence offset, in units of 80 ms (see [2]).

**LP_SEC** - The number of leap seconds that have occurred since the start of System Time.

The base station shall set this field to the number of leap seconds that have occurred since the start of System Time, as of the time given by the SYS_TIME field of this message.

**LTM_OFF** - Offset of local time from System Time.

The base station shall set this field to the two's complement offset of local time from System Time, in units of 30 minutes.

The local time of day, in units of 80 ms, as of four Sync Channel superframes (320 ms) after the end of the last superframe containing any part of this Sync Channel Message, minus the pilot PN sequence offset, is equal to SYS_TIME - (LP_SEC × 12.5) + (LTM_OFF × 22500).

**DAYLT** - Daylight savings time indicator.

If daylight savings time is in effect, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PRAT** - Paging Channel data rate.

The base station shall set this field to the PRAT field value shown in Table 3.7.2.3.2.26-1 corresponding to the data rate used by the Paging Channels in the system.

<table>
<thead>
<tr>
<th>PRAT Field (binary)</th>
<th>Paging Channel data rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9600 bps</td>
</tr>
<tr>
<td>01</td>
<td>4800 bps</td>
</tr>
<tr>
<td>10</td>
<td>Reserved</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**CDMA_FREQ** - Frequency assignment.

The base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing a Primary Paging Channel.8

---

8 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.
EXT_CDMA_FREQ - Extended frequency assignment.

The base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing a Primary Paging Channel that a mobile station capable of Radio Configurations greater than 2 or capable of supporting Quick Paging Channel will use.

SR1_BCCH_NON_TD_INCL - Common Channel in non TD mode on Spreading Rate 1 information included indicator.

The base station shall set this field to ‘1’ if the base station includes common channels (BCCH/F-CCCH/EACH) information in non TD mode; otherwise, the base station shall set this field to ‘0’.

SR1_NON_TD_FREQ_INCL - Non Transmit Diversity frequency included indicator.

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 ‘1’ if SR1_CDMA_FREQ_NON_TD is included in the message. The base station shall set this field to ‘0’ if the frequency specified by the EXT_CDMA_FREQ field is used for BCCH frequency assignment.

SR1_CDMA_FREQ_NON_TD - Frequency assignment for non-transmit diversity operation.

If SR1_NON_TD_FREQ_INCL is not included, or is included and 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 Broadcast Control Channel that does not support the TD operation.

SR1_BRAT_NON_TD - BCCH data rate in non-TD 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 the BRAT field value shown in Table 3.7.2.3.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.
Table 3.7.2.3.2-26-2. Broadcast Control Channel Data Rate

<table>
<thead>
<tr>
<th>BRAT Field (binary)</th>
<th>Broadcast Control Channel data rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>4800 bps</td>
</tr>
<tr>
<td>01</td>
<td>9600 bps</td>
</tr>
<tr>
<td>10</td>
<td>19200bps</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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:

The base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.

**SR1_CRAT_TD** – BCCH code 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:

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_TD** – Walsh code for the Spreading Rate 1 BCCH in Transmit Diversity mode.

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 Walsh code corresponding to the Spreading Rate 1 BCCH in Transmit Diversity mode.

**SR1_TD_MODE** – Spreading Rate 1 Transmit Diversity Mode.

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 corresponding to Table 3.7.2.3.2.26-3.

### Table 3.7.2.3.2.26-3. TD Mode

<table>
<thead>
<tr>
<th>TD_MODE</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>OTD (Orthogonal Transmit Diversity) mode</td>
</tr>
<tr>
<td>01</td>
<td>STS (Space Time Spreading) mode</td>
</tr>
<tr>
<td>10-11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**SR1_TD_POWER_LEVEL** – Spreading Rate 1 TD transmit power level.

If SR1_TD_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.
Table 3.7.2.3.2.26-4. TD Transmit Power Level

<table>
<thead>
<tr>
<th>TD_POWER_LEVEL</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>01</td>
<td>6 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>10</td>
<td>3 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>11</td>
<td>Same as the Forward Pilot Channel transmit power</td>
</tr>
</tbody>
</table>

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:
The base station shall set this field to the Walsh code corresponding to the Spreading Rate 3 BCCH.

**SR3_PRIMARY_PILOT**  – Primary SR3 pilot.

If SR3_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-5 corresponding to the position of the primary SR3 pilot.

**Table 3.7.2.3.2.26-5. The Position of the Primary SR3 Pilot**

<table>
<thead>
<tr>
<th>SR3_PRIMARY_PILOT (Binary)</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>The primary pilot is on the lowest SR3 frequency</td>
</tr>
<tr>
<td>01</td>
<td>The primary pilot is on the center SR3 frequency</td>
</tr>
<tr>
<td>10</td>
<td>The primary pilot is on the highest SR3 frequency</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**SR3_PILOT_POWER1**  – The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies.

If SR3_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.
Table 3.7.2.3.2.26-6. Pilot Transmission Power

<table>
<thead>
<tr>
<th>SR3_PILOT_POWER1, SR3_PILOT_POWER2 (Binary)</th>
<th>Relative Transmission Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0dB</td>
</tr>
<tr>
<td>001</td>
<td>1dB</td>
</tr>
<tr>
<td>010</td>
<td>2dB</td>
</tr>
<tr>
<td>011</td>
<td>3dB</td>
</tr>
<tr>
<td>100</td>
<td>4dB</td>
</tr>
<tr>
<td>101</td>
<td>5dB</td>
</tr>
<tr>
<td>110</td>
<td>6dB</td>
</tr>
<tr>
<td>111</td>
<td>7dB</td>
</tr>
</tbody>
</table>

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 station 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.
3.7.2.3.2.27 Extended Global Service Redirection Message

**MSG_TAG:** EGSRDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>REDIRECT_ACCOLC</td>
<td>16</td>
</tr>
<tr>
<td>RETURN_IF_FAIL</td>
<td>1</td>
</tr>
<tr>
<td>DELETE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>REDIRECT_P_REV_INCL</td>
<td>1</td>
</tr>
<tr>
<td>EXCL_P_REV_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REDIRECT_P_MIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REDIRECT_P_MAX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
<tr>
<td>LAST_SEARCH_RECORD_IND</td>
<td>1</td>
</tr>
<tr>
<td>NUM_ADD_RECORD</td>
<td>3</td>
</tr>
</tbody>
</table>

**(NUM_ADD_RECORD)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_REDIRECT_ACCOLC</td>
<td>16</td>
</tr>
<tr>
<td>ADD_DELETE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>ADD_REDIRECT_P_REV_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ADD_EXCL_P_REV_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_REDIRECT_P_MIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>ADD_REDIRECT_P_MAX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>ADD_RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × ADD_RECORD_LEN</td>
</tr>
<tr>
<td>ADD_LAST_SEARCH_RECORD_IND</td>
<td>1</td>
</tr>
</tbody>
</table>

**(NUM_ADD_RECORD)**

4

5  

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).

**REDIRECT_ACCOLC** - Redirected access overload classes.

See `REDIRECT_ACCOLC` field defined in 3.7.2.3.2.18.

The base station shall set the subfields corresponding to the access overload classes of mobile stations which are to be redirected to ‘1’, and shall set the remaining subfields to ‘0’.
RETURN_IF_FAIL - Return if fail indicator.

The base station shall set this field to ‘1’ if the mobile station is required to return to the system from which it is being redirected upon failure to obtain service after attempting the redirection criteria specified in all qualified redirection records in this message; otherwise, the base station shall set this field to ‘0’.

DELETE_TMSI - Delete TMSI indicator.

The base station shall set this field to ‘1’ if the mobile station is required to delete the TMSI assigned to the mobile station; otherwise, the base station shall set this field to ‘0’.

REDIRECT_P_REV_INCL - Redirection mobile protocol revision included.

If the redirection specified in this message applies to the mobile stations of some specific protocol revisions, the base station shall set this field to ‘1’; otherwise, if this redirection applies to all mobile stations, the base station shall set this field to ‘0’.

EXCL_P_REV_IND - Excluding mobile protocol revision indicator.

If the REDIRECT_P_REV_INCL is set to ‘1’, the base station shall include this field and set this field as described below; otherwise, the base station shall omit this field.

REDIRECT_P_MIN - Minimum redirection protocol revision.

If REDIRECT_P_REV_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 minimum protocol revision of which mobile stations are subjected to as specified by the action contained in EXCL_P_REV_IND (i.e., to be redirected or excluded from redirection). The base station shall set this field to a protocol revision equal to or greater than six.

REDIRECT_P_MAX - Maximum redirection protocol revision.

If REDIRECT_P_REV_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.
The base station shall set this field to the maximum protocol revision of which mobile stations are subjected to as specified by the action contained in EXCL_P_REV_IND (i.e., to be redirected or excluded from redirection). The base station shall set this field to a protocol revision equal to or greater than six.

**RECORD_TYPE** - Redirection record type.

The base station shall set this field to the RECORD_TYPE value shown in Table 3.7.2.3.2.16-2 corresponding to the type of redirection specified by this record.

**RECORD_LEN** - Redirection record length.

The base station shall set this field to the number of octets in the type-specific fields of this redirection record.

**Type-specific fields** - Redirection record type-specific fields.

The base station shall include type-specific fields based on the RECORD_TYPE of this redirection record, as specified below.

**LAST_SEARCH_RECORD_IND** - Last search record indicator.

The base station shall set this field to '0' if the mobile station is to attempt redirection per the next qualified redirection record in the message following failure to acquire the target system for the current redirection record; otherwise, the base station shall set this field to '1'.

**NUM_ADD_RECORD** - Number of additional redirection records.

The base station shall set this field to the number of additional redirection records.

The base station shall include NUM_ADD_RECORD occurrences of the following variable length additional redirection record.

**ADD_REDIRECT_ACCOLC** - Additional redirected access overload classes.

See REDIRECT_ACCOLC field defined in 3.7.2.3.2.18.

The base station shall set the subfields corresponding to the access overload classes of mobile stations which are to be redirected to ‘1’ and shall set the remaining subfields to ‘0’.
**ADD_DELETE_TMSI** - Additional delete TMSI indicator.

The base station shall set this field to ‘1’ if the mobile station is required to delete the TMSI assigned to the mobile station; otherwise, the base station shall set this field to ‘0’.

**ADD_REDIRECT_P_REV_INCL** - Additional redirection mobile protocol revision included.

If the redirection specified in this message applies to the mobile stations of some specific protocol revisions, the base station shall set this field to ‘1’; otherwise, if this redirection applies to all mobile stations, the base station shall set this field to ‘0’.

**ADD_EXCL_P_REV_IND** - Additional excluding mobile protocol revision indicator.

If the ADD_REDIRECT_P_REV_INCL is set to ‘1’, the base station shall include this field and set this field as described below; otherwise, the base station shall omit this field.

If mobile stations with MOB_P_REV in the range between ADD_REDIRECT_P_MIN and ADD_REDIRECT_P_MAX inclusive are excluded from this global service redirection, the base station shall set this field to ‘1’. Otherwise, if the mobile stations with MOB_P_REV in the protocol revision range specified in ADD_REDIRECT_P_MIN and ADD_REDIRECT_P_MAX are subjected to the redirection, the base station shall set this field to ‘0’.

**ADD_REDIRECT_P_MIN** - Additional minimum redirection protocol revision.

If ADD_REDIRECT_P_REV_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 minimum protocol revision of which mobile stations are subjected to as specified by the action contained in ADD_EXCL_P_REV_IND (i.e., to be redirected or excluded from redirection). The base station shall set this field to a protocol revision equal to or greater than six.

**ADD_REDIRECT_P_MAX** - Additional maximum redirection protocol revision.

If ADD_REDIRECT_P_REV_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum protocol revision of which mobile stations are subjected to as specified by the action contained in ADD_EXCL_P_REV_IND (i.e., to be redirected or excluded from redirection). The base station shall set this field to a protocol revision equal to or greater than six.

**ADD_RECORD_TYPE** - Additional redirection record type.

The base station shall set this field to the RECORD_TYPE value shown in Table 3.7.2.3.2.16-2 corresponding to the type of redirection specified by this record.
ADD_RECORD_LEN - Additional redirection record length.
The base station shall set this field to the number of octets in
the type-specific fields of this redirection record.

Type-specific fields - Redirection record type-specific fields.
The base station shall include type-specific fields based on
the ADD_RECORD_TYPE of this redirection record, as
specified below.

ADD_LAST_SEARCH_RECORD_IND - Additional last search record indicator.
The base station shall set this field to '0' if the mobile station
is to attempt redirection per the next qualified redirection
record in the message following failure to acquire the target
system for the current redirection record; otherwise, the base
station shall set this field to '1'.

If RECORD_TYPE or ADD_RECORD_TYPE is equal to '00000001', the base station shall
include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>IGNORE_CDMA</td>
<td>1</td>
</tr>
<tr>
<td>SYS_ORDERING</td>
<td>3</td>
</tr>
<tr>
<td>MAX_REDIRECT_DELAY</td>
<td>5</td>
</tr>
</tbody>
</table>

EXPECTED_SID - Expected SID.
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.

IGNORE_CDMA - Ignore CDMA Available indicator.
The base station shall set this field to '1' to indicate that the
mobile station is to ignore the CDMA Capability Message on
the analog system to which it is being redirected. The base
station shall set this field to '0' to indicate that the mobile
station may discontinue service on the system to which it is
being redirected if the mobile station receives a CDMA
Capability Message with CDMA_AVAIL equal to '1', and the
preferred mode of the mobile station is CDMA.

SYS_ORDERING - System ordering.
The base station shall set this field to the SYS_ORDERING
value shown in Table 3.7.2.3.2.16-3 corresponding to the
order in which the mobile station is to attempt to obtain
service on an analog system.

MAX_REDIRECT_DELAY - Maximum delay upon redirection.
The base station shall set this field to the maximum delay time, in units of 8 seconds, to be used by mobile stations in the event of a global redirection to analog mode. This operation can be invoked to avoid overloading an underlying analog cell’s reverse control channel.

If RECORD_TYPE or ADD_RECORD_TYPE is equal to ‘00000010’, the base station shall include the following field type specific fields:

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>EXPECTED_NID</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>NUM_CHANS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_CHANS occurrences of the following field:

{ (NUM_CHANS)

| CDMA_CHAN              | 11            |

} (NUM_CHANS)


SUBCLASS_INFO_INCL       | 1             |

SUBCLASS_REC_LEN         | 0 or 5        |

SUBCLASS_REC_LEN + 1 occurrences of the following subrecord:

{ (SUBCLASS_REC_LEN + 1)

| REDIRECT_SUBCLASS      | 1             |

} (SUBCLASS_REC_LEN + 1)

RESERVED                | 0 - 7 (as needed) |

BAND_CLASS - Band class. The base station shall set this field to the CDMA band class, as specified in [30].

EXPECTED_SID - Expected SID. 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’. 

EXPECTED_NID - Expected NID.
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.

**RESERVED** - Reserved bits.

The base station shall set this field to ‘0’

**NUM_CHANS** - Number of CDMA Channels.

The base station shall set this field to the number of occurrences of the CDMA_CHAN field in this record.

**CDMA_CHAN** - CDMA Channel number.

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.

**SUBCLASS_INFO_INCL** - Band subclass information included

The base station shall set this field to ‘0’ when band subclass information is not included for the redirection record; otherwise, the base station shall set this field to ‘1’.

**SUBCLASS_REC_LEN** - Band subclass subrecord length

If SUBCLASS_INFO_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 number of redirection band subclass indicator fields included in the subrecord minus one. The number of redirection band subclass indicator fields included is limited to the highest band subclass associated with this redirection record (i.e. if the highest band subclass is K, then SUBCLASS_REC_LEN = K).

If the SUBCLASS_REC_LEN field is included, the base station shall include SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the N’th field included corresponds to band subclass ‘N-1’.

**REDIRECT_SUBCLASS** - Redirection band subclass indicator

The base station shall set this field to ‘1’ if the corresponding band subclass is associated with this redirection record; otherwise, the base station shall set this field to ‘0’.

**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’.
### 3.7.2.3.2.28 Extended CDMA Channel List Message

**MSG_TAG:** ECCLM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>NUM_FREQ</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_FREQ occurrences of the following field:

```plaintext
{ (NUM_FREQ)
  CDMA_FREQ
} (NUM_FREQ)
```

### Field Length (bits)
- PILOT_PN: 9
- CONFIG_MSG_SEQ: 6
- NUM_FREQ: 4

#### Field: PILOT_PN
- 9 bits

#### Field: CONFIG_MSG_SEQ
- 6 bits

#### Field: NUM_FREQ
- 4 bits

NUM_FREQ occurrences of the following field:

```plaintext
{ (NUM_FREQ)
  CDMA_FREQ
} (NUM_FREQ)
```

#### Field: CDMA_FREQ
- 11 bits

### Field Length (bits)
- If RC_QPCH_SEL_INCL is equal to ‘1’, include NUM_FREQ occurrences of the following field:

```plaintext
{ (NUM_FREQ)
  RC_QPCH_HASH_IND
} (NUM_FREQ)
```

#### Field: RC_QPCH_HASH_IND
- 1 bit

### Field Length (bits)
- If TD_SEL_INCL is equal to ‘1’, include NUM_FREQ occurrences of the following fields:

```plaintext
{ (NUM_FREQ)
  TD_HASH_IND
  TD_POWER_LEVEL
} (NUM_FREQ)
```

#### Field: TD_SEL_INCL
- 1 bit

#### Field: TD_MODE
- 2 bits

#### Field: TD_HASH_IND
- 1 bit

#### Field: TD_POWER_LEVEL
- 2 bits

### Field Length (bits)
- If CDMA_BAND is equal to ‘1’, include SUBCLASS_INFO_INCL occurrences of the following subrecord:

```plaintext
{ (SUBCLASS_REC_LEN + 1)
  CDMA_SUBCLASS
} (SUBCLASS_REC_LEN + 1)
```

#### Field: CDMA_BAND
- 5 bits

#### Field: SUBCLASS_INFO_INCL
- 1 bit

#### Field: SUBCLASS_REC_LEN
- 0 or 5

#### Field: SUBCLASS_REC_LEN + 1 occurrences of the following subrecord:

```plaintext
{ (SUBCLASS_REC_LEN + 1)
  CDMA_SUBCLASS
} (SUBCLASS_REC_LEN + 1)
```

#### Field: CDMA_SUBCLASS
- 1 bit

### Field Length (bits)
- CDMA_BAND: 5
- SUBCLASS_INFO_INCL: 1
- SUBCLASS_REC_LEN: 0 or 5
- SUBCLASS_REC_LEN + 1 occurrences of the following subrecord:
  ```plaintext
  { (SUBCLASS_REC_LEN + 1)
    CDMA_SUBCLASS
  } (SUBCLASS_REC_LEN + 1)
  ```
- CDMA_SUBCLASS: 1

CDMA_FREQ_WEIGHT_INCL 1
If CDMA_FREQ_WEIGHT_INCL is equal to ‘1’, include NUM_FREQ occurrences of the following field:

\[ (NUM_FREQ) \]

\[ \begin{align*}
  \text{CDMA_FREQ_WEIGHT} & \quad 3 \\
\end{align*} \]

\[ (NUM_FREQ) \]

\[ \begin{align*}
  \text{NUM_BAND} & \quad 3 \\
\end{align*} \]

\[ (NUM_BAND) \]

\[ \begin{align*}
  \text{ADD_CDMA_BAND} & \quad 5 \\
  \text{ADD_SUBCLASS_INFO_INCL} & \quad 1 \\
  \text{ADD_SUBCLASS_REC_LEN} & \quad 0 \text{ or } 5 \\
\end{align*} \]

ADD_SUBCLASS_REC_LEN + 1 occurrences of the following subrecord:

\[ (ADD_SUBCLASS_REC_LEN + 1) \]

\[ \begin{align*}
  \text{ADD_CDMA_SUBCLASS} & \quad 1 \\
\end{align*} \]

\[ (ADD_SUBCLASS_REC_LEN + 1) \]

\[ \begin{align*}
  \text{ADD_TD_MODE} & \quad 0 \text{ or } 2 \\
  \text{BYPASS_SYS_DET_IND} & \quad 1 \\
  \text{NUM_ADD_FREQ} & \quad 4 \\
\end{align*} \]

NUM_ADD_FREQ occurrences of the following field:

\[ (NUM_ADD_FREQ) \]

\[ \begin{align*}
  \text{ADD_CDMA_FREQ} & \quad 11 \\
  \text{ADD_RC_QPCH_HASH_IND} & \quad 0 \text{ or } 1 \\
  \text{ADD_TD_HASH_IND} & \quad 0 \text{ or } 1 \\
  \text{ADD_TD_POWER_LEVEL} & \quad 0 \text{ or } 2 \\
  \text{ADD_CDMA_FREQ_WEIGHT} & \quad 0 \text{ or } 3 \\
\end{align*} \]

\[ (NUM_ADD_FREQ) \]

\[ (NUM_BAND) \]

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).

NUM_FREQ - Number of CDMA Frequencies
The base station shall set this field to the number of occurrences of the CDMA_FREQ field included in this message.

The base station shall not set this field to ‘0000’.

The base station shall include NUM_FREQ occurrences of the following one-field record:

| CDMA_FREQ      | CDMA Channel frequency assignment. |

If this message is sent on the Paging Channel:

The base station shall set this field to the CDMA channel number corresponding to the CDMA frequency assignment for a CDMA Channel containing a Paging Channel (see [2]).

This CDMA channel shall reside in the same band class as the band class where this message is being transmitted. If SUBCLASS_INFO_INCL is equal to ‘1’, this CDMA channel shall also reside in at least one supported CDMA_SUBCLASS included in the message.

If this message is sent on the Primary Broadcast Control Channel:

The base station shall set this field to the CDMA channel number corresponding to the CDMA frequency assignment for a CDMA Channel containing a Primary Broadcast Control Channel and Forward Common Control Channel (see [2]).

This CDMA channel shall reside in the same band class as the band class where this message is being transmitted. If SUBCLASS_INFO_INCL is equal to ‘1’, this CDMA channel shall also reside in at least one supported CDMA_SUBCLASS included in the message.

If the base station supports a CDMA frequency assignment without transmit diversity, the base station should not set the first occurrence of this field to a CDMA channel number corresponding to a transmit diversity frequency assignment.

RC_QPCH_SEL_INCL - RC and QPCH Selection included indicator

The base station shall set this field to ‘1’, if NUM_FREQ occurrences of RC_QPCH_HASH_IND are included; otherwise, it shall set this field to ‘0’.

If the base station sets this field to ‘1’, the base station shall set the RC_QPCH_HASH_IND field to ‘1’ in at least one of the following one-field records:

| RC_QPCH_HASH_IND | RC_QPCH channel hashing indicator |

If RC_QPCH_SEL_INCL is set to ‘1’, the base station shall include NUM_FREQ occurrences of this field and set this field as follow; otherwise, the base station shall omit this field.
The base station shall set this field to ‘1’, if the corresponding CDMA channel is to be selected for channel hashing by mobile stations capable of Radio Configurations greater than two or capable of supporting Quick Paging Channel.

**TD_SEL_INCL** - Transmit diversity selection indicator included.

The base station shall set this field to ‘1’, if the base station includes transmit diversity selection information in this message; otherwise, the base station shall set this field to ‘0’.

When the *Extended CDMA Channel List Message* is sent on the Paging Channel, the base station shall set this field to ‘0’.

**TD_MODE** - Transmit diversity mode.

If the field **TD_SEL_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 Transmit Diversity mode used on the band class where this message is being transmitted, as specified in Table 3.7.2.3.2.26-3.

If the **TD_SEL_INCL** is set to ‘1’, the base station shall include NUM_FREQ occurrences of the following two-field record, and shall set the **TD_HASH_IND** field to ‘1’ in at least one of the records:

**TD_HASH_IND** - Transmit diversity hash indicator.

If the associated CDMA_FREQ is to be selected for CDMA channel hashing by mobile stations capable of supporting transmit diversity **[TD_MODE]**, the base station shall set the field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**TD_POWER_LEVEL** - Transmit diversity power level.

If **TD_HASH_IND** is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the transmit diversity transmission power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

**CDMA_BAND** - Current band class.

The base station shall set this field to the CDMA band class (see [30]) corresponding to the CDMA frequency assignment for the CDMA Channel where this message is being transmitted.

**SUBCLASS_INFO_INCL** - Band subclass information included

The base station shall set this field to ‘0’ when no band subclasses are associated with the listed CDMA_FREQ channels or when band subclasses are not to be factored into the mobile station’s hashing algorithm; otherwise, the base station shall set this field to ‘1’.

**SUBCLASS_REC_LEN** - Band subclass subrecord length

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If SUBCLASS_INFO_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 number of band subclass indicator fields included in the subrecord minus one. The number of band subclass indicator fields included is limited to the highest band subclass supported on any of the CDMA_FREQ channels listed above for the current band (i.e., if the highest band subclass is K, then SUBCLASS_REC_LEN = K).

If the SUBCLASS_REC_LEN field is included, the base station shall include SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the Nth field included corresponds to band subclass ‘N-1’.

CDMA_SUBCLASS - Band subclass indicator

The base station shall set this field to ‘1’ if the corresponding band subclass is supported on any of the CDMA_FREQ channels listed above; otherwise, the base station shall set this field to ‘0’.

CDMA_FREQ_WEIGHT_INCL - CDMA frequency weight included indicator

The base station shall set this field to ‘1’ if the CDMA_FREQ_WEIGHT fields are included in this message; otherwise, it shall set this field to ‘0’.

If CDMA_FREQ_WEIGHT_INCL is included and set to ‘1’, the base station shall include NUM_FREQ occurrences of the following one-field record:

CDMA_FREQ_WEIGHT - CDMA frequency weight

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.

NUM_BAND - Number of CDMA Bands

The base station shall set this field to the number of additional bands listed in this message.

The base station shall include NUM_BAND occurrences of the following record:

ADD_CDMA_BAND - Band class.

The base station shall set this field to the CDMA band class, as specified in [30], corresponding to the additional CDMA frequencies (ADD_CDMA_FREQ) included in this record.

ADD_SUBCLASS_INFO_INCL - Band subclass information included

The base station shall set this field to ‘0’ when no band subclasses are associated with the listed band or when band subclasses are not to be factored into the mobile station’s hashing algorithm; otherwise, the base station shall set this field to ‘1’.

ADD_SUBCLASS_REC_LEN - Band subclass subrecord length
If ADD_SUBCLASS_INFO_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 number of band subclass indicator fields included in the subrecord minus one. The number of band subclass indicator fields included is limited to the highest band subclass supported on the band listed above (i.e., if the highest band subclass is K, then ADD_SUBCLASS_REC_LEN = K).

If the ADD_SUBCLASS_REC_LEN field is included, the base station shall include ADD_SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the Nth field included corresponds to band subclass ‘N-1’.

ADD_CDMA_SUBCLASS - Band subclass indicator

The base station shall set this field to ‘1’ if the corresponding band subclass is supported on the band listed above; otherwise, the base station shall set this field to ‘0’.

ADD_TD_MODE - Transmit diversity mode.

If TD_SEL_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 Transmit Diversity mode on the ADD_CDMA_BAND listed above, as specified in Table 3.7.2.3.2.26-3.

BYPASS_SYS_DET_IND - Direct to idle allowed indicator.

The base station shall set this field to ‘1’ if the mobile station is allowed to go directly to idle state on any CDMA channel belonging to the ADD_CDMA_BAND listed above.

NUM_ADD_FREQ - Number of additional CDMA Frequencies

The base station shall set this field to the number of occurrences of the ADD_CDMA_FREQ field included herafter.

The mobile station shall include NUM_ADD_FREQ occurrences of the following record:

ADD_CDMA_FREQ - CDMA Channel frequency assignment.

If this message is sent on the Paging Channel:

The base station shall set this field to the CDMA channel number corresponding to the CDMA frequency assignment for a CDMA Channel containing a Paging Channel (see [2]).

This CDMA channel resides in the band class listed in this ADD_CDMA_BAND record. If ADD_SUBCLASS_INFO_INCL is equal to ‘1’, this CDMA channel shall also reside in at least one supported ADD_CDMA_SUBCLASS included in this ADD_CDMA_BAND record.
If this message is sent on the Primary Broadcast Control Channel:

The base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for a CDMA Channel containing a Primary Broadcast Control Channel and Forward Common Control Channel (see [2]).

This CDMA channel resides in the band class listed in this ADD_CDMA_BAND record. If ADD_SUBCLASS_INFO_INCL is equal to ‘1’, this CDMA channel shall also reside in at least one supported ADD_CDMA_SUBCLASS included in this ADD_CDMA_BAND record.

If the base station supports a CDMA frequency assignment without transmit diversity, the base station should not set the first occurrence of this field to a CDMA channel number corresponding to a transmit diversity frequency assignment.

ADD_RC_QPCH_HASH_IND - RC QPCH channel hashing indicator

If RC_QPCH_SEL_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’, if the corresponding CDMA channel is to be selected for channel hashing by mobile stations capable of Radio Configurations greater than two or capable of supporting Quick Paging Channel.

ADD_TD_HASH_IND - Transmit diversity hash indicator

If TD_SEL_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 associated ADD_CDMA_FREQ is to be selected for CDMA channel hashing by mobile stations capable of supporting transmit diversity [TD_MODE], the base station shall set the field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_TD_POWER_LEVEL - Transmit diversity power level

If ADD_TD_HASH_IND is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the transmit diversity transmission power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

ADD_CDMA_FREQ_WEIGHT - CDMA frequency weight

If CDMA_FREQ_WEIGHT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to one less than the weight for this CDMA channel to be used in channel hashing by the mobile station.
3.7.2.3.2.29 User Zone Reject Message

MSG_TAG: UZRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REJECT_UZID</td>
<td>16</td>
</tr>
<tr>
<td>REJECT_ACTION_INDI</td>
<td>3</td>
</tr>
<tr>
<td>UZID_ASSIGN_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ASSIGN_UZID</td>
<td>0 or 16</td>
</tr>
</tbody>
</table>

REJECT_UZID - Rejected User Zone identifier.

The base station shall set this field to the User Zone identifier of the User Zone rejected by the base station.

REJECT_ACTION_INDI - Rejection action indicator.

The base station shall set this field to the value shown in Table 3.7.2.3.2.29-1 corresponding to the User Zone rejection action field to identify the mobile station action.

Table 3.7.2.3.2.29-1. Rejection Action Indicators

<table>
<thead>
<tr>
<th>Description</th>
<th>REJECT_ACTION_INDI (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disable UZID until Next Update</td>
<td>000</td>
</tr>
<tr>
<td>Disable UZID until next power cycle</td>
<td>001</td>
</tr>
<tr>
<td>Disable UZID until new SID</td>
<td>010</td>
</tr>
<tr>
<td>Disable UZID until new SID/NID</td>
<td>011</td>
</tr>
<tr>
<td>Disable UZID until next BASE_ID</td>
<td>100</td>
</tr>
<tr>
<td>All other REJECT_ACTION_INDI values are reserved</td>
<td></td>
</tr>
</tbody>
</table>

UZID_ASSIGN_INCL - User Zone identifier assignment included indicator.

If assigned UZID information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

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ASSIGN_UZID - Assigned User Zone identifiers.

The base station shall set this field to the User Zone identifier of the User Zone assigned to the mobile station.
### 3.7.2.3.2.30 ANSI-41 System Parameters Message

**MSG_TAG:** A41SPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>PACKET_ZONE_ID</td>
<td>8</td>
</tr>
<tr>
<td>REG_ZONE</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL_ZONES</td>
<td>3</td>
</tr>
<tr>
<td>ZONE_TIMER</td>
<td>3</td>
</tr>
<tr>
<td>MULT_SIDS</td>
<td>1</td>
</tr>
<tr>
<td>MULT_NIDS</td>
<td>1</td>
</tr>
<tr>
<td>HOME_REG</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SID_REG</td>
<td>1</td>
</tr>
<tr>
<td>FOR_NID_REG</td>
<td>1</td>
</tr>
<tr>
<td>POWER_UP_REG</td>
<td>1</td>
</tr>
<tr>
<td>POWER_DOWN_REG</td>
<td>1</td>
</tr>
<tr>
<td>PARAMETER_REG</td>
<td>1</td>
</tr>
<tr>
<td>REG_PRD</td>
<td>7</td>
</tr>
<tr>
<td>DIST_REG_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REG_DIST</td>
<td>0 or 11</td>
</tr>
<tr>
<td>DELETE_FOR_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>USE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>PREF_MSID_TYPE</td>
<td>2</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMSI_ZONE_LEN</td>
<td>4</td>
</tr>
<tr>
<td>TMSI_ZONE</td>
<td>$8 \times \text{TMSI_ZONE_LEN}$</td>
</tr>
<tr>
<td>IMSI_T_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MAX_NUM_ALT_SO</td>
<td>3</td>
</tr>
<tr>
<td>AUTO_MSG_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>AUTO_MSG_INTERVAL</td>
<td>0 or 3</td>
</tr>
<tr>
<td>OTHER_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BASE_ID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>MCC</td>
<td>0 or 10</td>
</tr>
<tr>
<td>IMSI_11_12</td>
<td>0 or 7</td>
</tr>
<tr>
<td>BROADCAST_GPS_ASST</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>MSG_INTEGRITY_SUP</td>
<td>1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SIG_INTEGRITY_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>IMSI_10_INCL</td>
<td>1</td>
</tr>
<tr>
<td>IMSI_10</td>
<td>0 or 4</td>
</tr>
<tr>
<td>MAX_ADD_SERV_INSTANCE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>TKZ_MODE_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>TKZ_ID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PZ_HYST_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_LIST_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PZ_HYST_ACT_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_MUL</td>
<td>0 or 3</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_EXP</td>
<td>0 or 5</td>
</tr>
<tr>
<td>EXT_PREF_MSID_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>MEID_REQD</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>
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).

SID  - System identification.  

The base station shall set this field to the system identification number for this system (see 2.6.5.2).

NID  - Network identification.  

This field serves as a sub-identifier of a system as defined by the owner of the SID.

The base station shall set this field to the network identification number for this network (see 2.6.5.2).

PACKET_ZONE_ID  - Packet data services zone identifier.  

If the base station supports a packet data service zone, the base station shall set this field to its non-zero packet data services zone identifier.

If the base station does not support a packet data service zone, the base station shall set this field to ‘00000000’.

REG_ZONE  - Registration zone.  

The base station shall set this field to its registration zone number (see 2.6.5.1.5).

TOTAL_ZONES  - Number of registration zones to be retained.  

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).

If zone-based registration is to be disabled, the base station shall set this field to ‘000’.

ZONE_TIMER  - Zone timer length.  

The base station shall set this field to the ZONE_TIMER value shown in Table 3.7.2.3.2.30-1 corresponding to the length of the zone registration timer to be used by mobile stations.
Table 3.7.2.3.2.30-1. Value of Zone Timer

<table>
<thead>
<tr>
<th>ZONE_TIMER Value (binary)</th>
<th>Timer Length (Minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>1</td>
</tr>
<tr>
<td>001</td>
<td>2</td>
</tr>
<tr>
<td>010</td>
<td>5</td>
</tr>
<tr>
<td>011</td>
<td>10</td>
</tr>
<tr>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>101</td>
<td>30</td>
</tr>
<tr>
<td>110</td>
<td>45</td>
</tr>
<tr>
<td>111</td>
<td>60</td>
</tr>
</tbody>
</table>

MULT_SIDS - Multiple SID storage indicator.
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’.

MULT_NIDS - Multiple NID storage indicator.
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’.

HOME_REG - Home registration indicator.
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’.

FOR_SID_REG - SID roamer registration indicator.
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’.

FOR_NID_REG - NID roamer registration indicator.
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’.
POWER_UP_REG - Power-up registration indicator.

If mobile stations enabled for autonomous registration are to register immediately after powering on and receiving the system overhead messages, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

POWER_DOWN_REG - Power-down registration indicator.

If mobile stations enabled for autonomous registration are to register immediately before powering down, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PARAMETER_REG - Parameter-change registration indicator.

If mobile stations are to register on parameter change events as specified in 2.6.5.1.6, the base station shall set this field to ‘1’. If not, the base station shall set this field to ‘0’.

REG_PRD - Registration period.

If mobile stations are not to perform timer-based registration, the base station shall set this field to ‘0000000’. If mobile stations are to perform timer-based registration, the base station shall set this field to the value in the range 29 to 85 inclusive, such that the desired timer value is

\[ \left\lfloor \frac{2 \times \text{REG_PRD}}{4} \right\rfloor \times 0.08 \text{ seconds.} \]

DIST_REG_INCL - Distance-Based Registration Information Included.

The base station shall set this field to ‘1’ if it includes distance-based registration information in the message and mobile stations are to perform distance-based registration; otherwise, the base station shall set this field to ‘0’.

REG_DIST - Registration distance.

If DIST_REG_INCL is set to ‘1’, the base station shall include the field REG_DIST and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the non-zero “distance” beyond which the mobile station is to re-register (see 2.6.5.1.4).

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 Enhanced Access Channel.

PREF_MSID_TYPE - Preferred Enhanced 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 Enhanced Access Channel.

- **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. The base station shall set this field to the TMSI zone number as specified in [27].

- **IMSI_T_SUPPORTED**: IMSI_T support indicator. The base station shall set this field to ‘1’ to indicate support for a 15-digit IMSI_T addressing according to [18].

- **MAX_NUM_ALT_SO**: Maximum number of alternative service options. The base station shall set this field to the maximum number of service option numbers defined in [30], corresponding to alternative service options with no service option group number assigned, that the mobile station is allowed to include in the **Origination Message**, and the **Page Response**.

  If the base station sets this field to a value greater than zero, in addition, the base station shall allow the mobile station to include:

  - a 4-bit or 8-bit service option bitmap in the **Origination Message** and the **Page Response Message**;
  - alternate service option numbers, not limited to **MAX_ALT_SO_NUM**, in the **Enhanced Origination Message**.

- **AUTO_MSG_SUPPORTED**: Autonomous message supported indicator. If the base station allows the autonomous delivery of the **Device Information Message** on the r-csch, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

- **AUTO_MSG_INTERVAL**: Autonomous message interval. If **AUTO_MSG_SUPPORTED** is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set this field to the **AUTO_MSG_INTERVAL** value shown in Table 3.7.2.3.2.13-4 to indicate the minimum time interval between autonomous messages sent by a mobile station to the infrastructure. This parameter is intended to allow the infrastructure to limit the frequency of autonomous messages sent by a mobile station on the r-csch.

- **OTHER_INFO_INCL**: Other information included indicator. The base station shall set this field to ‘1’ if the MC-RR Parameters Message is not sent (see [32]); otherwise, the base station shall set this field to ‘0’.
BASE_ID - Base station identification.
If OTHER_INFO_INCL is set to ‘1’, 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 its identification number.

If OTHER_INFO_INCL is set to ‘1’, 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 MCC (see 2.3.1).

IMSI_11_12 - 11th and 12th digits of the IMSI.
If OTHER_INFO_INCL is set to ‘1’, 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 IMSI_11_12 (see 2.3.1).

BROADCAST_GPS_ASST - Broadcast GPS Assist Indicator.
If OTHER_INFO_INCL is set to ‘1’, 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 ‘1’ if it supports Broadcast GPS Assist capability; otherwise, the base station shall set this field to ‘0’.

SIG_ENCRYPT_SUP - Signaling encryption supported indicator.
If OTHER_INFO_INCL is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.
If this field is included, the base station shall set the subfields as follows:
The base station shall set the CMEA subfield to ‘1’.
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’.
The base station shall set the RESERVED subfield to ‘00000’.

CS_SUPPORTED - Concurrent Services supported indicator.
If the base station supports concurrent services, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
MS_INIT_POS_LOC_SUP_IND - Mobile station initiated position location determination supported indicator. If the base station supports mobile station initiated position determination, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

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’.

SIG_INTEGRITY_SUP_INCL - Signaling message integrity information included indicator. 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.

SIG_INTEGRITY_SUP - Signaling integrity algorithm supported by the base station. If SIG_INTEGRITY_SUP_INCL is included and is set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field.

The base 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 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’.

The base station shall set the RESERVED subfield to ‘00000000’.

IMSI_10_INCL - IMSI_10 included. If the MNC is a 3-digit number and the base station wants to convey the third digit of the MNC to the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

IMSI_10 - The least significant digit of MNC when the MNC is a 3-digit number. If IMSI_10_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the least significant digit of MNC converted to binary by the standard decimal-to-binary conversion as shown in Table 2.3.1.1-1.
MAX_ADD_SERV_INSTANCE - Maximum number of additional service reference identifiers allowed in origination

If the CS_SUPPORTED 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:

The base station shall set this field to the maximum number of additional service reference identifiers that can be included in the Origination Message or Enhanced Origination Message.

TKZ_MODE_SUPPORTED - Tracking zone mode supported indicator.

The base station shall set this field to ‘1’ if tracking zone mode is supported; otherwise, the base station shall set this field to ‘0’.

TKZ_ID - Tracking zone identifier.

If TKZ_MODE_SUPPORTED is set to ‘1’, the base station shall set this field to its tracking zone identifier; otherwise, the base station shall omit this field.

PZ_HYST_ENABLED - Packet zone hysteresis enabled.

If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis feature is to be enabled at the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_INFO_INCL - Packet zone hysteresis information included indicator.

If the PZ_HYST_ENABLED field is included and is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

If the base includes the PZ_HYST_LIST_LEN, PZ_HYST_ACT_TIMER and packet zone hysteresis timer related fields, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_LIST_LEN - Packet zone hysteresis list length.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 length of the packet zone hysteresis list minus one. This field shall be within the range ‘0001’ through ‘1111’, inclusive.

PZ_HYST_ACT_TIMER - Packet zone hysteresis activation timer.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 to the value of the packet zone hysteresis activation timer (in units of seconds). This field shall be within the range ‘00000001’ through ‘11111111’, inclusive.

PZ_HYST_TIMER_MUL - Packet zone hysteresis timer multiplier.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to x, where \( x \times 8^y \) seconds is the value of the hysteresis timer and y is the value indicated in the PZ_HYST_TIMER_EXP field. The base station shall set this field to a value that is between 1 and 7 inclusive. The value 0 is reserved.

PZ_HYST_TIMER_EXP - Packet zone hysteresis timer exponent.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to y, where \( x \times 8^y \) seconds is the value of the hysteresis timer and x is the value indicated in the PZ_HYST_TIMER_MUL field. The base station shall set this field to a value that is between 0 and 4 inclusive. All the other values are reserved.

EXT_PREF_MSID_TYPE - Extended Preferred Enhanced 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 Enhanced Access Channel.

MEID_REQD - MEID Required Indicator.

If EXT_PREF_MSID_TYPE is set to ‘11’ and PREF_MSID_TYPE is set to either ‘00’ or ‘11’, 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’ to indicate that network requires MEID (of mobile stations having R-UIM) in registrations; otherwise the base station shall set this field to ‘0’.
### 3.7.2.3.2.31 MC-RR Parameters Message

**MSG_TAG: MCRRPM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>BASE_ID</td>
<td>16</td>
</tr>
<tr>
<td>P_REV</td>
<td>8</td>
</tr>
<tr>
<td>MIN_P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SR3_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SR3_CENTER_FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR3_CENTER_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>SR3_BRAT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR3_BCCH_CODE_CHAN</td>
<td>0 or 7</td>
</tr>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>4</td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td>4</td>
</tr>
<tr>
<td>T_ADD</td>
<td>6</td>
</tr>
<tr>
<td>T_DROP</td>
<td>6</td>
</tr>
<tr>
<td>T_COMP</td>
<td>4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_MAX_AGE</td>
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</tr>
<tr>
<td>SOFT_SLOPE</td>
<td>6</td>
</tr>
<tr>
<td>ADD_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>DROP_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>ENC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_FIELDS_LEN</td>
<td>8</td>
</tr>
<tr>
<td>ADD_FIELDS</td>
<td>$8 \times \text{ADD.Fields}_\text{LEN}$</td>
</tr>
<tr>
<td>CCH_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>MCC</td>
<td>0 or 10</td>
</tr>
<tr>
<td>IMSI_11_12</td>
<td>0 or 7</td>
</tr>
<tr>
<td>MAX_SLOT_CYCLE_INDEX</td>
<td>0 or 3</td>
</tr>
<tr>
<td>PWR_REP_THRESH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PWR_REP_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PWR_THRESH_ENABLE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PWR_PERIOD_ENABLE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PWR_REP_DELAY</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESELECT_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>EC.THRESH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>EC_IQ0_THRESHOLD</td>
<td>0 or 5</td>
</tr>
<tr>
<td>BASE_LAT</td>
<td>0 or 22</td>
</tr>
<tr>
<td>BASE_LONG</td>
<td>0 or 23</td>
</tr>
<tr>
<td>PILOT_REPORT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACC_ENT_HO_ORDER</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCESS_HO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCESS_HO_MSG_RSP</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCESS_PROBE_HO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACC_HO_LIST_UPD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACC_PROBE_HO_OTHER_MSG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MAX_NUM_PROBE_HO</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_FCCCH</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FCCCH_RATE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FCCCH_CODE_RATE</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

NUM_FCCCH occurrences of the following one field record:

/ (NUM_FCCCH)

| FCCCH_CODE_CHAN             | 8                              |

/ (NUM_FCCCH)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCAST_INDEX</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_BCCH_BCAST</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_BCCH_BCAST occurrences of the following three-field record:</td>
<td></td>
</tr>
<tr>
<td>} (NUM_BCCH_BCAST)</td>
<td></td>
</tr>
<tr>
<td>BCCH_CODE_CHAN</td>
<td>7</td>
</tr>
<tr>
<td>BRAT</td>
<td>2</td>
</tr>
<tr>
<td>BCCH_CODE_RATE</td>
<td>1</td>
</tr>
<tr>
<td>} (NUM_BCCH_BCAST)</td>
<td></td>
</tr>
<tr>
<td>QPCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_QPCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>QPCH_RATE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_POWER_LEVEL_PAGE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>QPCH_CCI_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_POWER_LEVEL_CONFIG</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_QPCH occurrences of the following one field record if SR3_INCL is set to ‘1’:</td>
<td></td>
</tr>
<tr>
<td>} (NUM_QPCH)</td>
<td></td>
</tr>
<tr>
<td>QPCH_CODE_CHAN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>} (NUM_QPCH)</td>
<td></td>
</tr>
<tr>
<td>QPCH_BI_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QPCH_POWER_LEVEL_BCAST</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SDB_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BROADCAST_GPS_ASST</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_TRAFFIC_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>MOB_QOS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_SYNC_ID</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_OPT_MSG</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SENDING_RAND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PRI_NGHBR_LST</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USER_ZONE_ID</td>
<td>0 or 1</td>
</tr>
<tr>
<td>EXT_GLOBAL_REDIRECT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 or (NUM_OPT_MSG – 4)</td>
</tr>
<tr>
<td>PILOT_INFO_REQ_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BAND_CLASS_INFO_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ALT_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD _UNIT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD</td>
<td>0 or 3</td>
</tr>
<tr>
<td>CHM_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>RELEASE_TO_IDLE_IND</td>
<td>1</td>
</tr>
<tr>
<td>RECONNECT_MSG_IND</td>
<td>1</td>
</tr>
<tr>
<td>T_TDROP_RANGE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>T_TDROP_RANGE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_CHM_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PDCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_ACKCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_CQICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>PDCH_SOFT_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PDCH_SOFTER_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>WALSH_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PDCCH</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_PDCCH+1 occurrences of the following record:

\[
\{ \text{NUM_PDCCH+1} \\
\} \text{NUM_PDCCH+1}
\]

| FOR_PDCCH_WALSH                      | 0 or 6        |

\[
\text{NEG_SLOT_CYCLE_INDEX_SUP} 1 \\
\text{IMSI_10_INCL} 0 or 1 \\
\text{IMSI_10} 0 or 4 \\
\text{NEG_SLOT_CYCLE_INDEX_SUP} 1 \\
\text{RER_MODE_SUPPORTED} 1 \\
\text{AUTO_FCSO_ALLOWED} 1 \\
\text{SENDING_BSPM} 1 \\
\text{BSPM_PERIOD_INDEX} 0 or 4 \\
\text{REV_PDCH_SUPPORTED} 0 or 1 \\
\text{REV_PDCH_PARMS_INCL} 0 or 1 \\
\text{REV_PDCH_RLGAIN_INCL} 0 or 1 \\
\text{RLGAIN_SPICH_PILOT} 0 or 6 \\
\text{RLGAIN_REQCH_PILOT} 0 or 6 \\
\text{RLGAIN_PDCCH_PILOT} 0 or 6 \\
\text{REV_PDCH_PARMS_1_INCL} 0 or 1 \\
\text{REV_PDCH_TABLE_SEL} 0 or 1 \\
\text{REV_PDCH_MAX_AUTO_TPR} 0 or 8 \\
\text{REV_PDCH_NUM_ARQ_ROUNDS_NO}
\text{NORMAL} 0 or 2 \\
\text{REV_PDCH_OPER_PARMS_INCL} 0 or 1 \\
\text{REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET} 0 or 4 \\
\text{REV_PDCH_DEFAULT_PERSISTENCE} 0 or 1 \\
\text{REV_PDCH_RESET_PERSISTENCE} 0 or 1 \\
\text{REV_PDCH_GRANT_PRECEDENCE} 0 or 1 \\
\text{REV_PDCH_MSIB_SUPPORTED} 0 or 1 |
### REV_PDCH_SOFT_HANDOFF_RESET_IND

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDB_IN_RCNM_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CAND_BAND_INFO_REQ</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_CAND_BAND_CLASS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

**NUM_CAND_BAND_CLASS +1 occurrences of the following record:**

```plaintext
[NUM_CAND_BAND_CLASS + 1]
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAND_BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>SUBCLASS_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SUBCLASS_REC_LEN</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

**SUBCLASS_REC_LEN +1 occurrences of the following subrecord:**

```plaintext
([SUBCLASS_REC_LEN + 1])
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_SUBCLASS_IND</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

**([SUBCLASS_REC_LEN + 1])**

**([NUM_CAND_BAND_CLASS + 1])**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESCAN</td>
<td>1</td>
</tr>
<tr>
<td>TX_PWR_LIMIT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TX_PWR_LIMIT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>BYPASS_REG_IND</td>
<td>2</td>
</tr>
</tbody>
</table>

---

1. **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.

2. **CONFIG_MSG_SEQ** - Configuration message sequence number. The base station shall set this field to CONFIG_SEQ (see 3.6.2.2).

3. **BASE_ID** - Base station identification. The base station shall set this field to its identification number.

4. **P_REV** - Protocol revision level. The base station shall set this field to '00001011'.

5. **MIN_P_REV** - Minimum protocol revision level. The base station sets this field to prevent mobile stations, which cannot be supported by the base station from accessing the system.
The base station shall set this field to the minimum protocol revision level that it supports.

**SR3_INCL** - Spreading Rate 3 common channel parameters included indicator.

The base station shall set this field to ‘1’ if the base station includes SR3 related parameters 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 from the current SR1 frequency assignment. 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 index.

If SR3_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the Walsh code index corresponding to the Spreading Rate 3 BCCH.

**SR3_PRIMARY_PILOT** - Primary SR3 pilot.

If SR3_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the value shown in Table 3.7.2.3.2.26-5 corresponding to the position of the primary SR3 pilot.

**SR3_PILOT_POWER1** - The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies.
If SR3_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the value shown in Table 3.7.2.3.2.26-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.

**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.

**SRCH_WIN_A** - Search window size for the Active Set and Candidate Set.

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 the Active Set and Candidate Set.

**SRCH_WIN_R** - Search window size for the Remaining Set.

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 the Remaining Set.

**T_ADD** - Pilot detection threshold.

This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement Message* initiating the handoff process (see 2.6.6.2.5.2).

The base station shall set this field to the pilot detection threshold, expressed as an unsigned binary number equal to 
\[
\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{Io} \right\rfloor.
\]

**T_DROP** - Pilot drop threshold.

This value is used by mobile stations to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

The base station shall set this field to the pilot drop threshold, expressed as an unsigned binary number equal to 
\[
\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{Io} \right\rfloor.
\]

**T_COMP** - Active Set versus Candidate Set comparison threshold.

Mobile stations transmit a *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement Message* when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

The base station shall set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.
T_TDROP - Drop timer value. Timer value after which an action is taken by mobile stations for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

The base station shall set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by mobile stations.

NGHBR_MAX_AGE - Neighbor Set maximum AGE.

The base station shall set this field to the maximum AGE value beyond which mobile stations are to drop members from the Neighbor Set (see 2.6.6.2.6.3).

SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the Active Set, or dropping a pilot from the Active Set (see 2.6.6.2.3 and 2.6.6.2.5.2).

The base station shall set this field as an unsigned binary number.

ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to the Active Set (see 2.6.6.2.5.2).

The base station shall set this field as a two’s complement signed binary number, in units of 0.5 dB.

DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot from the Active Set (see 2.6.6.2.3).

The base station shall set this field as a two’s complement signed binary number, in units of 0.5 dB.

ENC_SUPPORTED – Encryption fields included.

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’.

SIG_ENCRYPT_SUP – Signaling encryption supported indicator.

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.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

If this field is included, the base station shall set the subfields as follows:

- The base station shall set the CMEA subfield to ‘1’.
- 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’.
- The base station shall set the RESERVED subfield to ‘00000’.

UI_ENCRYPT_SUP - User information encryption supported indicator.

- 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.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

- The base station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.

ADD_FIELDS_LEN - Additional fields length.

- The base station shall set this field to the number of octets included in the ADD_FIELDS.

ADD_FIELDS - Additional fields.

- If the ADD_FIELDS_LEN field is not equal to ‘00000000’, the base station shall include the following fields as additional fields.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

CCH_INFO_INCL - Common Channel information included indicator.

- If the message is sent on the f-csch and additional information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.


- If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

IMSI_11_12 - 11th and 12th digits of the IMSI.
If CCH_INFO_INCL is set to ‘1’, 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 IMSI_11_12 (see 2.3.1).

**MAX_SLOT_CYCLE_INDEX** - Maximum slot cycle index.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field MAX_SLOT_CYCLE_INDEX and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the SLOT_CYCLE_INDEX value corresponding to the maximum slot cycle length permitted (see 2.6.2.1.1).

**PWR_REP_THRESH** - Power control reporting threshold.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PWR_REP_THRESH and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the number of bad frames (see [2]) to be received in a measurement period on the channel which carries the Power Control Subchannel before mobile stations are to generate a Power Measurement Report Message (see 2.6.4.1.1). If the base station sets PWR_THRESH_ENABLE to ‘1’, it shall not set this field to ‘00000’.

**PWR_REP_FRAMES** - Power control reporting frame count.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PWR_REP_FRAMES and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the value such that the number given by

\[
\left\lfloor 2 \left( \frac{\text{PWR_REP_FRAMES}}{2} \times 5 \right) \right\rfloor \text{frames}
\]

is the number of frames over which mobile stations are to count frame errors.

**PWR_THRESH_ENABLE** - Threshold report mode indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PWR_THRESH_ENABLE and shall set this field as shown below; otherwise, the base station shall omit this field.

If mobile stations are to generate threshold Power Measurement Report Messages, the base station shall set this field to ‘1’. If mobile stations are not to generate threshold Power Measurement Report Messages, the base station shall set this field to ‘0’.

**PWR_PERIOD_ENABLE** - Periodic report mode indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PWR_PERIOD_ENABLE and shall set this field as shown below; otherwise, the base station shall omit this field.
If mobile stations are to generate periodic \textit{Power Measurement Report Messages}, the base station shall set this field to ‘1’. If mobile stations are not to generate periodic \textit{Power Measurement Report Messages}, the base station shall set this field to ‘0’.

\begin{verbatim}
PWR_REP_DELAY - Power report delay.

The period that mobile stations wait following a \textit{Power Measurement Report Message} before restarting frame counting for power control purposes.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PWR_REP_DELAY and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the power report delay value, in units of 4 frames (see 2.6.4.1.1).

RESELECT_INCLUDED - System reselection parameters included.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field RESELECT_INCLUDED and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station is including system reselection parameters, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

EC_THRESH - Pilot power threshold.

If RESELECT_INCLUDED is included and is set to ‘1’, the base station shall include the field EC_THRESH and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to:

\[
\left\lceil \left(pilot\_power\_threshold + 115\right) \right\rceil
\]

where \textit{pilot\_power\_threshold} is the pilot power, \(E_c\), in dBm/1.23 MHz, below which the mobile station is to perform system reselection.

EC\_IQ0\_THRESH - Pilot \(E_c/I_0\) threshold.

If RESELECT_INCLUDED is included and is set to ‘1’, the base station shall include the field EC\_IQ0\_THRESH and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to:

\[
\left\lfloor -20 \times \log_{10}(pilot\_threshold) \right\rfloor
\]

where \textit{pilot\_threshold} is the pilot \(E_c/I_{00}\) below which the mobile station is to perform system reselection.

BASE_LAT - Base station latitude.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.
\end{verbatim}
The base station shall set this field to its latitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range -12960000 to 12960000 inclusive (corresponding to a range of -90° to +90°).

**BASE_LONG** - Base station longitude.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to its longitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range -25920000 to 25920000 inclusive (corresponding to a range of -180° to +180°).

**PILOT_REPORT** - Pilot reporting indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field PILOT_REPORT and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is to report the additional pilots which have pilot strengths exceeding T_ADD in all Enhanced Access Channel messages. The base station shall set this field to ‘0’ if the mobile station is to report the additional pilots which have pilot strengths exceeding T_ADD only in the *Origination Message*, *Reconnect Message*, and the *Page Response Message*.

**ACC_ENT_HO_ORDER** - Access entry handoff permitted indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access entry handoff after receiving a message while performing the *Mobile Station Order and Message Processing Operation* in the *Mobile Station Idle State* (see 2.6.2.4); otherwise, the base station shall set this field to ‘0’.

**ACCESS_HO** - Access handoff permitted indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff (see 2.6.3.1.3.2); otherwise, the base station shall set this field to ‘0’.

**ACCESS_HO_MSG_RSP** - Access handoff permitted for message response indicator.

If ACCESS_HO is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.
The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff after receiving a message and before responding to that message in the System Access State; otherwise, the base station shall set this field to ‘0’.

**ACCESS_PROBE_HO** - Access probe handoff permitted indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access probe handoff (see 2.6.3.1.3.3); otherwise, the base station shall set this field to ‘0’.

**ACC_HO_LIST_UPD** - Access handoff list update permitted indicator.

If ACCESS_PROBE_HO is included and is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to update the access handoff list during an access attempt (see 2.6.3.1.7.2); otherwise, the base station shall set this field to ‘0’.

**ACC_PROBE_HO_OTHER_MSG** - Access probe handoff permitted for messages other than the *Origination Message*, *Reconnect Message*, and the *Page Response Message*.

If ACCESS_PROBE_HO is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access probe handoff for messages other than the *Origination Message*, *Reconnect Message*, and the *Page Response Message*. The base station shall set this field to ‘0’ if the mobile station is permitted to perform an access probe handoff only for the *Origination Message*, *Reconnect Message*, and the *Page Response Message*. See 2.6.3.1.3.3.

**MAX_NUM_PROBE_HO** - Maximum number of times that the mobile station is permitted to perform an access probe handoff.

If ACCESS_PROBE_HO is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the maximum number of times the mobile station is allowed to perform an access probe handoff within an access attempt minus one.

**NUM_FCCCH** - Total number of Forward Common Control Channels.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and shall set it as shown below; otherwise, the base station shall omit this field.
The base station shall set this field to the total number of Forward Common Control Channels on this CDMA Channel.

If this is not a pilot beacon base station, the base station shall set this field to an integer value greater than 0.

**FCCCH_RATE** – Rate words for the Forward Common Control Channels.

If CCH_INFO_INCL is set to ‘1’ and NUM_FCCCH is not equal to ‘0’, the base station shall include this field and shall set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the FCCCH rate field value shown in Table 3.7.2.3.2.31-1 corresponding to the data rate used on the Forward Common Control Channels in the system.

**Table 3.7.2.3.2.31-1. Forward Common Control Channel Rate Words**

<table>
<thead>
<tr>
<th>FCCCH Rate Field (binary)</th>
<th>Forward Common Control Channel rate word</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>9600 bps, 20 ms frame size</td>
</tr>
<tr>
<td>001</td>
<td>19200 bps, 20 ms frame size</td>
</tr>
<tr>
<td>010</td>
<td>19200 bps, 10 ms frame size</td>
</tr>
<tr>
<td>011</td>
<td>38400 bps, 20 ms frame size</td>
</tr>
<tr>
<td>100</td>
<td>38400 bps, 10 ms frame size</td>
</tr>
<tr>
<td>101</td>
<td>38400 bps, 5 ms frame size</td>
</tr>
<tr>
<td>110 – 111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**FCCCH_CODE_RATE** – Code Rate for the Forward Common Control Channels.

If CCH_INFO_INCL is set to ‘1’ and NUM_FCCCH is not equal to ‘0’, the base station shall include this field and shall set it as shown below; otherwise, the base station shall omit this field.

If the FCCCH is operating in Spreading Rate 1, the base station shall set this field to ‘0’ if the FCCCH Code Rate is 1/4 (see [2]). The base station shall set this field to ‘1’ if the FCCCH Code Rate is 1/2 (see [2]).

If the FCCCH is operating in Spreading Rate 3, the base station shall set this field to ‘0’.

The base station shall include NUM_FCCCH occurrences of the following one field record:

**FCCCH_CODE_CHAN** – Code channel index for the Forward Common Control Channel.
The base station shall set this field to the code channel index (see [2]) in the range 1 to 255 inclusive that the mobile station is to use on the Forward Common Control Channel.

**BCAST_INDEX** - Broadcast index.

- If CCH_INFO_INCL is set to ‘1’, the base station shall include the field BCAST_INDEX and shall set this field as shown below; otherwise, the base station shall omit this field.
- If Periodic Enhanced Broadcast Paging is disabled, the base station shall set this field to ‘000’; otherwise, the base station shall set this field to the Broadcast Index (see 2.6.2.1.1.3.3.2).

**NUM_BCCH_BCAST** - The number of Broadcast Control Channels used for transmitting broadcast messages.

- If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.
- The base station shall set this field to the number of Broadcast Control Channels used for transmitting broadcast messages.

If the NUM_BCCH_BCAST field is included, the base station shall set NUM_BCCH_BCAST occurrences of the following three-field record, where the ith occurrence corresponds to a BCCH indexed by BCN of i+1:

**BCCH_CODE_CHAN** - The Walsh Code index for the Broadcast Control Channel.

- The base station shall set this field to the Walsh code corresponding to the Broadcast Control Channel.

**BRAT** - BCCH data rate.

- The base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.31-2 corresponding to the data rate used by the Broadcast Control Channel to which the mobile station is being directed.

**Table 3.7.2.3.2.31-2. Broadcast Control Channel Data Rate**

<table>
<thead>
<tr>
<th>BRAT Field (binary)</th>
<th>Broadcast Control Channel data rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>4800 bps</td>
</tr>
<tr>
<td>01</td>
<td>9600 bps</td>
</tr>
<tr>
<td>10</td>
<td>19200 bps</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**BCCH_CODE_RATE** - BCCH code rate.
For spreading rate 1, the base station shall set this field to ‘0’ if the BCCH Code Rate is 1/4 (see [2]). For spreading rate 1, the base station shall set this field to ‘1’ if the BCCH code rate is 1/2 (see [2]). For spreading rate 3, the base station shall set this field to ‘0’.

QPCH_SUPPORTED - Quick Paging Channel Supported Indication.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field QPCH_SUPPORTED and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station supports Quick Paging Channel operation, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

NUM_QPCH - Number of Quick Paging Channels.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the number of Quick Paging Channels on this CDMA Channel. The base station shall not set this field to ‘00’.

QPCH_RATE - Quick Paging Channel indicator rate.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the QPCH_RATE field value shown in Table 3.7.2.3.2.13-2 corresponding to the indicator rate used by the Quick Paging Channel in the system.

QPCH_POWER_LEVEL_PAGE - Quick Paging Channel paging indicator transmit power level.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel paging indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
### Table 3.7.2.3.2.31-3. Quick Paging Channel Transmit Power Level

<table>
<thead>
<tr>
<th>QPCH_POWER_LEVEL_PAGE (binary)</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>5 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>001</td>
<td>4 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>010</td>
<td>3 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>011</td>
<td>2 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>100</td>
<td>1 dB below the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>101</td>
<td>Same as the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>110</td>
<td>1 dB above the Pilot Channel Transmit Power</td>
</tr>
<tr>
<td>111</td>
<td>2 dB above the Pilot Channel Transmit Power</td>
</tr>
</tbody>
</table>

**QPCH_CCI_SUPPORTED** - Quick Paging Channel configuration change indicator supported.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the base station supports configuration change indicators on the Quick Paging Channel, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

**QPCH_POWER_LEVEL_CONFIG** - Quick Paging Channel configuration change indicator transmit power level.

If QPCH_CCI_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel configuration change indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.
If SR3_INCL is set to ‘1’ and QPCH_SUPPORTED is included and set to ‘1’, the base station shall include NUM_QPCH occurrences of the following one field record:

**QPCH_CODE_CHAN** - Code channel index of the Quick Paging Channel for Spreading Rate 3.

The base station shall set this field to the code channel index (see [2]) in the range 1 to 255 inclusive that the mobile station is to use on the Quick Paging Channel for Spreading Rate 3.

**QPCH_BI_SUPPORTED** - Quick Paging Channel broadcast indicator supported.

If QPCH_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the base station supports broadcast indicators on the Quick Paging Channel, the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

**QPCH_POWER_LEVEL_BCAST** - Quick Paging Channel broadcast indicator transmit power level.

If QPCH_BI_SUPPORTED is included and set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the Quick Paging Channel broadcast indicator transmit power level relative to that of the Pilot Channel as specified in Table 3.7.2.3.2.31-3.

**SDB_SUPPORTED** - Short Data Burst supported indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field SDB_SUPPORTED and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to send a Short Data Burst; otherwise, the base station shall set this field to ‘0’.

**BROADCAST_GPS_ASST** - Broadcast GPS Assist Indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field BROADCAST_GPS_ASST and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if it supports Broadcast GPS Assist capability; otherwise, the base station shall set this field to ‘0’.

**RLGAIN_TRAFFIC_PILOT** - Gain adjustment of the Reverse Traffic Channel relative to the Reverse Pilot Channel for Radio Configurations greater than 2.

If CCH_INFO_INCL is set to ‘1’, the base station shall include the field RLGAIN_TRAFFIC_PILOT and shall set this field as shown below; otherwise, the base station shall omit this field.
The base station shall set this field to the correction factor to be used by mobile stations in setting the power of a reverse traffic channel, expressed as a two’s complement value in units of 0.125 dB (see [2]).

REV_PWR_CNTL_DELAY_INCL - Reverse Power Control Delay included indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the base station includes the REV_PWR_CNTL_DELAY field in this message; otherwise, the base station shall set this field to ‘0’.

REV_PWR_CNTL_DELAY - The reverse power control delay.

If REV_PWR_CNTL_DELAY_INCL is included and set to ‘1’, 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 closed-loop reverse power control delay minus one (the closed-loop reverse power control delay is the time between the end of a gated-on 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.

MOB_QOS - Indicator granting permission to the mobile station to request QoS parameter settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’, if the mobile station is allowed to include a QoS record in the Origination Message, Origination Continuation Message, or Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

USE_SYNC_ID - Sync ID supported indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ to indicate that the mobile station is permitted to include the SYNC_ID field in the Page Response Message, the Reconnect Message, the Origination Message and the Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

NUM_OPT_MSG - Number of optional overhead messages to be sent.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set this field as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to the number of optional overhead messages to be sent.
SENDING_RAND - *ANSI-41 RAND Message* indicator.

If NUM_OPT_MSG is included and is equal to or greater than 1, the base station shall include the field SENDING_RAND and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station is sending the *ANSI-41 RAND Message* on the Primary Broadcast Control Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

PRI_NGHBR_LST - *Private Neighbor List Message* indicator.

If NUM_OPT_MSG is included and is equal to or greater than 2, the base station shall include the field PRI_NGHBR_LST and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station is sending the *Private Neighbor List Message* on the Primary Broadcast Control Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

USER_ZONE_ID - *User Zone Identification Message* indicator.

If NUM_OPT_MSG is included and is equal to or greater than 3, the base station shall include the field USER_ZONE_ID and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station is sending the *User Zone Identification Message* on the Primary Broadcast Control Channel, it shall set this field to ‘1’; otherwise, it shall set this field to ‘0’.

EXT_GLOBAL_REDIRECT - *Extended Global Service Redirection Message* indicator.

If NUM_OPT_MSG is included and is equal to or greater than 4, the base station shall include the field EXT_GLOBAL_REDIRECT and shall set this field as shown below; otherwise, the base station shall omit this field.

If the base station is sending the *Extended Global Service Redirection Message* on the Primary Broadcast Control Channel, it shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESERVED - Reserved bits.

If NUM_OPT_MSG is included and is equal to or greater than 5, the base station shall include the field RESERVED and shall set this field as shown below; otherwise, the base station shall omit this field.

The base station shall add (NUM_OPT_MSG – 4) reserved bits. The base station shall set these bits to ‘0’.

PILOT_INFO_REQ_SUPPORTED - Pilot information request supported indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.
If the base station supports mobile station request for pilot information using the “Pilot Information” record in the Base Station Status Request Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

BAND_CLASS_INFO_REQ – Band class information request indicator.

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the ALT_BAND_CLASS field is included in this message; otherwise, the base station shall set this field to ‘0’.

ALT_BAND_CLASS – Alternate band class.

If BAND_CLASS_INFO_REQ is not included, or is included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to an alternate CDMA band class (see [30]) supported by the base station. The mobile station is to indicate its capability to support the alternate band class in the Origination Message and Page Response Message.

CDMA_OFF_TIME_REP_SUP_IND – CDMA off time report supported indicator.

If the base station supports mobile station report for CDMA off time information using the CDMA Off Time Report Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit

If CDMA_OFF_TIME_REP_SUP_IND is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time unit used in CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table 3.7.2.3.2.13-5

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’.

**T_TDROP_RANGE_INCL** - Drop timer range value included indicator.

The base station shall set this field to ‘1’ if the T_TDROP_RANGE field is included in this message; otherwise, the base station shall set this field to ‘0’.

**T_TDROP_RANGE** - Drop timer range value.

Timer range value to use in association with the T_TDROP parameter when determining the drop timer expiration.

If T_TDROP_RANGE_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the T_TDROP_RANGE value shown in Table 2.6.6.2.3-2 corresponding to the timer expiration range value to be used by the mobile station.

**FOR_PDCH_SUPPORTED** - Forward Packet Data Channel supported indicator.

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’.

**PDCH_CHM_SUPPORTED** - PDCH Control Hold Mode supported indicator.

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:

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’.

**PDCH_PARMS_INCL** - Forward Packet Data Channel related parameters included indicator.

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:

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’.
FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.

If PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following F-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'.

RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Acknowledgment Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Channel Quality Indicator Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.

If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups (see [3]).

NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer switching.

If PDCH_PARMS_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group (see [3]).

NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.
If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

**NUM_SOFTER_SWITCHING_SLOTS** - Number of slots per frame for R-CQICH softer switching.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

**PDCH_SOFT_SWITCHING_DELAY** - F-PDCH soft switching delay.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups (see [3]).

**PDCH_SOFTER_SWITCHING_DELAY** - F-PDCH softer switching delay.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group (see [3]).

**WALSH_TABLE_ID** - The index of the Walsh Table used.

If PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the index of the Walsh Table being used by the Packet Data Channel. (See [3]).

**NUM_PDCCH** - The number of Packet Data Control Channels supported.
If PDCH_PARMS_INCL is not included, or is included and set
to '0', the base station shall omit this field; otherwise, the
base station shall include this field and set it as follows:
The base station shall set this field to ‘000’ if the pilot
supports one Packet Data Control Channel. The base station
shall set this field to ‘001’ if the pilot supports two Packet
Data Control Channels. The base station shall not set this
field to any other value.

The base station shall include $NUM_PDCCH+1$ occurrences of the following one-field record:

<table>
<thead>
<tr>
<th>FOR_PDCCH_WALSH</th>
<th>Forward Packet Data Control Channel Walsh code assignment.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If PDCH_PARMS_INCL is not included, or is included and set</td>
</tr>
<tr>
<td></td>
<td>to '0', the base station shall omit this field; otherwise,</td>
</tr>
<tr>
<td></td>
<td>the base station shall include this field and set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the Walsh code</td>
</tr>
<tr>
<td></td>
<td>assignment for the Forward Packet Data Control Channel.</td>
</tr>
</tbody>
</table>

If NUM_PDCCH is set to '001', the Walsh code of PDCCH0
shall be included first, followed by the Walsh code for
PDCCH1.

NEG_SLOT_CYCLE_INDEX_SUP – Negative slot cycle index supported indicator.

The base station shall set this field to the ‘1’ if it supports
negative values of the preferred slot cycle index
$(\text{SLOT}_\text{CYCLE}_\text{INDEX}_p)$; otherwise, the base station shall set
this field to ‘0’.

IMSI_10_INCL - IMSI_10 included.

The base station shall set this field to the ‘1’ if it supports
negative values of the preferred slot cycle index
$(\text{SLOT}_\text{CYCLE}_\text{INDEX}_p)$; otherwise, the base station shall set
this field to ‘0’.

IMSI_10 - The least significant digit of MNC when the MNC is a 3-digit
number.

If IMSI_10_INCL is not included, or is included and set to ‘0’,
the base station shall omit this field; otherwise, the base
station shall set this field to the least significant digit of MNC
converted to binary by the standard decimal-to-binary
conversion as shown in Table 2.3.1.1-1.

NEG_SLOT_CYCLE_INDEX_SUP – Negative slot cycle index supported indicator.

The base station shall set this field to the ‘1’ if it supports
negative values of the preferred slot cycle index
$(\text{SLOT}_\text{CYCLE}_\text{INDEX}_p)$; otherwise, the base station shall set
this field to ‘0’.

RER_MODE_SUPPORTED - Radio environment reporting mode supported indicator.
If the base station supports radio environment reporting mode, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**AUTO_FCSO_ALLOWED** - Autonomous *Fast Call Setup Order* allowed indicator.

The base station shall set this field to '1' if the mobile station is allowed to send an autonomous *Fast Call Setup Order*; otherwise, the base station shall set this field to '0'.

**SENDING_BSPM** - *BCMC Service Parameters Message* indicator.

If the base station is sending the *BCMC Service Parameters Message* on the Primary Broadcast Control Channel, it shall set this field to '1'; otherwise, it shall set this field to '0'.

**BSPM_PERIOD_INDEX** - BSPM Transmission Periodicity Index.

If the **SENDING_BSPM** 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:

The base station shall set this field to the BSPM transmission periodicity index corresponding to the periodicity with which the BSPM with **DIFF_BSPM** equal to '0' is transmitted on the Primary Broadcast Control Channel as specified in Table 2.7.3.5.1.

The base station shall start transmitting a *BCMC Service Parameters Message* within four F-BCCH slots of the F-BCCH BSPM slot given by

\[
\lfloor \frac{t}{4} \rfloor \mod (B + 1) = 0,
\]

where \( t \) represents system time in frames and \( B \) is given by

\[
B = 2^{\text{BSPM_PERIOD_INDEX}} \times 16
\]

**REV_PDCH_SUPPORTED** - Reverse Packet Data Channel supported indicator.

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:

If the base station supports the Reverse Packet Data Channel (R-PDCH), the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**REV_PDCH_PARMSS_INCL** - Reverse Packet Data Channel related parameters included indicator.

If **REV_PDCH_SUPPORTED** is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if the R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'.

**REV_PDCH_RLGAIN_INCL** - Reverse Packet Data Channel parameters related to reverse link adjustment gains included indicator.
If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following R-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'.

RLGAIN_SPICH_PILOT - Reverse Secondary Pilot Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Secondary Pilot Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

RLGAIN_REQCH_PILOT - Reverse Request Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Request Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

RLGAIN_PDCCH_PILOT - Reverse Packet Data Control Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

REV_PDCH_PARMS_1_INCL - Reverse Packet Data Channel parameters subset included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'.

REV_PDCH_TABLE_SEL - Reverse Packet Data Channel Table selector.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to the Reverse Packet Data Channel Table selector (see [2]).

REV_PDCH_MAX_AUTO_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.
If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

REV_PDCH_OPER_PARMS_INCL - Reverse Packet Data Channel operational parameters included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to ‘1’ if the following R-PDCH operational parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET - Maximum Allowed Reverse PDCH encoder packet size.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum size encoder packet that the mobile station is allowed to use. (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and 18456 bits respectively.

REV_PDCH_DEFAULT_PERSISTENCE - Reverse Packet Data Channel default initial persistence.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to ‘1’ if the mobile station is to be persistent at the call setup; otherwise, the base station shall set this field to ‘0’ (See [3]).

**REV_PDCH_RESET_PERSISTENCE** - Reverse Packet Data Channel reset persistence indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if, at the end of a persistent grant, the mobile station shall reset its persistent indicator to persistent; otherwise, the base station shall set this field to ‘0’ if the mobile station shall reset its persistent indicator to non-persistent (See [3]).

**REV_PDCH_GRANT_PRECEDENCE** - Reverse Packet Data Channel Grant Precedence Indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if unicast Forward Grant Channel messages have precedence over Rate Control commands; otherwise, the base station shall set this field to ‘0’ to indicate that Rate Control down commands from non-serving sectors have precedence over Forward Grant Channel messages (see [3]).

**REV_PDCH_MSIB_SUPPORTED** - Reverse PDCH MSIB usage indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to use the MSIB bit on the Reverse Packet Data Control Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

**REV_PDCH_SOFT_HANDOFF_SWITCHING_RESET_IND** - Reverse Packet Data Channel soft handoff switching reset indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to initialize RPDCHCF when soft selection occurs in the FPDCHCF; otherwise, the base station shall set this field to ‘0’ (see [3]).

**SDB_IN_RCNM_IND** - Short Data Burst allowed in Reconnect Message indicator.
If RECONNECT_MSG_IND is set to ‘0’ or SDB_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:

The base station shall set this field to ‘1’ if the mobile station is allowed to include a Short Data Burst (see [30]) in the Reconnect Message; otherwise, the base station shall set this field to ‘0’.

**CAND_BAND_INFO_REQ** - Candidate band class information request indicator

If CCH_INFO_INCL is set to ‘1’, the base station shall include this field and set it as shown below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ when requesting mobiles to report whether various candidate band class and band subclass (if applicable) combinations are supported; otherwise, the base station shall set this field to ‘0’.

The base station shall not include more than 16 band class-band subclass queries in this message.

**NUM_CAND_BAND_CLASS** - Number of candidate band classes

If CAND_BAND_INFO_REQ is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the number of candidate band classes included in the record minus one.

If CAND_BAND_INFO_REQ is included and set to ‘1’, the base station shall include

**NUM_CAND_BAND_CLASS** + 1 occurrences of the following record:

**CAND_BAND_CLASS** - Candidate band class

The base station shall set this field to a band class (see [30]) for which the mobile is to report its capabilities upon system access. It may be used in conjunction with the BAND_SUBCLASS_IND fields to specify band subclass(es) for which the mobile is to report its capabilities upon system access.

**SUBCLASS_INFO_INCL** - Band subclass information included

The base station shall set this field to ‘0’ when no band subclasses are associated with CAND_BAND_CLASS or if the base station requires only the band class capabilities of the mobile station. Otherwise, the base station shall set this field to ‘1’.

**SUBCLASS_REC_LEN** - Band subclass subrecord length
If SUBCLASS_INFO_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 number of band subclass indicator fields included in the subrecord minus one. The number of subclass indicator fields included depends on the highest band subclass being queried for mobile support for the associated CAND_BAND_CLASS (i.e. if the highest band subclass being queried is K, then SUBCLASS_REC_LEN = K).

If the SUBCLASS_REC_LEN field is included, the base station shall include SUBCLASS_REC_LEN + 1 occurrences of the following subrecord. The first field included corresponds to band subclass ‘0’ and the Nth field included corresponds to band subclass ‘N-1’.

**BAND_SUBCLASS_IND** - Band subclass indicator

The base station shall set this field to ‘1’ if it requires the mobile to report whether it supports this band subclass for the associated CAND_BAND_CLASS; otherwise, the base station shall set this field to ‘0’.

The mobile station is to indicate its capability to support the candidate band class and band subclass (if applicable) combination in the *Registration Message*, *Origination Message*, and *Page Response Message*.

**RESCAN** - Rescan indicator.

If mobile stations are to re-initialize and re-acquire the system upon receiving this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT_INCL** - Transmit Power Limit inclusion for the current base station

If the transmit power limit field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT** - Transmit Power Limit for the current base station

If TX_PWR_LIMIT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.

**BYPASS_REG_IND** - Indication to bypass the power up registration upon the change of bands, serving systems, and frequency blocks.

The base station shall set this field to ‘00’ if the mobile station is to perform a power up registration upon band, frequency block or serving system change.
The base station shall set this field to ‘01’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system changes due to processing the Extended CDMA Channel List Message.

The base station shall set this field to ‘10’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change when the SID remains the same.

The base station shall set this field to ‘11’ if the mobile station is to bypass the power up registration requirement upon band, frequency block or serving system change.
### 3.7.2.3.2.32 ANSI-41 RAND Message

**MSG_TAG:** A41RANDM

### 3.7.2.3.2.32 ANSI-41 RAND Message

**MSG_TAG:** A41RANDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
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<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ACC_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>RAND</td>
<td>32</td>
</tr>
</tbody>
</table>

- **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.

- **ACC_MSG_SEQ** - Enhanced Access Parameters Message sequence number. The base station shall set this field to ACC_CONFIG_SEQ (see 3.6.2.2).

- **RAND** - Random challenge value. The base station shall set this field to the random challenge value to be used by mobile stations for authentication.
### 3.7.2.3.2.33 Enhanced Access Parameters Message

**MSG_TAG**: EAPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
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<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
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<tr>
<td>ACC_MSG_SEQ</td>
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<td>PSIST_PARMS_INCL</td>
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<tr>
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<tr>
<td>PSIST(0-9)_EACH</td>
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<td>PSIST(10)_EACH</td>
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<td>PSIST(11)_EACH</td>
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<td>PSIST(12)_EACH</td>
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<td>PSIST(13)_EACH</td>
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<td>PSIST(14)_EACH</td>
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<td>PSIST(15)_EACH</td>
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<tr>
<td>PSIST_EMG</td>
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<td>MSG_PSIST_EACH</td>
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<tr>
<td>REG_PSIST_EACH</td>
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<tr>
<td>RESERVED</td>
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<tr>
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</tr>
<tr>
<td>MAX_REQ_SEQ</td>
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</tr>
<tr>
<td>MAX_RSP_SEQ</td>
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<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
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<thead>
<tr>
<th>Field</th>
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<tbody>
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<td>NUM_MODE_SELECTION_ENTRIES</td>
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<td>NUM_MODE_SELECTION_ENTRIES + 1 occurrences of the following record:</td>
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<tr>
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<tr>
<td>ACCESS_MODE_MAX_DURATION</td>
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<tr>
<td>IC_MAX</td>
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<td>EACH (NUM_MODE_PARM_REC + 1)</td>
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<td>APPLICABLE_MODES</td>
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<td>EACH_NOM_PWR</td>
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</tr>
<tr>
<td>EACH_INIT_PWR</td>
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<tr>
<td>EACH_PWR_STEP</td>
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<td>EACH_PREAMBLE_OFF_DURATION</td>
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<tr>
<td>EACH_PREAMBLE_ADD_DURATION</td>
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<td>EACH_BKOFF</td>
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<td>EACH_SLOT</td>
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<td>EACH_SLOT_OFFSET1</td>
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<table>
<thead>
<tr>
<th>Field</th>
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<tbody>
<tr>
<td>EACH SLOT OFFSET2</td>
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<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
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<tr>
<td>( (NUM_MODE_PARM_REC + 1) )</td>
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<tr>
<td>BA_PARMS_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM EACH BA</td>
<td>0 or 5</td>
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<tr>
<td>EACH BA RATES_SUPPORTED</td>
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<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
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<td>RA_PARMS_LEN</td>
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<td>NUM EACH RA</td>
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<tr>
<td>NUM CACH</td>
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<td>CACH_CODE_RATE</td>
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<tr>
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<td>NUM_RCCCH</td>
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<td>RCCCH RATES_SUPPORTED</td>
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<tr>
<td>RCCCH_PREAMBLE_ENABLED</td>
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<tr>
<td>RCCCH_PREAMBLE_NUM_FRAC</td>
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<td>RCCCH_PREAMBLE_FRAC_DURATION</td>
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<td>RCCCH_PREAMBLE_ADD_DURATION</td>
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<tr>
<td>RCCCH SLOT</td>
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<tr>
<td>RCCCH SLOT OFFSET1</td>
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<tr>
<td>RCCCH SLOT OFFSET2</td>
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<td>RCCCH NOM_PWR</td>
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<tr>
<td>RCCCH_INIT_PWR</td>
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</tr>
<tr>
<td>RA_PC_DELAY</td>
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<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
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<tbody>
<tr>
<td>EACAM_CACH_DELAY</td>
<td>0 or 4</td>
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<tr>
<td>RCCCH_HO_SUPPORTED</td>
<td>0 or 1</td>
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<tr>
<td>RCCCH_HO_THRESH</td>
<td>0 or 4</td>
</tr>
<tr>
<td>EACAM_PCCAM_DELAY</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NUM_CPCCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CPCCH_RATE</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

(NUM_CPCCH + 1) occurrences of the following record:

```
{ (NUM_CPCCH + 1)
  CPCCH_CODE_CHAN 8
} (NUM_CPCCH + 1)
```

(NUM_CPCCH + 1) occurrences of the following record:

```
{ (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_CPCCH + 1)
```

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)
```

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 PILOT_PN - Pilot PN sequence offset index.
2 The base station shall set this field to the pilot PN sequence offset for this base station, in units of 64 PN chips.
ACC_MSG_SEQ - Enhanced Access Parameters Message sequence number.

The base station shall set this field to ACC_CONFIG_SEQ (see 2.6.2.2.15).

PSIST_PARMS_INCL - Persistence parameters included indicator.

If persistence parameters are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PSIST_PARMS_LEN - Length of persistence parameters record.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the total length, in octets, of persistence parameters included in the message, including the PSIST_PARMS_LEN and RESERVED fields.

PSIST(0-9)_EACH - Persistence value for access overload classes 0 through 9.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload classes 0 through 9 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111111’.

PSIST(10)_EACH - Persistence value for access overload class 10 (test mobile stations).

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 10 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST(11)_EACH - Persistence value for access overload class 11 (emergency mobile stations).

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 11 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST(12)_EACH - Persistence value for access overload class 12.
If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 12 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST(13)_EACH - Persistence value for access overload class 13.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 13 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST(14)_EACH - Persistence value for access overload class 14.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 14 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile station is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST(15)_EACH - Persistence value for access overload class 15.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a mobile station in access overload class 15 is permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used. If such a mobile stations is not permitted to transmit requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

PSIST_EMG - Persistence value for emergency call for access overload classes 0 through 9.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:
If a mobile station in access overload classes 0 through 9 is permitted to transmit emergency requests on the Enhanced Access Channel, the base station shall set this field to the persistence value to be used for the emergency calls. If such a mobile station is not permitted to transmit emergency requests on the Enhanced Access Channel, the base station shall set this field to ‘111’.

**MSG_PSIST_EACH** - Persistence modifier for Enhanced Access Channel attempts for message transmissions.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the persistence modifier for Enhanced Access Channel attempts for message transmissions.

**REG_PSIST_EACH** - Persistence modifier for Enhanced Access Channel attempts for registrations which are not responses to the Registration Request Order.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the persistence modifier for Enhanced Access Channel attempts for registrations which are not responses to the Registration Request Order.

**RESERVED** - Reserved bits.

If PSIST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include as many bits as required to make the length of the persistence parameters record an integral number of octets. If this field is included, the base station shall set each of these bits to ‘0’.

**LAC_PARMS_LEN** - Length of Link Access Control parameter fields.

The base station shall set this field to the total length, in octets, of Link Access Control parameters included in the message, including the LAC_PARMS_LEN and RESERVED fields.

**ACC_TMO** - Acknowledgment timeout.

The base station shall set this field to one less than the length of time, in units of 20 ms, that a mobile station is to wait to receive a Layer 2 acknowledgment after the end of an Enhanced Access Channel transmission.

**RESERVED_1** - The reserved bits

The base station shall set this field to ‘0000’

**MAX_REQ_SEQ** - Maximum number of access probe sequences for an Enhanced Access Channel request.

The base station shall set this field to the maximum number of access probe sequences a mobile station is to transmit for an Enhanced Access Channel request. The base station shall set this field to a value greater than 0.
MAX_RSP_SEQ - Maximum number of access probe sequences for an Enhanced Access Channel response.  
The base station shall set this field to the maximum number of access probe sequences a mobile station is to transmit for an Enhanced Access Channel response. The base station shall set this field to a value greater than 0.

RESERVED - Reserved Bits.  
The base station shall include as many bits as required to make the length of the Link Access Control parameters record an integral number of octets. The base station shall set each of these bits to ‘0’.

NUM_MODE_SELECTION_ENTRIES - Number of entries of the Mode Selection Table.  
The base station shall set this field to the number of entries of the Mode Selection Table, minus one.

The base station shall include NUM_MODE_SELECTION_ENTRIES + 1 occurrences of the following three-field record:

ACCESS_MODE - Access Mode used for the Enhanced Access Channel.  
The base station shall set this field to the Access Mode value shown in Table 3.7.2.3.2.33-1 corresponding to the Access Mode used.

<table>
<thead>
<tr>
<th>ACCESS_MODE (binary)</th>
<th>Access Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Basic Access Mode</td>
</tr>
<tr>
<td>001</td>
<td>Reservation Access Mode</td>
</tr>
<tr>
<td>010 – 011</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

ACCESS_MODE_MIN_DURATION - The minimum message duration for the corresponding Access Mode.  
The base station shall set this field to the minimum message duration for the corresponding Access Mode, in units of 5 ms. See [3].

ACCESS_MODE_MAX_DURATION - The maximum message duration for the corresponding Access Mode.  
The base station shall set this field to the maximum message duration for the corresponding Access Mode, in units of 5 ms. See [3].

RLGAIN_COMMON_PILOT - Gain adjustment of the Enhanced Access Channel or Reverse Common Control Channel relative to the Reverse Pilot Channel.
The base station shall set this field to the correction factor to be used by mobile stations in setting the power of a code channel, expressed as a two's complement value in units of 0.125 dB (see [2]).

IC_THRESH - Interference correction threshold. The threshold level at which the interference correction begins to be applied.

The base station shall set this field to the negative of the interference correction threshold to be used by mobile stations to determine the interference correction, in units of 1 dB (see [2]).

IC_MAX - The maximum interference correction that can be applied.

The base station shall set this field to the maximum interference correction that can be applied, in units of 1 dB (see [2]).

NUM_MODE_PARM_REC - The number of mode-specific parameter records.

The base station shall set this field to the number of mode-specific parameter records included in the message, minus one.

The base station shall include NUM_MODE_PARM_REC + 1 occurrences of the following record:

EACH_PARM_REC_LEN - Length of the mode-specific parameters record.

The base station shall set this field to the total length, in octets, of the mode-specific parameters record, including the EACH_PARM_REC_LEN and RESERVED fields.

APPLICABLE_MODES - Access modes to which the access parameters specified in this record apply.

The base station shall set each subfield of the APPLICABLE_MODES field as follows: the base station shall set the subfield to ‘1’ if the access parameters included in this record are applicable to the corresponding Access Mode in Table 3.7.2.3.2.33-2; otherwise, the base station shall set the subfield to ‘0’.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC_MODE_1</td>
<td>1</td>
<td>Basic Access Mode</td>
</tr>
<tr>
<td>ACC_MODE_2</td>
<td>1</td>
<td>Reservation Access Mode</td>
</tr>
<tr>
<td>RESERVED</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

EACH_NOM_PWR - Nominal transmit power offset for the Enhanced Access Channels.
The base station shall set this field to the correction factor to be used by a mobile station in the open loop power estimate, expressed as a two's complement value in units of 1 dB (see [2]).

EACH_INIT_PWR - Initial power offset for the Enhanced Access Channels.

The base station shall set this field to the correction factor to be used by a mobile station in the open loop power estimate for the initial transmission on an Enhanced Access Channel, expressed as a two's complement value in units of 1 dB (see [2]).

EACH_PWR_STEP - Power increment for the Enhanced Access Channels.

The base station shall set this field to the value by which a mobile station is to increase their transmit power between successive access probes in an access probe sequence, in units of 1 dB.

EACH_NUM_STEP - Number of access probes.

The base station shall set this field to one less than the maximum number of access probes a mobile station is to transmit in a single access probe sequence.

EACH_PREAMBLE_ENABLED - Preamble enabled indicator for the Enhanced Access Channel.

The base station shall set this field to ‘1’ if EACH preambles related information is included in this message; otherwise, the base station shall set this field to ‘0’.

EACH_PREAMBLE_NUM_FRAC - The number of fractional preambles on the Enhanced Access Channels.

If EACH_PREAMBLE_ENABLED is set to ‘1’, the base station shall set this field to the number of fractional preambles minus one on the Enhanced Access Channels; otherwise, the base station shall omit this field.

EACH_PREAMBLE_FRAC_DURATION - Fractional preamble duration on the Enhanced Access Channels.

If EACH_PREAMBLE_ENABLED is set to ‘1’, the base station shall set this field to the fractional preamble duration minus one on an Enhanced Access Channel, in units of 1.25 ms; otherwise, the base station shall omit this field.

EACH_PREAMBLE_OFF_DURATION - Fractional preamble gated-off duration on the Enhanced Access Channels.

If EACH_PREAMBLE_ENABLED is set to ‘1’, the base station shall set this field to the fractional preamble gated-off duration (in units of 1.25 ms) after the transmission of each fractional preamble on an Enhanced Access Channel; otherwise, the base station shall omit this field.

EACH_PREAMBLE_ADD_DURATION - Additional preamble duration on the Enhanced Access Channels.
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.

**RESERVED** - Reserved bits.

The base station shall set this field to ‘000000’.

**EACH_PROBE_BKOFF** - Enhanced Access Channel probe backoff range.

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.

**EACH_BKOFF** - Enhanced Access Channel probe sequence backoff range.

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 and before the first enhanced access probe sequence of a response access.

**EACH_SLOT** - Slot duration for the Enhanced Access Channels.

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.

The base station shall set this field to a value between 0 and 63.

**EACH_SLOT_OFFSET1** - First slot offset for the Enhanced Access Channels.

The base station shall set this field so that the Enhanced Access Channel has a slot offset equal to \((EACH_ID \times EACH_SLOT_OFFSET2 + EACH_SLOT_OFFSET1) \mod (EACH_SLOT+1)\), 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.

**EACH_SLOT_OFFSET2** - Relative slot offset for the Enhanced Access Channels.

The base station shall set this field so that the Enhanced Access Channel has a slot offset equal to \((EACH_ID \times EACH_SLOT_OFFSET2 + EACH_SLOT_OFFSET1) \mod (EACH_SLOT+1)\), 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.

**RESERVED** - Reserved bits.

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’.

**BA_PARMS_LEN** - Length of Basic Access Mode parameter record.
The base station shall set this field to the total length, in octets, of Basic Access Mode parameters record included in the message, excluding the BA_PARMS_LEN but including the RESERVED fields. If there are no fields other than the BA_PARMS_LEN in this record, the base station shall set this field to ‘000’.

NUM_EACH_BA - Number of Enhanced Access Channels used for the Basic Access Mode.

If BA_PARMS_LEN is equal to ‘000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Enhanced Access Channels used for the Basic Access mode minus one.

EACH_BA_RATES_SUPPORTED - Supported rate words for the Basic Access mode on the Enhanced Access Channels.

If BA_PARMS_LEN is equal to ‘000’, the base station shall omit this field; otherwise, the base station shall include this field and set each subfield of the EACH_BA_RATES_SUPPORTED field as follows: the base station shall set the subfield to ‘1’ if the corresponding mode in Table 3.7.2.3.2.33-3 is allowed; otherwise the base station shall set the subfield to ‘0’.

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RATE_SIZE_1</td>
<td>1</td>
<td>9600 bps, 20 ms frame size</td>
</tr>
<tr>
<td>RATE_SIZE_2</td>
<td>1</td>
<td>19200 bps, 20 ms frame size</td>
</tr>
<tr>
<td>RATE_SIZE_3</td>
<td>1</td>
<td>19200 bps, 10 ms frame size</td>
</tr>
<tr>
<td>RATE_SIZE_4</td>
<td>1</td>
<td>38400 bps, 20 ms frame size</td>
</tr>
<tr>
<td>RATE_SIZE_5</td>
<td>1</td>
<td>38400 bps, 10 ms frame size</td>
</tr>
<tr>
<td>RATE_SIZE_6</td>
<td>1</td>
<td>38400 bps, 5 ms frame size</td>
</tr>
<tr>
<td>RESERVED</td>
<td>2</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

RESERVED - Reserved bits.

If BA_PARMS_LEN is equal to ‘000’, the base station shall omit this field; otherwise, the base station shall include as many bits as required to make the length of the Basic Access Mode record (excluding the BA_PARMS_LEN field but including the RESERVED field) an integral number of octets. The base station shall set each of these bits to ‘0’.

RA_PARMS_LEN - Length of Reservation Access Mode parameters record.
The base station shall set this field to the total length, in octets, of Reservation Access Mode parameters record included in the message, excluding the RA_PARMS_LEN but including the RESERVED field.

**NUM_EACH_RA** - Number of Enhanced Access Channels used for the Reservation Access Mode.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Enhanced Access Channels used for the Reservation Access mode minus one.

**NUM_CACH** - Number of Common Assignment Channels.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Common Assignment Channels supported by the system minus one.

**CACH_CODE_RATE** - Code Rate for the Common Assignment Channels.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

- If the CACH is operating in Spreading Rate 1, the base station shall set this field to '0' if the CACH Code Rate is 1/4 (see [2]).
- The base station shall set this field to ‘1’ if the CACH Code Rate is 1/2 (see [2]).
- If the CACH is operating in Spreading Rate 3, the base station shall set this field to ‘0’.

If RA_PARMS_LEN is not equal to '00000', the base station shall include (NUM_CACH + 1) occurrences of the following one field record:

**CACH_CODE_CHAN** - Code channel index for the Common Assignment Channel.

The base station shall set this field to the code channel index (see [2]) in the range 1 to 255 inclusive that the mobile station is to use on the Common Assignment Channel.

**NUM_RCCCH** - Number of Reverse Common Control Channels used for the Reservation Mode.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Reverse Common Control Channels used for the Reservation mode minus one.

**RCCCH_RATES_SUPPORTED** - Supported rate words on the Reverse Common Control Channels.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set each bit of the RCCCH_RATES_SUPPORTED field as follows: the base station shall set the bit to ‘1’ if the corresponding mode in Table 3.7.2.3.2.33-3 is allowed; otherwise the base station shall set the bit to ‘0’.
RCCCH_PREAMBLE_ENABLED - Preamble enabled indicator for the Reverse Common Control Channel.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If RCCCH preambles 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'.

RCCCH_PREAMBLE_NUM_FRAC - Number of fractional preambles on the Reverse Common Control Channels.

If RCCCH_PREAMBLE_ENABLED is included and is set to '1', the base station shall set this field to the number of fractional preambles minus one on the Reverse Common Control Channels; otherwise, the base station shall omit this field.

RCCCH_PREAMBLE_FRAC_DURATION - Fractional preamble duration for the Reverse Common Control Channels.

If RCCCH_PREAMBLE_ENABLED is included and is set to '1', the base station shall set this field to the fractional preamble duration minus one on a Reverse Common Control Channel, in units of 1.25 ms; otherwise, the base station shall omit this field.

RCCCH_PREAMBLE_OFF_DURATION - Fractional preamble gated-off duration on Reverse Common Control Channels.

If RCCCH_PREAMBLE_ENABLED is included and is set to '1', the base station shall set this field to the fractional preamble gated-off duration (in units of 1.25 ms) after the transmission of each fractional preamble on a Reverse Common Control Channel; otherwise, the base station shall omit this field.

RCCCH_PREAMBLE_ADD_DURATION - Additional preamble duration on the Reverse Common Control Channels.

If RCCCH_PREAMBLE_ENABLED is included and is set to '1', the base station shall set this field to the additional preamble duration on a Reverse Common Control Channel, in units of 1.25 ms; otherwise, the base station shall omit this field.

RCCCH_SLOT - Slot interval for the Reverse Common Control Channels.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to N where the slot duration on the Reverse Common Control Channel is \((N+1) \times 1.25\) ms. The base station shall set this field to a value between 0 and 63.

RCCCH_SLOT_OFFSET1 - First slot offset for the Reverse Common Control Channels.
If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it so that Reverse Common Control Channel has a slot offset equal to [(RCCCH_ID × RCCCH_SLOT_OFFSET2 + RCCCH_SLOT_OFFSET1) mod (RCCCH_SLOT+1)], where RCCCH_ID is the Reverse Common Control Channel Index. The base station shall set this field to a value between 0 and 63, in units of 1.25 ms.

RCCCH_SLOT_OFFSET2 - Second slot offset for the Reverse Common Control Channels.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it so that Reverse Common Control Channel has a slot offset equal to [(RCCCH_ID × RCCCH_SLOT_OFFSET2 + RCCCH_SLOT_OFFSET1) mod (RCCCH_SLOT+1)], where RCCCH_ID is the Reverse Common Control Channel Index. The base station shall set this field to a value between 0 and 63, in units of 1.25 ms.

RCCCH_NOM_PWR - Nominal transmit power offset for the Reverse Common Control Channels.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the correction factor to be used by a mobile station in the open loop power estimate, expressed as a two’s complement value in units of 1 dB (see [2]).

RCCCH_INIT_PWR - Initial power offset for the Reverse Common Control Channels.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the correction factor to be used by a mobile station in the open loop power estimate for the initial transmission on a Reverse Common Control Channel, expressed as a two’s complement value in units of 1 dB (see [2]).

RA_PC_DELAY - Power control delay for the Reverse Common Control Channel.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of power control bits the mobile is to disregard after initiating transmission on a Reverse Common Control Channel.

EACAM_CACH_DELAY - Maximum time after an Enhanced Access Channel header transmission for receiving a response on the Common Assignment Channel when Reverse Common Control Channel soft handoff has not been requested.
If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of complete Common Assignment Channel frames minus one, from the end of the 
*R-EACH Header*, for which a mobile station is to wait for the *Early Acknowledgment Channel Assignment Message* if the mobile station has not requested Reverse Common Control Channel soft handoff.

**RCCCH_HO_SUPPORTED** - Reverse Common Control Channel handoff supported indicator.

If RA_PARMS_LEN is equal to '00000', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if Reverse Common Control Channel handoff is supported by the base station; otherwise, the base station shall set this field to ‘0’.

**RCCCH_HO_THRESH** - Reverse Common Control Channel soft handoff threshold.

If RCCCH_HO_SUPPORTED is included and is set to ‘1’, the base station shall include this field; otherwise the base station shall omit this field.

If included, the base station shall set this field to:

\[ \left\lfloor -20 \times \log_{10} \text{pilot\_threshold} \right\rfloor \]

where \(\text{pilot\_threshold}\) is the pilot \(E_c/I_o\) threshold used to determine whether the mobile station requests Reverse Common Control Channel in soft handoff.

This is a positive value in units of 0.5 dB.

**EACAM_PCCAM_DELAY** - Maximum time after an Enhanced Access Channel header transmission for receiving a response on the Common Assignment Channel when Reverse Common Control Channel soft handoff has been requested.

If RCCCH_HO_SUPPORTED is included and is set to ‘1’, the base station shall include this field; otherwise the base station shall omit this field.

If included, the base station shall set this field to the number of complete Common Assignment Channel frames minus one, from the end of the *R-EACH Header*, for which a mobile station is to wait for the *Early Acknowledgment Channel Assignment Message* and *Power Control Channel Assignment Message* if the mobile station has requested Reverse Common Control Channel soft handoff (see [3]).

**NUM_CPCCH** - Number of Common Power Control Channels.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Common Power Control Channels supported minus one.
CPCCH_RATE - Power control rate for the Common Power Control Channels.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the value shown in Table 3.7.2.3.2.33-4 corresponding to the power control rate for the Common Power Control Channels.

<table>
<thead>
<tr>
<th>CPCCH_RATE (Binary)</th>
<th>Power Control Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>200 bps</td>
</tr>
<tr>
<td>01</td>
<td>400 bps</td>
</tr>
<tr>
<td>10</td>
<td>800 bps</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

If RA_PARMS_LEN is not equal to ‘00000’, the base station shall include (NUM_CPCCH + 1) occurrences of the following one field record:

CPCCH_CODE_CHAN - Code channel index for the Common Power Control Channel.

The base station shall set this field to the code channel index (see [2]) in the range 1 to 127 inclusive that the mobile station is to use on the Common Power Control Channel.

NUM_PCSCH_RA - Number of Power Control Subchannels used for the Reservation Access Mode.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the number of Power Control Subchannels used for the Reservation Access Mode minus one.

RESERVED - Reserved bits.

If RA_PARMS_LEN is equal to ‘00000’, the base station shall omit this field; otherwise, the base station shall include as many bits as required to make the length of the Reservation Access Mode record (excluding the RA_PARMS_LEN but including the RESERVED field) an integral number of octets.

The base station shall set each of these bits to ‘0’.

ACCT_INCL - Access Control based on Call Type (ACCT) information included indicator.

If the base station enables ACCT for at least one service option, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If the base station sets this field to ‘1’, then the base station shall also set at least one of ACCT_SO_INCL or ACCT_SO_GRP_INCL to ‘1’.

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ACCT_INCL_EMG - Access Control based on Call Type (ACCT) includes emergency calls indicator.

If ACCT_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '0' if the mobile station is not to apply ACCT to a call that is recognized by the mobile station to be an emergency call; otherwise, the base station shall set this field to '1'.

ACCT_AOC_BITMAP_INCL - Access Control based on Call Type (ACCT) access overload class bitmap included indicator.

If ACCT_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '0' if all mobile stations are to apply ACCT regardless of their access overload classes; otherwise, the base station shall set this field to '1' to indicate that the mobile station is to apply ACCT according to its access overload class.

ACCT_SO_INCL - Access Control based on Call Type (ACCT) service option included indicator.

If ACCT_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if at least one occurrence of the ACCT_SO field is included in this message; otherwise, the base station shall set this field to '0'.

NUM_ACCT_SO - Number of service options for Access Control based on Call Type (ACCT).

If ACCT_SO_INCL is not included, or is included and set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it to one less than the number of occurrences of the ACCT_SO field included in this message.

If ACCT_SO_INCL is included and set to '1', then the base station shall include NUM_ACCT_SO + 1 occurrences of the following variable-field record:

ACCT_AOC_BITMAP1 - Access Control based on Call Type (ACCT) access overload class bitmap.

If ACCT_AOC_BITMAP_INCL is set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

This field consists of the subfields defined in Table 3.7.2.3.2.2-1.
The base station shall set a subfield to ‘1’ to indicate that mobile stations having the corresponding access overload class are not permitted to perform access attempts using the associated service option ACCT_SO; otherwise, the base station shall set the subfield to ‘0’.

**ACCT_SO** - Access Control based on Call Type (ACCT) service option number.

The base station shall set this field to the value of the service option number (as specified in [30]) that has ACCT enabled.

**ACCT_SO_GRP_INCL** - Access Control based on Call Type (ACCT) service option group included indicator.

If ACCT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if at least one occurrence of the ACCT_SO_GRP field is included in this message; otherwise, the base station shall set this field to ‘0’.

**NUM_ACCT_SO_GRP** - Number of service option groups for Access Control based on Call Type (ACCT).

If ACCT_SO_GRP_INCL is not included, or is included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it to one less than the number of occurrences of the ACCT_SO_GRP field included in this message.

If ACCT_SO_GRP_INCL is included and set to ‘1’, then the base station shall include NUM_ACCT_SO_GRP + 1 occurrences of the following variable-field record:

**ACCT_AOC_BITMAP2** - Access Control based on Call Type (ACCT) access overload class bitmap.

If ACCT_AOC_BITMAP_INCL is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

This field consists of the subfields defined in Table 3.7.2.3.2.2-1. The base station shall set a subfield to ‘1’ to indicate that mobile stations having the corresponding access overload class are not permitted to perform access attempts using a service option specified by the associated ACCT_SO_GRP field; otherwise, the base station shall set the subfield to ‘0’.

**ACCT_SO_GRP** - Access Control based on Call Type (ACCT) service option group number.

The base station shall set this field to the value of the service option group number (as specified in [30]) whose members all have ACCT enabled.
### 3.7.2.3.2.34 Universal Neighbor List Message

**MSG_TAG: UNLM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>NUM_RADIO_INTERFACE</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>NUM_RADIO_INTERFACE occurrences of the following record:</td>
</tr>
<tr>
<td>RADIO_INTERFACE_TYPE</td>
<td>4</td>
</tr>
<tr>
<td>RADIO_INTERFACE_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Radio Interface Type-specific fields</td>
<td>8 × RADIO_INTERFACE_LEN</td>
</tr>
</tbody>
</table>

- **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).

- **NUM_RADIO_INTERFACE** - Number of interface types.
  - The base station shall set this field to the number of radio interface types for which neighbors are included in this message.
  - The base station shall include **NUM_RADIO_INTERFACE** occurrences of the following record, one occurrence for each radio interface for which neighbors are included in this message.

- **RADIO_INTERFACE_TYPE** - The radio interface type.
  - The base station shall set this field to the radio interface type of this record as specified in Table 3.7.2.3.2.34-1.
Table 3.7.2.3.2.34-1. Radio Interface Type

<table>
<thead>
<tr>
<th>RADIO_INTERFACE_TYPE (binary)</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>MC system</td>
</tr>
<tr>
<td>0001</td>
<td>Analog system</td>
</tr>
<tr>
<td>0010</td>
<td>HRPD System</td>
</tr>
<tr>
<td>0011-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

Table 3.7.2.3.2.34-1. Radio Interface Type

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 ‘0000’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_SRCH_MODE</td>
<td>2</td>
</tr>
<tr>
<td>SRCH_WIN_N</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_OFFSET_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_FIELDS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>USE_TIMING</td>
<td>1</td>
</tr>
<tr>
<td>GLOBAL_TIMING_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>GLOBAL_TX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>GLOBAL_TX_PERIOD</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NGHBR_SET_ENTRY_INFO</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_SET_ACCESS_INFO</td>
<td>1</td>
</tr>
<tr>
<td>NUM_NGHBR</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_NGHBR occurrences of the following subrecord:

\{(NUM_NGHBR)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGHBR_CONFIG</td>
<td>3</td>
</tr>
<tr>
<td>NGHBR_PN</td>
<td>9</td>
</tr>
<tr>
<td>BCCH_SUPPORT</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 \times RECORD_LEN</td>
</tr>
<tr>
<td>SEARCH_PRIORITY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SRCH_WIN_NGHBR</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_OFFSET_NGHBR</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_BAND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NGHBR_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>TIMING_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_TX_OFFSET</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NGHBR_TX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NGHBR_TX_PERIOD</td>
<td>0 or 7</td>
</tr>
<tr>
<td>ACCESS_ENTRY_HO</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACCESS_HO_ALLOWED</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

; (NUM_NGHBR)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESQ_ENABLED</td>
<td>1</td>
</tr>
<tr>
<td>RESQ_DELAY_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ALLOWED_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ATTEMPT_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_CODE_CHAN</td>
<td>0 or 11</td>
</tr>
<tr>
<td>RESQ_QOF</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_20MS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_5MS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RESQ_NUM_PREAMBLE_RC1_RC2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESQ_NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

(continues on next page)
FIELD | LENGTH (bits)
---------- | ------------------------------------------
RESQ_POWER_DELTA | 0 or 3

NUM_NGHBR occurrences of the following one-field record if RESQ_ENABLED is set to ‘1’:

\[
\{(NUM_NGHBR)\\NGHBR_RESQ_CONFIGURED 1\\}(NUM_NGHBR)\\(NUM_NGHBR)\\NGHBR_PDCH_SUPPORTED 1\\}(NUM_NGHBR)
\]

RESERVED | 0 – 7 (as needed)

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.

NGHBR_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>
<thead>
<tr>
<th>Value (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No search priorities or search windows</td>
</tr>
<tr>
<td>01</td>
<td>Search priorities</td>
</tr>
<tr>
<td>10</td>
<td>Search windows</td>
</tr>
<tr>
<td>11</td>
<td>Search windows and search priorities</td>
</tr>
</tbody>
</table>

SRCH_WIN_N - Search window size for the Neighbor Set.
If $\text{NGHBR\_SRCH\_MODE} = '00'$ or $\text{NGHBR\_SRCH\_MODE} = '01'$, the base station shall include the field $\text{SRCH\_WIN\_N}$ and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the value shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for the Neighbor Set.

**SRCH\_OFFSET\_INCL** - Neighbor pilot channel search window offset included.

If $\text{SRCH\_OFFSET\_NGHBR}$ field is included in the following records, the base station shall set this bit to ‘1’; otherwise, the base station shall set this bit to ‘0’.

**FREQ\_FIELDS\_INCL** - Frequency fields included.

If frequency fields are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**USE\_TIMING** - Use timing indicator.

If base station timing information is included for neighbor base stations, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**GLOBAL\_TIMING\_INCL** - Global timing included.

If $\text{USE\_TIMING}$ is set to ‘1’, the base station shall include the field $\text{GLOBAL\_TIMING\_INCL}$ and shall set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included globally for all neighbor base stations with $\text{TIMING\_INCL}$ equal to ‘1’, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**GLOBAL\_TX\_DURATION** - Global neighbor transmit time duration.

If $\text{GLOBAL\_TIMING\_INCL}$ is included and is set to ‘1’, the base station shall include the field $\text{GLOBAL\_TX\_DURATION}$ and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the duration of the base station transmit window, during each period, in units of 80 ms. The base station should set this field to a value of 3 or greater.

**GLOBAL\_TX\_PERIOD** - Global neighbor transmit time period.

If $\text{GLOBAL\_TIMING\_INCL}$ is included and is set to ‘1’, the base station shall include the field $\text{GLOBAL\_TX\_PERIOD}$ and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to duration of the period, in units of 80 ms.
NGHBR_SET_ENTRY_INFO - Neighbor Set access entry handoff information included indicator.
If the base station is including information on the Neighbor Set access entry handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

NGHBR_SET_ACCESS_INFO - Neighbor Set access handoff included indicator.
If the base station is including information on the Neighbor Set access handoff or access probe handoff, the base station shall set this field to ‘1’, otherwise, the base station shall set this field to ‘0’.

NUM_NGHBR - Number of neighbor pilot PN sequences.
The base station shall set this field to the number of neighbors included in the message.
The base station shall include one occurrence of the following subrecord for each pilot that
a mobile station is to place in its Neighbor Set.

NGHBR_CONFIG - Neighbor configuration.

The base station shall set this field to the value shown in
Table 3.7.2.3.2.34-3 corresponding to the configuration of this
neighbor.

Table 3.7.2.3.2.34-3. Neighbor Configuration Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Neighbor Configuration</th>
</tr>
</thead>
</table>
| 000            | The neighbor base station has the same number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channels as the current base station. 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:

- 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.

The position of the neighbor CDMA frequency assignment in the Extended CDMA Channel List Message transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the Extended CDMA Channel List Message transmitted by the current base station.

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.

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.

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. |
The neighbor base station does not have any frequencies with Primary Broadcast Control Channel/Forward Common Control Channel.

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.

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:

- 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.

The position of the neighbor CDMA frequency assignment in the *Extended CDMA Channel List Message* transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the *Extended CDMA Channel List Message* transmitted by the current base station.

This corresponding neighbor CDMA frequency assignment does have a Primary Paging Channel, at 9600 bps.
010  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.

The neighbor base station has a Primary Broadcast Control Channel on the following frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor base station has a Primary Broadcast Control Channel on the first CDMA Channel listed in the *Extended CDMA Channel List Message* transmitted by the current base station.

- If FREQ_INCL equals ‘1’ for this record, the neighbor base station has a Primary Broadcast Control Channel on the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ.

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.

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.

| 011  | The neighbor base station configuration is unknown but the neighbor base station has a Pilot Channel on the following frequency:

- If FREQ_INCL equals ‘0’ for this record, the neighbor CDMA frequency assignment is the same as the current CDMA frequency assignment and has a Pilot Channel.

- If FREQ_INCL equals ‘1’ for this record, the CDMA frequency assignment given by NGHBR_BAND and NGHBR_FREQ has a Pilot Channel. |
The neighbor base station has the same number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channel as the current base station.

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:

- 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.

The position of the neighbor CDMA frequency assignment in the *Extended CDMA Channel List Message* transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the *Extended CDMA Channel List Message* transmitted by the current base station.

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.

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.

<table>
<thead>
<tr>
<th>100</th>
<th>The neighbor base station has the same number of frequencies having Primary Broadcast Control Channel/Forward Common Control Channel as the current base station.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>- If FREQ_INCL equals ‘0’ for this record, this corresponding CDMA frequency assignment is the current CDMA frequency assignment.</td>
</tr>
<tr>
<td></td>
<td>- If FREQ_INCL equals ‘1’ for this record, this corresponding CDMA frequency assignment is given by NGHBR_BAND and NGHBR_FREQ.</td>
</tr>
<tr>
<td></td>
<td>The position of the neighbor CDMA frequency assignment in the <em>Extended CDMA Channel List Message</em> transmitted by the neighbor base station is the same as the position of this current CDMA frequency assignment in the <em>Extended CDMA Channel List Message</em> transmitted by the current base station.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>

| 101-111 | Reserved. |

<table>
<thead>
<tr>
<th>1</th>
<th>NGHBR_PN - Neighbor pilot PN sequence offset index.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The base station shall set this field to the pilot PN sequence offset for this neighbor, in units of 64 PN chips.</td>
</tr>
<tr>
<td>3</td>
<td>BCCH_SUPPORT - BCCH support indicator.</td>
</tr>
<tr>
<td>4</td>
<td>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:</td>
</tr>
<tr>
<td>5</td>
<td>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’.</td>
</tr>
<tr>
<td>6</td>
<td>ADD_PILOT_REC_INCL - Additional pilot information included indicator.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
The base station shall set this field to ‘1’ if additional pilot information listed in the NGHBR_PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

NGHBR_PILOT_REC_TYPE - Neighbor Pilot record type

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the NGHBR_PILOT_REC_TYPE value shown in Table 3.7.2.3.2.34-4 corresponding to the type of Pilot Record specified by this record.

<table>
<thead>
<tr>
<th>Description</th>
<th>NGHBR_PILOT_REC_TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1X Common Pilot with Transmit Diversity</td>
<td>000</td>
</tr>
<tr>
<td>1X Auxiliary Pilot</td>
<td>001</td>
</tr>
<tr>
<td>1X Auxiliary Pilot with Transmit Diversity</td>
<td>010</td>
</tr>
<tr>
<td>3X Common Pilot</td>
<td>011</td>
</tr>
<tr>
<td>3X Auxiliary Pilot</td>
<td>100</td>
</tr>
</tbody>
</table>

All other NGHBR_PILOT_REC_TYPE values are reserved

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the NGHBR_PILOT_REC_TYPE of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.
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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

- **QOF**: Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.
- **WALSH_LENGTH**: Length of the Walsh Code.
- **AUX_WALSH**: Walsh Code for the Auxiliary Pilot.
- **AUX_TD_POWER_LEVEL**: Auxiliary Transmit Diversity Pilot Power Level.
- **TD_MODE**: Transmit Diversity mode.
- **RESERVED**: Reserved bits.

If NGHBR_PILOT_REC_TYPE is equal to ‘011’, the base station shall include the following fields:
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.

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.

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2 bits</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3 bits</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3 bits</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

1. **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.

2. **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.

3. **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.

4. **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.

The base station shall set this field to the WALSH_LENGTH value shown in Table 3.7.2.3.22–6 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.

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 on the frequency of the primary pilot.

ADD_INFO_INCL1 - Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.

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’.

QOF1 - Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH1 - Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

The base station shall set this field to the WALSH_LENGTH value shown in Table 3.7.2.3.22–6 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.

AUX_PILOT_WALSH1 - Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

ADD_INFO_INCL2 - Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.
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’.

QOF2 - Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH2 - Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

AUX_PILOT_WALSH2 - Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

SEARCH_PRIORITY - Pilot Channel search priority.

If NGHBR_SRCH_MODE = ‘01’ or NGHBR_SRCH_MODE = ‘11’, the base station shall include the field SEARCH_PRIORITY and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the search priority for the Pilot Channel corresponding to NGHBR_PN. The base station shall set the search priority as shown in Table 3.7.2.3.2.34-5.
Table 3.7.2.3.2.34-5. Search Priority Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Search Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Low</td>
</tr>
<tr>
<td>01</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Very High</td>
</tr>
</tbody>
</table>

2

SRCH_WIN_NGHBR - Neighbor pilot channel search window size.

3

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.

4

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.

5

SRCH_OFFSET_NGHBR - Neighbor pilot channel search window size offset.

6

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.

7

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.

8

FREQ_INCL - Frequency included indicator.

9

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.

10

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’.

11

NGHBR_BAND - Neighbor band class.

12

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.
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.

**NGHBR_FREQ** - Neighbor frequency assignment.

If the FREQ_INCL field is omitted or is set to ‘0’, the base station shall omit this field.

If the FREQ_INCL field 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 Broadcast Control Channel/Forward Common Control Channel the mobile station is to search.

If the FREQ_INCL field 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 Broadcast Control Channel/Forward Common Control Channel the mobile station is to search.

**TIMING_INCL** - Timing included indicator.

If USE_TIMING is set to ‘1’, the base station shall include the field TIMING_INCL and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included for this neighbor base station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NGHBR_TX_OFFSET** - Neighbor transmit time offset.

If TIMING_INCL is included and is set to ‘1’, the base station shall include the field NGHBR_TX_OFFSET and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the time offset, in units of 80 ms, from the beginning of the neighbor timing period to the beginning of the first base station transmit window within the period. The beginning of the neighbor timing period occurs when ⌊t/4⌋ mod (16384)= 0.

**NGHBR_TX_DURATION** - Neighbor transmit time duration.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_DURATION and shall set this field as described below; otherwise, the base station shall omit this field.
The base station shall set this field to 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.

**NGHBR_TX_PERIOD** - Neighbor transmit time period.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_PERIOD and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to duration of the period, in units of 80 ms.

**ACCESS_ENTRY_HO** - Access entry handoff permitted when entering the System Access State.

If NGHBR_SET_ENTRY_INFO is equal to ‘1’, the base station shall include the field ACCESS_ENTRY_HO and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access entry handoff to the base station associated with the corresponding pilot between the time it receives a message on the Paging Channel when in the Mobile Station Idle State and it enters the System Access State to respond to the message; otherwise, the base station shall set this field to ‘0’.

**ACCESS_HO_ALLOWED** - Access handoff and access probe handoff permitted for the corresponding pilot while in the System Access State.

If NGHBR_SET_ACCESS_INFO is equal to ‘1’, the base station shall include the field ACCESS_HO_ALLOWED and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform an access handoff or access probe handoff to the base station associated with the corresponding pilot when the mobile station is in the System Access State (see 2.6.3.1.8 and 2.6.3.1.9); otherwise, the base station shall set this field to ‘0’.

**RESQ_ENABLED** - Call rescue feature enabled indicator.

The base station shall set this field to ‘1’ if the mobile station is permitted to perform a Reverse Enhanced Access Channel (R-EACH) [see 2.6.3.1.8 and 2.6.3.1.9]; otherwise, the base station shall set this field to ‘0’.
1 RESQ_DELAY_TIME  –  Call rescue delay timer value.
2 If RESQ_ENABLED is set to ‘0’, the base station shall omit
3 this field; otherwise, the base station shall include this field
4 and set it as follows:
5 The base station shall set this field to the value of the call
6 rescue delay timer to be used by the mobile station, in units
7 of 80 ms.

8 RESQ_ALLOWED_TIME  –  Call rescue allowed timer value.
9 If RESQ_ENABLED is set to ‘0’, the base station shall omit
10 this field; otherwise, the base station shall include this field
11 and set it as follows:
12 The base station shall set this field to the value of the call
13 rescue allowed timer to be used by the mobile station, in
14 units of 80 ms.

15 RESQ_ATTEMPT_TIME  –  Call rescue attempt timer value.
16 If RESQ_ENABLED is set to ‘0’, the base station shall omit
17 this field; otherwise, the base station shall include this field
18 and set it as follows:
19 The base station shall set this field to the value of the call
20 rescue attempt timer to be used by the mobile station, in
21 units of 40 ms.

22 RESQ_CODE_CHAN  –  Code channel index for the Rescue Channel.
23 If RESQ_ENABLED is set to ‘0’, the base station shall omit
24 this field; otherwise, the base station shall include this field
25 and set it as follows:
26 The base station shall set this field to the code channel index
27 (see [2]) that the mobile station is to use on the Forward
28 Fundamental Channel when attempting Call Rescue Soft
29 Handoff with the associated neighbor pilot.
30 If Radio Configuration 1, 2, 3, or 5 (see [2]) is used, the base
31 station shall set this field in the range 1 to 63 inclusive. If
32 Radio Configuration 4, 6 or 8 is used, the base station shall
33 set this field in the range 1 to 127 inclusive. If Radio
34 Configuration 7 or 9 is used, the base station shall set this
35 field in the range 1 to 255 inclusive.

36 RESQ_QOF  –  Quasi-Orthogonal Function mask identifier for the Rescue
37 Channel.
38 If RESQ_ENABLED is set to ‘0’, the base station shall omit
39 this field; otherwise, the base station shall include this field
40 and set it as follows:
41 The base station shall set this field to the quasi-orthogonal
42 function mask identifier (see [2]) that the mobile station is to
43 use on the Forward Fundamental Channel when attempting
44 Call Rescue Soft Handoff with the associated neighbor pilot.
RESQ_MIN_PERIOD_INCL – Minimum time between consecutive rescues included indicator.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the RESQ_MIN_PERIOD field is included in this message; otherwise, the base station shall set this field to ‘0’.

This field is set to ‘0’ if there is no minimum time restriction between consecutive rescues.

RESQ_MIN_PERIOD – Minimum time between consecutive rescues.

If RESQ_MIN_PERIOD_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less than the minimum time after a successful call rescue (i.e. receipt of N3m good frames by the mobile station after the rescue attempt timer is enabled) before any subsequent call rescue attempts can be initiated, in units of 2 seconds.

RESQ_NUM_TOT_TRANS_INCL – The required number of transmissions before declaring L2 Acknowledgment Failure when Call Rescue is enabled included indicator.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the required number of transmissions of a regular PDU and mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESQ_NUM_TOT_TRANS_20MS – The required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

If RESQ_NUM_TOT_TRANS_INCL field is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled. The base station shall not set this field to a value greater than N1m.

RESQ_NUM_TOT_TRANS_5MS – The required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.
If RESQ_NUM_TOT_TRANS_INCL field is not included or is included and 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 required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

The base station shall not set this field to a value greater than N15m.

RESQ_NUM_PREAMBLE_RC1_RC2 – The Traffic Channel preamble length for Call Rescue Soft Handoff when operating in Radio Configuration 1 or 2.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble, in 20 ms units, that the mobile station is to send when performing a call rescue soft handoff.

RESQ_NUM_PREAMBLE – The Traffic Channel preamble Length for Call Rescue Soft Handoff when operating in Radio Configuration greater than 2.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a call rescue soft handoff, as follows:

The base station shall set this field to the value shown in Table 3.7.3.2.17-1 corresponding to the Traffic Channel preamble length in 1.25 ms units.

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

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to a value by which mobile stations are to adjust the last closed-loop power level when re-enabling the transmitter for call rescue, expressed as a two’s complement value in units of 1 dB.

The base station shall include NUM_NGHBR occurrences of the following one-field record if RESQ_ENABLED is set to ‘1’. The base station shall use the same order for the following field as is used for the NGHBR_PN fields listed in this message.

NGHBR_RESQ_CONFIGURED – Neighbor Rescue Channel configured indicator.

The base station shall set this field to ‘1’ if a Rescue Channel is configured for this neighbor pilot; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_NGHBR occurrences of the following variable length record. The base station shall use the same order for the following field as is used for the NGHBR_PN fields listed in this message.
NGHBR_PDCH_SUPPORTED – Neighbor PDCH supported indicator.

The base station shall set this field to ‘1’ if PDCH is configured for this neighbor pilot; otherwise, the base station shall set this field to ‘0’.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire RADIO_INTERFACE_TYPE record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If RADIO_INTERFACE_TYPE is equal to ‘0001’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_ANALOG_NGHBR</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_ANALOG_NGHBR occurrences of the following subrecord:

{(NUM_ANALOG_NGHBR)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>SYS_A_B</td>
<td>2</td>
</tr>
</tbody>
</table>

} (NUM_ANALOG_NGHBR)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

NUM_ANALOG_NGHBR - Number of neighboring analog systems.

The base station shall set this field to the number of neighboring analog systems included in the message.

The base station shall include one occurrence of the following subrecord for each neighboring analog system included in the message:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td></td>
</tr>
<tr>
<td>SYS_A_B</td>
<td></td>
</tr>
</tbody>
</table>

BAND_CLASS - Band class.

The base station shall set this field to the CDMA band class, as specified in [30].

SYS_A_B - System A/B.

If BAND_CLASS is set to ‘00000’ or to ‘00011’, the base station shall set this field to the value shown in Table 3.7.2.3.2.34-6 corresponding to the availability of neighboring analog systems; otherwise, the base station shall set this field to ‘00’.
Table 3.7.2.3.2.34-6. Cellular System A/B

<table>
<thead>
<tr>
<th>Cellular System A/B</th>
<th>Value (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>00</td>
</tr>
<tr>
<td>System A</td>
<td>01</td>
</tr>
<tr>
<td>System B</td>
<td>10</td>
</tr>
<tr>
<td>System A and B</td>
<td>11</td>
</tr>
</tbody>
</table>

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire RADIO_INTERFACE_TYPE record equal to an integer number of octets. The base station shall set these bits to '0'.

If RADIO_INTERFACE_TYPE is equal to '0010', the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_HRPD_NGHBR</td>
<td>6</td>
</tr>
<tr>
<td>HRPD_NGHBR_REC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>NGHBR_PN</td>
<td>9</td>
</tr>
<tr>
<td>NGHBR_FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_BAND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NGHBR_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>PN_ASSOCIATION_IND</td>
<td>1</td>
</tr>
<tr>
<td>DATA_ASSOCIATION_IND</td>
<td>1</td>
</tr>
<tr>
<td>HRPD_NGHBR_REC_RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>

NUM_HRPD_NGHBR - Number of neighbor pilot PN sequences.

The base station shall set this field to the number of HRPD neighbors included in the message.

The base station shall include one occurrence of the following subrecord for each pilot that a mobile station is to place in its HRPD Neighbor Set.

HRPD_NGHBR_REC_LEN - HRPD neighbor record length
The base station shall set this field to one less than the number of octets included in this HRPD neighbor record including this field.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGHBR_PN</td>
<td>Neighbor pilot PN sequence offset index.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the pilot PN sequence offset for</td>
</tr>
<tr>
<td></td>
<td>this neighbor, in units of 64 PN chips.</td>
</tr>
<tr>
<td>NGHBR_FREQ_INCL</td>
<td>Neighbor frequency information included indicator.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the neighbor frequency</td>
</tr>
<tr>
<td></td>
<td>information is included in this message; otherwise, the base station shall</td>
</tr>
<tr>
<td></td>
<td>set this field to ‘0’.</td>
</tr>
<tr>
<td>NGHBR_BAND</td>
<td>Neighbor band class.</td>
</tr>
<tr>
<td></td>
<td>If the NGHBR_FREQ_INCL field is set to ‘0’, the base station shall omit</td>
</tr>
<tr>
<td></td>
<td>this field; otherwise, the base station shall include this field and set it</td>
</tr>
<tr>
<td></td>
<td>as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the CDMA band class, as specified</td>
</tr>
<tr>
<td></td>
<td>in [30], corresponding to the CDMA frequency assignment for the CDMA Channel</td>
</tr>
<tr>
<td></td>
<td>containing this neighbor.</td>
</tr>
<tr>
<td>NGHBR_FREQ</td>
<td>Neighbor frequency assignment.</td>
</tr>
<tr>
<td></td>
<td>If the NGHBR_FREQ_INCL field is set to ‘0’, the base station shall omit</td>
</tr>
<tr>
<td></td>
<td>this field; otherwise, the base station shall include this field and set it</td>
</tr>
<tr>
<td></td>
<td>as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the CDMA Channel number, in the</td>
</tr>
<tr>
<td></td>
<td>specified CDMA band class, corresponding to the CDMA frequency assignment</td>
</tr>
<tr>
<td></td>
<td>for this neighbor.</td>
</tr>
<tr>
<td>PN_ASSOCIATION_IND</td>
<td>Neighbor PN association indicator.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the system identified by</td>
</tr>
<tr>
<td></td>
<td>this system record has the same PN assignment as the 1x system to which this</td>
</tr>
<tr>
<td></td>
<td>BS belongs; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>DATA_ASSOCIATION_IND</td>
<td>Neighbor data association indicator.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the system identified by</td>
</tr>
<tr>
<td></td>
<td>this system record can reach the same set of PDSNs as the 1x system to which</td>
</tr>
<tr>
<td></td>
<td>this BS belongs; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>HRPD_NGHBR_REC_RESERVED</td>
<td>HRPD neighbor record reserved bits.</td>
</tr>
<tr>
<td></td>
<td>The base station shall add reserved bits as needed in order to make the</td>
</tr>
<tr>
<td></td>
<td>length of this record equal to an integer number of octets. The base station</td>
</tr>
</tbody>
</table>
|                      | shall set these bits to ‘0’.
3.7.2.3.2.35 Security Mode Command Message

**MSG_TAG: SMCM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CHANGE_KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

**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.
3.7.2.3.2.36 Universal Page Message

MSG_TAG: UPM

When Layer 3 at the base station sends a PDU corresponding to the Universal Page Message to Layer 2, it also sends the UPM Common fields to Layer 2. These UPM Common fields and PDUs are used by Layer 2 to assemble the Layer 2 PDU or PDUs corresponding to the Universal Page Message (see [4]).

UPM Common Fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONFIG_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>ACC_MSG_SEQ</td>
<td>6</td>
</tr>
<tr>
<td>READ_NEXT_SLOT</td>
<td>1</td>
</tr>
<tr>
<td>READ_NEXT_SLOT_BCAST</td>
<td>1</td>
</tr>
</tbody>
</table>

PDU Format for a mobile station-addressed page:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>ADD_MS_RECORD</td>
<td>0 or 8 × EXT_MS_SDU_LENGTH (see [4])</td>
</tr>
</tbody>
</table>

PDU Format for a mobile station-directed message announcement: There are no Layer 3 fields associated with this record.

PDU Format for an enhanced broadcast page:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCCH_INDEX/BCN</td>
<td>3</td>
</tr>
<tr>
<td>TIME_OFFSET</td>
<td>10</td>
</tr>
<tr>
<td>REPEAT_TIME_OFFSET</td>
<td>0 or 5</td>
</tr>
<tr>
<td>ADD_BCAST_RECORD</td>
<td>0 or 8 × EXT_BCAST_LENGTH (see [4])</td>
</tr>
</tbody>
</table>
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.

BCCH_INDEX - BCCH index.
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.
Otherwise, The base station shall set this field to one less than Broadcast Control Channel Number (BCN) to which the mobile station is being redirected.
The base station shall not set this field to ‘000’[reserved] or ‘001’.

TIME_OFFSET - BCCH offset.
If NUM_BCCH_BCAST is equal to ‘000’, base station shall set this field to one less than the time offset, in units of 40 ms, from the beginning of the slot in which this message began to the beginning of the Forward Common Control Channel slot to which the mobile station is being directed.
The base station shall set this field to one less than the time offset, in units of 40 ms, from the beginning of the slot in which this message began to the beginning of the Broadcast Control Channel slot to which the mobile station is being directed.

**REPEAT_TIME_OFFSET** - BCCH offset of repeat.

If **EXT_BCAST_SDU_LENGTH_IND** (see [4]) is set to ‘01’ or ‘11’, the base station shall set this field as follows:

- If **NUM_BCCH_BCAST** is equal to ‘000’, the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by **TIME_OFFSET** to the beginning of the Forward Common Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message.

- **Otherwise**, the base station shall set this field to one less than the time offset, in units of 40 ms, from the time specified by **TIME_OFFSET** to the beginning of the Broadcast Control Channel slot to which the mobile station is being directed for a repeat of the broadcast message.

Otherwise, the base station shall omit this field.

**ADD_BCAST_RECORD** - Additional broadcast information record.

The base station shall omit this field if **EXT_BCAST_SDU_LENGTH_IND** (see [4]) is set to ‘00’ or ‘01’; otherwise, the base station shall include **EXT_BCAST_SDU_LENGTH** (see [4]) octets in this field.
### 3.7.2.3.2.37 Authentication Request Message

**MSG_TAG: AUREQM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDA</td>
<td>128</td>
</tr>
<tr>
<td>CON_SQN</td>
<td>48</td>
</tr>
<tr>
<td>AMF</td>
<td>16</td>
</tr>
<tr>
<td>MAC_A</td>
<td>64</td>
</tr>
</tbody>
</table>

- **RANDA** – The Random Challenge Number. The base station shall set this field to the value of the Random Challenge Number in the authentication vector.
- **CON_SQN** – Concealed Sequence Number. The base station shall set this field to SQN ⊕ AK (Concealed Sequence Number), where SQN and AK are the sequence number and the anonymity key in the authentication vector, respectively.
- **AMF** – Authentication Management Field. The base station shall set this field to the value of the Authentication Management Field in the authentication vector.
- **MAC_A** – Message Authentication Code. The base station shall set this field to the value of the Message Authentication Code in the authentication vector.
3.7.2.3.2.38 BCMC Service Parameters Message

MSG_TAG: BSPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>BSPM_MSG_SEQ</td>
<td>6</td>
</tr>
</tbody>
</table>

**(BSPM COMMON RECORD)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSPM_COMMON_RECORD_LEN</td>
<td>4</td>
</tr>
</tbody>
</table>

**(BSPM COMMON RECORD)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIFF_BSPM</td>
<td>1</td>
</tr>
<tr>
<td>AUTO_REQ_ALLOWED_IND</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_CHG_REG_REQUIRED</td>
<td>1</td>
</tr>
<tr>
<td>FREQ_CHG_REG_TIMER_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FREQ_CHG_REG_TIMER</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REGISTRATION_REQ_FLAG_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REGISTRATION_REQ_TIMER_PERIOD</td>
<td>0 or 8</td>
</tr>
<tr>
<td>BCMC_ON_TRAFFIC_SUP</td>
<td>1</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_REQUIRED</td>
<td>1</td>
</tr>
<tr>
<td>NON_DEFAULT_VALUEINCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACH_TIME_STAMP_SHORT_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_LONG_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_UNIT</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_FSCH</td>
<td>7</td>
</tr>
<tr>
<td>FSCH_PLCM_SCHEME_IND</td>
<td>2</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>8</td>
</tr>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FRAMING_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>FCS_LENGTH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>BSPM_COMMON_RECORD_RESERVED</td>
<td>0 ~ 7 (as needed)</td>
</tr>
</tbody>
</table>

**NUM_FSCH** occurrences of the following variable length record:
### NUM_FSCH

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCH_RECORD_LEN</td>
<td>4</td>
</tr>
<tr>
<td>FSCH_BAND_CLASS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FSCH_CDMA_FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>FSCH_CODE_CHAN</td>
<td>11</td>
</tr>
<tr>
<td>FSCH_PLCM_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FSCH_PLCM_INDEX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FSCH_MUX_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>FSCH_RC</td>
<td>5</td>
</tr>
<tr>
<td>FSCH_CODING</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_RATE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_OFFSET</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FSCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>FSCH_FRAME_40_USED</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_FRAME_80_USED</td>
<td>1</td>
</tr>
<tr>
<td>TDM_STRUCTURE_IND</td>
<td>1</td>
</tr>
<tr>
<td>TDM_SLOT_LENGTH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>TDM_SUPER_PERIOD_MASK_LEN</td>
<td>0 or 2</td>
</tr>
<tr>
<td>TDM_MEGA_PERIOD_MASK_LEN</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FSCH_RECORD_RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>

### NUM_BCMC_PROGRAMS

NUM_BCMC_PROGRAMS plus one occurrences of the following variable length record:

### NUM_BCMC_PROGRAMS+1

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_RECORD_LEN</td>
<td>4</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>BCMC_PROG_RAM_ID_LEN+1</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
</tbody>
</table>
### NUM_FLOW_DISCRIMINATOR

<table>
<thead>
<tr>
<th>NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:</th>
</tr>
</thead>
</table>

{ (NUM_FLOW_DISCRIMINATOR+1) or 1 occurrences of the following variable length record: |

### BCMC_FLOW_DISCRIMINATOR

<table>
<thead>
<tr>
<th>BCMC_FLOW_DISCRIMINATOR HEAD RECORD_LEN</th>
</tr>
</thead>
</table>

### BCMC_FLOW_DISCRIMINATOR Variable (Value of BCMC_FLOW_DISCRIMINATOR_LEN)

<table>
<thead>
<tr>
<th>FLOW_INFO_ON_OTHER_FREQ</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BSPM_CDMA_FREQ_SAME_AS_PREV</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BSPM_BAND_CLASS</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BSPM_CDMA_FREQ</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>REGISTRATION_REQ_FLAG</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>AUTH_SIGNATURE_REQ_IND</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BCMC_FLOW_ON_TRAFFIC_IND</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NUM_LPM_ENTRIES</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BCMC_FLOW_DISCRIMINATOR Head RECORD_RESERVED</th>
</tr>
</thead>
</table>

### NUM_LPM_ENTRIES occurrences of the following variable length record:

{ (NUM_LPM_ENTRIES) occurrences of the following variable length record: |

### FSCH_ID

<table>
<thead>
<tr>
<th>TDM_USED_IND</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDM_MASK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDM_SUPER_PERIOD_MASK_INCL</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDM_SUPER_PERIOD_MASK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDM_MEGA_PERIOD_MASK_INCL</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>TDM_MEGA_PERIOD_MASK</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>BSR_ID</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>NUM_NGHBR</th>
</tr>
</thead>
</table>

### NUM_NGHBR occurrences of the following variable length record:

{ (NUM_NGHBR) occurrences of the following variable length record: |
<table>
<thead>
<tr>
<th>Variable</th>
<th>Value Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGHBR_RECORD_LEN</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_PN</td>
<td>9</td>
</tr>
<tr>
<td>NGHBR_BCMC_CONFIG</td>
<td>3</td>
</tr>
<tr>
<td>NGHBR_BSR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NGHBR_FSCH_BAND_CLASS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NGHBR_FSCH_CDMA_FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>NGHBR_FSCH_CODE_CHAN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_CODE_CHAN</td>
<td>0 or 11</td>
</tr>
<tr>
<td>NGHBR_FSCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_PLCM_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_PLCM_INDEX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NGHBR_FSCH_MUX_OPTION</td>
<td>0 or 16</td>
</tr>
<tr>
<td>NGHBR_FSCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NGHBR_FSCH_CODING</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_OUTERCODE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_OUTERCODE_RATE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NGHBR_FSCH_OUTERCODE_OFFSET</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NGHBR_FSCH_NUM_BITS_INDEX</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NGHBR_FSCH_FRAME_40_USED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_FSCH_FRAME_80_USED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_RECORD_RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>

\(\text{(NUM_NGHBR)}\)

\(\text{(NUM_LPM_ENTRIES)}\)

\(\text{(NUM_FLOW_DISCRIMINATOR+1)}\) or 1

\(\text{(NUM_BCMC_PROGRAMS+1)}\)

```c
BCMC_NUM_BCCN_NGHBR 3

BCMC_NUM_BCCN_NGHBR occurrences of the following variable length record

\(\text{(BCMC_NUM_BCCN_NGHBR)}\)

BCMC_BCCN_NGHBR_PN 9

BCMC_SR1_BCCN_NON_TD_INCL 1

BCMC_SR1_NON_TD_FREQ_INCL 0 or 1

BCMC_SR1_CDMA_FREQ_NON_TD 0 or 11
```
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.

BSPM_MSG_SEQ - BSPM sequence number.
The base station shall set this field to the BCMC Service Parameters Message sequence number.

BSPM_COMMON_RECORD_LEN - BSPM common part record length.
The base station shall set this field to one minus the number of octets included in this BSPM common part record including this field.

DIFF_BSPM - Differential BSPM indicator.
If this message contains all the information with respect to the last transmitted BCMC Service Parameters Message, the base station shall set this field to '0'; if this message contains only information that changed with respect to the last transmitted BCMC Service Parameters Message, the base station shall set this field to '1'.

AUTO_REQ_ALLOWED_IND - Autonomous BCMC request allowed indicator.
The base station shall set this field to '1' to indicate that the mobile station is allowed to request for a BCMC flow that is not included in this message; otherwise, the base station shall set this field to '0'.

FREQ_CHG_REG_REQUIRED - Frequency change BCMC registration required indication.
The base station shall set this field to ‘1’ to indicate that the mobile station is to send a Registration Message whenever mobile station changes frequency while monitoring at least one of the BCMC flows listed on this message; otherwise, the base station shall set this field to ‘0’.

FREQ_CHG_REG_TIMER_IND - Frequency change registration timer indicator.

The base station shall omit this field if the FREQ_CHG_REG_REQUIRED field is set to ‘0’; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ to indicate frequency change registration timer is enabled; otherwise, the base station shall set this field to ‘0’.

FREQ_CHG_REG_TIMER - Frequency change registration timer.

If the field FREQ_CHG_REG_TIMER_IND is not included or is included and 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 a value as specified in Table 3.7.2.3.2.38-1 to indicate the duration of time within which the mobile station is not to perform another registration due to a frequency change.

Table 3.7.2.3.2.38-1. Value of Frequency change registration timer

<table>
<thead>
<tr>
<th>FREQ_CHG_REG_TIMER Value (binary)</th>
<th>Timer Length (Minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Reserved</td>
</tr>
<tr>
<td>001</td>
<td>1</td>
</tr>
<tr>
<td>010</td>
<td>2</td>
</tr>
<tr>
<td>011</td>
<td>5</td>
</tr>
<tr>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>101</td>
<td>20</td>
</tr>
<tr>
<td>110</td>
<td>30</td>
</tr>
<tr>
<td>111</td>
<td>60</td>
</tr>
</tbody>
</table>

REGISTRATION_REQ_FLAG_INCL - Registration Required Flag Included.
The base station shall set this field to ‘1’ if the registration is required for at least one BCMC flow listed in this message; otherwise, the base station shall set this field to ‘0’.

**REGISTRATION_REQ_TIMER_PERIOD** - Registration Required Timer Period.

If **REGISTRATION_REQ_FLAG_INCL** is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to \( \log_2 \) of the maximum value of the **RegistrationRequiredTimer** divided by 80 msec.

**BCMC_ON_TRAFFIC_SUP** - BCMC on traffic channel supported indicator.

The base station shall set this field to ‘1’ to indicate that the BCMC feature is supported on traffic channel; otherwise, the base station shall set this field to ‘0’.

**AUTH_SIGNATURE_REQUIRED** - Authorization signature required indication.

The base station shall set this field to ‘1’ to indicate that the mobile station is to include the authorization signature in the Registration Message, Origination Message, or Page Response Message for at least one of the BCMC flows included in this message; otherwise, the base station shall set this field to ‘0’.

**NON_DEFAULT_VALUE_INCLUDED** - Non-default values for Authorization signature included indicator.

If the **AUTH_SIGNATURE_REQUIRED** 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:

The base station shall set this field to ‘0’ if default values are to be used to generate the Authorization signature; otherwise, the base station shall set this field to ‘1’.

**ACH_TIME_STAMP_SHORT_LENGTH** - Length of time stamp for use on r-csch.

If the **NON_DEFAULT_VALUE_INCLUDED** field is not included or is included and 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 length of the time stamp, in units of bits, included on the Registration Message, Origination Message, or Page Response Message transmitted on r-csch.

**TIME_STAMP_LONG_LENGTH** - Length of time stamp.

If the **NON_DEFAULT_VALUE_INCLUDED** field is not included or is included and 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 length of the time stamp, in units of bits, used to generate the Authorization signature.

**TIME_STAMP_UNIT** - Unit for time stamp length.
If the NON_DEFAULT_VALUE_INCLUDED field is not included or is included and 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 unit of the time stamp length field as follows: the unit of the time stamp field shall be $2^{\text{value of this field}}$.

**NUM_FSCH** - Number of Forward Broadcast Supplemental Channels.

The base station shall set this field to the number of Forward Broadcast Supplemental Channels being transmitted by this base station in any one of the frequencies.

**FSCH_PLCM_SCHEME_IND** - Forward Broadcast Supplemental Channel Public Long Code Mask Scheme Indicator.

The base station shall set this field as specified in Table 3.7.2.3.2.38-2 to indicate the Forward Supplemental Channel public long code mask scheme used.

**Table 3.7.2.3.2.38-2.** Forward Supplemental Channel PLCM scheme used

<table>
<thead>
<tr>
<th>FSCH_PLCM_SCHEME_IND (binary)</th>
<th>PLCM scheme used</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>PLCM autonomously generated from BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow on each Forward Supplemental Channel</td>
</tr>
<tr>
<td>01</td>
<td>PLCM generated from FSCH_PLCM_INDEX signaled for each Forward Supplemental Channel</td>
</tr>
<tr>
<td>10</td>
<td>PLCM scheme individually specified for each Forward Supplemental Channel</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**NUM_BCMC_PROGRAMS** - Number of BCMC Programs.

The base station shall set this field to the number of BCMC programs available in this base station in any one of the frequencies minus one.

The base station shall not set this field to '000000'.

**USE_TIME** - Use action time indicator.
If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**ACTION_TIME** - Action time.

If the USE_TIME field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it to the System Time in units of 80 ms (modulo 64) at which this message takes effect.

**FRAMING_TYPE** - Framing type.

The base station shall set this field as specified in Table 3.7.2.3.2.38-7 to indicate the framing type used.

**Table 3.7.2.3.2.38-7. FRAMING_TYPE values**

<table>
<thead>
<tr>
<th>FRAMING_TYPE (binary)</th>
<th>Framing type used</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>HDLC-like</td>
</tr>
<tr>
<td>01</td>
<td>Segment-based</td>
</tr>
<tr>
<td>10</td>
<td>Reserved</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**FCS_LENGTH** - FCS Length.

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:

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.

**Table 3.7.2.3.2.38-8. FCS_LENGTH values**

<table>
<thead>
<tr>
<th>FCS_LENGTH (binary)</th>
<th>Length of FCS (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>0</td>
</tr>
<tr>
<td>01</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>Reserved</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**BSPM_COMMON_RECORD_RESERVED** - BSPM common part record reserved bits.
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'.

The base station shall include NUM_FSCH occurrences of the following variable length record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCH_RECORD_LEN</td>
<td>Forward Broadcast Supplemental Channel record length.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to one minus less the number of octets</td>
</tr>
<tr>
<td></td>
<td>included in this Forward Broadcast Supplemental Channel record.</td>
</tr>
<tr>
<td>FSCH_BAND_CLASS_INCL</td>
<td>Forward Supplemental Channel band class included indicator.</td>
</tr>
<tr>
<td></td>
<td>If this Forward Supplemental Channel resides in the same band_class as where</td>
</tr>
<tr>
<td></td>
<td>this message is being transmitted, the base station shall set this field to</td>
</tr>
<tr>
<td></td>
<td>‘0’; otherwise, the base station shall set this field to ‘1’.</td>
</tr>
<tr>
<td>FSCH_BAND_CLASS</td>
<td>Band class of the Forward Broadcast Supplemental Channel.</td>
</tr>
<tr>
<td></td>
<td>If the FSCH_BAND_CLASS_INCL field is set to ‘0’, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field; otherwise, the base station shall include this field and</td>
</tr>
<tr>
<td></td>
<td>set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the CDMA band class, as specified</td>
</tr>
<tr>
<td></td>
<td>in [30], corresponding to the CDMA frequency assignment containing this</td>
</tr>
<tr>
<td></td>
<td>Forward Broadcast Supplemental Channel.</td>
</tr>
<tr>
<td>FSCH_CDMA_FREQ_INCL</td>
<td>Forward Broadcast Supplemental Channel Frequency included indicator.</td>
</tr>
<tr>
<td></td>
<td>If this Forward Supplemental Channel resides in the same frequency as where</td>
</tr>
<tr>
<td></td>
<td>this message is being transmitted, the base station shall set this field to</td>
</tr>
<tr>
<td></td>
<td>‘0’; otherwise, the base station shall set this field to ‘1’.</td>
</tr>
<tr>
<td>FSCH_CDMA_FREQ</td>
<td>Frequency assignment of the Forward Broadcast Supplemental Channel.</td>
</tr>
<tr>
<td></td>
<td>If the FSCH_CDMA_FREQ_INCL field is set to ‘0’, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field; otherwise, the base station shall include this field and</td>
</tr>
<tr>
<td></td>
<td>set it as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to the CDMA Channel number corresponding</td>
</tr>
<tr>
<td></td>
<td>to the CDMA frequency assignment for the CDMA Channel containing this</td>
</tr>
<tr>
<td></td>
<td>Forward Broadcast Supplemental Channel.</td>
</tr>
<tr>
<td>FSCH_CODE_CHAN</td>
<td>Code channel index of the Forward Broadcast Supplemental Channel.</td>
</tr>
<tr>
<td></td>
<td>Code channel index of the Forward Broadcast Supplemental Channel.</td>
</tr>
</tbody>
</table>
The base station shall set this field to the code channel index of this **Forward Broadcast Supplemental Channel** as specified in [2].

If the FSCH_PLCM_SCHEME_IND field is not set to ‘10’, the base station shall omit this field; otherwise, the base stations shall include this field and set it as follows:

- If the index to generate PLCM for this Forward Supplemental Channel is signaled in this message, the base station shall set this field to ‘1’; otherwise if the PLCM for this Forward Supplemental Channel is autonomously generated from BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow on this Forward Supplemental Channel as specified in 2.6.13.10.1, the base station shall set this field to ‘0’.

The base station shall set this field to the index from which the public long code mask for this Forward Supplemental Channel is generated as specified in 2.6.13.10.2.

The base station shall set this field to the multiplex option of this **Forward Broadcast Supplemental Channel** as specified in [3].

The base station shall set this field to the radio configuration of this **Forward Broadcast Supplemental Channel** as specified in [2].

The base station shall set this field to ‘1’ if Convolutional Coding will be used when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The base station shall set this field to ‘0’ if Convolutional Coding will be used for all block sizes.

The base station shall set this field to the radio configuration of this **Forward Broadcast Supplemental Channel** as specified in [2].

The base station shall set this field to ‘1’ if Convolutional Coding will be used when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The base station shall set this field to ‘0’ if Convolutional Coding will be used for all block sizes.
The base station shall set this field to ‘1’ if the Forward Broadcast Supplemental Channel outer code information is included in this message; otherwise, the base station shall set this field to ‘0’.

**FSCH_OUTERCODE_RATE** - Outer Code Rate of the Forward Broadcast Supplemental Channel.

If the FSCH_OUTERCODE_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:

The base station shall set this field to specify the outer code rate of the Forward Broadcast Supplemental Channel as specified in Table 3.7.2.3.2.38-3

**Table 3.7.2.3.2.38-3. Forward Supplemental Channel Outer Code Rate**

<table>
<thead>
<tr>
<th>FSCH_OUTERCODE_RATE (binary)</th>
<th>FORWARD SUPPLEMENTAL CHANNEL Outer Code Rate</th>
<th>Length of TDM_SUPER_PER IOD_MASK (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>11/16</td>
<td>11</td>
</tr>
<tr>
<td>001</td>
<td>12/16</td>
<td>12</td>
</tr>
<tr>
<td>010</td>
<td>13/16</td>
<td>13</td>
</tr>
<tr>
<td>011</td>
<td>14/16</td>
<td>14</td>
</tr>
<tr>
<td>100-111</td>
<td>Reserved</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**FSCH_OUTERCODE_OFFSET** - Outer Coding Buffer Offset of the Forward Broadcast Supplemental Channel.

If the FSCH_OUTERCODE_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:

The base station shall set this field to specify the outer coding buffer offset of the Forward Broadcast Supplemental Channel in units of 20ms as specified in [2]. The base station shall set this field to a value between 0 and 63 inclusive.

**FSCH_NUM_BITS_INDX** - Number of information bits index of the Forward Broadcast Supplemental Channel.

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 this Forward Broadcast Supplemental Channel.
FSCH_FRAME_40_USED - Forward Broadcast Supplemental Channel 40ms frame used indicator.

The base station shall set this field to ‘1’ if 40ms frame is used on this Forward Broadcast Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both FSCH_FRAME_40_USED and FSCH_FRAME_80_USED fields to ‘1’.

FSCH_FRAME_80_USED - Forward Broadcast Supplemental Channel 80ms frame used indicator.

The base station shall set this field to ‘1’ if 80ms frame is used on this Forward Broadcast Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both FSCH_FRAME_40_USED and FSCH_FRAME_80_USED fields to ‘1’.

TDM_STRUCTURE_IND - TDM structure used indicator.

The base station shall set this field to ‘1’ if a time-division multiplexing structure [i.e. BCMC TDM Mode] is used on this Forward Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

TDM_SLOT_LENGTH - TDM slot length.

If the TDM_STRUCTURE_IND field is set to ‘0’ or if FSCH_OUTERCODE_INCL field in this record is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to the length of the TDM slot as specified in Table 3.7.2.3.2.38-4.

<table>
<thead>
<tr>
<th>TDM_SLOT_LENGTH (binary)</th>
<th>Length of the TDM slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>20 ms</td>
</tr>
<tr>
<td>01</td>
<td>40 ms</td>
</tr>
<tr>
<td>10</td>
<td>80 ms</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

TDM_SUPER_PERIOD_MASK_LEN - TDM super period mask length indicator.
If the TDM_STRUCTURE_IND field is set to ‘0’ or if the 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:

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.

<table>
<thead>
<tr>
<th>TDM SUPER PERIOD MASK LEN or TDM_MEGA_PERIOD_MASK_LEN</th>
<th>Bits in TDM SUPER PERIODIOD_MASK or TDM MEGA PERIODIOD MASK TDM period</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>4 slots</td>
</tr>
<tr>
<td>01</td>
<td>8 bits</td>
</tr>
<tr>
<td>10</td>
<td>16 bits</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

The base station shall set this field to the TDM mega period mask length as specified in Table 3.7.2.3.2.38-5.

FSCH_RECORD RESERVED - Forward Broadcast Supplemental Channel Forward Supplemental Channel record reserved bits.

The base station shall add reserved bits as needed in order to make the length of this Forward Broadcast Supplemental Channel Forward Supplemental Channel record equal to an integer number of octets. The base station shall set these bits to ‘0’.

The base station shall include NUM_BCMC_PROGRAMS plus one occurrences of the following variable length record:

<table>
<thead>
<tr>
<th>BCMC_FLOW_RECORD_LEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC flow record length</td>
</tr>
</tbody>
</table>

The base station shall set this field to one minus the number of octets included in this BCMC flow record including this field.
BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field. The base station shall set this field to one less than the length in bits of the BCMC_PROGRAM_ID of this program.

BCMC_PROGRAM_ID - BCMC program Identifier. The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits. The base station shall set this field to the BCMC program identifier of this program.

BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field. The base station shall set this field to the length in bits of the BCMC_FLOW_DISCRIMINATOR of this program.

NUM_FLOW_DISCRIMINATOR - Number of BCMC_flow_discriminators.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the base station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_LEN - BCMC_flow_discriminator_header record length.

The base station shall set this field to one less the number of octets included in this BCMC_flow_discriminator_header record including this field.

BCMC_FLOW_DISCRIMINATOR - BCMC flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the BCMC flow discriminator of this flow.

FLOW_INFO_ON_OTHER_FREQ - BCMC flow information on another frequency indicator.

The base station shall set this field to ‘1’ if the information on this BCMC flow is available on another frequency; otherwise, the base station shall set this field to ‘0’.
BSPM_CDMA_FREQSAME_AS_PREV - BSPM_CDMA_Frequency_same_as_previous

indicator

BCMC flow information on another frequency indicator.

If the FLOW_INFO_ON_OTHER_FREQ 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:

The base station shall set this field to ‘1’ if the CDMA channel number and band class where the BCMC Service Parameters Message containing information on this BCMC flow is transmitted is the same as the one for the previous BCMC flow listed in this message.

BSPM_BAND_CLASS - BSPM_band_class.

If the BSPM_CDMA_FREQSAME_AS_PREV field is not included or included and set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the CDMA band class where the BCMC Service Parameters Message containing information on this BCMC flow is transmitted.

BSPM_CDMA_FREQ - BSPM Frequency.

If the BSPM_CDMA_FREQSAME_AS_PREV field is not included or included and set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the CDMA channel number where the BCMC Service Parameters Message containing information on this BCMC flow is transmitted.

REGISTRATION_REQ_FLAG - Registration Required Flag.

If FLOW_INFO_ON_OTHER_FREQ is set to ‘1’ or REGISTRATION_REQ_FLAG_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if registration is required for this BCMC flow. Otherwise, the base station shall set this field to ‘0’.

AUTH_SIGNATURE_REQ_IND - Authorization signature required indicator.

If FLOW_INFO_ON_OTHER_FREQ is set to ‘1’ or the AUTH_SIGNATURE_REQUIRED 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:

The base station shall set this field to ‘1’ if the mobile station is to include the authorization signature in the Registration Message, Origination Message, or Page Response Message for this BCMC flow; otherwise, the base station shall set this field to ‘0’.

FREQ_CHG_REG_REQ_IND - Frequency change BCMC registration required indication.
The base station shall set this field to ‘1’ to indicate that the mobile station is to send a Registration Message whenever mobile station changes frequency while monitoring this BCMC flow; otherwise, the base station shall set this field to ‘0’.

**BCMC_FLOW_ON_TRAFFIC_IND** - BCMC flow on traffic channel supported indicator.

If FLOW_INFO_ON_OTHER_FREQ is set to ‘1’ or BCMC_ON_TRAFFIC_SUP 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 this BCMC flow is available on traffic channel; otherwise, the base station shall set this field to ‘0’.

**NUM_LPM_ENTRIES** - Number of Logical-to-Physical Mapping Entries.

If the FLOW_INFO_ON_OTHER_FREQ field is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the number of logical-to-physical mapping included for this BCMC flow.

**BCMC_FLOW_DISCRIMINATOR_HEADER_RECORD_RESERVED** - BCMC flow discriminator header record reserved bits.

The base station shall add reserved bits as needed in order to make the length of this BCMC flow discriminator header record equal to an integer number of octets. The base station shall set these bits to ‘0’.

The base station shall include NUM_LPM_ENTRIES occurrences of the following variable-length record:

**FSCH_ID** - Forward Broadcast Supplemental Channel Identifier. The base station shall set this field to the identifier corresponding to the Forward Broadcast Supplemental Channel on which the above BCMC flow is being transmitted. The Forward Supplemental Channel included first in this message is given the FSCH_ID of ‘0000000’, the second one listed is given the FSCH_ID of ‘0000001’, and so on.

**TDM_USED_IND** - TDM used indicator.

If the TDM_STRUCTURE_IND field for the Forward Supplemental Channel specified by this FSCH_ID 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 a time-division multiplexing structure (i.e., BCMC TDM Mode) is used on the Forward Supplemental Channel for this flow; otherwise, the base station shall set this field to ‘0’.

**TDM_MASK** - TDM mask.
If the TDM_USED_IND field is not included or is included and 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 FSCH_OUTERCODE_INCL field corresponding to FSCH_ID field included in this record is set to '1', the duration of a slot is 20 ms; otherwise, duration of a slot is indicated by TDM SLOT LENGTH. For each bit of this field, the base station set it to '1' if this flow is assigned to the corresponding slot. For each bit of this field, the base station shall set it to '0' if this flow is not assigned to the corresponding slot.

TDM_SUPER_PERIOD_MASK_INCL - TDM super period mask included indicator.

If the TDM_USED_IND field is not included or is included and 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 set it to ‘1’ if TDM_SUPER_PERIOD_MASK field is included in this message; otherwise, the base station shall set it to ‘0’.

TDM_SUPER_PERIOD_MASK - TDM super period mask.

If the TDM_SUPER_PERIOD_MASK_INCL field is not included or is included and 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 FSCH_OUTERCODE_INCL field corresponding to FSCH_ID field included in this record is set to '0', then number of bits included in this field is indicated by TDM_SUPER_PERIOD_MASK_LEN field. Otherwise, number of bits included in this field is set as specified in Table 3.7.2.3.2.38-3, based on FSCH_OUTERCODE_RATE field corresponding to FSCH_ID field included in this record.

Duration of super slot is 4 slots. For each bit of this field, the base station set it to ‘1’ if the TDM_MASK specified above applies to the corresponding super slot. For each bit of this field, the base station shall set it to ‘0’ if the TDM_MASK specified above does not apply to the corresponding super slot.

If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID field included in this record is set to '1', the super period mask bits for parity frames (16 – bits included in this field) are not specified.

If TDM_SUPER_PERIOD_MASK is not included in this message, then it is considered equivalent to TDM_SUPER_PERIOD_MASK being implicitly included with all bits set to ‘1’.

TDM_MEGA_PERIOD_MASK_INCL - TDM mega period mask included indicator.
If the TDM_USED_IND field is not included or is included and 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 set it to ‘1’ if TDM_MEGA_PERIOD_MASK field is included in this message; otherwise, the base station shall set it to ‘0’.

**TDM_MEGA_PERIOD_MASK** - TDM mega period mask.

If the TDM_MEGA_PERIOD_MASK_INCL field is not included or is included and 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 FSCH_OUTERCODE_INCL field corresponding to FSCH_ID field included in this record is set to ‘1’, then number of bits included in this field is indicated by TDM_MEGA_PERIOD_MASK_LEN field. Otherwise, number of bits included in this field is set as specified in Table 3.7.2.3.2.38-6.

**Table 3.7.2.3.2.38-6. Length of TDM_MEGA_PERIOD_MASK**

<table>
<thead>
<tr>
<th>TDM_SUPER_PERIOD_MASK_INCL (binary)</th>
<th>Length of TDM_MEGA_PERIOD_MASK (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

If FSCH_OUTERCODE_INCL field corresponding to FSCH_ID field included in this record is set to ‘1’, duration of mega slot is 16 super slots. Otherwise, duration of mega slot is number of bits in TDM_SUPER_PERIOD_MASK times duration of super slot.

For each bit of this field, the base station set it to ‘1’ if the TDM_SUPER_PERIOD_MASK specified above applies to the corresponding mega slot. For each bit of this field, the base station shall set it to ‘0’ if the TDM_SUPER_PERIOD_MASK specified above does not apply to the corresponding mega slot.

**BSR_ID** - BCMC Service Reference Identifier.

The base station shall set this field to the BCMC Service Reference identifier corresponding to this BCMC flow on this Forward Broadcast Supplemental Channel. The base station shall not set this field to a value of 0.
NUM_NGHBR - Number of neighbor base stations.

If NUM_LPM_ENTIRES 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:

The base station shall set this field to the number of neighbor base stations included in this message for this logical-to-physical mapping entry.

The base station shall include NUM_NGHBR occurrences of the following variable length record.

NGHBR_RECORD_LEN - Neighbor record length.

The base station shall set this field to one minus the number of octets included in this neighbor record including this field.

NGHBR_PN - Neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this neighbor base station, in units of 64 PN chips.

NGHBR_BCMC_CONFIG - Neighbor BCMC Configuration.

The base station shall set this field as specified in Table 3.7.2.3.2.38-6 to indicate the configuration of this BCMC flow in this neighbor base station.
### Table 3.7.2.3.2.38-6. Neighbor BCMC Configuration Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Neighbor BCMC Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>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.</td>
</tr>
<tr>
<td>001</td>
<td>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.</td>
</tr>
<tr>
<td>010</td>
<td>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.</td>
</tr>
<tr>
<td>011</td>
<td>The neighbor base station supports this BCMC flow on traffic channel.</td>
</tr>
<tr>
<td>100-111</td>
<td>Reserved.</td>
</tr>
</tbody>
</table>

### NGHBR_BSR_ID - Neighbor BCMC Service Reference Identifier.

If the NGHBR_BCMC_CONFIG field is set to ‘000’, ‘010’, or ‘011’, 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 BCMC Service Reference identifier corresponding to this BCMC flow in the neighbor base station.

The base station shall not set this field to a value of 0.

### NGHBR_FSCH_BAND_CLASS_INCL - Neighbor Forward Broadcast Supplemental Channel band class included indicator.

If the NGHBR_BCMC_CONFIG field is set to ‘000’ ‘010’, or ‘011’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

If this F-SCH in the neighbor base station resides in the same band class as in this base station, the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘1’.
NGHBR_FSCH_BAND_CLASS - Band class of the Forward Broadcast Supplemental Channel in the neighbor base station.

If the NGHBR_FSCH_BAND_CLASS_INCL field is not included in this message or is included and 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 CDMA band class, as specified in [30], corresponding to the CDMA frequency assignment containing this Forward Broadcast Supplemental Channel in the neighbor base station.

NGHBR_FSCH_CDMA_FREQ_INCL - Neighbor frequency included indicator.

If the NGHBR_BCMC_CONFIG field is set to '000', '010', or '011', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If this F-SCH in the neighbor base station resides in the same frequency as in this base station, the base station shall set this field to '0'; otherwise, the base station shall set this field to '1'.

NGHBR_FSCH_CDMA_FREQ - Frequency assignment of the Forward Broadcast Supplemental Channel in the neighbor base station.

If the NGHBR_FSCH_CDMA_FREQ_INCL field is not included in this message or is included and 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 CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing this Forward Broadcast Supplemental Channel in this neighbor base station.

NGHBR_FSCH_CODE_CHAN_INCL - Neighbor pilot Forward Broadcast Supplemental Channel Code Channel Index Included Indicator.

If the NGHBR_BCMC_CONFIG field is set to ‘000’ or ‘011’ the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If this F-SCH in the neighbor base station uses the same code channel as in this base station, the base station shall set this field to '0'; otherwise, the base station shall set this field to '1'.

NGHBR_FSCH_CODE_CHAN - Neighbor pilot Forward Broadcast Supplemental Channel Code Channel Index.

If the NGHBR_FSCH_CODE_CHAN_INCL field is not included in this message or is included and 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 code channel index that the mobile station is to use for this Forward Broadcast Supplemental Channel on this neighbor base station.

NGHBR_FSCH_PARMS_INCL - Neighbor Forward Broadcast Supplemental Channel Parameters Included Indicator.

If the NGHBR_BCMC_CONFIG field is set to ‘000’, ‘010’, or ‘011’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

If this F-SCH in the neighbor base station uses the same physical layer parameters as in this base station, the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘1’.

NGHBR_FSCH_PLCM_IND - Neighbor Forward Broadcast Supplemental Channel Public Long Code Mask Scheme Indicator.

If the NGHBR_FSCH_PARMS_INCL field is not included in this message, or is included and 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 index to generate PLCM for this Forward Supplemental Channel is signaled in this message, the base station shall set this field to ‘1’; otherwise if the PLCM for this Forward Supplemental Channel is autonomously generated from BCMC_FLOW_ID and BSR_ID corresponding to a BCMC flow on this Forward Supplemental Channel as specified in 2.6.13.10.1, the base station shall set this field to ‘0’.

NGHBR_FSCH_PLCM_INDEX - Index to generate the Forward Supplemental Channel public long code mask.

If the NGHBR_FSCH_PLCM_IND field is not included or is included and is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include and set it as follows.

The base station shall set this field to the index from which the public long code mask for this Forward Supplemental Channel is generated as specified in 2.6.13.10.2.

NGHBR_FSCH_MUX_OPTION - Multiplex Option of the Forward Broadcast Supplemental Channel in the neighbor base station.

If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 multiplex option of this Forward Broadcast Supplemental Channel in the neighbor base station as specified in [3].
NGHBR_FSCH_RC - Radio configuration of the Forward Broadcast Supplemental Channel in the Neighbor Base Station. If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 radio configuration to be used by the mobile station for this Forward Broadcast Supplemental Channel in this neighbor base station as specified in [2].

NGHBR_FSCH_CODING - Coding type of the Forward Broadcast Supplemental Channel in this neighbor base station. If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 Convolutional Coding will be used when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The base station shall set this field to '0' if Convolution Coding will be used for all block sizes.

NGHBR_FSCH_OUTERCODE_INCL - Forward Broadcast Supplemental Channel Outer Code included indicator for this neighbor base station. If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 the Forward Broadcast Supplemental Channel outer code information for this neighbor base station is included in this message; otherwise, the base station shall set this field to ‘0’.

NGHBR_FSCH_OUTERCODE_RATE - Outer Code Rate of the Forward Broadcast Supplemental Channel in this neighbor base station. If the FSCH_OUTERCODE_INCL field is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows: The base station shall set this field to specify the outer code rate of the Forward Broadcast Supplemental Channel as specified in Table 3.7.2.3.2.38-3.
NGHBR_FSCH_OUTERCODE_OFFSET - Outer Coding Buffer Offset of the Forward Broadcast Supplemental Channel in this neighbor base station.

If the FSCH_OUTERCODE_INCL field is not included or is included and 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 specify the outer coding buffer offset of the Forward Broadcast Supplemental Channel in units of 20ms as specified in [2]. The base station shall set this field to a value between 0 and 63 inclusive.

NGHBR_FSCH_NUM_BITS_IDX - Number of Information bits index of the Forward Broadcast Supplemental Channel in the Neighbor Base Station.

If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 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 this Forward Broadcast Supplemental Channel in this neighbor base station.

NGHBR_FSCH_FRAME_40_USED - Forward Broadcast Supplemental Channel 40ms frame used indicator in the Neighbor Base Station.

If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 40ms frame is used on this Forward Broadcast Supplemental Channel in this neighbor base station; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both NGHBR_FSCH_FRAME_40_USED and NGHBR_FSCH_FRAME_80_USED fields to ‘1’.

NGHBR_FSCH_FRAME_80_USED - Forward Broadcast Supplemental Channel 80ms frame used indicator in the Neighbor Base Station.

If the NGHBR_FSCH_PARMS_INCL field is not included in this message or is included and 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 80ms frame is used on this Forward Supplemental Forward Broadcast Supplemental Channel in this neighbor base station; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both NGHBR_FSCH_FRAME_40_USED and NGHBR_FSCH_FRAME_80_USED fields to ‘1’.

NGHBR_RECORD_RESERVED - Neighbor record reserved bits.

The base station shall add reserved bits as needed in order to make the length of this neighbor record equal to an integer number of octets. The base station shall set these bits to ‘0’.

BCMC_NUM_BCCH_NGHBR - Number of neighbor base stations that support Broadcast Control Channel.

The base station shall set this field to the number of neighbor base stations included in this message that support Primary Broadcast Control Channel and support BCMC on idle state.

BCMC_BCCH_NGHBR_PN - Neighbor Pilot PN sequence offset index.

The base station shall set this field to the pilot PN sequence offset for this neighbor base station, in units of 64 PN chips.

BCMC_SR1_BCCH_NON_TD_INCL - Common Channel in non TD mode on Spreading Rate 1 information included indicator.

The base station shall set this field to ‘1’ if the base station includes common channels (BCCH/F-CCCH/EACH) information in non TD mode; otherwise, the base station shall set this field to ‘0’.

BCMC_SR1_NON_TD_FREQ_INCL - Non Transmit Diversity frequency included indicator.

If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is included and 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 BCMC_SR1_CDMA_FREQ_NON_TD is included in the message. Otherwise, base station shall set this field to ‘0’.

BCMC_SR1_CDMA_FREQ_NON_TD - Frequency assignment for non-transmit diversity operation.

If BCMC_SR1_NON_TD_FREQ_INCL is not included, or is included and 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 Broadcast Control Channel that does not support the TD operation.

BCMC_SR1_BRAT_NON_TD - BCCH data rate in non-TD mode for Spreading Rate 1.
If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is included and 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 BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.

**BCMC_SR1_CRAT_NON_TD** – BCCH code rate in non Transmit Diversity mode for Spreading Rate 1.

If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is included and 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]).

**BCMC_SR1_BCCH_CODE_CHAN_NON_TD** – Walsh code for the Spreading Rate 1 BCCH in non Transmit Diversity mode.

If BCMC_SR1_BCCH_NON_TD_INCL is not included, or is included and 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.

**BCMC_SR1_TD_INCL** - Spreading Rate 1 Transmit Diversity frequency information included indicator.

The base station shall set this field to ‘1’ if BCMC_SR1_CDMA_FREQ_TD, BCMC_SR1_BRAT_TD, BCMC_SR1_CRAT_TD, BCMC_SR1_TD_MODE, and BCMC_SR1_TD_POWER_LEVEL are included in the message; otherwise, the base station shall set this field to ‘0’.

**BCMC_SR1_CDMA_FREQ_TD** - Spreading Rate 1 frequency assignment for Transmit Diversity operation.

If BCMC_SR1_TD_INCL is not included, or is included and 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.

**BCMC_SR1_BRAT_TD** - BCCH data rate in Transmit Diversity mode for Spreading Rate 1.

If BCMC_SR1_TD_INCL is not included, or is included and 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 BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel in the system.

**BCMC_SR1_CRAT_TD** — BCCH code rate in Transmit Diversity mode for Spreading Rate 1.

If BCMC_SR1_TD_INCL is not included, or is included and 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]].

**BCMC_SR1_BCCH_CODE_CHAN_TD** — Walsh code for the Spreading Rate 1 BCCH in Transmit Diversity mode.

If BCMC_SR1_TD_INCL is not included, or is included and 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 Transmit Diversity mode.

**BCMC_SR1_TD_MODE** — Spreading Rate 1 Transmit Diversity Mode.

If BCMC_SR1_TD_INCL is not included, or is included and 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 corresponding to Table 3.7.2.3.2.26-3.

**BCMC_SR1_TD_POWER_LEVEL** — Spreading Rate 1 TD transmit power level.

If BCMC_SR1_TD_INCL is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.
During Traffic Channel operation, the base station sends signaling messages to the mobile station using the f-dsch.
3.7.3.1 Reserved
1  3.7.3.2 Reserved
3.7.3.3 PDU Formats on the f-dsch

The signaling messages sent over the f-dsch are summarized in Table 3.7.3.3-1.
### Table 3.7.3.3-1. f-dsch Messages (Part 1 of 2)

<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>P_REV_IN_USE⁹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Message</td>
<td>ORDRM</td>
<td>3.7.3.3.2.1</td>
<td>All</td>
</tr>
<tr>
<td>Authentication Challenge Message</td>
<td>AUCM</td>
<td>3.7.3.3.2.2</td>
<td>All</td>
</tr>
<tr>
<td>Alert With Information Message</td>
<td>AWIM</td>
<td>3.7.3.3.2.3</td>
<td>All</td>
</tr>
<tr>
<td>Data Burst Message</td>
<td>DBM</td>
<td>3.7.3.3.2.4</td>
<td>All</td>
</tr>
<tr>
<td>Analog Handoff Direction Message</td>
<td>AHDM</td>
<td>3.7.3.3.2.6</td>
<td>All</td>
</tr>
<tr>
<td>In-Traffic System Parameters Message</td>
<td>ITSPM</td>
<td>3.7.3.3.2.7</td>
<td>All</td>
</tr>
<tr>
<td>Neighbor List Update Message</td>
<td>NLUM</td>
<td>3.7.3.3.2.8</td>
<td>&lt; 8</td>
</tr>
<tr>
<td>Send Burst DTMF Message</td>
<td>BDTMFM</td>
<td>3.7.3.3.2.9</td>
<td>All</td>
</tr>
<tr>
<td>Power Control Parameters Message</td>
<td>PCNPM</td>
<td>3.7.3.3.2.10</td>
<td>All</td>
</tr>
<tr>
<td>Retrieve Parameters Message</td>
<td>RTPM</td>
<td>3.7.3.3.2.11</td>
<td>All</td>
</tr>
<tr>
<td>Set Parameters Message</td>
<td>STPM</td>
<td>3.7.3.3.2.12</td>
<td>All</td>
</tr>
<tr>
<td>SSD Update Message</td>
<td>SSDUM</td>
<td>3.7.3.3.2.13</td>
<td>All</td>
</tr>
<tr>
<td>Flash With Information Message</td>
<td>FWIM</td>
<td>3.7.3.3.2.14</td>
<td>All</td>
</tr>
<tr>
<td>Mobile Station Registered Message</td>
<td>MSRM</td>
<td>3.7.3.3.2.15</td>
<td>All</td>
</tr>
<tr>
<td>Status Request Message</td>
<td>STRQM</td>
<td>3.7.3.3.2.16</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Extended Handoff Direction Message</td>
<td>EHDM</td>
<td>3.7.3.3.2.17</td>
<td>All</td>
</tr>
<tr>
<td>Service Request Message</td>
<td>SRQM</td>
<td>3.7.3.3.2.18</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Service Response Message</td>
<td>SRPM</td>
<td>3.7.3.3.2.19</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Service Connect Message</td>
<td>SCM</td>
<td>3.7.3.3.2.20</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>Service Option Control Message</td>
<td>SOCM</td>
<td>3.7.3.3.2.21</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td>TMSI Assignment Message</td>
<td>TASM</td>
<td>3.7.3.3.2.22</td>
<td>1, ≥ 4</td>
</tr>
<tr>
<td>Service Redirection Message</td>
<td>SRDM</td>
<td>3.7.3.3.2.23</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Supplemental Channel Assignment Message</td>
<td>SCAM</td>
<td>3.7.3.3.2.24</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Power Control Message</td>
<td>PCNM</td>
<td>3.7.3.3.2.25</td>
<td>≥ 4</td>
</tr>
</tbody>
</table>

⁹ P_REV_IN_USE equal to “All” implies all values applicable to the Band Class.
<table>
<thead>
<tr>
<th>Message Name</th>
<th>MSG_TAG</th>
<th>Section Number</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended Neighbor List Update Message</td>
<td>ENLUM</td>
<td>3.7.3.3.2.26</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Candidate Frequency Search Request Message</td>
<td>CFSRQM</td>
<td>3.7.3.3.2.27</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Candidate Frequency Search Control Message</td>
<td>CFSCNM</td>
<td>3.7.3.3.2.28</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Power Up Function Message</td>
<td>PUFM</td>
<td>3.7.3.3.2.29</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Power Up Function Completion Message</td>
<td>PUFCM</td>
<td>3.7.3.3.2.30</td>
<td>≥ 4</td>
</tr>
<tr>
<td>General Handoff Direction Message</td>
<td>GHDM</td>
<td>3.7.3.3.2.31</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Resource Allocation Message</td>
<td>RAM</td>
<td>3.7.3.3.2.32</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Resource Allocation Mini Message</td>
<td>RAMM</td>
<td>3.7.3.3.2.33</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended Release Message</td>
<td>ERM</td>
<td>3.7.3.3.2.34</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended Release Mini Message</td>
<td>ERMM</td>
<td>3.7.3.3.2.35</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Universal Handoff Direction Message</td>
<td>UHDM</td>
<td>3.7.3.3.2.36</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Extended Supplemental Channel Assignment Message</td>
<td>ESCAM</td>
<td>3.7.3.3.2.37</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Forward Supplemental Channel Assignment Mini Message</td>
<td>FSCAMM</td>
<td>3.7.3.3.2.38</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Reverse Supplemental Channel Assignment Mini Message</td>
<td>RSCAMM</td>
<td>3.7.3.3.2.39</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Mobile Assisted Burst Operation Parameters Message</td>
<td>MABOPM</td>
<td>3.7.3.3.2.40</td>
<td>≥ 6</td>
</tr>
<tr>
<td>User Zone Reject Message</td>
<td>UZRM</td>
<td>3.7.3.3.2.41</td>
<td>≥ 6</td>
</tr>
<tr>
<td>User Zone Update Message</td>
<td>UZUM</td>
<td>3.7.3.3.2.42</td>
<td>≥ 6</td>
</tr>
<tr>
<td>Call Assignment Message</td>
<td>CLAM</td>
<td>3.7.3.3.2.43</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Extended Alert With Information Message</td>
<td>EAWIM</td>
<td>3.7.3.3.2.44</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Extended Flash With Information Message</td>
<td>EFWIM</td>
<td>3.7.3.3.2.45</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Security Mode Command Message</td>
<td>SMCM</td>
<td>3.7.3.3.2.46</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Base Station Status Response Message</td>
<td>BSSRSPM</td>
<td>3.7.3.3.2.47</td>
<td>≥ 7</td>
</tr>
<tr>
<td>Authentication Request Message</td>
<td>AUREQM</td>
<td>3.7.3.3.2.48</td>
<td>≥ 10</td>
</tr>
<tr>
<td>Rate Change Message</td>
<td>RATCHGM</td>
<td>3.7.3.3.2.49</td>
<td>≥ 9</td>
</tr>
<tr>
<td>In-Traffic BCMC Service Parameters Message</td>
<td>ITBSPM</td>
<td>3.7.3.3.2.50</td>
<td>≥ 11</td>
</tr>
<tr>
<td>MEID Universal Handoff Direction Message</td>
<td>MUHDM</td>
<td>See [47]</td>
<td>≥ 6 but &lt; 9</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>1 3.7.3.3.1 Reserved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 3.7.3.3.2 Message Body Contents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 The following sections specify the contents of the message body for each message that may be sent on the f-dsch.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.7.3.2.1 Order Message

MSG_TAG: ORDRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>ORDER</td>
<td>6</td>
</tr>
<tr>
<td>ADD_RECORD_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Order-specific fields (if used)</td>
<td>$8 \times ADD_RECORD_LEN$</td>
</tr>
<tr>
<td>CON_REF_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**USE_TIME** - Use action time indicator.

This field indicates whether an explicit action time is specified in this order.

If an explicit action time can be specified for this order code, as shown in Table 3.7.4-1, the base station may 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_OFFSETs × 1.25 ms, in units of 80 ms (modulo 64), at which the order is to take effect. If the USE_TIME field is set to ‘0’, the base station shall set this field to ‘000000’.

**ORDER** - Order code.

The base station shall set this field to the ORDER code for this type of Order Message (see 3.7.4).

**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 message.

**Order-specific fields** - Order-specific fields.

The base station shall include order-specific fields as specified in 3.7.4.

**CON_REF_INCL** - Connection reference included indicator.

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.
3.7.3.3.2.2 Authentication Challenge Message

MSG_TAG: AUCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDU</td>
<td>24</td>
</tr>
<tr>
<td>GEN_CMEAKEY</td>
<td>1</td>
</tr>
</tbody>
</table>

RANDU - Random challenge data.

The base station shall set this field as specified in 2.3.12.1.4.

GEN_CMEAKEY - Generate CMEAKEY indicator.

The base station shall set this field to ‘1’ if it wants the MS to generate the CMEAKEY during the Unique Challenge-Response procedure (see 2.3.12.1.4); otherwise, the base station shall set this field to ‘0’.
3.7.3.3.2.3 Alert With Information Message

MSG_TAG: AWIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero or more occurrences of the following record:</td>
<td></td>
</tr>
<tr>
<td>{</td>
<td></td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
<tr>
<td>}</td>
<td></td>
</tr>
</tbody>
</table>

The base station shall include occurrences of the following three-field record as specified in 3.7.5.

<table>
<thead>
<tr>
<th>RECORD_TYPE</th>
<th>Information record type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_LEN</td>
<td>Information record length.</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>Type-specific fields.</td>
</tr>
</tbody>
</table>

The base station shall set this field as specified in 3.7.5.

The base station shall set this field to the number of octets in the type-specific fields included in this record.

The base station shall include type-specific fields as specified in 3.7.5.
3.7.3.3.2.4 Data Burst Message

**MSG_TAG: DBM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_NUMBER</td>
<td>8</td>
</tr>
<tr>
<td>BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>NUM_MSGS</td>
<td>8</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
{ (NUM_FIELDS)
  CHARi
} (NUM_FIELDS)
```

### Field Interpretation

- **MSG_NUMBER**: Message number.
  - The base station shall set this field to the number of this message within the data burst stream.

- **BURST_TYPE**: Data burst type.
  - The base station shall set the value of this field for the type of this data burst as defined in [30]. If the base station sets this field equal to ‘111110’, it shall set the first two CHARi fields of this message equal to the EXTENDED_BURST_TYPEINTERNATIONAL field as described in the definition of CHARi below. If the base station sets this field equal to ‘111111’, it shall set the first two CHARi fields of this message equal to the EXTENDED_BURST_TYPE as described in the definition of CHARi below.

- **NUM_MSGS**: Number of messages in the data burst stream.
  - The base station shall set this field to the number of messages in this data burst stream.

- **NUM_FIELDS**: Number of characters in this message.
  - The base station shall set this field to the number of occurrences of the CHARi field included in this message.

- **CHARi**: Character.
  - The base station shall include NUM_FIELDS occurrences of this field. The base station shall set these fields to the corresponding octet of the data burst stream.
If the BURST_TYPE field of this message is equal to ‘111110’, the first two CHARi octets shall represent a 16 bit EXTENDED_BURST_TYPE_INTERNATIONAL field, which is encoded as shown below. The first ten bits of this field contain a binary mapping of the Mobile Country Code (MCC) associated with the national standards organization administering the use of the remaining octets of the message. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the EXTENDED_BURST_TYPE_INTERNATIONAL field shall specify the COUNTRY_BURST_TYPE. The base station shall set the value of the COUNTRY_BURST_TYPE according to the type of this data burst as defined in standards governed by the country where this data burst type is to be used.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Country Code</td>
<td>10</td>
</tr>
<tr>
<td>COUNTRY_BURST_TYPE</td>
<td>6</td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 × (NUM_FIELDS – 2)</td>
</tr>
</tbody>
</table>

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].

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENDED_BURST_TYPE</td>
<td>16</td>
</tr>
<tr>
<td>(first two CHARi fields)</td>
<td></td>
</tr>
<tr>
<td>Remaining CHARi fields</td>
<td>8 × (NUM_FIELDS – 2)</td>
</tr>
</tbody>
</table>
1  3.7.3.3.2.5 Reserved
2  No text.
3.7.3.3.2.6 Analog Handoff Direction Message

**MSG_TAG: AHDM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>VMAC</td>
<td>3</td>
</tr>
<tr>
<td>ANALOG_CHAN</td>
<td>11</td>
</tr>
<tr>
<td>SCC</td>
<td>2</td>
</tr>
<tr>
<td>MEM</td>
<td>1</td>
</tr>
<tr>
<td>AN_CHAN_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>DSCC_MSB</td>
<td>1</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**USE_TIME** - Use action time indicator. This field indicates whether an explicit action time is specified in this message. If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**ACTION_TIME** - Action time. If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET_s × 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’.

**SID** - System identification of the analog system. The base station shall set this field to the system identification number for the analog system (see [6]).

**VMAC** - Voice mobile station attenuation code. This field indicates the mobile station’s power level associated with the designated voice channel. The base shall set this field to the MAC value shown in [12] corresponding to the nominal power for this mobile station.
ANALOG_CHAN - Analog voice channel number.
The base station shall set this field to the channel number of the analog voice channel, as specified in [12].

SCC - SAT color code.
This indicates the supervisory audio tone associated with the designated analog voice channel.
The base station shall set this field to the SAT value shown in [12].
If the assignment is to a narrow analog channel, the base station shall set this field to the two least significant bits of the DSCC.

MEM - Message encryption mode indicator.
To enable analog control message encryption on the assigned forward and reverse analog voice channels, the base station shall set this bit to ‘1’. To disable analog control message encryption, the base station shall set this bit to ‘0’.

AN_CHAN_TYPE - Analog voice channel type.
The base station shall set this field to the analog channel type as specified in Table 3.7.3.2.6.1. If the mobile station does not have narrow analog capability, the base station shall set this field to ‘00’.

### Table 3.7.3.3.2.6-1. Analog Channel Type

<table>
<thead>
<tr>
<th>Description</th>
<th>Analog Ch</th>
<th>AN_CHAN_TYPE (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide channel on ANALOG_CHAN</td>
<td>N</td>
<td>00</td>
</tr>
<tr>
<td>Narrow channel 10 kHz below ANALOG_CHAN</td>
<td>NL</td>
<td>01</td>
</tr>
<tr>
<td>Narrow channel 10 kHz above ANALOG_CHAN</td>
<td>NU</td>
<td>10</td>
</tr>
<tr>
<td>Narrow channel centered on ANALOG_CHAN</td>
<td>NM</td>
<td>11</td>
</tr>
</tbody>
</table>

DSCC_MSB - Digital supervisory audio tone color code most significant bit.
The base station shall set this field to ‘0’ when directing handoff to a wide analog channel. The base station shall set this field to the most significant bit of the DSCC when directing handoff to a narrow analog channel.

BAND_CLASS - Band class.
The base station shall set this field according to values defined in [30].
CON_REF_INCL – Connection reference included indicator.

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 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 which is to be transferred to the analog system.
### 3.7.3.3.2.7 In-Traffic System Parameters Message

**MSG_TAG:** ITSPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>4</td>
</tr>
<tr>
<td>SRCH_WIN_N</td>
<td>4</td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td>4</td>
</tr>
<tr>
<td>T_ADD</td>
<td>6</td>
</tr>
<tr>
<td>T_DROP</td>
<td>6</td>
</tr>
<tr>
<td>T_COMP</td>
<td>4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_MAX_AGE</td>
<td>4</td>
</tr>
<tr>
<td>P_REV</td>
<td>8</td>
</tr>
<tr>
<td>SOFT_SLOPE</td>
<td>6</td>
</tr>
<tr>
<td>ADD_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>DROP_INTERCEPT</td>
<td>6</td>
</tr>
<tr>
<td>PACKET_ZONE_ID</td>
<td>8</td>
</tr>
<tr>
<td>EXTENSION</td>
<td>1</td>
</tr>
<tr>
<td>T_MULCHAN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BEGIN_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESUME_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>T_SLOTTED_INCL</td>
<td>1</td>
</tr>
<tr>
<td>T_SLOTTED</td>
<td>0 or 8</td>
</tr>
<tr>
<td>ENC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>CHM_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD_LD_UNIT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESHOLD_LD</td>
<td>0 or 3</td>
</tr>
<tr>
<td>T_TDROP_RANGE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>T_TDROP_RANGE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_CHM_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SDB_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MOB_QOS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>PZ_HYST_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_LIST_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PZ_HYST_ACT_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_MUL</td>
<td>0 or 3</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_EXP</td>
<td>0 or 5</td>
</tr>
<tr>
<td>BCMC_ON_TRAFFIC_SUP</td>
<td>1</td>
</tr>
<tr>
<td>AUTO_REQ_TRAF_ALLOWED_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MAX_ADD_SERV_INSTANCE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>USE_CH_CFG_RRM</td>
<td>1</td>
</tr>
</tbody>
</table>

1. **SID** - System identification. The base station shall set this field to the system identification number for this wireless system (see 2.6.5.2).

2. **NID** - Network identification. This field serves as a sub-identifier of a system as defined by the owner of the SID.
The base station shall set this field to the network identification number for this network (see 2.6.5.2).

SRCH_WIN_A - Search window size for the Active Set and Candidate Set.

The base station shall 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.

SRCH_WIN_N - Search window size for the Neighbor Set.

The base station shall 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 Neighbor Set.

SRCH_WIN_R - Search window size for the Remaining Set.

The base station shall 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 Remaining Set.

T_ADD - Pilot detection threshold.

This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message initiating the handoff process (see 2.6.6.2.5.2).

The base station shall set this field to the pilot detection threshold, expressed as an unsigned binary number equal to $\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{I_o} \right\rfloor$.

T_DROP - Pilot drop threshold.

This value is used by the mobile station to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

The base station shall set this field to the pilot drop threshold, expressed as an unsigned binary number equal to $\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{I_o} \right\rfloor$.

T_COMP - Active Set versus Candidate Set comparison threshold.

The mobile station transmits a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

The base station shall set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB.

T_TDROP - Drop timer value.
Timer value after which an action is taken by the mobile station for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a Pilot Strength Measurement Message or an Extended Pilot Strength Measurement Message is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

The base station shall set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by the mobile station.

NGHBR_MAX_AGE - Maximum age for retention of Neighbor Set members. The mobile station drops neighbor set members whose AGE count exceeds this field.

The base station shall set this field to the Neighbor Set maximum age retention value (see 2.6.6.2.6.3).

P_REV - Protocol revision level. The base station shall set this field to the base station protocol revision level.

SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the Active Set, or dropping a pilot from the Active Set (see 2.6.6.2.3 and 2.6.6.2.5.2).

The base station shall set this field as an unsigned binary number.

ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to the Active Set (see 2.6.6.2.5.2).

The base station shall set this field as a two's complement signed binary number, in units of 0.5 dB.

DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot from the Active Set (see 2.6.6.2.3).

The base station shall set this field as a two's complement signed binary number, in units of 0.5 dB.

PACKET_ZONE_ID - Packet data services zone identifier. If the base station supports a packet data service zone, the base station shall set this field to its non-zero packet data services zone identifier.

If the base station does not support a packet data service zone, the base station shall set this field to ‘00000000’.

EXTENSION - Indicator that extension fields are present. If Reverse Supplemental Code Channel or Reverse Supplemental Channel system parameters are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T_MULCHAN</td>
<td><em>Supplemental Channel Request Message</em> pilot strength reporting offset.</td>
</tr>
<tr>
<td></td>
<td>If EXTENSION is set to ‘1’, the base station shall include this field and</td>
</tr>
<tr>
<td></td>
<td>set this field to the threshold offset that the mobile station is to use</td>
</tr>
<tr>
<td></td>
<td>when reporting neighbor pilot strength measurements in a *Supplemental</td>
</tr>
<tr>
<td></td>
<td>Channel Request Message*. The mobile station is to interpret this field as</td>
</tr>
<tr>
<td></td>
<td>an offset to T_ADD ranging from 0.5 dB (corresponding to T_MULCHAN = ‘000’)</td>
</tr>
<tr>
<td></td>
<td>to 4.0 dB (corresponding to T_MULCHAN = ‘111’) in 0.5 dB increments.</td>
</tr>
<tr>
<td>BEGIN_PREAMBLE</td>
<td>Number of preamble frames on Reverse Supplemental Code Channels at the</td>
</tr>
<tr>
<td></td>
<td>beginning of transmission on Reverse Supplemental Code Channel.</td>
</tr>
<tr>
<td></td>
<td>If EXTENSION is set to ‘1’, the base station shall include this field and</td>
</tr>
<tr>
<td></td>
<td>set this field to the number of Reverse Supplemental Code Channel</td>
</tr>
<tr>
<td></td>
<td>preamble frames that the mobile station is to send when beginning</td>
</tr>
<tr>
<td></td>
<td>transmission on Reverse Supplemental Code Channels.</td>
</tr>
<tr>
<td>RESUME_PREAMBLE</td>
<td>Number of preamble frames on Reverse Supplemental Code Channels at the</td>
</tr>
<tr>
<td></td>
<td>resumption of transmission.</td>
</tr>
<tr>
<td></td>
<td>If EXTENSION is set to ‘1’, the base station shall include this field and</td>
</tr>
<tr>
<td></td>
<td>set this field to the number of Reverse Supplemental Code Channel preamble</td>
</tr>
<tr>
<td></td>
<td>frames that the mobile station is to send when resuming transmission on</td>
</tr>
<tr>
<td></td>
<td>a Reverse Supplemental Code Channel following an autonomous suspension of</td>
</tr>
<tr>
<td></td>
<td>transmission on an allocated Supplemental Code Channel.</td>
</tr>
<tr>
<td>T_SLOTTED_INCL</td>
<td>Slotted timer value included indicator.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ if the slotted timer value</td>
</tr>
<tr>
<td></td>
<td>is included; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>T_SLOTTED</td>
<td>Slotted timer value</td>
</tr>
<tr>
<td></td>
<td>If T_SLOTTED_INCL is set to ‘1’, the base station shall include this</td>
</tr>
<tr>
<td></td>
<td>field and set this field to the value of the TMS_Slotted timer to be used</td>
</tr>
<tr>
<td></td>
<td>by the mobile station in units of 80 ms; otherwise, the base station shall</td>
</tr>
<tr>
<td></td>
<td>omit this field.</td>
</tr>
<tr>
<td>ENC_SUPPORTED</td>
<td>Encryption fields included.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ in the encryption related</td>
</tr>
<tr>
<td></td>
<td>fields are included; otherwise the base station shall set this field to ‘0’</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>Signaling Encryption supported indicator.</td>
</tr>
<tr>
<td></td>
<td>If ENC_SUPPORTED is equal to ‘1’, the base station shall include this field</td>
</tr>
<tr>
<td></td>
<td>and set this field to the value of the TMS_Slotted timer to be used by the</td>
</tr>
<tr>
<td></td>
<td>mobile station in units of 80 ms; otherwise, the base station shall omit</td>
</tr>
<tr>
<td></td>
<td>this field. If this field is included, this field indicates which</td>
</tr>
<tr>
<td></td>
<td>signaling encryption algorithms are supported by the base station.</td>
</tr>
</tbody>
</table>
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.

If this field is included, the base station shall set the subfields as follows:

The base station shall set the CMEA subfield to ‘1’.

The base station shall set each other subfield to ‘1’ if the corresponding signaling algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.

The base station shall set the RESERVED subfield to ‘00000’.

UI_ENCRYPT_SUP – User information Encryption supported indicator.

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.

This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The base station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.

CS_SUPPORTED - Concurrent Services supported indicator.

If the base station supports concurrent services, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

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’.

CDMA_OFF_TIME_REP_SUP_IND – CDMA off time report supported indicator.

If the base station supports mobile station report for CDMA off time information using the CDMA Off Time Report Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit

If CDMA_OFF_TIME_REP_SUP_IND is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time unit used in CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table 3.7.2.3.2.13-5

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.

T_TDROPT_RANGE_INCL - Drop timer range value included indicator.

The base station shall set this field to ‘1’ if the T_TDROPT_RANGE field is included in this message; otherwise, the base station shall set this field to ‘0’.

T_TDROPT_RANGE - Drop timer range value.

Timer range value to use in association with the T_TDROPT parameter when determining the drop timer expiration.

If T_TDROPT_RANGE_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the T_TDROPT_RANGE value shown in Table 2.6.6.2.3-2 corresponding to the timer expiration range value to be used by the mobile station.

FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.

If the base station supports Forward Packet Data Channel, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PDCH_CHM_SUPPORTED – PDCH Control Hold Mode supported indicator.

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:

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’.

SDB_SUPPORTED - Short Data Burst supported indicator.

The base station shall set this field to ‘1’ if the mobile station is permitted to send a Short Data Burst; otherwise, the base station shall set this field to ‘0’.

MOB_QOS - Indicator granting permission to the mobile station to request QoS parameter settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message.

If CS_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise the base station shall include this field and shall set it as follows:
The base station shall set this field to ‘1’, if the mobile station is allowed to include a QoS record in the *Origination Message*, *Origination Continuation Message*, or *Enhanced Origination Message*; otherwise, the base station shall set this field to ‘0’.

**MS_INIT_POS_LOC_SUP_IND** - Mobile station initiated position location determination supported indicator.

If the base station supports mobile station initiated position determination, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PZ_HYST_PARMS_INCL** - Packet zone hysteresis parameters included indicator.

If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis parameters are included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PZ_HYST_ENABLED** - Packet zone hysteresis enabled.

If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis feature is to be enabled at the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PZ_HYST_INFO_INCL** - Packet zone hysteresis information included indicator.

If the PZ_HYST_ENABLED field is included and is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

If the base includes the PZ_HYST_LIST_LEN, PZ_HYST_ACT_TIMER and packet zone hysteresis timer related fields, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PZ_HYST_LIST_LEN** - Packet zone hysteresis list length.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 length of the packet zone hysteresis list minus one. *This field shall be within the range ‘0001’ through ‘1111’, inclusive.*

**PZ_HYST_ACT_TIMER** - Packet zone hysteresis activation timer.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to the value of the packet zone hysteresis activation timer (in units of seconds). This field shall be within the range ‘00000001’ through ‘11111111’, inclusive.

**PZ_HYST_TIMER_MUL** - Packet zone hysteresis timer multiplier.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to x, where $x \times 8^y$ seconds is the value of the hysteresis timer and y is the value indicated in the PZ_HYST_TIMER_EXP field. The base station shall set this field to a value that is between 1 and 7 inclusive. The value 0 is reserved.

**PZ_HYST_TIMER_EXP** - Packet zone hysteresis timer exponent.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to y, where $x \times 8^y$ seconds is the value of the hysteresis timer and x is the value indicated in the PZ_HYST_TIMER_MUL field. The base station shall set this field to a value that is between 0 and 4 inclusive. All the other values are reserved.

**BCMC_ON_TRAFFIC_SUP** - BCMC on traffic channel supported indicator.

The base station shall set this field to ‘1’ to indicate that the BCMC feature is supported on traffic channel; otherwise, the base station shall set this field to ‘0’.

**AUTO_REQ_TRAF_ALLOWED_IND** - Autonomous BCMC request on traffic channel allowed indicator.

If the BCMC_ON_TRAFFIC_SUP 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:

The base station shall set this field to ‘1’ to indicate that the mobile station is allowed to request for a BCMC flow autonomously on traffic; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_SUPPORTED** - Reverse Packet Data Channel supported indicator.

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.

If the base station supports the Reverse Packet Data Channel (R-PDCH), the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**MAX_ADD_SERV_INSTANCE** - Maximum number of additional service reference identifiers allowed in origination
If the CS_SUPPORTED 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:

The base station shall set this field to the maximum number of additional service reference identifiers that can be included in the Origination Message or Enhanced Origination Message.

USE_CH_CFG_RRM - Channel configuration request allowed indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is permitted to include the CH_IND and EXT_CH_IND fields in the Resource Request Message, and the Resource Request Mini Message; otherwise, the base station shall set this field to ‘0’.
3.7.3.3.2.8 Neighbor List Update Message

MSG_TAG: NLUM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```
{  
  PILOT_INC - Pilot PN sequence offset index increment.  
  The mobile station searches for Remaining Set pilots at pilot  
  PN sequence offset index values that are multiples of this value.  
  The base station shall set this field to the pilot PN sequence  
  increment, in units of 64 PN chips, that the mobile station is  
  to use for searching the Remaining Set. The base station  
  should set this field to the largest increment such that the  
  pilot PN sequence offsets of all its neighbor base stations are  
  integer multiples of that increment.  
  NGHBR_PN - Neighbor pilot PN sequence offset index.  
  The base station shall include one occurrence of this field for  
  each pilot in its neighbor list. The base station shall set this  
  field to the pilot's PN sequence offset, in units of 64 PN chips.  
  The base station shall include no more than 20 occurrences of this field.  
  }
```
3.7.3.2.9 Send Burst DTMF Message

**MSG_TAG:** BDTFM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_DIGITS</td>
<td>8</td>
</tr>
<tr>
<td>DTMF_ON_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>DTMF_OFF_LENGTH</td>
<td>3</td>
</tr>
</tbody>
</table>

**NUM_DIGITS** occurrences of the following field:

\[
\{ (NUM\_DIGITS) \\
\text{DIGIT}_i \quad 4 \\
\} (NUM\_DIGITS)
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

- **NUM_DIGITS** - Number of DTMF digits. The base station shall set this field to the number of DTMF digits included in this message.
- **DTMF_ON_LENGTH** - DTMF pulse width code. 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.
- **DTMF_OFF_LENGTH** - DTMF interdigit interval code. 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.
- **DIGIT\_i** - DTMF digit. 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.
- **CON_REF_INCL** - Connection reference included indicator. 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 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.
3.7.3.3.2.10 Power Control Parameters Message

MSG_TAG: PCNP

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWR_REP_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>PWR_REP_FRAMES</td>
<td>4</td>
</tr>
<tr>
<td>PWR_THRESH_ENABLE</td>
<td>1</td>
</tr>
<tr>
<td>PWR_PERIOD_ENABLE</td>
<td>1</td>
</tr>
<tr>
<td>PWR_REP_DELAY</td>
<td>5</td>
</tr>
</tbody>
</table>

PWR_REP_THRESH - Power control reporting threshold.
The base station shall set this field to the number of bad frames (see [2]) to be received in a measurement period on the channel which carries the Power Control Subchannel before the mobile station is to generate a Power Measurement Report Message (see 2.6.4.1.1). If the base station sets PWR_THRESH_ENABLE to ‘1’, it shall not set this field to ‘00000’.

PWR_REP_FRAMES - Power control reporting frame count.
The base station shall set this field to the value such that the number given by

\[ \left\lfloor 2\left(\frac{\text{PWR_REP_FRAMES}}{2}\right) \times 5 \right\rfloor \]

is the number of frames over which the mobile station is to count frame errors.

PWR_THRESH_ENABLE - Threshold report mode indicator.
If the mobile station is to generate threshold Power Measurement Report Messages, the base station shall set this field to ‘1’. If the mobile station is not to generate threshold Power Measurement Report Messages, the base station shall set this field to ‘0’.

PWR_PERIOD_ENABLE - Periodic report mode indicator.
If the mobile station is to generate periodic Power Measurement Report Messages, the base station shall set this field to ‘1’. If the mobile station is not to generate periodic Power Measurement Report Messages, the base station shall set this field to ‘0’.

PWR_REP_DELAY - Power report delay.
The period that the mobile station waits following a Power Measurement Report Message before restarting frame counting for power control purposes.
The base station shall set this field to the power report delay value, in units of 4 frames (see 2.6.4.1.1).
3.7.3.3.2.11 Retrieve Parameters Message

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARAMETER_ID</td>
<td>16</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```c
{
PARAMETER_ID
}
```

PARAMETER_ID - Parameter identification.

The base station can request the mobile station to report any parameter specified in Table E-1.

The base station shall include one occurrence of this field for each parameter requested. The base station shall set this field to the parameter identification number specified in Table E-1 corresponding to the parameter requested.
3.7.3.2.12 Set Parameters Message

MSG_TAG: STPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARAMETER_ID</td>
<td>16</td>
</tr>
<tr>
<td>PARAMETER_LEN</td>
<td>10</td>
</tr>
<tr>
<td>PARAMETER</td>
<td>PARAMETER_LEN + 1</td>
</tr>
</tbody>
</table>

The base station shall include one occurrence of the following three-field record for each parameter to be set.

- **PARAMETER_ID** - Parameter identification.
  - The base station shall set this field to the identification shown in Table E-1 corresponding to the settable parameter to be set.

- **PARAMETER_LEN** - Parameter length.
  - The base station shall set this field to the length shown in Table E-1 corresponding to the parameter to be set.

- **PARAMETER** - Parameter value.
  - The base station shall set this field to the value of the parameter specified by the PARAMETER_ID field.
3.7.3.3.2.13 SSD Update Message

MSG_TAG: SSDUM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDSSD</td>
<td>56</td>
</tr>
</tbody>
</table>

RANDSSD - Random data.
The base station shall set this field as specified in 2.3.12.1.5.
3.7.3.2.14 Flash With Information Message

MSG_TAG: FWIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One or more occurrences of</td>
<td></td>
</tr>
<tr>
<td>the following record:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{RECORD_LEN}$</td>
</tr>
</tbody>
</table>

The base station shall include occurrences of the following three-field record as specified in 3.7.5.

- RECORD_TYPE - Information record type.
  The base station shall set this field as specified in 3.7.5.

- RECORD_LEN - Information record length.
  The base station shall set this field to the number of octets in the type-specific fields included in this record.

- Type-specific fields - Type-specific fields.
  The base station shall include type-specific fields as specified in 3.7.5.
3.7.3.3.2.15 Mobile Station Registered Message

MSG_TAG: MSRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID</td>
<td>15</td>
</tr>
<tr>
<td>NID</td>
<td>16</td>
</tr>
<tr>
<td>REG_ZONE</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL_ZONES</td>
<td>3</td>
</tr>
<tr>
<td>ZONE_TIMER</td>
<td>3</td>
</tr>
<tr>
<td>MULT_SIDS</td>
<td>1</td>
</tr>
<tr>
<td>MULT_NIDS</td>
<td>1</td>
</tr>
<tr>
<td>BASE_LAT</td>
<td>22</td>
</tr>
<tr>
<td>BASE_LONG</td>
<td>23</td>
</tr>
<tr>
<td>REG_DIST</td>
<td>11</td>
</tr>
</tbody>
</table>

- **SID** - System identification. The base station shall set this field to the system identification number for this system.

- **NID** - Network identification. This field serves as a sub-identifier of a system as defined by the owner of the SID. The base station shall set this field to the network identification number for this network. The NID value of 65,535 is reserved.

- **REG_ZONE** - Registration zone. The base station shall set this field to its registration zone number (see 2.6.5.1.5).

- **TOTAL_ZONES** - Number of registration zones to be retained. 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). If zone-based registration is to be disabled, the base station shall set this field to ‘000’.

- **ZONE_TIMER** - Zone timer length. 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.
MULT_SIDS - Multiple SID storage indicator.
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'.

MULT_NIDS - Multiple NID storage indicator.
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’.

BASE_LAT - Base station latitude.
The base station shall set this field to its latitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range -1296000 to 1296000 inclusive (corresponding to a range of -90° to +90°).

BASE_LONG - Base station longitude.
The base station shall set this field to its longitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range -2592000 to 2592000 inclusive (corresponding to a range of -180° to +180°).

REG_DIST - Registration distance.
If mobile stations are to perform distance-based registration, the base station shall set this field to the non-zero “distance” beyond which the mobile station is to re-register (see 2.6.5.1.4). If mobile stations are not to perform distance-based registration, the base station shall set this field to 0.
3.7.3.3.2.16 Status Request Message

MSG_TAG: STRQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times QUAL_INFO_LEN$</td>
</tr>
<tr>
<td>NUM_FIELDS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_FIELDS occurrences of the following field:

```
{ (NUM_FIELDS)
  RECORD_TYPE
} (NUM_FIELDS)
```

QUAL_INFO_TYPE - Qualification information type.

The base station shall set this field to the value shown in Table 3.7.2.3.2.15-1 to show the inclusion of qualification information in the type-specific fields.

QUAL_INFO_LEN - Qualification information length.

The base station shall set this field to the number of octets included in the type-specific fields of the qualification information.

Type-specific fields - Type-specific fields.

The base station shall set these fields to the qualification information according to the QUAL_INFO_TYPE field.

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:

<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

If QUAL_INFO_TYPE is equal to ‘00000010’, the base station shall use the following fixed-length format for the type-specific fields:
<table>
<thead>
<tr>
<th>Type-specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>OP_MODE</td>
<td>8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

1. **BAND_CLASS** - Band class.
   - The base station shall set this field to the CDMA band class, as specified in [30].

2. **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.

3. **RESERVED** - Reserved bits.
   - The base station shall set this field to ‘000’.

4. **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:

5. **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.
3.7.3.3.2.17 Extended Handoff Direction Message

MSG_TAG: EHDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>HDM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>SEARCHINCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_ADD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_DROP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_COMP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>HARDINCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PRIVATE_LCM</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_L2</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_FPC</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SERV_NEG_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ENCRYPT_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NOM_PWR_EXT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NOM_PWR</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>Additional fields</td>
<td>$8 \times \text{ADD}_\text{LENGTH}$</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

```markdown
/
PILOT\_PN                  9
PWR\_COMB\_IND             1
CODE\_CHAN                 8
/
```

2

**USE\_TIME** - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

3

**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 handoff is to take effect. If the USE\_TIME field is set to ‘0’, the base station shall set this field to ‘000000’.

4

**HDM\_SEQ** - Extended Handoff Direction Message sequence number.

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.

The base station shall set this field as specified in 2.6.6.2.2.2.

5

**SEARCH\_INCLUDED** - Pilot search parameters included.

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’.

6

**SRCH\_WIN\_A** - Search window size for the Active Set and Candidate Set.

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.

7

**T\_ADD** - Pilot detection threshold.
This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the *Pilot Strength Measurement Message* or *Extended Pilot Strength Measurement Message* initiating the handoff process (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_ADD and set this field to the pilot detection threshold, expressed as an unsigned binary number equal to \[-2 \times 10 \times \log_{10} \frac{E_c}{I_o}\]; otherwise, the base station shall omit this field.

**T_DROP** - Pilot drop threshold.

This value is used by mobile stations to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_DROP and set this field to the pilot drop threshold, expressed as an unsigned binary number equal to \[-2 \times 10 \times \log_{10} \frac{E_c}{I_o}\]; otherwise, the base station shall omit this field.

**T_COMP** - Active Set versus Candidate Set comparison threshold.

The mobile station transmits a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message* when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_COMP and set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB; otherwise, the base station shall omit this field.

**T_TDROP** - Drop timer value.

Timer value after which an action is taken by the mobile station for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a *Pilot Strength Measurement Message* or an *Extended Pilot Strength Measurement Message* is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_TDROP and set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by the mobile station; otherwise, the base station shall omit this field.

**HARD_INCLUDED** - Hard handoff parameters included.
If the mobile station is to change FRAME_OFFSET, PRIVATE_LCM, ENCRYPT_MODE, SERV_NEG_TYPE, NOM_PWR_EXT, NUM_PREAMBLE, NOM_PWR, BAND_CLASS, or CDMA_FREQ, or the mobile station is to perform a reset of the acknowledgment procedures, or the mobile station is to reset Forward Traffic Channel power control counters, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FRAME_OFFSET - Frame offset.
The Forward and Reverse Traffic Channel frames are delayed FRAME_OFFSET × 1.25 ms relative to system timing (see [2]). If HARD_INCLUDED is set to ‘1’, the base station shall include the field FRAME_OFFSET and set it to the Forward and Reverse Traffic Channel frame offset; otherwise, the base station shall omit this field.

PRIVATE_LCM - Private long code mask indicator.
This field is used to change the long code mask after a hard handoff. If HARD_INCLUDED is set to ‘1’, the base station shall include the field PRIVATE_LCM and set it as described below; otherwise, the base station shall omit this field.
If the private long code mask is to be used after the handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESET_L2 - Reset acknowledgment procedures command.
This field is used to reset acknowledgment processing in the mobile station. If HARD_INCLUDED is set to ‘1’, the base station shall include the field RESET_L2 and set it as described below; otherwise, the base station shall omit this field.
If the field is included and the mobile station is to reset its acknowledgment procedures, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESET_FPC - Reset Forward Traffic Channel power control.
This field is used to reset the Forward Traffic Channel power control counters. If HARD_INCLUDED is set to ‘1’, the base station shall include the field RESET_FPC and set it as described below; otherwise, the base station shall omit this field.
The base station shall set this field to ‘0’ if the Forward Traffic Channel power control counters are to be maintained after completion of the handoff. If the counters are to be initialized as specified in 2.6.4.1.1.1, then the base station shall set this field to ‘1’.
SERV_NEG_TYPE - Service negotiation type.

If HARD_INCLUDED is set to ‘1’, the base station shall include the field SERV_NEG_TYPE and set it as described below; otherwise, the base station shall omit this field.

If the mobile station is to use service negotiation, the base station shall set this field to ‘1’. If the mobile station is to use service option negotiation, the base station shall set this field to ‘0’.

ENCRYPT_MODE - Message encryption mode.

If HARD_INCLUDED is set to ‘1’, the base station shall include the field ENCRYPT_MODE and set it 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 messages sent on the Forward and Reverse Traffic Channels, as specified in 2.3.12.2; otherwise, the base station shall omit this field.

NOM_PWR_EXT - Extended nominal transmit power.

If HARD_INCLUDED is set to ‘1’, the base station shall include this field and set it as described below; otherwise, the base station shall omit this field.

If the mobile station is being handed off to a base station operating in Band Class 0 or Band Class 3, the base station shall set this field to ‘0’; otherwise, it shall set this field as follows:

If the correction factor to be used by the mobile station in the open loop power estimate is between –24 dB and –9 dB inclusive, the base station shall set this field to ‘1’; otherwise, the correction factor is in the range –8 dB to 7 dB inclusive, the base station shall set this field to ‘0’.

NOM_PWR - Nominal transmit power offset.

If HARD_INCLUDED is set to ‘1’, the base station shall include the field NOM_PWR and set it to the correction factor to be used by the mobile station in the open loop power estimate, expressed as a two’s complement value in units of 1 dB (see [2]); otherwise, the base station shall omit this field.

NUM_PREAMBLE - Traffic Channel preamble length.

If HARD_INCLUDED is set to ‘0’, the base station shall omit the NUM_PREAMBLE field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a handoff; as follows:
If, after the handoff, radio configuration 1 or radio configuration 2 is to be used, the base station shall set NUM_PREAMBLE to the Traffic Channel preamble length in 20 ms units; otherwise, the base station shall set NUM_PREAMBLE to the value shown in Table 3.7.3.2.17-1 corresponding to the Traffic Channel preamble length in 1.25 ms units.

<table>
<thead>
<tr>
<th>NUM_PREAMBLE or RESQ_NUM_PREAMBLE (binary)</th>
<th>Preamble Length in 1.25 ms Increments</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0</td>
</tr>
<tr>
<td>001</td>
<td>2</td>
</tr>
<tr>
<td>010</td>
<td>4</td>
</tr>
<tr>
<td>011</td>
<td>6</td>
</tr>
<tr>
<td>100</td>
<td>8</td>
</tr>
<tr>
<td>101</td>
<td>10</td>
</tr>
<tr>
<td>110</td>
<td>12</td>
</tr>
<tr>
<td>111</td>
<td>16</td>
</tr>
</tbody>
</table>

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.
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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P_REV</td>
<td>8</td>
</tr>
</tbody>
</table>

- **P_REV** - Protocol revision level.

- **PILOT_PN** - Pilot PN sequence offset index.

- **PWR_COMB_IND** - Power control symbol combining indicator.

- **CODE_CHAN** - Code channel index.
3.7.3.3.2.18 Service Request Message

MSG_TAG: SRQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERV_REQ_SEQ</td>
<td>3</td>
</tr>
<tr>
<td>REQ_PURPOSE</td>
<td>4</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

SERV_REQ_SEQ - Service request sequence number.

The base station shall set this field to the service request sequence number pertaining to this request message as specified in 3.6.4.1.2.1.1.

REQ_PURPOSE - Request purpose.

The base station shall set this field to the appropriate REQ_PURPOSE code from Table 3.7.3.3.2.18-1 to indicate the purpose of the message.

<table>
<thead>
<tr>
<th>REQ_PURPOSE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>Indicates that the purpose of this message is to reject a proposed service configuration.</td>
</tr>
<tr>
<td>0010</td>
<td>Indicates that the purpose of this message is to propose a service configuration.</td>
</tr>
</tbody>
</table>

All other REQ_PURPOSE codes are reserved.
RECORD_TYPE - Information record type.

If REQ_PURPOSE is set to '0010', 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 record type value shown in Table 3.7.5-1 corresponding to the Service Configuration information record.

RECORD_LEN - Information record length.

If REQ_PURPOSE is set to '0010', 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 octets included in the type-specific fields of the Service Configuration information record.

Type-specific fields - Type-specific fields.

If REQ_PURPOSE is set to '0010', 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 these fields as specified in 3.7.5.7 for the Service Configuration information record.
3.7.3.3.2.19 Service Response Message

MSG_TAG: SRPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERV_REQ_SEQ</td>
<td>3</td>
</tr>
<tr>
<td>RESP_PURPOSE</td>
<td>4</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

SERV_REQ_SEQ - Service request sequence number.

The base station shall set this field to the value of the SERV_REQ_SEQ field in the Service Request Message to which it is responding.

RESP_PURPOSE - Response purpose.

The base station shall set this field to the appropriate RESP_PURPOSE code from Table 3.7.3.3.2.19-1 to indicate the purpose of the message.

Table 3.7.3.3.2.19-1. RESP_PURPOSE Codes

<table>
<thead>
<tr>
<th>RESP_PURPOSE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>Indicates that the purpose of the message is to reject a proposed service configuration.</td>
</tr>
<tr>
<td>0010</td>
<td>Indicates that the purpose of the message is to propose a service configuration.</td>
</tr>
</tbody>
</table>

All other RESP_PURPOSE codes are reserved.
RECORD_TYPE - Information record type.

If RSP_PURPOSE is set to ‘0010’, 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 record type value shown in Table 3.7.5-1 corresponding to the Service Configuration information record.

RECORD_LEN - Information record length.

If RSP_PURPOSE is set to ‘0010’, 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 octets included in the type-specific fields of the Service Configuration information record.

Type-specific fields - Type-specific fields.

If RSP_PURPOSE is set to ‘0010’, 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 these fields as specified in 3.7.5.7 for the Service Configuration information record.
3.7.3.3.2.20 Service Connect Message

MSG_TAG: SCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>SERV_CON_SEQ</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>2</td>
</tr>
<tr>
<td>USE_OLD_SERV_CONFIG</td>
<td>2</td>
</tr>
<tr>
<td>SR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR_ID_RESTORE_BITMAP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 ×SYNC_ID_LEN)</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_CALLS.Assign</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

NUM_CALLS.Assign occurrences of the following record:

```plaintext
 NUM_CALLS.Assign

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>RESPONSE_IND</td>
<td>1</td>
</tr>
<tr>
<td>TAG</td>
<td>0 or 4</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>
```

```plaintext
 USE_TYPE0~PLCM
```

```plaintext
 SYNC_ID_BS_INITIATED_IND
```

```plaintext
 SR_ID_RELEASE_BITMAP_INCL
```

```plaintext
 SR_ID_RELEASE_BITMAP
```

1. **USE_TIME** - Use action time indicator. This field indicates whether an explicit action time is specified in this message.
   
   If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

2. **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 * 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’.

3. **SERV_CON_SEQ** - Connect sequence number. 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.

4. **RESERVED** - Reserved bits. The base station shall set this field to ‘00’.

---

3-529
USE_OLD_SERV_CONFIG - Use stored service configuration indicator.

This field may be used by the base station to instruct the mobile station to use the stored service configuration (that is, both the Service Configuration information record and the Non-negotiable Service Configuration information record).

If MOB_P_REV is less than seven, the base station shall set this field to '00'.

If the base station had sent an Extended Channel Assignment Message with GRANTED_MODE set to '11' or a service configuration has been sent successfully to the mobile station 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.
Table 3.7.3.20-1. USE_OLD_SERV_CONFIG values

<table>
<thead>
<tr>
<th>USE_OLD_SERV_CONFIG Field (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Mobile Station is to use the SCR and NNSCR included in this message</td>
</tr>
<tr>
<td>01</td>
<td>Mobile Station is to use the stored service configuration, where all service option connections are to be restored.</td>
</tr>
<tr>
<td>10</td>
<td>Mobile Station is to use the stored service configuration but with the modifications specified by the SCR and NNSCR included in this message</td>
</tr>
<tr>
<td>11</td>
<td><strong>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. Mobile Station is to use the stored service configuration, where only the service option connection record(s) indicated via the SR_ID field are to be restored.</strong></td>
</tr>
</tbody>
</table>

2

SR_ID — Service reference identifier.

3

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:
If the mobile station is to restore all remaining service option connections from the stored service configuration, the base station shall set this field to ‘111’; if the mobile station is to restore more than one but not all remaining service option connections from the stored service configuration, the base station shall set this field to ‘000’; otherwise, the base station shall set this field to the service reference identifier corresponding to the service option connection to be restored.

**SR_ID_RESTORE_BITMAP** – Bitmap of service reference identifiers to be restored.

If the SR_ID field is included and set to ‘000’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

This field consists of the subfields defined in Table 3.7.2.3.2.21-6. The base station shall set a subfield to ‘1’ to indicate that the mobile station is to restore the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to ‘0’ to indicated that the service option connection of the corresponding service reference identifier is not affected.

**SYNC_ID_INCL** - Service Configuration synchronization identifier included indicator.

The base station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the base station shall set this field to ‘0’.

If MOB_P_REV is less than seven or if MOB_P_REV is less than 11 and USE_OLD_SERV_CONFIG field is set to ‘01’ or ‘11’, the base station shall set this field to ‘0’.

**SYNC_ID_LEN** - Service Configuration synchronization identifier length.

If the SYNC_ID_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:
The base station shall set this field to the length (in octets) of the SYNC_ID field included in this message. The base station shall set this field to a value larger than zero.

**SYNC_ID** - Service Configuration synchronization identifier.

If the SYNC_ID_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:

The base station shall set this field to the synchronization identifier corresponding to the service configuration conveyed by this message.

**RECORD_TYPE** - Information record type.

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.

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.

**RECORD_LEN** - Information record length.

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.

The base station shall set this field to the number of octets included in the type-specific fields of the Service Configuration information record.

**Type-specific fields** - Type-specific fields.

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.

The base station shall set these fields as specified in 3.7.5.7 for the Service Configuration information record.

**RECORD_TYPE** - Information record type.

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.

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.

**RECORD_LEN** - Information record length.
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.

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.

Type-specific fields

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.

The base station shall set these fields as specified in 3.7.5.20
for the Non-Negotiable Service Configuration information
record.

CC_INFO_INCL – Call Control information included indicator.

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:

The base station shall set this field to ‘1’ if Call Control related
parameters (to assign new call(s)) are included in this
message; otherwise, the base station shall set this field to ‘0’.

NUM_CALLS_ASSIGN – Number of call assignments.

If the CC_INFO_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 set it as follows:

The base station shall set this field to the number of new call
assignments included in this message.

The base station shall include NUM_CALLS_ASSIGN occurrences of the following variable
length record.

CON_REF – Connection reference.

The base station shall set this field to the connection
reference of the service option connection corresponding to
this call.

RESPONSE_IND – Response indicator.

The base station shall set this field to ‘1’ if this call
assignment is a response to an Enhanced Origination Message
from the mobile station; otherwise, the base station shall set
this field to ‘0’.

TAG – Transaction identifier.
If the RESPONSE_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:

The base station shall set this field to the value of the TAG field received in the Enhanced Origination Message to which this call assignment is the response.

**BYPASS_ALERT_ANSWER** - Bypass alert indicator.

If the RESPONSE_IND field is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate for this call, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**USE_TYPE0_PLCM** - Use TYPE0 PLCM indicator.

If the mobile station is to start using the PLCM defined by PLCM_TYPE of ‘0000’ when P_REV_IN_USE is less than 11 or ‘0100’ when P_REV_IN_USE is greater than or equal to 11 (see Table 3.7.2.3.2.21-5), the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**SYNC_ID_BS_INITIATED_IND** - SYNC_ID base station initiated indicator.

If the SYNC_ID_INCL field is set to ‘1’ and the USE_OLD_SERV_CONFIG field is included and is set to ‘10’, then the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

If the SYNC_ID included in this message is initiated by the base station and is to be used by mobile station to restore the stored configuration, then the base station shall set this field to ‘1’; otherwise the base station shall set this field to ‘0’.

**SR_ID_RELEASE_BITMAP_INCL** - SR_ID release bitmap included indicator.

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:

If SR_ID_RELEASE_BITMAP is included, base station shall set this field to ‘1’; otherwise, base station shall set this field to ‘0’.

**SR_ID_RELEASE_BITMAP** - SR_ID release bitmap.

If the SR_ID_RELEASE_BITMAP_INCL field is not included or is included and is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
This field consists of the subfields defined in Table 3.7.3.3.2.20-2. The base station shall set a subfield to ‘1’ to indicate that the mobile station is to release the service option connection of the corresponding service reference identifier; otherwise, the base station shall set the subfield to ‘0’ to indicate that the service option connection of the corresponding service reference identifier is not affected.

The base station shall not indicate the mobile station to restore and release the same SR_ID using this message.

**Table 3.7.3.3.2.20-2, SR_ID_RELEASE_BITMAP Subfields.**

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR_ID_1</td>
<td>1</td>
<td>sr_id 1 to be released</td>
</tr>
<tr>
<td>SR_ID_2</td>
<td>1</td>
<td>sr_id 2 to be released</td>
</tr>
<tr>
<td>SR_ID_3</td>
<td>1</td>
<td>sr_id 3 to be released</td>
</tr>
<tr>
<td>SR_ID_4</td>
<td>1</td>
<td>sr_id 4 to be released</td>
</tr>
<tr>
<td>SR_ID_5</td>
<td>1</td>
<td>sr_id 5 to be released</td>
</tr>
<tr>
<td>SR_ID_6</td>
<td>1</td>
<td>sr_id 6 to be released</td>
</tr>
</tbody>
</table>
### 3.7.3.3.2.21 Service Option Control Message

**MSG_TAG:** SOCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>CTL_REC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>$8 \times \text{CTL_REC_LEN}$</td>
</tr>
</tbody>
</table>

#### USE_TIME
- Use action time indicator.
- This field indicates whether an explicit action time is specified in this message.
- If an explicit action time is specified in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

#### ACTION_TIME
- Action time.
- If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus $\text{FRAME\_OFFSET}_8 \times 1.25 \text{ ms}$, 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 set this field to ‘000000’.

#### CON_REF
- Service option connection reference.
- The base station shall set this field to the reference for the service option connection.

#### SERVICE_OPTION
- Service option.
- The base station shall set this field to the service option in use with the service option connection.

#### CTL_REC_LEN
- Service option control record length.
- The base station shall set this field to the number of octets included in the type-specific fields of this service option control record.

#### Type-specific fields
- Type-specific fields.
- The base station shall set these fields as specified by the requirements for the service option, which are defined external to this specification. See relevant service option specification.
3.7.3.3.22 TMSI Assignment Message

MSG_TAG: TASM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMSI_ZONE_LEN</td>
<td>4</td>
</tr>
<tr>
<td>TMSI_ZONE</td>
<td>$8 \times$ TMSI_ZONE_LEN</td>
</tr>
<tr>
<td>TMSI_CODE</td>
<td>32</td>
</tr>
<tr>
<td>TMSI_EXP_TIME</td>
<td>24</td>
</tr>
</tbody>
</table>

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.

The base station shall set this field to the TMSI zone number, as specified in [27].

TMSI_CODE - Temporary mobile station identity code.

The base station shall set this field to the 32-bit TMSI code assigned to the mobile station.

If the base station is to deassign the TMSI, the base station shall set all the bits in this field to ‘1’.

TMSI_EXP_TIME - TMSI expiration time.

The base station shall set this field to the System Time in the units of $80 \text{ ms} \times 2^{12}$ when the TMSI is to expire.
3.7.3.3.2.23 Service Redirection Message

**MSG_TAG:** SRDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETURN_IF_FAIL</td>
<td>1</td>
</tr>
<tr>
<td>DELETE_TMSI</td>
<td>1</td>
</tr>
<tr>
<td>REDIRECT_TYPE</td>
<td>1</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

```
/

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
</tbody>
</table>

Type-specific fields \(8 \times \text{RECORD\_LEN}\)
```

4. **RETURN_IF_FAIL** - Return if fail indicator.
   The base station shall set this field to ‘1’ if the mobile station is required to return to the system from which it is being redirected upon failure to obtain service using the redirection criteria specified in this message; otherwise, the base station shall set this field to ‘0’.

5. **DELETE_TMSI** - Delete TMSI indicator.
   The base station shall set this field to ‘1’ if the mobile station is required to delete the TMSI assigned to the mobile station; otherwise, the base station shall set this field to ‘0’.

6. **REDIRECT_TYPE** - Redirect indicator.
   The base station shall set this field to the REDIRECT_TYPE value shown in Table 3.7.2.3.2.16-1 corresponding to the redirection type.

7. The base station shall include one occurrence of the following record:

8. **RECORD_TYPE** - Redirection record type.
   The base station shall set this field to the RECORD_TYPE value shown in Table 3.7.2.3.2.16-2 corresponding to the type of redirection specified by this record.

9. **RECORD_LEN** - Redirection record length.
   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.
Type-specific fields - Redirect record type-specific fields. The base station shall include type-specific fields based on the RECORD_TYPE of this redirection record.

If RECORD_TYPE is equal to ‘00000000’, the base station shall not include the type-specific fields.

If RECORD_TYPE is equal to ‘00000001’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>IGNORE_CDMA</td>
<td>1</td>
</tr>
<tr>
<td>SYS.getOrder</td>
<td>3</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>

EXPECTED_SID - Expected SID. 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.

IGNORE_CDMA - Ignore CDMA Available indicator. The base station shall set this field to ‘1’ to indicate that the mobile station is to ignore the CDMA Capability Message on the analog system to which it is being redirected. The base station shall set this field to ‘0’ to indicate that the mobile station may discontinue service on the system to which it is being redirected if the mobile station receives a CDMA Capability Message with CDMA_AVAIL equal to ‘1’, and the preferred mode of the mobile station is CDMA.

SYS_ORDERING - System ordering. The base station shall set this field to the SYS_ORDERING value shown in Table 3.7.2.3.2.16-3 corresponding to the order in which the mobile station is to attempt to obtain service on an analog system.

RESERVED - Reserved bits. The base station shall set this field to ‘00000’.

If RECORD_TYPE is equal to ‘00000010’, the base station shall include the following fields:
<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>EXPECTED_SID</td>
<td>15</td>
</tr>
<tr>
<td>EXPECTED_NID</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
<tr>
<td>NUM_CHANS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_CHANS occurrences of the following field:

\[
\{ (NUM_CHANS) \\
CDMA_CHAN \quad \text{11} \\
\} (NUM_CHANS)
\]

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>

1. BAND_CLASS - Band class. The base station shall set this field to the CDMA band class, as specified in [30].
2. EXPECTED_SID - Expected SID. 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.
3. EXPECTED_NID - Expected NID. 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.
4. RESERVED - Reserved bits. The base station shall set this field to ‘0000’.
5. NUM_CHANS - Number of CDMA Channels. The base station shall set this field to the number of occurrences of the CDMA_CHAN field in this record.
6. CDMA_CHAN - CDMA Channel number. 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.
7. 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’.

3-541
3.7.3.2.24 Supplemental Channel Assignment Message

MSG_TAG: SCAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_RETRY_DELAY</td>
<td>1</td>
</tr>
<tr>
<td>RETRY_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_INCLUDED</td>
<td>1</td>
</tr>
</tbody>
</table>

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_PARMS_INCLUDED 1
  T_MULCHAN 0 or 3
  BEGIN_PREAMBLE 0 or 3
  RESUME_PREAMBLE 0 or 3
}
```

FOR_INCLUDED 1

(continues on next page)
Field | Length (bits)
---|---
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 record only if FOR_INCLUDED is set to ‘1’:

{ FOR_SUP_CONFIG
　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
}

If EXPL_CODE_CHAN is set to ‘0’, the following field is
included:

BASE_CODE_CHAN | 0 or 8

{ (NUM_SUP_PILOTS)
}

3 USE_RETRY_DELAY | Assign or Retry Indicator.
The base station shall set this field to ‘1’ to indicate that this message contains a retry delay time; otherwise, the base station shall set this field to ‘0’ to indicate that no RETRY_DELAY has been included.

RETRY_DELAY - Supplemental Channel Request Message retry delay.

If USE_RETRRY_DELAY is set to ‘1’, the base station shall include and set this field to the duration of the delay interval in units of 320 ms (4 frames) from the next 80 ms system time boundary during which the mobile station is not permitted to send a Supplemental Channel Request Message. The base station shall set RETRY_DELAY to ‘11111111’ to indicate that the mobile station is to refrain from sending Supplemental Channel Request Messages indefinitely.

REV_INCLUDED - Reverse Supplemental Code Channel configuration indicator.

The base station shall set this field to ‘1’ to indicate that this message contains assignment information for Reverse Supplemental Code Channels; otherwise, the base station shall set this field to ‘0’.

If REV_INCLUDED is set to ‘1’, then the base station shall include the following fields, otherwise the base station shall omit the following fields:

REV_DTX_DURATION - Reverse Discontinuous Transmission Duration.

The base station shall set this field to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Code Channel within the reverse assignment duration. The base station shall set this field to ‘0000’ if the mobile station is to stop using a Reverse Supplemental Code Channel once it has stopped transmitting on that Reverse Supplemental Code Channel. The base station shall set this field to ‘1111’ if the mobile station is allowed to resume transmission on a Reverse Supplemental Code Channel at any time within the reverse assignment duration.

EXPL_REV_START_TIME - Explicit Reverse Supplemental Code Channel assignment start time indicator.

This field indicates whether a start time for the specified Reverse Supplemental Code Channel Assignment is specified in this message. If a REV_START_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’. If EXPL_REV_START_TIME is set to ‘1’, then the base station shall set USE_REV_HDM_SEQ to ‘0’.

REV_START_TIME - Explicit start time for Reverse Supplemental Code Channel assignment.
If EXPL_REV_START_TIME is included and set to ‘1’, the base
station shall include and set this field to the System Time, in
units of 80 ms (modulo 64), at which the mobile station may
start transmitting on the specified number of Reverse
Supplemental Code Channels. If EXPL_REV_START_TIME is
omitted or set to ‘0’, the base station shall omit this field.

USE_REV_DURATION - Use reverse duration indicator.

The base station shall set this field to ‘1’ if the
REV_DURATION field is included in the message; otherwise,
the base station shall set this field to ‘0’. If the mobile station
is granted permission to transmit on Reverse Supplemental
Code Channels (i.e., NUM_REV_CODES is not ‘000’) then a
value of ‘0’ for this field indicates an infinite Reverse
Supplemental Code Channel assignment duration (i.e., the
mobile station may transmit on Reverse Supplemental Code
Channels until it receives a subsequent Supplemental Channel
Assignment Message or a General Handoff Direction Message
that specifies an updated REV_DURATION or an updated
value of NUM_REV_CODES).

REV_DURATION - Duration of Reverse Supplemental Code Channel assignment.

The base station shall include this field only if the
USE_REV_DURATION field is included and set to ‘1’. If this
field is included, this field indicates the allocated duration, in
units of 80 ms, during which the mobile station may transmit
on Reverse Supplemental Code Channels.

USE_REV_HDM_SEQ - Use Reverse General Handoff Direction Message sequence
number indicator.

The base station shall set this field to ‘1’ to indicate that this
Reverse Supplemental Code Channel assignment shall take
effect at the same time as a corresponding General Handoff
Direction Message; otherwise, the base station shall set this
field to ‘0’. If USE_REV_HDM_SEQ is set to ‘1’, then the base
station shall set EXPL_REV_START_TIME to ‘0’.

REV_LINKED_HDM_SEQ - Sequence number of the reverse linked General Handoff
Direction Message.

If USE_REV_HDM_SEQ is included and set to ‘1’, then the
base station shall set this field to the sequence number of the
General Handoff Direction Message (HDM_SEQ) to which this
Reverse Supplemental Code Channel assignment is linked.

NUM_REV_CODES - Number of Reverse Supplemental Code Channels.

The base station shall set this field to the number of Reverse
Supplemental Code Channels that are assigned to the mobile
station.

USE_T_ADD_ABORT - Reverse use T_ADD abort indicator.
The base station shall set this field to ‘1’ to indicate that the mobile station is to utilize the T_ADD Reverse Supplemental Code Channel abort feature for this reverse assignment; otherwise, the base station shall set this field to ‘0’.

USE_SCRM_SEQ_NUM - Use Supplemental Channel Request Message sequence number indicator.

The base station shall set this field to ‘1’ if the SCRM_SEQ_NUM field is included in this message; otherwise, the base station shall set this field to ‘0’.

SCRM_SEQ_NUM - Supplemental Channel Request Message sequence number.

If USE_SCRM_SEQ_NUM is set to ‘1’, the base station shall set this field to the sequence number corresponding to the SCRM_SEQ_NUM field in a Supplemental Channel Request Message to which the mobile station is to match this message; otherwise, the base station shall omit this field.

REV_PARMS_INCLUDED - Reverse additional parameters included flag.

The base station shall set this field to ‘1’ if the following three fields (T_MULCHAN, BEGIN_PREAMBLE, and RESUME_PREAMBLE) are included in this message; otherwise, the base station shall set this field to ‘0’.

T_MULCHAN - Supplemental Channel Request Message pilot strength reporting offset.

If REV_PARMS_INCLUDED is set to ‘1’, the base station shall include this field and set this field to the threshold offset that the mobile station is to use when reporting neighbor pilot strength measurements in a Supplemental Channel Request Message. The mobile station is to interpret this field as an offset to T_ADD ranging from 0.5 dB (corresponding to T_MULCHAN = ‘000’) to 4.0 dB (corresponding to T_MULCHAN = ‘111’) in 0.5 dB increments.

BEGIN_PREAMBLE - Number of preamble frames on Reverse Supplemental Code Channels at the beginning of transmission on Reverse Supplemental Code Channel.

If REV_PARMS_INCLUDED is set to ‘1’, the base station shall include this field and set this field to the number of Reverse Supplemental Code Channel preamble frames that the mobile station is to send when beginning transmission on Reverse Supplemental Code Channels.

RESUME_PREAMBLE - Number of preamble frames on Reverse Supplemental Code Channels at the resumption of transmission.

If REV_PARMS_INCLUDED is set to ‘1’, the base station shall include this field and set this field to the number of Reverse Supplemental Code Channel preamble frames that the mobile station is to send when resuming transmission on a Reverse Supplemental Code Channel following an autonomous suspension of transmission on an allocated Supplemental Code Channel.
FOR_INCLUDED - Forward Supplemental Code Channel configuration indicator.
The base station shall set this field to ‘1’ to indicate that this message contains assignment information for Forward Supplemental Code Channels; otherwise, the base station shall set this field to ‘0’.

If FOR_INCLUDED is set to ‘1’, then the base station shall include the remaining fields in this message, otherwise the base station shall omit all of the following except for RESERVED.

FOR_SUP_CONFIG - Forward Supplemental Code Channel configuration indicator.
The base station shall set this field to ‘00’ to indicate that the mobile station is to stop processing the Forward Supplemental Code Channels at the implicit action time of the message.
The base station shall set this field to ‘01’ to indicate that the mobile station is to start processing the Forward Supplemental Code Channels in the Code Channel List at the implicit, explicit, or linked start time specified by this message (see 2.6.6.2.5.1).
The base station shall set this field to ‘10’ if the Forward Supplemental Code Channels are specified in the message and the mobile station is to update its Code Channel List and stop processing the Forward Supplemental Code Channels at the implicit action time of the message.
The base station shall set this field to ‘11’ if the Forward Supplemental Code Channels are specified in the message and the mobile station is to start processing the Forward Supplemental Code Channels at the implicit, explicit, or linked start time specified by this message (see 2.6.6.2.5.1).

EXPL_FOR_START_TIME - Explicit forward start time indicator.
This field indicates whether an explicit Forward Supplemental Code Channel start time is specified in this message.
The base station shall include this field only if FOR_SUP_CONFIG is set to ‘01’ or ‘11’. If a FOR_START_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’.

If EXPL_FOR_START_TIME is set to ‘1’, then the base station shall set USE_FOR_HDM_SEQ to ‘0’.

The following field is included only if EXPL_FOR_START_TIME is included and set to ‘1’:

FOR_START_TIME - Start time of the Forward Supplemental Code Channel assignment.
The base station shall include this field only if FOR_SUP_CONFIG is set to ‘01’ or ‘11’. If the EXPL_FOR_START_TIME field is set to ‘1’, the base station shall set this field to the System Time, in units of 80 ms (modulo 64), at which the mobile station is to start processing the Forward Supplemental Code Channels. If EXPL_FOR_START_TIME is set to ‘0’, the base station shall omit this field.

USE_FOR_DURATI - Use forward duration indicator.

The base station shall set this field to ‘1’ if FOR_DURATION is included in the message; otherwise, the base station shall set this field to ‘0’.

If FOR_SUP_CONFIG is set to ‘01’ or ‘11’, then the base station may set this field to ‘0’ to indicate that the mobile station is to be assigned an infinite Forward Supplemental Code Channel assignment duration (i.e., the mobile station is to continue processing Forward Supplemental Code Channels until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies an updated FOR_DURATION). Otherwise, the base station may set this field to ‘1’ to indicate that the mobile station is to be given a Forward Supplemental Code Channel assignment for the duration specified by the FOR_DURATI field.

If FOR_SUP_CONFIG is set to ‘00’ or ‘10’, then the base station shall set USE_FOR_DURATI to ‘0’.

FOR_DURATI - Duration of Forward Supplemental Code Channel assignment.

The base station shall include this field only if USE_FOR_DURATI is included and set to ‘1’. If this field is included, this field indicates allocated duration, in units of 80 ms, during which the mobile station is to process the Forward Supplemental Code Channels.

USE_FOR_HDM_SEQ - Use Forward General Handoff Direction Message sequence number indicator.

This field indicates whether processing of the Forward Supplemental Code Channels shall take effect at the same time as a corresponding General Handoff Direction Message.

The base station shall include this field only if FOR_SUP_CONFIG is equal to ‘01’ or ‘11’. If this message is linked with a General Handoff Direction Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’. If USE_FOR_HDM_SEQ is set to ‘1’, then the base station shall set EXPL_FOR_START_TIME to ‘0’.

FOR_LINKED_HDM_SEQ - Sequence number of the General Handoff Direction Message.
If the USE_FOR_HDM_SEQ field is included and set to ‘1’, the base station shall set this field to the sequence number of the General Handoff Direction Message (HDM_SEQ) to which this Forward Supplemental Code Channel assignment is linked; otherwise, if USE_FOR_HDM_SEQ is not included or is set to ‘0’, then base station shall omit this field.

NUM_SUP_PILOTS - Number of pilots in the Active Set which have at least one associated Supplemental Code Channel.

NUM_FOR_SUP - Number of Forward Supplemental Code Channels.

If FOR_SUP_CONFIG is included and is set to ‘10’ or ‘11’, the base station shall include this field and shall set this field to the number of pilots for which there is at least one associated Supplemental Code Channel. This field shall not be included if FOR_SUP_CONFIG is omitted or is set to ‘01’ or ‘00’.

If FOR_SUP_CONFIG is included and is set to ‘10’ or ‘11’, the base station shall include NUM_SUP_PILOTS occurrences of the following record, one for each pilot for which there is at least one associated Supplemental Code Channel:

PILOT_PN - Pilot PN sequence offset index.

EXPL_CODE_CHAN - Explicit code channel indicator

If EXPL_CODE_CHAN is set to ‘1’, then the base station shall include NUM_FOR_SUP occurrences of the following field, one for each pilot which has been included:

SUP_CODE_CHAN - Supplemental Code Channel index.
The base station shall set this field to the code channel index (see [2]) in the range 1 to 63 inclusive of the Supplemental Code Channel associated with this pilot.

If EXPL_CODE_CHAN is set to ‘0’, then the base station shall include the following field:

**BASE_CODE_CHAN** - Base code channel index.

If EXPL_CODE_CHAN is equal to ‘0’, the base station shall include this field and set it to the base code channel index (see [2]) in the range of 1 to \((63 - NUM_FOR_SUP + 1)\), inclusive, that the mobile station is to use as the first Forward Supplemental Code Channel associated with this pilot. The mobile station is to use NUM_FOR_SUP successive code channels beginning with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN through BASE_CODE_CHAN + NUM_FOR_SUP – 1) for the Forward Supplemental Code Channels associated with this pilot.

The base station shall not include this field if EXPL_CODE_CHAN is equal to ‘1’ or if EXPL_CODE_CHAN is not included.
### 3.7.3.2.25 Power Control Message

**MSG_TAG: PCNM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PWR_CNTL_STEP</td>
<td>3</td>
</tr>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_OLPCH_FCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_FCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_FCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_OLPCH_DCCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_DCCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_DCCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_SEC_CHAN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SUP</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

Include NUM_SUP occurrence of the following record:

```
} (NUM_SUP)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FPC_SCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_SCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_SCH_MAX_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

} (NUM_SUP)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_THRESH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>FPC_SETPT_THRESH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_THRESH_SCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_SETPT_THRESH_SCH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RPC_NUM_REC</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

If RPC INCL is set to ‘1’, RPC_NUM_REC occurrences of the following record:

```plaintext
/
(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\times RPC_ADJ_REC_LEN, or 8 \times 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
```

PWR_CNTL_STEP - Power control step size

The base station shall set this field to the closed loop power control step size parameter shown in Table 3.7.3.3.2.25-1 corresponding to the power control step size that the mobile station is to use for closed loop power control.
Table 3.7.3.3.25-1. Closed Loop Power Control

<table>
<thead>
<tr>
<th>PWR_CNTL_STEP (binary)</th>
<th>Power Control Step Size (dB nominal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>1</td>
</tr>
<tr>
<td>001</td>
<td>0.5</td>
</tr>
<tr>
<td>010</td>
<td>0.25</td>
</tr>
</tbody>
</table>

All other PWR_CNTL_STEP values are reserved.

1 USE_TIME - Use action time indicator.

This field indicates whether an ACTION_TIME is specified in this message.

If an ACTION_TIME is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

2 ACTION_TIME - Action time.

If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus $\text{FRAME_{OFFSET}} \times 1.25$ 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.

3 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’.

4 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]).

5 FPC_PRI_CHAN - Power Control Subchannel indicator.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.

If only the Fundamental Channel is assigned, the base station shall set this field to ‘0’. If only the Dedicated Control Channel is assigned, the base station shall set this field to ‘1’.
If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to ‘0’, the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

**FPC_OLPC_FCH_INCL** - Fundamental Channel Outer Loop Power Control parameter included indicator.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the forward link fundamental channel outer loop power control parameters are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**FPC_FCH_FER** - Fundamental channel target Frame Error Rate.

If FPC_OLPC_FCH_INCL is included and set to ‘1’, the base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2; otherwise, the base station shall omit this field.

**Table 3.7.3.3.2.25-2. Target Frame Error Rate**

<table>
<thead>
<tr>
<th>FER (Binary)</th>
<th>Frame Error Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>00000</td>
<td>0.2%</td>
</tr>
<tr>
<td>00001-10100</td>
<td>0.5% -10% (in units of 0.5%)</td>
</tr>
<tr>
<td>10101-11001</td>
<td>11% - 15% (in units of 1.0%)</td>
</tr>
<tr>
<td>11010-11110</td>
<td>18% - 30% (in units of 3.0%)</td>
</tr>
<tr>
<td>11111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**FPC_FCH_MIN_SETPT** - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint

If FPC_OLPC_FCH_INCL is included and set to ‘1’, the base station shall set this field to minimum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.

The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt **setpoint to the current setpoint used at the mobile station on this channel.**

**FPC_FCH_MAX_SETPT** - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint

If FPC_OLPC_FCH_INCL is included and set to ‘1’, the base station shall set this field to maximum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.
The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt Eb/No setpoint to the current setpoint used at the mobile station on this channel.

FPC_O LPC_DCCH_INCL - Dedicated Control Channel Outer Loop Power Control parameter included indicator.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the forward link Dedicated Control Channel outer loop power control parameters are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FPC_DCCH_FER - Dedicated Control Channel target Frame Error Rate.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to the target Frame Error Rate on the Forward Dedicated Control Channel, as specified in Table 3.7.3.3.2.25-2; otherwise, the base station shall omit this field.

FPC_DCCH_MIN_SETPT - Minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.

The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt Eb/No setpoint to the current setpoint used at the mobile station on this channel.

FPC_DCCH_MAX_SETPT - Maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB; otherwise, the base station shall omit this field.

The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt Eb/No setpoint to the current setpoint used at the mobile station on this channel.

FPC_SEC_CHAN - Master Supplemental channel index.

If FPC_INCL is set to ‘1’ and FPC_MODE is set to ’001’, ’010’, ‘101’, or ‘110’, the base station shall set this field to the master Supplemental Channel index; otherwise, the base station shall omit this field.
NUM_SUP – Number of Supplemental Channels.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the total number of the Supplemental Channels.

The base station shall include NUM_SUP occurrences of the following record:

SCH_ID  - Supplemental channel index.

The base station shall set this field to the Supplemental Channel index.

FPC_SCH_FER  - Supplemental channel target Frame Error Rate.

The base station shall set this field to the target Frame Error Rate on the Supplemental Channel, as specified in Table 3.7.3.3.2.25-2.

FPC_MIN_SCH_MIN_SETPT  - Minimum Supplemental Channel outer loop Eb/Nt setpoint.

The base station shall set this field to minimum Supplemental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt setpoint to the current setpoint used at the mobile station on this channel.

FPC_MAX_SCH_MAX_SETPT  - Maximum Supplemental Channel outer loop Eb/Nt setpoint.

The base station shall set this field to maximum Supplemental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

The base station shall set this field to ‘11111111’, when it directs the mobile station to set this Eb/Nt setpoint to the current setpoint used at the mobile station on this channel.

FPC_THRESH_INCL  - Setpoint Report Threshold included indicator.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If FPC_SETPT_THRESH 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_SETPT_THRESH  - Setpoint Report Threshold.

If FPC_THRESH_INCL is set to ‘1’, the base station shall set the value to FPC_SETPT_THRESH (in units of 0.125 dB) above which the outer loop report message will be sent by the mobile station; otherwise, the base station shall omit this field.

FPC_THRESH_SCH_INCL  - SCH Setpoint Report Threshold included indicator.

If FPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:
If FPC_SETPT_THRESH_SCH 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_SETPT_THRESH_SCH - SCH Setpoint Report Threshold.

If FPC_THRESH_SCH_INCL is set to ‘1’, the base station shall set the value to FPC_SETPT_THRESH_SCH (in units of 0.125 dB) above which the outer loop report message will be sent by the mobile station; otherwise, the base station shall omit this field.

RPC_INCL - Reverse Link Power Control parameter included indicator.

If the reverse 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’.

RPC_NUM_REC - Number of records for Reverse Link Power Control.

If RPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to one less than the number of records included in this message.

If RPC_NUM_REC is included in this message, the base station shall include RPC_NUM_REC occurrences of the following record:

RPC_ADJ_REC_TYPE - Reverse Link Power Control adjustment record type.

The base station shall set this field to the value shown in Table 3.7.3.3.2.25-3 corresponding to the type of adjustment that is to be used.

Table 3.7.3.3.2.25-3. RPC_ADJ_REC_TYPE and RPC_ADJ_REC_LEN fields

<table>
<thead>
<tr>
<th>Description</th>
<th>RPC_ADJ_REC_TYPE (binary)</th>
<th>RPC_ADJ_REC_LEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Channel Adjustment Gain</td>
<td>0000</td>
<td>2-7</td>
</tr>
<tr>
<td>Attribute Adjustment Gain for Basic Rates</td>
<td>0001</td>
<td>2-26</td>
</tr>
<tr>
<td>Attribute Adjustment Gain for Higher Rates</td>
<td>0010</td>
<td>2-31</td>
</tr>
<tr>
<td>Attribute Adjustment Gain for R-CQICH</td>
<td>0011</td>
<td>2-6</td>
</tr>
<tr>
<td>Attribute Adjustment Gain for R-PDCCH</td>
<td>0100</td>
<td>13-936</td>
</tr>
</tbody>
</table>

All other values are reserved.

RPC_ADJ_REC_LEN - Reverse Link Power Control adjustment record length.
If RPC_ADJ_REC_TYPE is not equal to '0100', the base station shall set this field to the number of octets in the type-specific fields of this adjustment record as given in Table 3.7.3.3.2.25-3.

If RPC_ADJ_REC_TYPE is equal to '0100', the base station shall set this field to '0000'.

EXT_RPC_ADJ_REC_LEN - Reverse Link Power Control adjustment record length.

If RPC_ADJ_REC_TYPE is not equal to '0100', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

If RPC_ADJ_REC_TYPE is equal to '0100', the base station shall set this field to the number of octets in the type-specific fields of this adjustment record as given in Table 3.7.3.3.2.25-3.

Type-specific fields - Reverse Link Power Control adjustment record type-specific fields.

The base station shall include type-specific fields based on the RPC_ADJ_REC_TYPE of this adjustment record, as specified as below.
If RPC_ADJ_REC_TYPE is equal to ‘0000’, the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-4.

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>DCCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DCCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SCH0_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SCH0_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SCH1_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SCH1_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_ACKCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_ACKCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_CQICH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_CQICH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

FCH_INCL - FCH channel adjustment gain included indicator.

If FCH_CHAN_ADJ_GAIN is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Fundamental Channel.

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.

DCCH_INCL - DCCH channel adjustment gain included indicator.

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’.

DCCH_CHAN_ADJ_GAIN - Channel adjustment gain for the Reverse Dedicated Control Channel.
If DCCH_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 Dedicated Control 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.

SCH0_INCL - SCH0 channel adjustment gain included indicator.

If SCH0_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’.

SCH0_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Supplemental Channel 0.

If SCH0_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 Supplemental Channel 0. 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.

SCH1_INCL - SCH1 channel adjustment gain included indicator.

If SCH1_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’.

SCH1_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Supplemental Channel 1.

If SCH1_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 Supplemental Channel 1. 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.

REV_ACKCH_INCL - Reverse Acknowledgment Channel channel adjustment gain included indicator.

If REV_ACKCH_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’.

REV_ACKCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Acknowledgment Channel.
If REV_ACKCH_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 Acknowledgment 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 -24 to 24 inclusive.

REV_CQICH_INCL - Reverse Channel Quality Indicator Channel channel adjustment gain included indicator.

If REV_CQICH_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’.

REV_CQICH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Channel Quality Indicator Channel.

If REV_CQICH_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 Channel Quality Indicator 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 -16 to 16 inclusive.

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 ‘0001’, the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-5.
Table 3.7.3.3.25-5. Type Specific Fields for RECORD_TYPE = ‘0001’

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RC3_RC5_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1500</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2700</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_3600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>5MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600_5MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1350_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_3600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2400_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800_80MS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_ATT_ADJ_GAIN_9600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_3600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

**RL_ATT_ADJ_GAIN_TYPE** - Reverse Link Attribute Adjustment Gain value type indicator.

If the following fields are set to the nominal attribute gain adjustment values that the mobile station is to use for the transmission attributes (relative to Nominal_Attribute_Gain specified in [2]), the base station shall set this field to ‘0’. If the following fields are set to the pilot reference level adjustment values that the mobile station is to use for the transmission attributes (relative to Pilot_Reference_Level specified in [2]), the base station shall set this field to ‘1’.

**RC3_RC5_20MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_1500** - Reverse Link Attribute Adjustment Gain for the transmission rate 1500 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame.
The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_2700 -** Reverse Link Attribute Adjustment Gain for the transmission rate 2700 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 2700 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 2700 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_4800 -** Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_9600 -** Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RC4_RC6_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 20ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 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’.

RL_ATT_ADJ_GAIN_1800 - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_3600 - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_7200 - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_14400- Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

5MS_INCL - 5ms frame Reverse Link Attribute Adjustment Gain included indicator.

If Reverse Link Attribute Adjustment Gain for 5ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_9600_5MS - Reverse Link Attribute Adjustment Gain for the transmission rate 9600 bits/s with 5ms frame.

If 5MS_INCL is set to ‘0’, the base station shall omit this field.

If 5MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 5ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If 5MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 5ms frame. The base station shall set the correction factor expressed as a two's complement value in units of 0.125 dB.

RC3_RC5_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 40 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1350_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 1350 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1350 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1350 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_2400_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 2400 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 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.

**RL_ATT_ADJ_GAIN_4800_40MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 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.

**RL_ATT_ADJ_GAIN_9600_40MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.
If $RC3\_RC5\_40MS\_INCL$ is set to ‘0’, the base station shall omit this field.

If $RC3\_RC5\_40MS\_INCL$ is set to ‘1’ and $RL\_ATT\_ADJ\_GAIN\_TYPE$ is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If $RC3\_RC5\_40MS\_INCL$ is set to ‘1’ and $RL\_ATT\_ADJ\_GAIN\_TYPE$ is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

$RC4\_RC6\_40MS\_INCL$ - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

$RL\_ATT\_ADJ\_GAIN\_1800\_40MS$ - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If $RC4\_RC6\_40MS\_INCL$ is set to ‘0’, the base station shall omit this field.

If $RC4\_RC6\_40MS\_INCL$ is set to ‘1’ and $RL\_ATT\_ADJ\_GAIN\_TYPE$ is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If $RC4\_RC6\_40MS\_INCL$ is set to ‘1’ and $RL\_ATT\_ADJ\_GAIN\_TYPE$ is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

$RL\_ATT\_ADJ\_GAIN\_3600\_40MS$ - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If $RC4\_RC6\_40MS\_INCL$ is set to ‘0’, the base station shall omit this field.
If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_7200_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_14400_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 80 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 1200 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1200 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1200 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_2400_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 2400 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_4800_80MS - Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_9600_80MS - Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC4_RC6_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame included indicator.
If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_1800_80MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_3600_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_7200_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_14400_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RESERVED** - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If RPC_ADJ_REC_TYPE is equal to ‘0010’, the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-6.
Table 3.7.3.2.25-6. Type Specific Fields for
RECORD_TYPE = '0010'

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODE_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RC3_RC5_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_307200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_614400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_230400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_460800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1036800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_307200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200_40MS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

(continues on next page)
### Fields and Lengths

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_ATT_ADJ_GAIN_230400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_518400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_259200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

1. **CODE_TYPE** - Coding type indicator.
   - 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'.

2. **RL_ATT_ADJ_GAIN_TYPE** - Reverse Link Attribute adjustment Gain value type indicator.
   - 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'.

3. **RC3_RC5_20MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20ms frame included indicator.
   - 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’.

4. **RL_ATT_ADJ_GAIN_19200** - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.
If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_38400 - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_76800 - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_153600 - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_307200 - Reverse Link Attribute Adjustment Gain for the transmission rate 307200 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_614400 - Reverse Link Attribute Adjustment Gain for the transmission rate 614400 bits/s.
If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 614400 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 614400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RC4_RC6_20MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 20ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 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’.

**RL_ATT_ADJ_GAIN_28800** - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_57600** - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_115200 - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_230400 - Reverse Link Attribute Adjustment Gain for the transmission rate 230400 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If $\text{RC4\_RC6\_20MS\_INCL}$ is set to ‘1’ and $\text{RL\_ATT\_ADJ\_GAIN\_TYPE}$ is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

$\text{RL\_ATT\_ADJ\_GAIN\_460800}$ - Reverse Link Attribute Adjustment Gain for the transmission rate 460800 bits/s.

If $\text{RC4\_RC6\_20MS\_INCL}$ is set to ‘0’, the base station shall omit this field.

If $\text{RC4\_RC6\_20MS\_INCL}$ is set to ‘1’ and $\text{RL\_ATT\_ADJ\_GAIN\_TYPE}$ is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 460800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 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.

$\text{RL\_ATT\_ADJ\_GAIN\_1036800}$ - Reverse Link Attribute Adjustment Gain for the transmission rate 1036800 bits/s.

If $\text{RC4\_RC6\_20MS\_INCL}$ is set to ‘0’, the base station shall omit this field.

If $\text{RC4\_RC6\_20MS\_INCL}$ is set to ‘1’ and $\text{RL\_ATT\_ADJ\_GAIN\_TYPE}$ is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1036800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 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.

$\text{RC3\_RC5\_40MS\_INCL}$ - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40ms frame included indicator.
If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_19200_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_38400_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_76800_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.
If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_153600_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_307200_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 307200 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC4_RC6_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_28800_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_57600_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘1’ and \( \text{NORM\_ATT\_GAIN\_TYPE} \) is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL\_ATT\_ADJ\_GAIN\_115200\_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘0’, the base station shall omit this field.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘1’ and \( \text{RL\_ATT\_ADJ\_GAIN\_TYPE} \) is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘1’ and \( \text{RL\_ATT\_ADJ\_GAIN\_TYPE} \) is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 40ms frame.

**RL\_ATT\_ADJ\_GAIN\_230400\_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 230400 bits/s.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘0’, the base station shall omit this field.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘1’ and \( \text{RL\_ATT\_ADJ\_GAIN\_TYPE} \) is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If \( \text{RC4\_RC6\_40MS\_INCL} \) is set to ‘1’ and \( \text{RL\_ATT\_ADJ\_GAIN\_TYPE} \) is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s and 40ms frame.

**RL\_ATT\_ADJ\_GAIN\_518400\_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 518400 bits/s.
If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 518400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 518400 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_19200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_38400_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.
If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_76800_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_153600_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RC4_RC6_80MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_28800_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_57600_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_115200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_259200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 259200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 259200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 259200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RESERVED - Reserved bits.
The base station shall add reserved bits as needed in order to make the length of the entire record equal to an integer number of octets. The base station shall set these bits to '0'.

If RPC_ADJ_REC_TYPE is equal to '0011', the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-7.

Table 3.7.3.3.2.25-7. Type Specific Fields for RECORD_TYPE = '0011'

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

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:
If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH. The base station shall set the value in the range from –40 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_CQICH_ATT_ADJ_GAIN_LOW_INCL - Reverse Channel Quality Indicator Channel attribute adjustment gain for the low power level included indicator.

If the attribute adjustment gain for the low 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_LOW - Attribute adjustment gain for Reverse Channel Quality Indicator Channel for the low Channel Quality Indicator gain power level.

If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH. The base station shall set the value in the range from –16 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

If RPC_ADJ_REC_TYPE is equal to ‘0100’, the base station shall set type-specific fields as specified in Table 3.7.3.3.2.25-8.
Table 3.7.3.25-8. Type Specific Fields for

| RECORD_TYPE = ‘0100’ |

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_REQCH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_REQCH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_SPICH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_SPICH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_SPICH_EP_SIZE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCCH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCCH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCCH_ATTRIBUTE_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCCH_EP_SIZE_NUM</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

{ (REV_PDCCH_EP_SIZE_NUM +1)
} (2)

REV_PDCCH_ATTRIBUTE_ADJ_GAIN  8

} (2)

} (REV_PDCCH_EP_SIZE_NUM +1)

REV_PDCCH_BOOST_ADJ_INCL      1

{ (2)

REV_PDCCH_BOOST_ADJ_GAIN      0 or 8

} (2)

REV_PDCCH_PAYLOAD_ADJ_INCL    1

REV_PDCCH_EP_SIZE_NUM_1      0 or 4

{ (REV_PDCCH_EP_SIZE_NUM_1 +1)

REV_PDCCH_PAYLOAD_ADJ_GAIN    8

} (REV_PDCCH_EP_SIZE_NUM_1 +1)

REV_PDCH_ADJ_INCL            1

REV_PDCH_ADJ_GAIN            0 or 8

REV_PDCH_PAYLOAD_ADJ_INCL    1

REV_PDCH_EP_SIZE_NUM         0 or 4

{ (REV_PDCH_EP_SIZE_NUM +1)

REV_PDCH_PAYLOAD_ADJ_GAIN    8

} (REV_PDCH_EP_SIZE_NUM +1)

REV_PDCH_BOOST_ADJ_INCL      1

{ (2)
REV_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 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 $-324$ to $540$ 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.
If the attribute adjustment gains for the Reverse Secondary Pilot 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_SPICH_ADJ_GAIN - Reverse Secondary Pilot Channel Adjustment Gain.

If REV_SPICH_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-SPICH. The base station shall set the value in the range from $-2^{16}$ to $2^{16}$-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_EP_SIZE - Minimum Encoder Packet Size for which the Reverse Secondary Pilot Channel is used.

If REV_SPICH_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 minimum encoder packet size for which the Reverse Secondary Pilot Channel is used (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 6168, 9240, 12312, 15384, and 18456 bits respectively.

REV_PDCCH_ADJ_INCL - Reverse Packet Data Control Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control 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_PDCCH_ADJ_GAIN - Reverse Packet Data Control Channel Adjustment Gain.

If REV_PDCCH_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-PDCCH. The base station shall set the value in the range from $-4^{32}$ to $4^{32}$-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_PDCCH_ATTRIBUTE_ADJ_INCL - Reverse Packet Data Control Channel Attribute Adjustment included field.
If the attribute adjustment gains for the Reverse Packet Data Control Channel are included per encoder packet size and per boost mode in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Control Channel Attribute Adjustment Gains.

If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than half the number of occurrences of the field included hereafter. The records are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to ‘1’, the base station shall include REV_PDCCH_EP_SIZE_NUM+1 occurrences of the following record:

The base station shall include 2 occurrences of the following field. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

REV_PDCCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Control Channel Attribute Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCCH, for the i-th encoder packet size, and for the non-boosted and boosted modes.

The base station shall set the value in the range from \(-2^{32}\) to \(2^{32}\)-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_PDCCH_BOOST_ADJ_INCL - Reverse Packet Data Control Channel Boost Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control Channel per boosted mode are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If REV_PDCCH_BOOST_ADJ_INCL is set to ‘1’, the base station shall include two occurrences of the following record:

REV_PDCCH_BOOST_ADJ_GAIN - Reverse Packet Data Control Channel Boost Adjustment Gains.
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-PDCCH, for the appropriate mode. The base station shall set the value in the range from $-\frac{32}{32}$ to $\frac{32}{32}$ inclusive.

The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode. 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_PDCCH_PAYLOAD_ADJ_INCL - Reverse Packet Data Control Channel Payload Attribute Adjustment inclusion field.

If the attribute adjustment gains for the Reverse Packet Data Control Channel are included per encoder packet size in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCCH_EP_SIZE_NUM_1 - Number of occurrences of Reverse Packet Data Control Channel Payload Attribute Adjustment Gain records. If REV_PDCCH_PAYLOAD_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to one less than the number of occurrences of the field included hereafter. The fields are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCCH_PAYLOAD_ADJ_INCL is set to ‘1’, the base station shall include $(REV_PDCCH_EP_SIZE_NUM_1+1) \times 2$ occurrences of the following record:

REV_PDCCH_PAYLOAD_ADJ_GAIN - Reverse Packet Data Control Channel Payload Attribute Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCCH, for the i-th encoder packet size, and for the non-boosted and boosted modes. In each set for the i-th encoder packet, the first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

The base station shall set the value in the range from $-\frac{32}{32}$ to $\frac{32}{32}$ inclusive. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

REV_PDCH_ADJ_INCL - Reverse Packet Data Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data 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’.
REVPDCH_ADJ_GAIN - Reverse Packet Data Channel Adjustment Gain.

If REVPDCH_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-PDCH. The base station shall set the value in the range from $-40$ to $656$, 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.

REVPDCH_PAYLOAD_ADJ_INCL - Reverse Packet Data Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per encoder packet size in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REVPDCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Channel Payload Adjustment Gains.

If REVPDCH_PAYLOAD_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following field. The fields are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits

If REVPDCH_PAYLOAD_ADJ_INCL is set to ‘1’, the base station shall include REVPDCH_EP_SIZE_NUM+1 occurrences of the following record:

REVPDCH_PAYLOAD_ADJ_GAIN - Reverse Packet Data Channel Payload Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH, for the i-th encoder packet size. The base station shall set the value in the range from $-40$ to $656$, 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.

REVPDCH_BOOST_ADJ_INCL - Reverse Packet Data Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per boosted mode in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
If REV_PDCH_BOOST_ADJ_INCL is set to ‘1’, the base station shall include two occurrences of the following record. The first occurrence of this field-record is for the non-boosted mode, while the second is for the boosted mode.

REV_PDCH_BOOST_ADJ_GAIN - Reverse Packet Data Channel Boost-dependent Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH. The base station shall set the value in the range from $-40$ to $656$ inclusive.

The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

REV_PDCH_SUBPACKET_ADJ_INCL - Reverse Packet Data Channel Subpacket Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per subpacket transmission round in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_RETRX_NUM - Number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains.

If REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following field.

If REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘1’, the base station shall include $(REV_PDCH_RETRX_NUM+1)$ occurrences of the following record:

REV_PDCH_SUBPACKET_ADJ_GAIN - Reverse Packet Data Channel Subpacket Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH, on the i-th transmission round. The base station shall set the value in the range from $-40$ to $656$ inclusive.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

REV_PDCH_ATTRIBUTE_ADJ_INCL - Reverse Packet Data Channel Attribute Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per encoder packet size and per subpacket transmission round in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
REV_PDCH_EP_SIZE_NUM_1 - Number of occurrences of the Reverse Packet Data Channel Attribute Adjustment Gains record.

If REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following subrecord. The subrecords are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCH_ATTRIBUTE_ADJ_INCL REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘1’, the base station shall include (REV_PDCH_EP_SIZE_NUM_1+1) occurrences of the following subrecord:

REV_PDCH_RETRX_NUM_1 - Number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains.

The base station shall set this field to one less than the number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains record.

The base station shall include (REV_PDCH_RETRX_NUM_1+1) occurrences of the following record:

The base station shall include 2 occurrences of the following field. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

REV_PDCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Channel Attribute Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH, for the i-th encoder packet size on a j-th transmission round, using the non-boosted or boosted mode.

The base station shall set the value in the range from –40 to 56 inclusive. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

REV_PDCH_PARMS_INCL - Reverse Packet Data Channel related parameters included indicator.

The base station shall set this field to ‘1’ if the R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.
If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

REV_PDCH_NUM_ARQ_ROUNDS_BOOST - Maximum number of allowed HARQ retransmissions on the Reverse PDCH in the boosted mode.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

FPC_BCMC_CHAN - Channel used for secondary power control subchannel.

If FPC_INCL is set to ‘1’ and FPC_MODE is set to ‘001’, ‘010’, ‘101’, or ‘110’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.

If F-FCH is associated with secondary power control subchannel, the base station shall set this field to ‘1’; otherwise, base station shall set this field to ‘0’ to indicate that FPC_SEC_CHAN points to the channel associated with secondary power control subchannel.

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’.
3.7.3.2.26 Extended Neighbor List Update Message

MSG_TAG: ENLUM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_INC</td>
<td>4</td>
</tr>
<tr>
<td>NGHBR_SRCH_MODE</td>
<td>2</td>
</tr>
<tr>
<td>SRCH_WIN_N</td>
<td>4</td>
</tr>
<tr>
<td>USE_TIMING</td>
<td>1</td>
</tr>
<tr>
<td>GLOBAL_TIMING_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>GLOBAL_TX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>GLOBAL_TX_PERIOD</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NUM_NGHBR</td>
<td>6</td>
</tr>
</tbody>
</table>

NUM_NGHBR occurrences of the following field:

\{(NUM_NGHBR)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGHBR_PN</td>
<td>9</td>
</tr>
<tr>
<td>SEARCH_PRIORITY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SRCH_WIN_NGHBR</td>
<td>0 or 4</td>
</tr>
<tr>
<td>TIMING_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NGHBR_TX_OFFSET</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NGHBR_TX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NGHBR_TX_PERIOD</td>
<td>0 or 7</td>
</tr>
</tbody>
</table>

\{(NUM_NGHBR)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NGHBR_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or $8 \times$ RECORD_LEN</td>
</tr>
<tr>
<td>SRCH_OFFSET_NGHBR</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

\{(NUM_NGHBR)

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESQ_ENABLED</td>
<td>1</td>
</tr>
<tr>
<td>RESQ_DELAY_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ALLOWED_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_ATTEMPT_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RESQ_CODE_CHAN</td>
<td>0 or 11</td>
</tr>
<tr>
<td>RESQ_QOF</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_MIN_PERIOD</td>
<td>0 or 5</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_20MS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RESQ_NUM_TOT_TRANS_5MS</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RESQ_NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESQ_POWER_DELTA</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

If RESQ_ENABLED is set to ‘1’, NUM_NGHBR occurrences of the following one-field record:

```plaintext
{ (NUM_NGHBR)
  NGHBR_RESQ_CONFIGURED 1
} (NUM_NGHBR)
```

1. **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.

2. **NGHBR_SRCH_MODE** - Search mode.
   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.
Table 3.7.3.2.26-1. NGHBR_SRCH_MODE Field

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No search priorities or search windows</td>
</tr>
<tr>
<td>01</td>
<td>Search priorities</td>
</tr>
<tr>
<td>10</td>
<td>Search windows</td>
</tr>
<tr>
<td>11</td>
<td>Search windows and search priorities</td>
</tr>
</tbody>
</table>

SRCH_WIN_N - Default search window size for the Neighbor Set.

The base station shall set this field to the value specified in Table 2.6.6.2.1-1 corresponding to the default search window size to be used by the mobile station for its Neighbor Set. The mobile station uses the default search window size for all pilots in its Neighbor Set when the search window is not specified for each pilot individually (NGHBR_SRCH_MODE is set to a value other than ‘10’ and ‘11’).

USE_TIMING - Use timing indicator.

If base station timing information is included for neighbor base stations, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

GLOBAL_TIMING_INCL - Global timing included.

If USE_TIMING is set to ‘1’, the base station shall include the field GLOBAL_TIMING_INCL and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included globally for all neighbor base stations with TIMING_INCL equal to ‘1’, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

GLOBAL_TX_DURATION - Global neighbor transmit time duration.

If GLOBAL_TIMING_INCL is included and is set to ‘1’, the base station shall include the field GLOBAL_TX_DURATION and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the duration of the base station transmit window, during each period, in units of 80 ms. The base station should set this field to a value of 3 or greater.

GLOBAL_TX_PERIOD - Global neighbor transmit time period.

If GLOBAL_TIMING_INCL is included and is set to ‘1’, the base station shall include the field GLOBAL_TX_PERIOD and shall set this field as described below; otherwise, the base station shall omit this field.
The base station shall set this field to duration of the period, in units of 80 ms.

The base station shall set this field to the number of neighbors included in the message.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set

**NUM_NGHB**R - Number of neighbor pilot PN sequences.

The base station shall include one occurrence of this field for each pilot in its neighbor list. The base station shall set this field to the pilot’s PN sequence offset, in units of 64 PN chips.

**SEARCH_PRIORITY** - Pilot Channel search priority.

If **NGHBR_SRCH_MODE** is set to ‘01’ or ‘11’, then the base station shall set this field to the search priority for this neighbor. The base station shall set the search priority as specified in Table 3.7.3.3.2.26-2. If **NGHBR_SRCH_MODE** is set to any other value, the base station shall omit this field.

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Search Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Low</td>
</tr>
<tr>
<td>01</td>
<td>Medium</td>
</tr>
<tr>
<td>10</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Very High</td>
</tr>
</tbody>
</table>

**SRCH_WIN_NGHB**R - Neighbor pilot channel search window size.

If **NGHBR_SRCH_MODE** is set to ‘10’ or ‘11’, then the base station shall set this field to the value specified in Table 2.6.6.2.1-1 corresponding to the search window size to be used by the mobile stations for this neighbor. If **NGHBR_SRCH_MODE** is set to any other value, the base station shall omit this field.

**TIMING_INCL** - Timing included indicator.

If **USE_TIMING** is set to ‘1’, the base station shall include the field **TIMING_INCL** and set this field as described below; otherwise, the base station shall omit this field.

If base station timing information is included for this neighbor base station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NGHBR_TX_OFFSET** - Neighbor transmit time offset.
If TIMING_INCL is included and is set to ‘1’, the base station shall include the field NGHBR_TX_OFFSET and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to the time offset, in units of 80 ms, from the beginning of the neighbor timing period to the beginning of the first base station transmit window within the period. The beginning of the neighbor timing period occurs when \( \lceil t/4 \rceil \mod (16384) = 0 \).

NGHBR_TX_DURATION - Neighbor transmit time duration.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_DURATION and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to 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.

NGHBR_TX_PERIOD - Neighbor transmit time period.

If TIMING_INCL is included and is set to ‘1’ and GLOBAL_TIMING_INCL is set to ‘0’, the base station shall include the field NGHBR_TX_PERIOD and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to duration of the period, in units of 80 ms.

SRCH_OFFSET_INCL - Neighbor pilot channel search window offset included.

If NGHBR_SRCH_MODE = ‘10’ or ‘11’ and if the SRCH_OFFSET_NGHB field is included in the following records, the base station shall set this bit to ‘1’; otherwise, the base station shall set this bit to ‘0’.

The base station shall include one occurrence of the following record for each pilot that a mobile station is to place in its Neighbor Set. The base station shall use the same order for the following record as is used for previous pilots which are listed in this message. Specifically, the \( i^{th} \) occurrence of the following record shall correspond the \( i^{th} \) pilot in this message.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.

The base station shall set this field to ‘1’ if additional pilot information listed in NGHBR_PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

NGHBR_PILOT_REC_TYPE - Neighbor Pilot record type
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the NGHBR_PILOT_REC_TYPE value shown in Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the NGHBR_PILOT_REC_TYPE of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
</tbody>
</table>

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:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

1. QOF - Quasi-orthogonal function index. The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

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.

3. 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.

4. 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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_Power_Level</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

5. 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]).

6. WALSH_LENGTH - Length of the Walsh code.
The base station shall set this field to the WALSH_LENGTH value shown in 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.

AUX_WALSH - Walsh code for the Auxiliary Pilot.

The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot power level.

The base station shall set this field to the Auxiliary Transmit Diversity Pilot transmit power level relative to that of the Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.

TD_MODE - Transmit Diversity mode.

The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

If NGHBR_PILOT_REC_TYPE is equal to ‘011’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th><strong>Field</strong></th>
<th><strong>Length (bits)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

**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.

**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 as the Auxiliary pilot on the frequency of the primary 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 on the frequency of the primary pilot.

**ADD_INFO_INCL1** - Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.

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’.

**QOF1** - Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

**WALSH_LENGTH1** - Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

**AUX_PILOT_WALSH1** - Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.
ADD_INFO_INCL2 - Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.

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’.

QOF2 - Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH2 - Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

AUX_PILOT_WALSH2 - Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

SRCH_OFFSET_NGHB - Neighbor pilot channel search window offset.

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 the mobile station for this neighbor; otherwise, the base station shall omit this field.

RESQ_ENABLED - Call rescue feature enabled indicator.
The base station shall set this field to ‘1’ if the call rescue feature is enabled and there is at least one occurrence of NGHBR_RESQ_CONFIGURED set to ‘1’ in this message; otherwise, the base station shall set this field to ‘0’.

**RESQ_DELAY_TIME** – Call rescue delay timer value.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue delay timer to be used by the mobile station, in units of 80 ms.

**RESQ_ALLOWED_TIME** – Call rescue allowed timer value.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue allowed timer to be used by the mobile station, in units of 80 ms.

**RESQ_ATTEMPT_TIME** – Call rescue attempt timer value.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the call rescue attempt timer to be used by the mobile station, in units of 40 ms.

**RESQ_CODE_CHAN** – Code channel index for the Rescue Channel.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 when attempting Call Rescue Soft Handoff with the associated neighbor 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 or 8 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.

**RESQ_QOF** – Quasi-Orthogonal Function mask identifier for the Rescue Channel.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the quasi-orthogonal function mask identifier (see [2]) that the mobile station is to use on the Forward Fundamental Channel when attempting Call Rescue Soft Handoff with the associated neighbor pilot.

**RESQ_MIN_PERIOD_INCL** – Minimum time between consecutive rescues included indicator.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the RESQ_MIN_PERIOD field is included in this message; otherwise, the base station shall set this field to ‘0’.

This field is set to ‘0’ if there is no minimum time restriction between consecutive rescues.

**RESQ_MIN_PERIOD** – Minimum time between consecutive rescues.

If RESQ_MIN_PERIOD_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less than the minimum time after a successful call rescue (i.e. receipt of N3m good frames by the mobile station after the rescue attempt timer is enabled) before any subsequent call rescue attempts can be initiated, in units of 2 seconds.

**RESQ_NUM_TOT_TRANS_INCL** – The required number of transmissions before declaring L2 Acknowledgment Failure when Call Rescue is enabled included indicator.

If RESQ_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the required number of transmissions of a regular PDU and mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RESQ_NUM_TOT_TRANS_20MS** – The required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

If RESQ_NUM_TOT_TRANS_INCL field is not included or is included and 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 required number of transmissions of a regular PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

The base station shall not set this field to a value greater than N1m.
RESQ_NUM_TOT_TRANS_5MS - The required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

If RESQ_NUM_TOT_TRANS_INCL field is not included or is included and 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 required number of transmissions of a mini PDU before declaring L2 Acknowledgment Failure when Call Rescue is enabled.

The base station shall not set this field to a value greater than $N_{15m}$.

RESQ_NUM_PREAMBLE - The Traffic Channel preamble Length for Call Rescue Soft Handoff.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a call rescue soft handoff, as follows:

If Radio configuration 1 or Radio configuration 2 is being used, the base station shall set this field to the Traffic Channel preamble length in 20 ms units; otherwise, the base station shall set this field 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.

RESQ_POWER_DELTA - The power level adjustment to be applied to the last closed-loop power level when re-enabling the transmitter for call rescue soft handoff.

If RESQ_ENABLED is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to a value by which mobile stations are to adjust the last closed-loop power level when re-enabling the transmitter for call rescue, expressed as a two's complement value in units of 1 dB.

The base station shall include NUM_NGHBR occurrences of the following one-field record if RESQ_ENABLED is set to '1'. The base station shall use the same order for the following field as is used for the NGHBR_PN fields listed in this message.

NGHBR_RESQ_CONFIGURED - Neighbor Rescue Channel configured indicator.

The base station shall set this field to '1' if a Rescue Channel is configured for this neighbor pilot; otherwise, the base station shall set this field to '0'.

The base station shall not set this field to a value greater than $N_{15m}$. 
3.7.3.2.27 Candidate Frequency Search Request Message

MSG_TAG: CFSRQM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>RESERVED_1</td>
<td>4</td>
</tr>
<tr>
<td>CFSRM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>SEARCH_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>SEARCH_PERIOD</td>
<td>4</td>
</tr>
<tr>
<td>SEARCH_MODE</td>
<td>4</td>
</tr>
<tr>
<td>MODE_SPECIFIC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Mode-specific fields</td>
<td>$8 \times $ MODE_SPECIFIC_LEN</td>
</tr>
<tr>
<td>ALIGN_TIMING</td>
<td>1</td>
</tr>
<tr>
<td>SEARCH_OFFSET</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

**USE_TIME** - Use action time indicator.

This field indicates whether an explicit action time is specified in this message. If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If the base station requests the mobile station to perform an aligned search (see 2.6.6.2.8.3), the base station shall specify an explicit action time for the message.

**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 $\times 1.25$ 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 set this field to ‘000000’.

**RESERVED_1** - Reserved bits.

The base station shall set this field to ‘0000’.

**CFSRM_SEQ** - Candidate Frequency Search Request Message sequence number.
The base station shall set this field to the Candidate Frequency Search Request Message sequence number, as specified in 2.6.6.2.2.3.

SEARCH_TYPE - Search command.

The base station shall set this field to the appropriate SEARCH_TYPE code from Table 3.7.3.3.2.27-1 to indicate the purpose of the message.

<table>
<thead>
<tr>
<th>SEARCH_TYPE (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>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)</td>
</tr>
<tr>
<td>01</td>
<td>Directs the mobile station to perform a single search (see 2.6.6.2.8.3.1 and 2.6.6.2.10.1).</td>
</tr>
<tr>
<td>11</td>
<td>Directs the mobile station to perform a periodic search (see 2.6.6.2.8.3.2 and 2.6.6.2.10.2).</td>
</tr>
<tr>
<td>10</td>
<td>Reserved.</td>
</tr>
</tbody>
</table>

SEARCH_PERIOD - Time between successive searches on the Candidate Frequency for periodic searches.

The base station shall set this field to the SEARCH_PERIOD value shown in Table 2.6.6.2.8.3.2-1 corresponding to the search period to be used by the mobile station, i.e., the time between the beginning of successive searches on the Candidate Frequency.

SEARCH_MODE - Search mode.

The base station shall set this field to the SEARCH_MODE value specified in Table 3.7.3.3.2.27-2 corresponding to the type of search specified by this message.
### Table 3.7.3.2.27-2. SEARCH_MODE Types

<table>
<thead>
<tr>
<th>SEARCH_MODE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>Searches for CDMA pilots on a Candidate Frequency.</td>
</tr>
<tr>
<td>0001</td>
<td>Searches for analog channels.</td>
</tr>
<tr>
<td>0010</td>
<td>Searches for Direct Spread (DS) neighbor cell [see [32]].</td>
</tr>
<tr>
<td>0011-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**MODE_SPECIFIC_LEN** - Length of mode-specific fields.

The base station shall set this field to the number of octets in the mode-specific fields of this message.

**Mode-specific fields** - Search mode-specific fields.

The base station shall include mode-specific fields based on the SEARCH_MODE field.

If SEARCH_MODE is equal to ‘0000’, the base station shall include the following fields:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>11</td>
</tr>
<tr>
<td>SF_TOTAL_EC_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>SF_TOTAL_EC_IO_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>DIFF_RX_PWR_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>MIN_TOTAL_PILOT_EC_IO</td>
<td>5</td>
</tr>
<tr>
<td>CF_T_ADD</td>
<td>6</td>
</tr>
<tr>
<td>TF_WAIT_TIME</td>
<td>4</td>
</tr>
<tr>
<td>CF_PILOT_INC</td>
<td>4</td>
</tr>
<tr>
<td>CF_SRCH_WIN_N</td>
<td>4</td>
</tr>
<tr>
<td>CF_SRCH_WIN_R</td>
<td>4</td>
</tr>
<tr>
<td>RESERVED_2</td>
<td>5</td>
</tr>
<tr>
<td>PILOT_UPDATE</td>
<td>1</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>0 or 6</td>
</tr>
<tr>
<td>CF_NGHBR_SRCH_MODE</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

/ (0 or NUM_PILOTS)

| NGHBR_PN                   | 9             |
| SEARCH_SET                 | 1             |
| SEARCH_PRIORITY            | 0 or 2        |
| SRCH_WIN_NGHBR             | 0 or 4        |

/ (0 or NUM_PILOTS)

If PILOT_UPDATE is set to ‘1’, the base station shall include the following field:

NUM_PILOTS occurrences of the following record:

| CF_SRCH_OFFSET_INCL        | 1             |

(continues on next page)
If PILOT_UPDATE is set to ‘1’, the base station shall include NUM_PILOTS occurrences of the following record:

NUM_PILOTS occurrences of the following record:

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
SRCH_OFFSET_NGHBR | 0 or 3

RESERVED_3 | 0 - 7 (as needed)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>Band class. The base station shall set this field to the CDMA band class of the Candidate Frequency.</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>Frequency assignment. The base station shall set this field to the CDMA frequency assignment for the Candidate Frequency.</td>
</tr>
</tbody>
</table>
| SF_TOTAL_EC_THRESH | Serving Frequency total pilot E_c threshold. 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

\[
\left\lfloor \frac{10 \times \log_{10} (total\_ec\_thresh) + 120}{2} \right\rfloor
\]

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. |
| SF_TOTAL_EC_\(\Omega\)0_THRESH | Serving Frequency total pilot E_c/I_\(\Omega\)0 threshold. If the mobile station is not to use the measurement of total E_c/I_\(\Omega\)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

\[
\left\lfloor -20 \times \log_{10} (total\_ec\_\Omega\_0\_thresh) \right\rfloor
\]
where $total_{ec\_io0\_thresh}$ is defined by the following rule: The mobile station is not to visit the CDMA Candidate Frequency to search for pilots if the total $E_c/I_{Io}$ of the pilots in the Serving Frequency Active Set is greater than $total_{ec\_io0\_thresh}$.

**DIFF_RX_PWR_THRESH** - Minimum difference in received power.

If this message is used for the Candidate Frequency single or periodic search procedure:

If the mobile station is to search for pilots on the CDMA Candidate Frequency irrespective of the received power on the Candidate Frequency, the base station shall set this field to '00000'; otherwise, the base station shall set this field to

$$\left\lceil \frac{(minimum\_power\_diff + 30)}{2} \right\rceil$$

where $minimum\_power\_diff$ is determined by the following rule: The mobile station is not to search for pilots on the CDMA Candidate Frequency if $(cand\_freq\_pwr - serving\_freq\_pwr)$ is less than $minimum\_power\_diff$ (in dB), where $cand\_freq\_pwr$ is the received power on the CDMA Candidate Frequency, in dBm / 1.23 MHz, and $serving\_freq\_pwr$ is the received power on the Serving Frequency, in dBm / 1.23 MHz.

If this message is used for the Hard Handoff with Return on Failure procedure:

If the mobile station is to continue hard handoff procedures irrespective of the received power on the Target Frequency, the base station shall set this field to ‘00000’; otherwise, the base station shall set this field to

$$\left\lceil \frac{(minimum\_power\_diff + 30)}{2} \right\rceil$$

where $minimum\_power\_diff$ is determined by the following rule: The mobile station is to declare the handoff attempt to be unsuccessful if $(target\_freq\_pwr - serving\_freq\_pwr)$ is less than $minimum\_power\_diff$ (in dB), where $target\_freq\_pwr$ is the received power on the CDMA Target Frequency, in dBm / 1.23 MHz, and $serving\_freq\_pwr$ is the received power on the Serving Frequency, in dBm / 1.23 MHz.

**MIN_TOTAL_PILOT_EC_IO0** - Minimum total pilot $E_c/ I_0$.

If this message is used for the Candidate Frequency periodic search procedure:

If the mobile station is to search for pilots on the CDMA Candidate Frequency irrespective of the strength of pilots in the Candidate Frequency Search Set, the base station shall set this field to ‘00000’; otherwise, the base station shall set this field to

$$\left\lfloor -20 \times \log_{10} total\_pilot\_threshold \right\rfloor$$
where total_pilot_threshold is defined by the following rule:
The mobile station is not to send the Candidate Frequency Search Report Message if the sum of $E_c/I_o$ of all pilots in the mobile station’s Candidate Frequency Search Set that measure above $CF_{T\_ADD}$ is less than total_pilot_threshold.

If this message is used for the Hard Handoff with Return on Failure procedure:

If the mobile station is to attempt to demodulate the Forward Traffic Channels irrespective of the strength of pilots in the Active Set, the base station shall set this field to ‘00000’; otherwise, the base station shall set this field to

$$\lceil -20 \times \log_{10} \text{total}_{\text{pilot}_\text{threshold}} \rceil$$

where total_pilot_threshold is defined by the following rule:
The mobile station is not to attempt to demodulate the Forward Traffic Channels if the sum of $E_c/I_o$ of all pilots in the mobile station’s Active Set is less than total_pilot_threshold.

**CF_T_ADD** - Pilot detection threshold for the CDMA Candidate Frequency.

This value is used by the mobile station to trigger the sending of the Candidate Frequency Search Report Message during a periodic search of the CDMA Candidate Frequency (see 2.6.6.2.8.3.2).

The base station shall set this field to the pilot detection threshold, expressed as an unsigned binary number equal to

$$\lceil -2 \times 10 \times \log_{10} E_c/I_o \rceil$$

**TF_WAIT_TIME** - The total maximum wait time on the CDMA Target Frequency.

The base station shall set this field to the maximum wait time, in units of 80 ms, that the mobile station is to spend waiting for a period of $(N_{11m} \times 20)$ ms with sufficient signal quality (e.g. good frames) on the CDMA Target Frequency.

**CF_PILOT_INC** - Pilot PN sequence offset index increment to be used on the CDMA Candidate Frequency after handoff.

The base station shall set this field to the pilot PN sequence increment, in units of 64 PN chips, that the mobile station is to use for searching the Remaining Set, after a handoff to the CDMA Candidate Frequency is successfully completed. 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.

**CF_SRCH_WIN_N** - Default search window size for the Candidate Frequency Search Set.
The base station shall set this field to the value specified in Table 2.6.6.2.1-1 corresponding to the default search window size to be used by the mobile station for its Candidate Frequency Search Set. The mobile station uses the default search window size for all pilots in its Candidate Frequency Search Set when the search window has not been specified for each pilot individually.

**CF_SRCH_WIN_R** - Search window size for the Remaining Set on the CDMA Candidate Frequency.

The base station shall 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 Remaining Set on the CDMA Candidate Frequency after a handoff is successfully completed.

**RESERVED_2** - Reserved bits.

The base station shall set this field to ‘00000’.

**PILOT_UPDATE** - Pilot search parameter update indicator.

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’.

**NUM_PILOTS** - Number of pilots included in the message.

If the PILOT_UPDATE 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:

The base station shall set this field to the number of the CDMA Candidate Frequency pilots included in this message. The base station shall set this field to a value from 0 to $N_{8m}$ inclusive.

**CF_NGHBR_SRCH_MODE** - Search mode for Candidate Frequency Search Set.

If the PILOT_UPDATE 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:

The base station shall set this field to the value shown in Table 3.7.3.3.2.27-3 corresponding to the search mode.

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>No search priorities or search windows specified</td>
</tr>
<tr>
<td>01</td>
<td>Search priorities specified</td>
</tr>
<tr>
<td>10</td>
<td>Search windows specified</td>
</tr>
<tr>
<td>11</td>
<td>Search windows and search priorities specified</td>
</tr>
</tbody>
</table>
The base station shall include NUM_PILOTS occurrences of the following four-field record, one for each included CDMA Candidate Frequency pilot.

**NGHBR_PN** - Neighbor pilot PN sequence offset index.

The base station shall set this field to the pilot's PN sequence offset, in units of 64 PN chips.

**SEARCH_SET** - Flag to indicate if the corresponding pilot is to be searched.

The base station shall set this field to '1' if the mobile station should add the corresponding pilot to its Candidate Frequency Search Set; otherwise, the base station shall set this field to '0'.

**SEARCH_PRIORITY** - Pilot Channel search priority.

If CF_NGHBR_SRCH_MODE is set to '01' or '11', then the base station shall set this field to the search priority for this neighbor. The base station shall set the search priority as specified in Table 3.7.3.2.26-2. If CF_NGHBR_SRCH_MODE is set to any other value, the base station shall omit this field.

**SRCH_WIN_NGHBR** - Neighbor pilot channel search window size.

If CF_NGHBR_SRCH_MODE is set to '10' or '11', then the base station shall set this field to the value specified in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for this neighbor. If the CF_NGHBR_SRCH_MODE is set to any other value, the base station shall omit this field.

**CF_SRCH_OFFSET_INCL** - Neighbor pilot channel search window offset included.

If PILOT_UPDATE 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 CF_NGHBR_SRCH_MODE is set to '10' or '11' and if SRCH_OFFSET_NGHBR is included in the message, the base station shall set this bit to '1'; otherwise, the base station shall set this bit to '0'.

**ADD_PILOT_REC_INCL** - Additional pilot information included indicator.

The base station shall set this field to '1' if additional pilot information listed in NGHBR_PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to '0' if the corresponding pilot is the common pilot and there is no additional pilot information included.

**NGHBR_PILOT_REC_TYPE** - Neighbor Pilot record type

If ADD_PILOT_REC_INCL is set to '1', the base station shall set this field to the NGHBR_PILOT_REC_TYPE value shown in Table 3.7.2.3.2.22-5 corresponding to the type of Pilot Record specified by this record.
If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**RECORD_LEN** - Pilot record length.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

**Type-specific fields** - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the NGHBR_PILOT_REC_TYPE of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

If NGHBR_PILOT_REC_TYPE is equal to ‘000’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
</tbody>
</table>

- **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 these bits to ‘0000’.

If NGHBR_PILOT_REC_TYPE is equal to ‘001’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

3-624
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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

QOF - Quasi-orthogonal function index for the Auxiliary Transmit Diversity Pilot.
The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

WALSH_LENGTH - Length of the Walsh code.
The base station shall set this field to the WALSH_LENGTH value shown in 3.7.2.3.2.22-6 corresponding to the length of the Walsh code for the pilots that are used as Auxiliary pilot in the transmit diversity mode.

AUX_WALSH - Walsh code for the Auxiliary Pilot.
The base station shall set this field to the Walsh code corresponding to the Auxiliary Pilot.

AUX_TD_POWER_LEVEL - Auxiliary Transmit Diversity Pilot power level.
The base station shall set this field to the Auxiliary Transmit Diversity Pilot transmit power level relative to that of the Auxiliary Pilot as specified in Table 3.7.2.3.2.22-7.

**TD_MODE** - Transmit Diversity mode.

The base station shall set this field to the Transmit Diversity mode, as specified in Table 3.7.2.3.2.26-3.

**RESERVED** - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

If NGHBR_PILOT_REC_TYPE is equal to ‘011’, the base station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
</tbody>
</table>

**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:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

1. **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.

2. **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.

3. **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.

4. **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.
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 as the Auxiliary pilot on the frequency of the primary 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 on the frequency of the primary pilot.

ADD_INFO_INCL1 - Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.

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’.

QOF1 - Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH1 - Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

AUX_PILOT_WALSH1 - Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.

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:

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.

ADD_INFO_INCL2 - Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.
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’.

QOF2 - Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

WALSH_LENGTH2 - Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

AUX_PILOT_WALSH2 - Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.

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:

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.

RESERVED - Reserved bits.

The base station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

SRCH_OFFSET_NGHBR - Neighbor pilot channel search window offset.

If CF_SRCH_OFFSET_INCL is included and equals to ‘1’, then the base station shall set this field to the value specified in Table 2.6.6.2.1-2 corresponding to the search window offset to be used by the mobile station for this neighbor; otherwise, the base station shall omit this field.

RESERVED_3 - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the Mode-specific fields equal to an integer number of octets. The base station shall set these bits to ‘0’.

If SEARCH_MODE is equal to ‘0001’, the base station shall include the following fields:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND_CLASS</td>
<td>5</td>
</tr>
<tr>
<td>SF_TOTAL_EC_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>SF_TOTAL_EC_Io0_THRESH</td>
<td>5</td>
</tr>
<tr>
<td>RESERVED_4</td>
<td>6</td>
</tr>
<tr>
<td>NUM_ANALOG_FREQS</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_ANALOG_FREQS occurrences of the following record:

`{(NUM_ANALOG_FREQS)}

ANALOG_FREQ 11

{NUM_ANALOG_FREQS}

RESERVED_5 0-7

---

**BAND_CLASS** - Band class.

The base station shall set this field to the CDMA band class associated with the analog frequencies included in this message.

**SF_TOTAL_EC_THRESH** - Serving Frequency total pilot $E_c$ threshold.

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 Analog Frequencies periodic search procedure, the base station shall set this field to ‘11111’; otherwise, the base station shall set this field to

$$\left\lfloor \frac{(10 \times \log_{10}(total_{ec\_thresh}) + 120)}{2} \right\rfloor$$

where $total_{ec\_thresh}$ is defined by the following rule: The mobile station is not to visit any analog frequency if the total $E_c$ of the pilots in the Serving Frequency Active Set is greater than $total_{ec\_thresh}$.

**SF_TOTAL_EC_Io0_THRESH** - Serving Frequency total pilot $E_c/I_o0$ threshold.

If the mobile station is not to use the measurement of total $E_c/I_o0$ of the pilots in the Serving Frequency Active Set in the Analog Frequencies periodic search procedure, the base station shall set this field to ‘11111’; otherwise, the base station shall set this field to

$$\left\lfloor -20 \times \log_{10}(total_{ec\_io0\_thresh}) \right\rfloor$$

where $total_{ec\_io0\_thresh}$ is defined by the following rule: The mobile station is not to visit any analog frequency if the total $E_c/I_o0$ of the pilots in the Serving Frequency Active Set is greater than $total_{ec\_io0\_thresh}$.

**RESERVED_4** - Reserved bits.
The base station shall set this field to ‘000000’.

NUM_ANALOG_FREQS - Number of analog frequencies.

The base station shall set this field to the number of neighbors on the candidate frequency. The base station shall set this field to a value from 1 to 7, inclusive.

The message will include NUM_ANALOG_FREQS occurrences of the following one-field record, one for each neighbor on the candidate frequency.

ANALOG_FREQ - Analog frequency channel number.

The base station shall set this field to the analog frequency channel number to search.

RESERVED_5 - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the Mode-specific fields equal to an integer number of octets. The base station shall set these bits to ‘0’.

ALIGN_TIMING - Align timing indicator.

If the base station requests that the mobile station offset the start of the first search from the action time of this message (or of a subsequent Candidate Frequency Search Control Message that starts a search) by a delay specified by the SEARCH_OFFSET field, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

SEARCH_OFFSET - Search offset.

If the ALIGN_TIMING field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to

\[
\min(63, \lceil \frac{\text{search_offset_time}}{0.00125} \rceil)
\]

where \( \text{search_offset_time} \) is the time offset, in seconds, of the start of the first search from the action time of this message (or of a subsequent Candidate Frequency Search Control Message that starts a search).
3.7.3.3.2.28 Candidate Frequency Search Control Message

**MSG_TAG:** CFSCNM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>CFSCM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>SEARCH_TYPE</td>
<td>2</td>
</tr>
<tr>
<td>ALIGN_TIMING</td>
<td>1</td>
</tr>
</tbody>
</table>

**USE_TIME** - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If the base station requests the mobile station to perform an aligned search (see 2.6.6.2.8.3), the base station shall specify an explicit action time for the message.

**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_OFFSETs × 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 set this field to ‘000000’.

**CFSCM_SEQ** - Candidate Frequency Search Control Message sequence number.

The base station shall set this field to the Candidate Frequency Search Control Message sequence number, as specified in 3.6.6.2.2.5.

**SEARCH_TYPE** - Search command.

The base station shall set this field to the appropriate SEARCH_TYPE code from Table 3.7.3.3.2.27-1 to indicate the purpose of the message.

**ALIGN_TIMING** - Align timing indicator.
If the base station requests that the mobile station offset the start of the first search from the action time of this message by a delay specified by the SEARCH_OFFSET field of the last Candidate Frequency Search Request Message sent to the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
3.7.3.2.29 Power Up Function Message

MSG_TAG: PUFM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>ACTION_TIME_FRAME</td>
<td>2</td>
</tr>
<tr>
<td>PUF_SETUP_SIZE</td>
<td>6</td>
</tr>
<tr>
<td>PUF_PULSE_SIZE</td>
<td>7</td>
</tr>
<tr>
<td>PUF_INTERVAL</td>
<td>10</td>
</tr>
<tr>
<td>PUF_INIT_PWR</td>
<td>6</td>
</tr>
<tr>
<td>PUF_PWR_STEP</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL_PUF_PROBES</td>
<td>4</td>
</tr>
<tr>
<td>MAX_PWR_PUF</td>
<td>4</td>
</tr>
<tr>
<td>PUF_FREQ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PUF_BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PUF_CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

USE_TIME - Use action time indicator.
The base station shall set this field to ‘1’.

ACTION_TIME - Action time.
The base station shall set this field to the System Time minus FRAME_OFFSETs × 1.25 ms, in units of 80 ms (modulo 64), used in calculating the start of the first PUF probe.

ACTION_TIME_FRAME - Action time frame.
The base station shall set this field to the number of frames after ACTION_TIME that the mobile station is to begin the first PUF probe.

PUF_SETUP_SIZE - Number of PUF setup power control groups.
The base station shall set this field to one less than the number of power control groups that the mobile station is to transmit at nominal power prior to transmitting a PUF pulse.
The base station shall set the values of PUF_SETUP_SIZE and PUF_PULSE_SIZE so that \([\text{PUF_SETUP_SIZE} + 1 + \text{PUF_PULSE_SIZE} + 1] \mod 16\) is not equal to 0.

PUF_PULSE_SIZE - Number of PUF pulse power control groups.
The base station shall set this field to one less than the number of power control groups that the mobile station is to transmit at elevated power level during the PUF pulse. The base station shall set the values of PUF_SETUP_SIZE and PUF_PULSE_SIZE so that \([\text{PUF_SETUP_SIZE} + 1 + \text{PUF_PULSE_SIZE} + 1]\) mod 16 is not equal to 0.

**PUF_INTERVAL** - PUF interval. The base station shall set this field to the number of frames between the start of each PUF probe.

**PUF_INIT_PWR** - Power increase of initial PUF pulse. The base station shall set this field to the amount (in dB) that the mobile station is to increase its mean output power for the first PUF pulse.

**PUF_PWR_STEP** - PUF power step. The base station shall set this field to the value (in dB) by which the mobile station is to increment the power of a PUF pulse above nominal power from one PUF pulse to the next.

**TOTAL_PUF_PROBES** - Total number of PUF probes. The base station shall set this field to one less than the maximum number of PUF probes the mobile station is to transmit in a PUF attempt.

**MAX_PWR_PUF** - Maximum number of PUF probes transmitted at full power. The base station shall set this field to one less than the number of PUF pulses that the mobile station is to transmit at maximum power level.

**PUF_FREQ_INCL** - Frequency included indicator. If the mobile station is to change PUF_BAND_CLASS or PUF_CDMA_FREQ, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**PUF_BAND_CLASS** - Band class. If PUF_FREQ_INCL is set to ‘1’, the base station shall include this field 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.

**PUF_CDMA_FREQ** - Frequency assignment. If PUF_FREQ_INCL is set to ‘1’, the base station shall include this field and set it to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA frequency for the CDMA Channel as specified in [2]; otherwise, the base station shall omit this field.
3.7.3.3.2.30 Power Up Function Completion Message

MSG_TAG: PUFCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVED</td>
<td>6</td>
</tr>
<tr>
<td>LOC_IND</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED_1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MS_LAT</td>
<td>0 or 22</td>
</tr>
<tr>
<td>MS_LONG</td>
<td>0 or 23</td>
</tr>
<tr>
<td>MS_LOC_TSTAMP</td>
<td>0 or 24</td>
</tr>
</tbody>
</table>

- **RESERVED** - Reserved bits.
  - The base station shall set these bits to '000000'.

- **LOC_IND** - Location indicator
  - If the base station is to include MS_LAT, MS_LONG, and MS_LOC_TSTAMP in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

- **RESERVED_1** - Reserved bits.
  - If LOC_IND is equal to '1', the base station shall set these bits to '000'; otherwise, the base station shall not include this field.

- **MS_LAT** - Mobile station latitude.
  - If LOC_IND is equal to '1', the base station shall set this field to the mobile station’s latitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range -1296000 to 1296000 inclusive (corresponding to a range of -90° to +90°).
  - Otherwise, the base station shall not include this field.

- **MS_LONG** - Mobile station longitude.
  - If LOC_IND is equal to '1', the base station shall set this field to the mobile station’s longitude in units of 0.25 second, expressed as a two’s complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range -2592000 to 2592000 inclusive (corresponding to a range of -180° to +180°).
  - Otherwise, the base station shall not include this field.

- **MS_LOC_TSTAMP** - Time stamp.
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.

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOURS</td>
<td>8</td>
</tr>
<tr>
<td>MINUTES</td>
<td>8</td>
</tr>
<tr>
<td>SECONDS</td>
<td>8</td>
</tr>
</tbody>
</table>

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.
3.7.3.2.31 General Handoff Direction Message

MSG_TAG: GHDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>HDM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>SEARCH_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_WIN_N</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_ADD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_DROP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_COMP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SOFT_SLOPE</td>
<td>0 or 6</td>
</tr>
<tr>
<td>ADD_INTERCEPT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>DROP_INTERCEPT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>EXTRA_PARMS</td>
<td>1</td>
</tr>
<tr>
<td>P_REV</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PACKET_ZONE_ID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PRIVATE_LCM</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_L2</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_FPC</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SERV_NEG_TYPE</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCRYPT_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NOM_PWR_EXT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NOM_PWR</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>RETURN_IF_HANDOFF_FAIL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>COMPLETE_SEARCH</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PERIODIC_SEARCH</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SCR_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SERV_CON_SEQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 x</td>
</tr>
<tr>
<td>SUP_CHAN_PARMS_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>FOR_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_SUP_CONFIG</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_FOR_SUP</td>
<td>0 or 3</td>
</tr>
<tr>
<td>USE_FOR_DURATION</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_DURATION</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_DTX_DURATION</td>
<td>0 or 4</td>
</tr>
<tr>
<td>CLEAR_RETRY_DELAY</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_REV_DURATION</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_DURATION</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_REV_CODES</td>
<td>0 or 3</td>
</tr>
<tr>
<td>USE_T_ADD_ABORT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PARMS_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>T_MULCHAN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BEGIN_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RESUME_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>USE_PWR_CNTL_STEP</td>
<td>1</td>
</tr>
<tr>
<td>PWR_CNTL_STEP</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
</tbody>
</table>

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)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_SUBCHAN_GAIN</td>
<td>5</td>
</tr>
<tr>
<td>USE_PC_TIME</td>
<td>1</td>
</tr>
<tr>
<td>PC_ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_TRAFFIC_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>DEFAULT_RLAG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NNSCR_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

Type-specific fields 0 or 8 × RECORD_LEN

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_FCH_GATING_MODE</td>
<td>1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 \times ) SYNC_ID_LEN)</td>
</tr>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
</tbody>
</table>

**USE_TIME** - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**ACTION_TIME** - Action time.

If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET \(_s \times 1.25\) ms, in units of 80 ms (modulo 64), at which the handoff is to take effect. If the USE_TIME field is set to ‘0’, the base station shall omit this field.

**HDM_SEQ** - General Handoff Direction Message sequence number.

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. The base station shall set this field to the handoff message sequence number, as specified in 3.6.6.2.2.10.

**SEARCH_INCLUDED** - Pilot search parameters included.

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’.

**SRCH_WIN_A** - Search window size for the Active Set and Candidate Set.

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.

**SRCH_WIN_N** - Search window size for the Neighbor Set.
If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SRCH_WIN_N and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for the Neighbor Set after completion of the handoff; otherwise, the base station shall omit this field.

SRCH_WIN_R - Search window size for the Remaining Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SRCH_WIN_R and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for the Remaining Set after completion of the handoff; otherwise, the base station shall omit this field.

T_ADD - Pilot detection threshold.

This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message initiating the handoff process (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_ADD and set this field to the pilot detection threshold, expressed as an unsigned binary number equal to $\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{I_0} \right\rfloor$; otherwise, the base station shall omit this field.

T_DROP - Pilot drop threshold.

This value is used by mobile stations to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_DROP and set this field to the pilot drop threshold, expressed as an unsigned binary number equal to $\left\lfloor -2 \times 10 \times \log_{10} \frac{E_c}{I_0} \right\rfloor$; otherwise, the base station shall omit this field.

T_COMP - Active Set versus Candidate Set comparison threshold.

The mobile station transmits a Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_COMP and set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB; otherwise, the base station shall omit this field.
T_TDROP - Drop timer value.  
Timer value after which an action is taken by the mobile station for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_TDROP and set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by the mobile station; otherwise, the base station shall omit this field.

SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the active set, or dropping a pilot from the active set (see 2.6.6.2.3 and 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SOFT_SLOPE in the additional fields and set this field as an unsigned binary number; otherwise, the base station shall omit this field.

ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to the active set (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field ADD_INTERCEPT in the additional fields and set this field as a two's complement signed binary number in units of 0.5 dB; otherwise, the base station shall omit this field.

DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot from the active set (see 2.6.6.2.3).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field DROP_INTERCEPT in the additional fields and set this field as a two's complement signed binary number in units of 0.5 dB; otherwise, the base station shall omit this field.

EXTRA_PARMS - Extra parameters included.

If the mobile station is to change FRAME_OFFSET, PRIVATE_LCM, ENCRYPT_MODE, NOM_PWR, BAND_CLASS, or CDMA_FREQ, or the mobile station is to perform a reset of the acknowledgment procedures, or the mobile station is to reset Forward Traffic Channel power control counters, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

P_REV - Protocol revision level.

If EXTRA_PARMS is set to ‘1’, 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; otherwise, the base station shall omit this field.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PACKET_ZONE_ID</td>
<td>Packet data services zone identifier. If EXTRA_PARMS is set to ‘1’, the base station shall include the field PACKET_ZONE_ID and set this field as described below; otherwise, the base station shall omit this field. If the base station supports a packet data service zone, the base station shall set this field to the non-zero packet data services zone identifier that the mobile station is to use after completion of the handoff. If the base station does not support a packet data service zone, the base station shall set this field to ‘00000000’.</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>Frame offset. The Forward and Reverse Traffic Channel frames are delayed FRAME_OFFSET × 1.25 ms relative to system timing (see [2]). If EXTRA_PARMS is set to ‘1’, the base station shall include the field FRAME_OFFSET and set this field to the Forward and Reverse Traffic Channel frame offset; otherwise, the base station shall omit this field.</td>
</tr>
<tr>
<td>PRIVATE_LCM</td>
<td>Private long code mask indicator. This field is used to change the long code mask after a hard handoff. If EXTRA_PARMS is set to ‘1’, the base station shall include the field PRIVATE_LCM and set this field as described below; otherwise, the base station shall omit this field. If the private long code mask is to be used after the handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>RESET_L2</td>
<td>Reset acknowledgment procedures command. This field is used to reset acknowledgment processing in the mobile station. If EXTRA_PARMS is set to ‘1’, the base station shall include the field RESET_L2 and set this field as described below; otherwise, the base station shall omit this field. If the field is included and the mobile station is to reset its acknowledgment procedures, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>RESET_FPC</td>
<td>Reset Forward Traffic Channel power control. This field is used to reset the Forward Traffic Channel power control counters. If EXTRA_PARMS is set to ‘1’, the base station shall include the field RESET_FPC and set this field as described below; otherwise, the base station shall omit this field.</td>
</tr>
</tbody>
</table>
The base station shall set this field to ‘0’ if the Forward Traffic Channel power control counters are to be maintained after completion of the handoff. If the counters are to be initialized as specified in 2.6.1.1.1, then the base station shall set this field to ‘1’.

**SERV_NEG_TYPE** - Service negotiation type.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field SERV_NEG_TYPE and set this field as described below; otherwise, the base station shall omit this field.

If the mobile station is to use service negotiation, the base station shall set this field to ‘1’. If the mobile station is to use service option negotiation, the base station shall set this field to ‘0’.

**ENCRYPT_MODE** - Message encryption mode.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field ENCRYPT_MODE and set this field to the ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2 corresponding to the encryption mode that is to be used for messages sent on the Forward and Reverse Traffic Channels, as specified in 2.3.12.2; otherwise, the base station shall omit this field.

**NOM_PWR_EXT** - Extended nominal transmit power.

If EXTRA_PARMS is set to ‘1’, the base station shall include this field and set this field as described below; otherwise, the base station shall omit this field.

If the mobile station is being handed off to a base station operating in Band Class 0 or Band Class 3, the base station shall set this field to ‘0’; otherwise, the base station shall set it as follows:

If the correction factor to be used by the mobile station in the open loop power estimate is between -24 dB and -9 dB inclusive, the base station shall set this field to ‘1’; otherwise (the correction factor is in the range -8 dB to 7 dB inclusive), the base station shall set this field to ‘0’.

**NOM_PWR** - Nominal transmit power offset.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field NOM_PWR and set this field to the correction factor to be used by the mobile station in the open loop power estimate, expressed as a two’s complement value in units of 1 dB (see [2]); otherwise, the base station shall omit this field.

**NUM_PREAMBLE** - Traffic Channel preamble length.

If EXTRA_PARMS is set to ‘0’, the base station shall omit the NUM_PREAMBLE field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a handoff; as follows:
If, after the handoff, radio configuration 1 or radio configuration 2 is to be used, the base station shall set NUM_PREAMBLE to the Traffic Channel preamble length in 20 ms units; otherwise, the base station shall set NUM_PREAMBLE to the value shown in Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel preamble length in 1.25 ms units.

BAND_CLASS - Band class.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field BAND_CLASS and set this field to the CDMA band class corresponding to the CDMA Channel as specified in [30]; otherwise, the base station shall omit this field.

CDMA_FREQ - Frequency assignment.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field CDMA_FREQ and set this field 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.

RETURN_IF_HANDOFF_FAIL - Return on failure flag.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field RETURN_IF_HANDOFF_FAIL and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to resume the use of the Active Set on the Serving Frequency following an unsuccessful hard handoff attempt, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to ‘0’.

COMPLETE_SEARCH - Flag to complete search.

If RETURN_IF_HANDOFF_FAIL is included and is set to ‘1’, the base station shall include the field COMPLETE_SEARCH and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to complete the search of the Candidate Frequency Search Set before resuming the use of the Active Set on the Serving Frequency when an inter-frequency handoff attempt is unsuccessful, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to ‘0’.

PERIODIC_SEARCH - Flag to search the Candidate Frequency periodically.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field PERIODIC_SEARCH and set this field as described below; otherwise, the base station shall omit this field.

RETURN_IF_HANDOFF_FAIL - Return on failure flag.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field RETURN_IF_HANDOFF_FAIL and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to resume the use of the Active Set on the Serving Frequency following an unsuccessful hard handoff attempt, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to ‘0’.

COMPLETE_SEARCH - Flag to complete search.

If RETURN_IF_HANDOFF_FAIL is included and is set to ‘1’, the base station shall include the field COMPLETE_SEARCH and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to complete the search of the Candidate Frequency Search Set before resuming the use of the Active Set on the Serving Frequency when an inter-frequency handoff attempt is unsuccessful, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to ‘0’.

PERIODIC_SEARCH - Flag to search the Candidate Frequency periodically.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field PERIODIC_SEARCH and set this field as described below; otherwise, the base station shall omit this field.
If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to periodically search the Candidate Frequency, as specified in 2.6.6.2.8.3; otherwise, the base station shall set this field to ‘0’.

**SCR_INCLUDED** - Service Configuration Record included indicator.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field SCR_INCLUDED and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ if it includes Service Configuration Record in the message; otherwise, the base station shall set this field to ‘0’.

**SERV_CON_SEQ** - Connect sequence number.

If SCR_INCLUDED is included and is set to ‘1’, the base station shall include the field SERV_CON_SEQ and shall set this field to the connect sequence number pertaining to this service configuration as specified in 3.6.4.1.2.1.2.

If SCR_INCLUDED is included and is set to ‘1’, the base station shall include one occurrence of the following three-field record to specify the service configuration.

**RECORD_TYPE** - Information record type.

If SCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_TYPE and shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Service Configuration information record.

**RECORD_LEN** - Information record length.

If SCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_LEN and shall set this field to the number of octets included in the type-specific fields of the Service Configuration information record.

**Type-specific fields** - Type-specific fields.

If SCR_INCLUDED is included and is set to ‘1’, the base station shall include the type specific fields and shall set these fields as specified in 3.7.5.7 for the Service Configuration information record.

**SUP_CHAN_PARMS_INCLUDED** - Supplemental code channel parameters included indicator.

The base station shall set this field to ‘1’ if the base station includes the FOR_INCLUDED, REV_INCLUDED, and REV_PARMS_INCLUDED fields in the message; otherwise, the base station shall set this field to ‘0’.

**FOR_INCLUDED** - Forward assignment information included indicator.

If SUP_CHAN_PARMS_INCLUDED is set to ‘1’, the base station shall include the field FOR_INCLUDED and set this field as described below; otherwise, the base station shall omit this field.
If the base station includes this field, it shall set this field to ‘1’ if Forward Supplemental Code Channel assignment information is included in the message; otherwise, the base station shall set this field to ‘0’.

FOR_SUP_CONFIG - Forward Supplemental Code Channel configuration indicator.

If FOR_INCLUDED is included and is set to ‘1’, the base station shall include the field FOR_SUP_CONFIG and set this field according to the following rules:

The base station shall set this field to ‘00’ if Forward Supplemental Code Channels are not specified in the message, and the mobile station is to stop processing all Forward Supplemental Code Channels.

The base station shall set this field to ‘01’ if Forward Supplemental Code Channels are not specified in the message, and the mobile station is to start processing the Forward Supplemental Code Channels previously stored in its Code Channel List, CODE_CHAN_LISTs.

The base station shall set this field to ‘10’ if the Forward Supplemental Code Channels are specified in the message, and the mobile station is to stop processing all Forward Supplemental Code Channels in CODE_CHAN_LISTs, and to update the CODE_CHAN_LISTs, according to the information contained in the message.

The base station shall set this field to ‘11’ if the Forward Supplemental Code Channels are specified in the message, and the mobile station is to update its Code Channel List, CODE_CHAN_LISTs, according to the information contained in the message and to start processing the Forward Supplemental Code Channels.

NUM_FOR_SUP - Number of Forward Supplemental Code Channels.

If FOR_SUP_CONFIG is included and is set to ‘10’ or ‘11’, the base station shall include the field NUM_FOR_SUP and set it to the number of Forward Supplemental Code Channels assigned to the mobile station; otherwise, the base station shall omit this field. NUM_FOR_SUP shall not exceed the maximum number of Forward Supplemental Code Channels for the negotiated multiplex option.

USE_FOR_DURATION - Use forward duration indicator.

If FOR_SUP_CONFIG is included and is set to ‘01’ or ‘11’, the base station shall include the field USE_FOR_DURATION and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to ‘1’ if the FOR_DURATION field is included in the message and the mobile station is to process the Forward Supplemental Code Channels for a time duration indicated by FOR_DURATION.
The base station shall set this field to ‘0’ if the mobile station is to process the Forward Supplemental Code Channels for an indefinite duration (i.e., the mobile station is to continue processing Forward Supplemental Code Channels until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Forward Supplemental Code Channel assignment.

FOR_DURATION - Duration of Forward Supplemental Code Channel assignment.

If USE_FOR_DURATION is included and is set to ‘1’, the base station shall include the field FOR_DURATION and set this field to the allocated duration, in units of 80 ms, for which the mobile station is to process the Forward Supplemental Code Channels; otherwise, the base station shall omit this field.

REV_INCLUDED - Reverse assignment information included indicator.

If SUP_CHAN_PARMS_INCLUDED is set to ‘1’, the base station shall include the field REV_INCLUDED and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if Reverse Supplemental Code Channel assignment information is included in the message; otherwise, the base station shall set this field to ‘0’.

REV_DTX_DURATION - Reverse Discontinuous Transmission Duration.

If REV_INCLUDED is included and is set to ‘1’, the base station shall include the field REV_DTX_DURATION; otherwise the base station shall omit this field.

If the base station includes this field, it shall set this field to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Code Channel within the reverse assignment duration. The base station shall set this field to ‘0000’ if the mobile station is to stop using a Reverse Supplemental Code Channel once it has stopped transmitting on that Reverse Supplemental Code Channel. The base station shall set this field to ‘1111’ if the mobile station is allowed to resume transmission on a Reverse Supplemental Code Channel at any time within the reverse assignment duration.

CLEAR_RETRY_DELAY - Clear retry delay indicator.

If REV_INCLUDED is included and is set to ‘1’, the base station shall include the field CLEAR_RETRY_DELAY and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to ‘1’ to indicate that the mobile station is to clear any existing retry delay which it has stored (see 2.6.6.2.5.1); otherwise, the base station shall set this field to ‘0’.

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USE_REV_DURATION - Use reverse duration indicator.

If REVINCLUDED is included and is set to ‘1’, the base station shall include the field USE_REV_DURATION and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to ‘1’ if the REV_DURATION field is included in the message and the mobile station is allowed to transmit on the Reverse Supplemental Code Channels for a time duration indicated by REV_DURATION.

The base station shall set this field to ‘0’ if the mobile station is allowed to transmit on the Reverse Supplemental Code Channels for an indefinite duration (i.e., the mobile station may continue to transmit on the Reverse Supplemental Code Channels until it receives a subsequent Supplemental Channel Assignment Message or a General Handoff Direction Message that specifies a different Reverse Supplemental Code Channel assignment.

REV_DURATION - Duration of Reverse Supplemental Code Channel Assignment.

If USE_REV_DURATION is included and is set to ‘1’, the base station shall include the field REV_DURATION and set this field to the allocated duration, in units of 80 ms, for which the mobile station may transmit on Reverse Supplemental Code Channels; otherwise the base station shall omit this field.

NUM_REV_CODES - Number of Reverse Supplemental Code Channels.

If REVINCLUDED is included and is set to ‘1’, the base station shall include the field NUM_REV_CODES and set this field to the number of Reverse Supplemental Code Channels which are assigned to the mobile station; otherwise the base station shall omit this field.

USE_T_ADD_ABORT - Reverse use T_ADD abort indicator.

If REVINCLUDED is included and is set to ‘1’, the base station shall include the field USE_T_ADD_ABORT and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to ‘1’ to indicate that the mobile station is to use the T_ADD Reverse Supplemental Code Channel abort feature for this reverse assignment; otherwise, the base station shall set this field to ‘0’.

REV_PARMS_INCLUDED - Reverse assignment parameters included indicator.

If SUP_CHAN_PARMS_INCLUDED is set to ‘1’, the base station shall include the field REV_PARMS_INCLUDED and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to ‘1’ if the following three fields are included in the message; otherwise, the base station shall set this field to ‘0’.
T_MULCHAN - *Supplemental Channel Request Message* pilot strength reporting offset.

If REV_PARMS_INCLUDED is included and is set to ‘1’, the base station shall include the field T_MULCHAN and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to the threshold offset that the mobile station is to use when reporting neighbor pilot strength measurements in a *Supplemental Channel Request Message*. The mobile station is to interpret this field as an offset to T_ADD ranging from 0.5 dB (corresponding to T_MULCHAN = ‘000’) to 4.0 dB (corresponding to T_MULCHAN = ‘111’), in 0.5 dB increments.

BEGIN_PREAMBLE - Number of preamble frames on Reverse Supplemental Code Channels at the beginning of transmission on Reverse Supplemental Code Channel.

If REV_PARMS_INCLUDED is included and is set to ‘1’, the base station shall include the field BEGIN_PREAMBLE and set this field to the number of Reverse Supplemental Code Channel preamble frames that the mobile station is to send when beginning transmission on Reverse Supplemental Code Channels; otherwise the base station shall omit this field.

RESUME_PREAMBLE - Number of preamble frames on Reverse Supplemental Code Channels at the resumption of transmission.

If REV_PARMS_INCLUDED is included and is set to ‘1’, the base station shall include the field RESUME_PREAMBLE and set this field to the number of Reverse Supplemental Code Channel preamble frames that the mobile station is to send when resuming transmission on a Reverse Supplemental Code Channel following an autonomous suspension of transmission on an allocated Supplemental Code Channel; otherwise the base station shall omit this field.

USE_PWR_CNTL_STEP - Power control step size indicator.

The base station shall set this field to ‘1’ if the field PWR_CNTL_STEP is included in the message.

PWR_CNTL_STEP - Power control step size.

If USE_PWR_CNTL_STEP is set to ‘1’, then the base station shall include the field PWR_CNTL_STEP and set this field to the step size that the mobile station is to use for closed loop power control, according to Table 3.7.3.3.2.25-1; otherwise, the base station shall omit this field.

NUM_PILOTS - Number of pilots included in the message.

The base station shall set this field to the number of pilots included in the message. The base station shall set this field to an integer that is equal to or greater than 1.
The base station shall include one occurrence of the following four-part record for each of the NUM_PILOTS pilots included in the message:

- **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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

- **FOR_FUND_CODE_CHAN** - Forward Fundamental Channel. The base station shall set this field to the code channel index to be used for the Forward Fundamental Channel associated with this pilot.

- **FOR_SUP_INCLUDED** - Forward Supplemental Code Channel included. The base station shall include this field if FOR_SUP_CONFIG is included and is set to ‘10’ or ‘11’. If included, the base station shall set this field to ‘1’ if there are Supplemental Code Channels associated with this pilot.

- **FOR_SUP_CHAN_REC** - Forward Supplemental Code Channel record. If FOR_SUP_INCLUDED is set to ‘1’, the base station shall include the record FOR_SUP_CHAN_REC and set its fields as described below; otherwise, the base station shall omit this record.

  **FOR_SUP_CHAN_REC** contains information about Forward Supplemental Code Channels associated with this pilot, and consists of the field EXPL_CODE_CHAN, and either the BASE_CODE_CHAN field or NUM_FOR_SUP occurrences of the FOR_SUP_CODE_CHAN field, as shown below.

<table>
<thead>
<tr>
<th>EXPL_CODE_CHAN</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASE_CODE_CHAN</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

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)
```

- **EXPL_CODE_CHAN** - Explicit code channel indicator.
The base station shall set this field to ‘1’ to indicate explicit assignment of each Forward Supplemental Code Channel by means of the field FOR_SUP_CODE_CHAN. The base station shall set this field to ‘0’ if the mobile station is to use NUM_FOR_SUP adjacent code channels beginning with index BASE_CODE_CHAN (i.e., BASE_CODE_CHAN through BASE_CODE_CHAN + NUM_FOR_SUP - 1).

In both cases (i.e., the explicit code channel list format and range format), the order of the code channel indices is the same for all pilots specified in this message (i.e., for each pilot, the $i^{th}$ entry in the list indicates the code channel index to be used for the $i^{th}$ Forward Supplemental Code Channel associated with that pilot).

**BASE_CODE_CHAN** - Base code channel index.

If the EXPL_CODE_CHAN field is included and is set to ‘0’, the base station shall include the field BASE_CODE_CHAN and set this field as described below; otherwise the base station shall omit this field.

The base station shall set this field to the base code channel index (see [2]) in the range of 1 to (63 - NUM_FOR_SUP + 1), inclusive, that the mobile station is to use as the first Forward Supplemental Code Channel associated with this pilot. The mobile station is to use code channel index (BASE_CODE_CHAN + $i$ - 1), where $i$ ranges from 1 to NUM_FOR_SUP, for the $i^{th}$ Forward Supplemental Code Channel associated with this pilot.

**FOR_SUP_CODE_CHAN** - Forward Supplemental Code Channel.

If EXPL_CODE_CHAN is included and is set to ‘1’, the base station shall include NUM_FOR_SUP occurrences of the field FOR_SUP_CODE_CHAN and set this field as described below; otherwise the base station shall omit this field.

The base station shall set the $i^{th}$ occurrence of this field to the code channel index (see [2]), in the range 1 to 63 inclusive, that the mobile station is to use for the $i^{th}$ Forward Code Channel associated with this pilot.

**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 that of 20 ms frames at a 9600 bps or 14400 bps rate on the Forward Fundamental Channel or the Forward Dedicated Control Channel indicated by FPC_PRI_CHAN. The base station shall set the value in units of 0.25 dB.

**USE_PC_TIME** - Use power control action time indicator.

This field indicates whether an explicit time [PC_ACTION_TIME] at which a new value for Power Control Subchannel to traffic ratio [FPC_SUBCHAN_GAIN] takes effect is specified in the message.
If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PC_ACTION_TIME** - Power Control Subchannel gain action time.

If the USE_PC_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET \( \times 1.25 \) ms, in units of 80 ms (modulo 64), at which FPC_SUBCHAN_GAIN specified in this message is to take effect. If the USE_PC_TIME field is set to ‘0’, the base station shall omit this field.

**RLGAIN_TRAFFIC_PILOT** - Gain adjustment of the Reverse Traffic Channel relative to the Reverse Pilot Channel power for Radio Configurations greater than 2.

If EXTRA_PARMS is set to ‘1’, the base station shall include this field and set it to the correction factor to be used by mobile stations in setting the power of a code channel, expressed as a two’s complement value in units of 0.125 dB (see [2]); otherwise, the base station shall omit this field.

**DEFAULT_RLAG** - Default reverse link attribute gain used indicator.

If EXTRA_PARMS is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows.

If the mobile station is to use the default values for the reverse link attribute gain, as specified in [2] after completion of handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NNSCR_INCLUDED** - Non-negotiable Service Configuration Record included indicator.

The base station shall omit this field, if EXTRA_PARMS is set to ‘0’; otherwise, the base station shall include this field and set this field as described below:

The base station shall set this field to ‘1’, if the Non-negotiable Service Configuration record is included in this message; otherwise, the base station shall set this field to ‘0’.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include one occurrence of the following three-field record to specify the non-negotiable service configuration parameters.

**RECORD_TYPE** - Information record type.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_TYPE and shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Non-Negotiable Service Configuration information record.

**RECORD_LEN** - Information record length.
If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_LEN and shall set this field to the number of octets included in the type-specific fields of the Non-Negotiable Service Configuration information record.

Type-specific fields - Type-specific fields.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the type specific fields and shall set these fields as specified in 3.7.5.20 for the Non-Negotiable Service Configuration information record.

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 after handoff; otherwise, the base station shall set this field 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’.

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:

The base station shall set this field to the closed-loop reverse power control delay minus one (the closed-loop reverse power control delay is the time between the end of a gated-on 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.

D_SIG_ENCRYPT_MODE - Dedicated channel encryption mode indicator.

If ENCRYPT_MODE is included and is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

ENC_KEY_SIZE - Encryption key size indication.

If ENCRYPT_MODE is included and is set to ‘10’ or ‘11’, the base station shall include this field and set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.
SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

If either the SCR_INCLUDED field is included and is set to ‘1’ or the NNSCR_INCLUDED field is included and is set to ‘1’, the base station shall include this field; otherwise, the base station shall omit this field. If included, the base station shall set this field as follows:

The base station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the base station shall set this field to ‘0’.

SYNC_ID_LEN - Service Configuration synchronization identifier length.

If the SYNC_ID_INCL field is not included or is included and 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 length (in octets) of the SYNC_ID field included in this message. The base station shall set this field to a value larger than zero.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is not included or is included and 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 synchronization identifier corresponding to the service configuration conveyed by this message.

CS_SUPPORTED - Concurrent Services supported indicator.

If the base station supports concurrent services, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
3.7.3.3.2.32 Resource Allocation Message

MSG_TAG: RAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>1</td>
</tr>
</tbody>
</table>

USE_TIME - Use action time indicator.
This field indicates whether an explicit action time is specified in this message.
If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ACTION_TIME - Action time.
If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET \( \times 1.25 \) ms, in units of 80 ms (modulo 64), at which this message is to take effect. If the USE_TIME field is set to ‘0’, the base station shall omit this field.

FPC_PRI_CHAN - Power Control Subchannel indicator.
The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.
If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:
If this field is set to ‘0’, the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.
3.7.3.2.33 Resource Allocation Mini Message

MSG_TAG: RAMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>1</td>
</tr>
</tbody>
</table>

**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 × 1.25 ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE_TIME field is set to ‘0’, the base station shall omit this field.

**FPC_PRI_CHAN** - Power Control Subchannel indicator.
The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.
If the F-CPCCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCCH; otherwise:
If this field is set to ‘0’, the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.
3.7.3.3.2.34 Extended Release Message
MSG_TAG: ERM
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>CH_IND</td>
<td>3</td>
</tr>
<tr>
<td>GATING_RATE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_GATING_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>USE_EXT_CH_IND</td>
<td>1</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PDCH_CONTROL_HOLD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>DIRECT_TO_IDLE_INFO_INCL</td>
<td>1</td>
</tr>
</tbody>
</table>

If `DIRECT_TO_IDLE_INFO_INCL` is set to ‘1’, the following DIRECT TO IDLE record shall be included:

```
{ (DIRECT TO IDLE Record)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELEASE_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>SID</td>
<td>0 or 15</td>
</tr>
<tr>
<td>NID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>FREQ_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PAGE_CH</td>
<td>0 or 3</td>
</tr>
<tr>
<td>PRAT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_BCCH_CODE_CHAN_NON_TD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>SR1_CRAT_NON_TD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR1_BRAT_NON-TD</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_TD_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_BCCH_CODE_CHAN_TD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>SR1_CRAT_TD</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR1_BRAT_TD</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SR1_TD_POWER_LEVEL</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>
```
NUM_PILOTS_D2I_INCL 0 or 1
NUM_PILOTS_D2I 0 or 3

NUM_PILOTS_D2I occurrence of the following record:

```
{ (NUM_PILOTS_D2I)
PILOT_PN 9
}
```

```

RRER_MODE_ENABLED 1
RER_MAX_NUM_MSG_ID 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_ID 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_F SCH 0 or 3
NUM_BCMC_PROGRAMS 0 or 46
```

If NUM_F SCH field is included, then NUM_F SCH plus one occurrences of the following variable length record:

```
{ (NUM_F SCH + 1)
FSCH_RECORD_LEN 8
FSCH_CODE_CHAN 11
FSCH_MUX_OPTION 16
```
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCH_RC</td>
<td>5</td>
</tr>
<tr>
<td>FSCH_CODING</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_RATE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FSCH_OUTERCODE_OFFSET</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FSCH_RATE</td>
<td>4</td>
</tr>
<tr>
<td>FSCH_FRAME_SIZE</td>
<td>2</td>
</tr>
<tr>
<td>FSCH_FRAME_40_USED</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_FRAME_80_USED</td>
<td>1</td>
</tr>
<tr>
<td>FSCH_RECORD_RESERVED</td>
<td>0-7</td>
</tr>
</tbody>
</table>

If `NUM_BCMC_PROGRAMS` field is included, then `NUM_BCMC_PROGRAMS` plus one occurrences of the following variable length record:

\[(NUM\_FSCH + 1)\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>BCMC_PROGRAM_ID_LEN+1</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
</tbody>
</table>

`NUM_FLOW_DISCRIMINATOR`+1 or 1 occurrences of the following variable length record

\[(NUM\_FLOW\_DISCRIMINATOR+1) or 1\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
<tr>
<td>NUM_LPM_ENTRIES</td>
<td>3</td>
</tr>
</tbody>
</table>

`NUM_LPM_ENTRIES` plus one occurrences of the following variable-length record:

\[(NUM\_LPM\_ENTRIES + 1)\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCH_ID</td>
<td>7</td>
</tr>
<tr>
<td>BSR_ID</td>
<td>3</td>
</tr>
</tbody>
</table>

\[(NUM\_LPM\_ENTRIES + 1)\]

\[(NUM\_FLOW\_DISCRIMINATOR+1) or 1\]

\[(NUM\_BCMC\_PROGRAMS + 1)\]
USE_TIME - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.

If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ACTION_TIME - Action time.

If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET × 1.25 ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE_TIME field is set to ‘0’, the base station shall omit this field.

CH_IND - Channel Indicator.

The base station shall set this field as shown in Table 3.7.3.3.2.34-1, to release physical resources.

<table>
<thead>
<tr>
<th>CH_IND (binary)</th>
<th>Physical Resource(s) Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>No Fundamental Channel, Dedicated Control Channel, or Continuous Reverse Pilot Channel released</td>
</tr>
<tr>
<td>001</td>
<td>Fundamental Channel</td>
</tr>
<tr>
<td>010</td>
<td>Dedicated Control Channel</td>
</tr>
<tr>
<td>011</td>
<td>Reserved</td>
</tr>
<tr>
<td>100</td>
<td>Continuous Reverse Pilot Channel</td>
</tr>
<tr>
<td>101</td>
<td>Fundamental Channel and Continuous Reverse Pilot Channel</td>
</tr>
<tr>
<td>110</td>
<td>Reserved</td>
</tr>
<tr>
<td>111</td>
<td>Fundamental Channel, Dedicated Control Channel, and Continuous Reverse Pilot Channel</td>
</tr>
</tbody>
</table>

GATING_RATE_INCL - Reverse pilot gating rate included flag.

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’.

PILOT_GATING_RATE - Actual Reverse Pilot gating Rate.
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 3.7.3.2.34-2 corresponding to the actual gating rate on the Reverse Pilot Channel; otherwise, the base station shall omit this field.

Table 3.7.3.2.34-2. Actual Reverse Pilot Gating rate

<table>
<thead>
<tr>
<th>PILOT_GATING_RATE field (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Gating rate 1</td>
</tr>
<tr>
<td>01</td>
<td>Gating rate ½</td>
</tr>
<tr>
<td>10</td>
<td>Gating rate ¼</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

USE_EXT_CH_IND - Use EXT_CH_IND to set channel configuration

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’.

EXT_CH_IND - Extended Channel Indicator.

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:

The base station shall set this field to the desired channel configuration shown in Table 2.7.1.3.2.4-11.

PDCH_CONTROL_HOLD - Packet Data Channel Control Hold mode indication.

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:

The base station shall set this field to ‘1’ to instruct the mobile station to transition to the Packet Data Channel Control Hold Mode.

If EXT_CH_IND signals the allocation of F-FCH, this field shall be set to ‘0’.

Table 3.7.3.2.34-3 shows the valid combinations of CH_IND, EXT_CH_IND, and PDCH_CONTROL_HOLD.
### Table 3.7.3.3.2.34-3. Valid CH_IND, EXT_CH_IND, and PDCH_CONTROL_HOLD

<table>
<thead>
<tr>
<th>Current EXT_CH_IND (binary)</th>
<th>CH_IND (binary)</th>
<th>EXT_CH_IND (binary)</th>
<th>PDCH_CONTROL_HOLD (binary)</th>
<th>Physical Resource(s) Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>111</td>
<td>Omit</td>
<td>0</td>
<td>All assigned channels</td>
</tr>
<tr>
<td>00001</td>
<td>XXX</td>
<td>00001</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>00010</td>
<td>XXX</td>
<td>00010</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>00011</td>
<td>000</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH and R-CQICH</td>
</tr>
<tr>
<td>00100</td>
<td>XXX</td>
<td>00100</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>00100</td>
<td>000</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH and R-CQICH</td>
</tr>
<tr>
<td>00100</td>
<td>100</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH and R-CQICH, Continuous R-PICH</td>
</tr>
<tr>
<td>00101</td>
<td>XXX</td>
<td>00011</td>
<td>0</td>
<td>R-DCCCH</td>
</tr>
<tr>
<td>00101</td>
<td>010</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, R-DCCCH</td>
</tr>
<tr>
<td>00110</td>
<td>XXX</td>
<td>00011</td>
<td>0</td>
<td>F/R-DCCCH</td>
</tr>
<tr>
<td>00110</td>
<td>XXX</td>
<td>00100</td>
<td>0 or 1</td>
<td>F/R-FCH, Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1</td>
</tr>
<tr>
<td>00110</td>
<td>XXX</td>
<td>00101</td>
<td>0</td>
<td>F-DCCCH</td>
</tr>
<tr>
<td>00110</td>
<td>000</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH and R-CQICH</td>
</tr>
<tr>
<td>00110</td>
<td>010</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, F/R-DCCCH</td>
</tr>
<tr>
<td>00110</td>
<td>001</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, F/R-FCH</td>
</tr>
<tr>
<td>00110</td>
<td>101</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, F/R-FCH, Continuous R-PICH</td>
</tr>
<tr>
<td>01001</td>
<td>XXX</td>
<td>00001</td>
<td>0 or 1</td>
<td>R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01001</td>
<td>XXX</td>
<td>01001</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>01010</td>
<td>XXX</td>
<td>00010</td>
<td>0 or 1</td>
<td>R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01010</td>
<td>XXX</td>
<td>01010</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>01011</td>
<td>XXX</td>
<td>00011</td>
<td>Omit</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>01011</td>
<td>000</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, R-PDCH</td>
</tr>
<tr>
<td>01100</td>
<td>XXX</td>
<td>00100</td>
<td>0 or 1</td>
<td>R-PDCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01100</td>
<td>XXX</td>
<td>01100</td>
<td>1</td>
<td>Continuous R-PICH and R-CQICH</td>
</tr>
<tr>
<td>01100</td>
<td>000</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, R-PDCH</td>
</tr>
<tr>
<td>01100</td>
<td>100</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, R-PDCH, Continuous R-PICH</td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>01101</td>
<td>XXX</td>
<td>01011</td>
<td>0</td>
<td>R-DCCH</td>
</tr>
<tr>
<td>01101</td>
<td>XXX</td>
<td>00101</td>
<td>0</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>01101</td>
<td>XXX</td>
<td>00011</td>
<td>0</td>
<td>R-PDCH, R-DCCH</td>
</tr>
<tr>
<td>01101</td>
<td>010</td>
<td>Omit</td>
<td>Omit</td>
<td>F-PDCH, R-CQICH, R-PDCH, R-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>01011</td>
<td>0</td>
<td>F/R-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>01100</td>
<td>0 or 1</td>
<td>F/R-FCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>01101</td>
<td>0</td>
<td>F-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00110</td>
<td>0</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00111</td>
<td>0 or 1</td>
<td>R-PDCH, F/R-DCCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00100</td>
<td>0 or 1</td>
<td>R-PDCH, F/R-FCH [Continuous R-PICH/R-CQICH when PDCH_CONTROL_HOLD=1]</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00101</td>
<td>0</td>
<td>R-PDCH, F-FCH, F-RCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00010</td>
<td>0</td>
<td>R-PDCH, F-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00100</td>
<td>0</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00101</td>
<td>0</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00110</td>
<td>0</td>
<td>R-PDCH, F-FCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00111</td>
<td>0</td>
<td>R-PDCH, F-FCH, F-RCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00010</td>
<td>0</td>
<td>R-PDCH, F-DCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00011</td>
<td>0</td>
<td>R-PDCH, R-DCCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00010</td>
<td>0</td>
<td>R-PDCH, F-DCCH, F-CPCCH</td>
</tr>
<tr>
<td>01110</td>
<td>XXX</td>
<td>00001</td>
<td>0</td>
<td>R-DCCH, R-DCCCH, R-FCH</td>
</tr>
<tr>
<td>01111</td>
<td>XXX</td>
<td>01111</td>
<td>0</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>10010</td>
<td>XXX</td>
<td>10000</td>
<td>0</td>
<td>R-PDCH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>10101</td>
<td>XXX</td>
<td>1001</td>
<td>Omit</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>10010</td>
<td>Omit</td>
<td>R-PDCH</td>
</tr>
<tr>
<td>10011</td>
<td>XXX</td>
<td>00100</td>
<td>Omit</td>
<td>R-PDCH, F-FCH</td>
</tr>
<tr>
<td>10100</td>
<td>XXX</td>
<td>00010</td>
<td>Omit</td>
<td>R-PDCH, F-DCCH</td>
</tr>
<tr>
<td>10100</td>
<td>XXX</td>
<td>00100</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10100</td>
<td>XXX</td>
<td>00010</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10101</td>
<td>XXX</td>
<td>00100</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10101</td>
<td>XXX</td>
<td>00010</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00110</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00101</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00100</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00011</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00010</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
<tr>
<td>10110</td>
<td>XXX</td>
<td>00001</td>
<td>Omit</td>
<td>R-PDCH, F-CPCCH</td>
</tr>
</tbody>
</table>
SWITCHING_PARMS_INCL - R-CQICH switching parameters included indicator.

If the USE_EXT_CH_IND or the GATING_RATE_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:

The base station shall set this field to '1' if the parameters for R-CQICH soft and softer switching are included in this message; otherwise, the base station shall set this field to '0'.

NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft switching while in Control Hold.

If SWITCHING_PARMS_INCL is not included or included and set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

NUM.SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer switching while in Control Hold.

If SWITCHING_PARMS_INCL is not included or included and set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

DIRECT_TO_IDLE_INFO_INCL - Direct to Idle information included.

If USE_EXT.CH_IND is equal to '0' and CH_IND is equal to '111' or the physical channels indicated by the two least significant bits of CH_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the base station shall set this field as follows:

• If DIRECT TO IDLE record is included, the base station shall set this field to '1'; otherwise base station shall set this field to '0'.

Otherwise the base station shall set this field to '0'.

RELEASE_TYPE - Release type.

If DIRECT_TO_IDLE_INFO_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field as specified in Table 3.7.3.3.2.34-4.
### Table 3.7.3.2.34-4 Release Type

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Release Type/Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Release to <em>Mobile Station Idle State</em> on the PCH</td>
</tr>
<tr>
<td>001</td>
<td>Release to <em>Mobile Station Idle State</em> on the Primary BCCH.</td>
</tr>
<tr>
<td>010</td>
<td>Release to <em>Mobile Station Idle State</em> on the Primary BCCH that supports Transmit Diversity.</td>
</tr>
<tr>
<td>011</td>
<td>Release to <em>System Determination Substate of the Mobile Station Initialization State.</em></td>
</tr>
<tr>
<td>100-111</td>
<td>Reserved.</td>
</tr>
</tbody>
</table>

**SID** - System identification.

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).

**NID** - Network identification.

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:

This field serves as a sub-identifier of a system as defined by the owner of the SID.

The base station shall set this field to the network identification number for the network that the mobile station is being directed to (see 2.6.5.2).

**FREQ_INCL** - Frequency included indicator.

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:

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’.

**CDMA_FREQ** - Frequency assignment.
If the FREQ_INCL field is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the CDMA Channel number corresponding to the CDMA frequency assignment for the CDMA Channel containing the Paging Channel or Primary Broadcast Control Channel.

**BAND_CLASS** - Band class.

If the FREQ_INCL field is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, 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 or Primary Broadcast Control Channel.

**PAGE_CH** - Paging Channel.

If RELEASE_TYPE field is included and equals ‘000’, the base station shall set this field to the Paging Channel number of the Paging Channel that the mobile station is being directed to; otherwise, the base station shall omit this field.

**PRAT** - Paging Channel data rate.

If RELEASE_TYPE field is included and equals ‘000’, the base station shall set this field to the PRAT field value shown in Table 3.7.2.3.2.26-1 corresponding to the data rate used by the Paging Channel that the mobile station is being directed to; otherwise, the base station shall omit this field.

**SR1_BCCH_CODE_CHAN_NON_TD** – Walsh code for the Spreading Rate 1 BCCH in non Transmit Diversity mode.

If RELEASE_TYPE field is not included or is included and is not equal to ‘001’, the base station shall omit this field; otherwise, the base station shall set this field to the Walsh code corresponding to the Spreading Rate 1 BCCH in non Transmit Diversity mode that the mobile station is being directed to.

**SR1_CRAT_NON_TD** – BCCH code rate in non Transmit Diversity mode for Spreading Rate 1.

If RELEASE_TYPE field is not included or is included and is not equal to ‘001’, 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_BRAT_NON_TD** - BCCH data rate in non Transmit Diversity mode for Spreading Rate 1.

If RELEASE_TYPE field is not included or is included and is not equal to ‘001’, 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 BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel that the mobile station is being directed to.

SR1_TD_MODE - Spreading Rate 1 Transmit Diversity Mode.

If RELEASE_TYPE field is included and equals ‘010’, the base station shall set this field to the value shown in Table 3.7.2.3.2.26-3; otherwise, the base station shall omit this field.

SR1_BCCH_CODE_CHAN_TD - Walsh Code for Spreading Rate 1 BCCH in Transmit Diversity mode.

If RELEASE_TYPE field is included and equals ‘010’, the base station shall set this field to the Walsh Code corresponding to the Spreading Rate 1 BCCH in Transmit Diversity mode that the mobile station is being directed to; otherwise, the base station shall omit this field.

SR1_CRAT_TD - BCCH code rate in Transmit Diversity mode for Spreading Rate 1.

If RELEASE_TYPE field is not included or is included and is not equal to ‘010’, 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 ¼ (see [2]). The base station shall set this field to ‘1’ if the BCCH Code Rate is ½ (see [2]).

SR1_BRAT_TD - BCCH date rate in Transmit Diversity mode for Spreading Rate 1.

If RELEASE_TYPE field is included and equals ‘010’, the base station shall set this field to the BRAT field value shown in Table 3.7.2.3.2.26-2 corresponding to the data rate used by the Primary Broadcast Control Channel that the mobile station is being directed to; otherwise, the base station shall omit this field.

SR1_TD_POWER_LEVEL - Spreading Rate 1 TD transmit power level.

If RELEASE_TYPE field is not included or is included and is not equal to ‘010’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the TD transmit power level relative to that of the Forward Pilot Channel, as specified in Table 3.7.2.3.2.26-4.

NUM_PILOTS_D2I_INCL - Number of Pilots (Direct to Idle) Included Indicator.

If RELEASE_TYPE field is not included or is included and is equal to ‘011’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:
The base station shall set this field to ‘0’ to indicate any pilot can be used for direct to idle transition; otherwise, the base station shall set this field to ‘1’.

NUM_PILOTS_D2I - Number of Pilots (Direct to Idle).

If NUM_PILOTS_D2I_INCL field is not included or is included and is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to ‘000’ to indicate any pilot in the active set can be used for direct to idle transition; otherwise, the base station shall set this field to number of pilots included in this DIRECT TO IDLE record.

If NUM_PILOTS_D2I field is included, the base station shall include NUM_PILOTS_D2I occurrences of the following record:

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.

RER_MODE_ENABLED - Radio environment reporting mode enabled indicator.

If USE_EXT_CH_IND is equal to ‘0’ and CH_IND is equal to ‘111’, or the physical channels indicated by the two least significant bits of CH_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the base station shall set this field as follows:

• If the radio environment reporting mode is enabled in this message, the base station shall set this field to ‘1’;
  otherwise, the base station shall set this field to ‘0’.

Otherwise, the base station shall set this field to ‘0’.

RER_MAX_NUM_MSG_IDX - Maximum number of Radio Environment Messages permitted while in radio environment reporting mode index.

If RER_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of Radio Environment Messages that the mobile station is allowed to transmit while in radio environment reporting mode, expressed as \(2^{\text{RER_MAX_NUM_MSG_IDX}}\) where \(0 \leq \text{RER_MAX_NUM_MSG_IDX} \leq 6\). If the mobile station is allowed to transmit an unlimited number of Radio Environment Message, then the base station shall set this field to ‘111’.

RER_TIME - Radio environment report timer value.

If RER_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the value of the radio-environment report timer, expressed as $2^{\text{RER\_TIME}}$ where $0 \leq \text{RER\_TIME} \leq 6$ and in units of RER\_TIME\_UNIT. If the value of the radio-environment report timer is infinite, then the base station shall set this field to ‘111’.

RER\_TIME\_UNIT - Radio environment report timer value units.

If RER\_MODE\_ENABLED is set to ‘1’ and RER\_TIME is not set to ‘111’, the base station shall include this field and shall set it according to Table 3.7.3.2.34-5; otherwise, the base station shall omit this field.

**Table 3.7.3.2.34-5 RER\_TIME\_UNIT values**

<table>
<thead>
<tr>
<th>RER_TIME_UNIT (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Seconds</td>
</tr>
<tr>
<td>01</td>
<td>Minutes</td>
</tr>
<tr>
<td>10</td>
<td>Hours</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

MAX\_RER\_PILOT\_LIST\_SIZE - Maximum number of pilots to maintain in RER\_PILOT\_LIST.

If RER\_MODE\_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of pilots that the mobile station is to maintain in RER\_PILOT\_LIST (see [4]). The base station shall set this field to a value in the range 1 to 6 inclusive.

RSC\_MODE\_SUPPORTED – Reduced slot cycle mode supported indicator.

If USE\_EXT\_CH\_IND is equal to ‘0’ and CH\_IND is equal to ‘111’, or the physical channels indicated by the two least significant bits of CH\_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the base station shall set this field as follows:

- If the fields related to reduced slot cycle mode are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

Otherwise, the base station shall set this field to ‘0’.
MAX_RSC_END_TIME_UNIT – Maximum reduced slot cycle mode end time unit.

If RSC_MODE_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field according to Table 2.7.3.5-1 to indicate the units of the MAX_RSC_END_TIME_VALUE field.

MAX_RSC_END_TIME_VALUE – Maximum reduced slot cycle mode end time value.

If RSC_MODE_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum system time \((\text{modulo } 16)\), in units of time specified by MAX_RSC_END_TIME_UNIT \((\text{modulo } 16)\), at which the mobile station is to exit the reduced slot cycle mode.

REQ_RSCI_INCL – REQ_RSCI included indicator.

If RSC_MODE_SUPPORTED is equal to ‘1’, the base station shall include this field and set it as specified below; otherwise, the base station shall omit this field.

If the base station is requesting the mobile station to operate in the reduced slot cycle mode following release of the traffic channel, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REQ_RSCI – Requested reduced slot cycle index.

If REQ_RSCI_INCL is included and equal to ‘1’, the base station shall set this field as specified in Table 2.7.1.3.2.1-8 to the reduced slot cycle index value that it is requesting the mobile station to operate with; otherwise, the base station shall omit this field.

IGNORE_QPCH – Ignore QPCH indicators.

If RSC_MODE_SUPPORTED is equal to ‘1’, the base station shall include this field and set it as specified below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘1’ to indicate to the mobile station that it is not to check its assigned paging indicators on the QPCH while operating in the reduced slot cycle mode if the reduced slot cycle index is -3 or -4; otherwise, the base station shall set this field to ‘0’.

TKZ_MODE_ENABLED - Tracking zone mode enabled indicator.

If USE_EXT_CH_IND is equal to ‘0’ and CH_IND is equal to ‘111’, or the physical channels indicated by the two least significant bits of CH_IND includes all the physical channels (FCH, DCCH, or both) currently being processed by the mobile station, the base station shall set this field as follows:

• If the tracking zone mode is enabled in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
Otherwise, the base station shall set this field to ‘0’.

**TKZ_ID** - Tracking zone identifier.

If TKZ_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to its tracking zone identifier.

**TKZ_MAX_NUM_MSG_IDX** - Maximum number of *Radio Environment Messages* permitted while in tracking zone mode index.

If TKZ_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of *Radio Environment Messages* that the mobile station is allowed to transmit while in tracking zone mode, expressed as $2^{TKZ_MAX_NUM_MSG_IDX}$ where $0 \leq TKZ_MAX_NUM_MSG_IDX \leq 6$. If the mobile station is allowed to transmit an unlimited number of *Radio Environment Messages*, then the base station shall set this field to ‘111’.

**TKZ_UPDATE_PRD** - Tracking zone update period.

If TKZ_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field such that the desired tracking zone update timer value is $2^{TKZ_UPDATE_PRD+6}$ seconds. If the value of the timer is infinite, then the base station shall set this field to ‘1111’.

**TKZ_LIST_LEN** - Tracking zone list length.

If TKZ_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the length of the tracking zone list minus one.

**TKZ_TIMER** - Tracking zone timer.

If TKZ_MODE_ENABLED is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the tracking zone timer (in units of seconds) minus one.

**TBR_RAND_SUPPR_ENABLE** - Timer Based Registration Randomization Suppression enable indicator.

The base station shall set this field to ‘1’, if the mobile station is allowed to suppress timer-based registration randomization in order to eliminate unnecessary timer-based registrations (see 2.6.5.1.3.1); otherwise, the base station shall set this field to ‘0’.
TBR_RAND_WINDOW – Timer-based registration randomization window.

The base station shall set this field to the value shown in Table 2.6.5.1.3-1 corresponding to the randomization for timer-based registration (see 2.6.5.1.3).

BCMC_INFO_INCL - BCMC information Included Indicator

If RELEASE_TYPE field is not included or is included and is equal to ‘011’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to ‘1’ if BCMC information is included in this message; otherwise, the base station shall set this field to ‘0’.

The BCMC information included in this message is applicable to all the pilots indicated by the DIRECT TO IDLE record in this message.

NUM_FSCH - Number of Forward Broadcast Supplemental Channel

If BCMC_INFO_INCL field is not included or is included and is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to the number of Forward Broadcast Supplemental Channels for which information is included in this message minus one.

NUM_BCMC_PROGRAMS - Number of BCMC Programs

If BCMC_INFO_INCL field is not included or is included and is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to the number of BCMC programs for which information is included in this message minus one.

If NUM_FSCH field is included, the base station shall include NUM_FSCH plus one occurrences of the following variable length record:

FSCH_RECORD_LEN - Forward Broadcast Supplemental Channel

The base station shall set this field to the number of octets included in this Forward Broadcast Supplemental Channel record including this field.
FSCH_CODE_CHAN - Code channel index of the Forward Broadcast Supplemental Channel.

The base station shall set this field to the code channel index of this Forward Broadcast Supplemental Channel as specified in [2].

FSCH_MUX_OPTION - Multiplex Option of the Forward Broadcast Supplemental Channel.

The base station shall set this field to the multiplex option of this Forward Broadcast Supplemental Channel as specified in [3].

FSCH_RC - Radio configuration of the Forward Broadcast Supplemental Channel.

The base station shall set this field to the radio configuration of this Forward Broadcast Supplemental Channel as specified in [2].

FSCH_CODING - Coding type of the Forward Broadcast Supplemental Channel.

The base station shall set this field to ‘1’ if Convolutional Coding will be used when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The base station shall set this field to ‘0’ if Convolution Coding will be used for all block sizes.

FSCH_OUTERCODE_INCL - Forward Broadcast Supplemental Channel Outer Code included indicator.

The base station shall set this field to ‘1’ if the Forward Broadcast Supplemental Channel outer code information is included in this message; otherwise, the base station shall set this field to ‘0’.

FSCH_OUTERCODE_RATE - Outer Code Rate of the Forward Broadcast Supplemental Channel.

If the FSCH_OUTERCODE_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:

The base station shall set this field to the outer code rate of the Forward Broadcast Supplemental Channel as specified in Table 3.7.2.3.2.38-3.[2].

FSCH_OUTERCODE_OFFSET - Outer Coding Buffer Offset of the Forward Broadcast Supplemental Channel.

If the FSCH_OUTERCODE_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:

The base station shall set this field to the outer coding buffer offset of the Forward Broadcast Supplemental Channel in units of 20ms as specified in [2].
FSCH_RATE - Data Rate of the Forward Broadcast Supplemental Channel.

The base station shall set this field to the data rate of this Forward Broadcast Supplemental Channel as specified in [2].

FSCH_FRAME_40_USED - Forward Supplemental Channel 40ms frame used indicator.

The base station shall set this field to ‘1’ if 40ms frame is used on this Forward Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both FSCH_FRAME_40_USED and FSCH_FRAME_80_USED fields to ‘1’.

FSCH_FRAME_80_USED - Forward Supplemental Channel 80ms frame used indicator.

The base station shall set this field to ‘1’ if 80ms frame is used on this Forward Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

The base station shall not set both FSCH_FRAME_40_USED and FSCH_FRAME_80_USED fields to ‘1’.

FSCH_FRAME_SIZE - Frame Size of the Forward Broadcast Supplemental Channel.

The base station shall set this field to the frame size used on this Forward Broadcast Supplemental Channel as specified in [2].

FSCH_RECORD_RESERVED - Forward Broadcast Supplemental Channel record Reserved bits.

The base station shall add reserved bits as needed in order to make the length of this Forward Broadcast Supplemental Channel record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If NUM_BCMC_PROGRAMS field is included, the base station shall include NUM_BCMC_PROGRAMS plus one occurrences of the following variable length record:

BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

The base station shall set this field to one less than the length in bits of the BCMC_PROGRAM_ID of this program.

BCMC_PROGRAM_ID - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.

The base station shall set this field to the BCMC program identifier of this program.

BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

The base station shall set this field to the length in bits of the BCMC_FLOW_DISCRIMINATOR of this program.

NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators.
The length of this field shall be determined by the value of the
BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
is omitted; otherwise, the length of this field shall be
BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the number of flow
discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include
NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record;
otherwise, the base station shall include 1 occurrence of the following variable length
record:

BCMC_FLOW_DISCRIMINATOR - BCMC flow discriminator

The length of this field shall be determined by the value of the
BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
is omitted; otherwise, the length of this field shall be
BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the BCMC flow
discriminator of this flow.

NUM_LPM_ENTRIES - Number of Logical-to-Physical Mapping Entries

The base station shall set this field to one less than the
number of logical to physical mapping included for this BCMC
flow.

The base station shall include NUM_LPM_ENTRIES plus one occurrences of the following
variable-length record:

FSCH_ID - Forward Broadcast Supplemental Channel Identifier

The base station shall set this field to the identifier
corresponding to the Forward Broadcast Supplemental Channel on which the above
BCMC flow is being transmitted.

The F-SCH included first in this message is given the
FSCH_ID of '0000000', the second one listed is given the
FSCH_ID of '0000001', and so on.

BSR_ID_LEN_IND - BCMC Service Reference Identifier length indicator

The base station shall set this field to ‘1’ if the length of the
BCMC Service Reference Identifier is 3 bits; the base station
shall set this field to ‘0’ if the length of the BCMC Service Reference Identifier is 16 bits.

BSR_ID - BCMC Service Reference Identifier

The base station shall set this field to the BCMC Service
Reference identifier corresponding to this BCMC flow on this
Forward Broadcast Supplemental Channel.

The base station shall not set this field to a value of 0.
3.7.3.3.2.35 Extended Release Mini Message

MSG_TAG: ERMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>CH_IND</td>
<td>3</td>
</tr>
<tr>
<td>GATING_RATE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_GATING_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>USE_EXT_CH_IND</td>
<td>1</td>
</tr>
<tr>
<td>EXT_CH_IND</td>
<td>0 or 5</td>
</tr>
<tr>
<td>PDCH_CONTROL_HOLD</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

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_OFFSETs × 1.25 ms, in units of 80 ms (modulo 64), at which the message is to take effect. If the USE_TIME field is set to ‘0’, the base station shall omit this field.

CH_IND - Channel Indicator.

The base station shall set this field as shown in Table 3.7.3.3.2.34-1, to release physical resources.

GATING_RATE_INCL - Reverse pilot gating rate included flag.

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’.

PILOT_GATING_RATE - Actual Reverse Pilot gating Rate.

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.

USE_EXT_CH_IND - Use EXT_CH_IND to set channel configuration
The base station shall set this field to ‘1’ if the EXT_CH_IND is included in this message and is used to set the channel configuration; otherwise, the base station shall set this field to ‘0’.

**EXT_CH_IND** - Extended Channel Indicator.

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:

The base station shall set this field to the desired channel configuration shown in Table 2.7.1.3.2.4-11.

**PDCH_CONTROL_HOLD** - Packet Data Channel Control Hold mode indication.

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:

The base station shall set this field to ‘1’ to instruct the mobile station to transition to the Packet Data Channel Control Hold Mode.

If EXT_CH_IND signals the allocation of F-FCH, this field shall be set to ‘0’.

Table 3.7.3.3.2.34-3 shows the valid combinations of CH_IND, EXT_CH_IND, and PDCH_CONTROL_HOLD.
3.7.3.3.2.36 Universal Handoff Direction Message

**MSG_TAG:** UHDM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>HDM_SEQ</td>
<td>2</td>
</tr>
<tr>
<td>PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>P_REV</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SERV_NEG_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SEARCH_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>SRCH_WIN_A</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_WIN_N</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SRCH_WIN_R</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_ADD</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_DROP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>T_COMP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>T_TDROP</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SOFT_SLOPE</td>
<td>0 or 6</td>
</tr>
<tr>
<td>ADD_INTERCEPT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>DROP_INTERCEPT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>EXTRA_PARMS</td>
<td>1</td>
</tr>
<tr>
<td>PACKET_ZONE_ID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FRAME_OFFSET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PRIVATE_LCM</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_L2</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESET_FPC</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCRYPT_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NOM_PWR_EXT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NOM_PWR</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RLGAIN_TRAFFIC_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>DEFAULT_RLAG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_PREAMBLE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>BAND_CLASS</td>
<td>0 or 5</td>
</tr>
<tr>
<td>CDMA_FREQ</td>
<td>0 or 11</td>
</tr>
<tr>
<td>RETURN_IF_HANDOFF_FAIL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>COMPLETE_SEARCH</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PERIODIC_SEARCH</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SCR_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SERV_CON_SEQ</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or $8 \times \text{RECORD_LEN}$</td>
</tr>
<tr>
<td>NNSCR_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RECORD_TYPE</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or $8 \times \text{RECORD_LEN}$</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>USE_PWR_CNTL_STEP</td>
<td>1</td>
</tr>
<tr>
<td>PWR_CNTL_STEP</td>
<td>0 or 3</td>
</tr>
<tr>
<td>CLEAR_RETRY_DELAY</td>
<td>1</td>
</tr>
<tr>
<td>SCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_FOR_ASSIGN</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

The base station shall include NUM_FOR_ASSIGN occurrences of the following fields

\[
\{(\text{NUM}_\text{FOR}_\text{ASSIGN})\}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_START_TIME_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH_START_TIME</td>
<td>0 or 5</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
</tbody>
</table>

\[
\} (\text{NUM}_\text{FOR}_\text{ASSIGN})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>REV_SCH_START_TIME_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_START_TIME</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
</tbody>
</table>

\[
\} (\text{NUM}_\text{REV}_\text{ASSIGN})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_SUBCHAN_GAIN</td>
<td>5</td>
</tr>
<tr>
<td>USE_PC_TIME</td>
<td>1</td>
</tr>
<tr>
<td>PC_ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>CH_IND</td>
<td>3</td>
</tr>
<tr>
<td>ACTIVE_SET_REC_LEN</td>
<td>8</td>
</tr>
<tr>
<td>ACTIVE_SET_REC_FIELDS</td>
<td>8 × \text{ACTIVE_SET_REC_LEN}</td>
</tr>
<tr>
<td>REV_FCH_GATING_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Field</td>
<td>Length (bits)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>REV_PWR_CNTL_DELAY</td>
<td>0 or 2</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>3XFL_1XRL_INCL</td>
<td>1</td>
</tr>
<tr>
<td>1XRL_FREQ_OFFSET</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SYNC_ID_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SYNC_ID_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>SYNC_ID</td>
<td>0 or (8 × SYNC_ID_LEN)</td>
</tr>
<tr>
<td>CC_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_CALLS_ASSIGN</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**NUM_CALLS_ASSIGN** occurrences of the following variable length record:

```plaintext
{ (NUM_CALLS_ASSIGN)
  CON_REF 8
  RESPONSE_IND 1
  TAG 0 or 4
  BYPASS_ALERT_ANSWER 0 or 1
} (NUM_CALLS_ASSIGN)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>CHM_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESH_LD_UNIT</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CDMA_OFF_TIME_REP_THRESH_LD</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RELEASE_TO_IDLE_IND</td>
<td>1</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_INTEGRITY_SUP</td>
<td>1</td>
</tr>
<tr>
<td>GEN_2G_KEY</td>
<td>1</td>
</tr>
<tr>
<td>REGISTER_IN_IDLE</td>
<td>1</td>
</tr>
<tr>
<td>PLCM_TYPE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PLCM_TYPE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PLCM_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>T_TDROP_RANGE_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>T_TDROP_RANGE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FOR_PDCH_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_CHM_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PILOT_INFO_REQ_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>ENC_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>SIG_ENCRYPT_SUP</td>
<td>0 or 8</td>
</tr>
<tr>
<td>UI_ENCRYPT_SUP</td>
<td>0 or 8</td>
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<tr>
<td>USE_SYNC_ID</td>
<td>1</td>
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<tr>
<td>SID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SID</td>
<td>0 or 15</td>
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<tr>
<td>NID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NID</td>
<td>0 or 16</td>
</tr>
<tr>
<td>SDB_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MOB_QOS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>MS_INIT_POS_LOC_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PZ_HYST_LIST_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>PZ_HYST_ACT_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_MUL</td>
<td>0 or 3</td>
</tr>
<tr>
<td>PZ_HYST_TIMER_EXP</td>
<td>0 or 5</td>
</tr>
<tr>
<td>BCMC_ON_TRAFFIC_SUP</td>
<td>1</td>
</tr>
<tr>
<td>AUTO_REQ_TRAF_ALLOWED_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SCH_BCMC_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_SCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_SCH_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_SCH_359</td>
<td>0 or 395</td>
</tr>
</tbody>
</table>

NUM_FOR_ASSIGN occurrence of the following record if SCH_BCMC_IND is included and is set to ‘1’:

```c
{ (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)
```

```c
{ 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

  } (NUM_FOR_ASSIGN)
```
If CH_IND = ‘101’, the ACTIVE_SET_REC_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NUM_FOR_SCH occurrences of the following three fields:</td>
<td></td>
</tr>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NUM_REV_SCH occurrences of the following three fields:</td>
<td></td>
</tr>
<tr>
<td>REV_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_WALSH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>SRCH_OFFSET_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_PILOTS occurrences of the following record:</td>
<td></td>
</tr>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>SRCH_OFFSET</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>2</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>NUM_SCH</th>
<th>0 or 5</th>
</tr>
</thead>
</table>

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 |
\} (NUM_SCH)

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 |
\}
<table>
<thead>
<tr>
<th>CODE_CHAN_SCH_HIGH</th>
<th>0 or 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>} (NUM_SCH)</td>
<td></td>
</tr>
<tr>
<td>} (NUM_PILOTS)</td>
<td></td>
</tr>
<tr>
<td>CCSH_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>USE_CCSH_ENCODER_TIME</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CCSH_ENCODER_ACTION_TIME</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

If CCSH_INCLUDED is set to ‘1’, include one occurrence of the following field for each of the Forward Supplemental Channel records with PILOT_INCL field set to ‘1’.

<table>
<thead>
<tr>
<th>CCSH_ENCODER_TYPE</th>
<th>0 or 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>} (NUM_SCH)</td>
<td></td>
</tr>
<tr>
<td>} (NUM_PILOTS)</td>
<td></td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>
If CH_IND = ‘010’ or ‘110’, the ACTIVE_SET_REC_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
</tbody>
</table>

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)
NUM_SCH occurrences of the following five fields:

```markdown
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>PILOT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_SCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>
```

If `3X_DCCH_INFO_INCL` is set to ‘1’, `NUM_PILOTS` occurrences of the following record:

```markdown
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_DCCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_DCCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_HIGH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_SCH_INFO_INCL</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>
```

If `3X_SCH_INFO_INCL` is included and set to ‘1’, `NUM_SCH` occurrences of the following record:

```markdown
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>3X_SCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_SCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_SCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH_HIGH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>
```
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)

If CCSH_INCLUDED is set to ‘1’, include one occurrence of the following field for each of the Forward Supplemental Channel records with PILOT_INCL field set to ‘1’.

}

{(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

} (NUM_PILOTS)

RESERVED   0 - 7 (as needed)
If CH_IND = ‘111’, the ACTIVE_SET_REC_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_WALSH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>SRCH_OFFSET_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>SRCH_OFFSET</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 × RECORD_LEN</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH</td>
<td>2</td>
</tr>
</tbody>
</table>

(continues on next page)
NUM_SCH occurrences of the following five field record:

\[
\{ \text{NUM_SCH} \}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>PILOT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_SCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

\[
\{ \text{NUM_SCH} \}
\]

\[
\{ \text{NUM_PILOTS} \}
\]

\[
\{ \text{NUM_PILOTS} \}
\]

If 3X_FCH_INFO_INCL or 3X_DCCH_INFO_INCL is set to ‘1’, NUM_PILOTS occurrences of the following record:

\[
\{ \text{NUM_PILOTS} \}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_FCH_LOW_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_FCH_HIGH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_FCH_HIGH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_DCCH_LOW_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_DCCH_HIGH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH_HIGH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_SCH_INFO_INCL</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>
If 3X_SCH_INFO_INCL is included and set to ‘1’, NUM_SCH occurrences of the following record:

\[
\text{(NUM_SCH)}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>3X_SCH_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH_LOW</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_SCH_LOW</td>
<td>0 or 11</td>
</tr>
<tr>
<td>3X_SCH_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH_HIGH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_SCH_HIGH</td>
<td>0 or 11</td>
</tr>
</tbody>
</table>

\[
\text{(NUM_SCH)}
\]

\[
\text{(NUM_PILOTS)}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCSH_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>USE_CCSH_ENCODER_TIME</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CCSH_ENCODER_ACTION_TIME</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

If CCSH_INCLUDED is set to ‘1’, include one occurrence of the following field for each of the Forward Supplemental Channel records with PILOT_INCL field set to ‘1’:

\[
\text{(NUM_SCH)}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCSH_ENCODER_TYPE</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

\[
\text{(NUM_SCH)}
\]

\[
\text{(NUM_SCH)}
\]

\[
\text{(NUM_PILOTS)}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNDICATED_BCMC_IND</td>
<td>1</td>
</tr>
<tr>
<td>REV_FCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>
### Table

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_PLCM_FOR_FCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_TYPE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_PLCM_FOR_FCH_39</td>
<td>0 or 39</td>
</tr>
<tr>
<td>FOR_CPCCH_INFO_INCL</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrence of the following record if FOR_CPCCH_INFO_INCL is set to ‘1’:

```plaintext
{ (NUM_PILOTS)
  FOR_CPCCH_WALSH 7
  FOR_CPCSCH 5
}
```

RESERVED 0 - 7 (as needed)
If CH_IND = ‘000’, the ACTIVE_SET_REC_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXT_CH_IND</td>
<td>5</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
<tr>
<td>EXT_ACTIVE_SET_REC.Fields</td>
<td>8 \times (ACTIVE_SET_REC_LEN-1)</td>
</tr>
</tbody>
</table>

The EXT_ACTIVE_SET_REC_FIELDS shall be:

<table>
<thead>
<tr>
<th>Field</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDCH_CONTROL_HOLD</td>
<td>1</td>
</tr>
<tr>
<td>FULL_CI_FEEDBACK_IND</td>
<td>1</td>
</tr>
<tr>
<td>FOR_CPCCH_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_CPCCH_UPDATE_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_CQICH_FRAME_OFFSET</td>
<td>4</td>
</tr>
<tr>
<td>REV_CQICH_REPS</td>
<td>2</td>
</tr>
<tr>
<td>REV_ACKCH_REPS</td>
<td>2</td>
</tr>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NUM_FOR_SCH occurrences of the following three fields:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 5</td>
</tr>
<tr>
<td>NUM_REV_SCH occurrences of the following three fields:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>REV_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_WALSH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>SRCH_OFFSET_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_GROUP_IND_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_PDCH_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_ACKCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_CQICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CHM_SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_SLOTS_CHM</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_SLOTS_CHM</td>
<td>0 or 2</td>
</tr>
<tr>
<td>PDCH_SOFT_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>PDCH_SOFTER_SWITCHING_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_PDCH_COMMON_PARMS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>WALSH_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>TX_DISABLED_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_PDCCH</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_PDCCH+1 occurrences of the following record:

```{ (NUM_PDCCH+1) }
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_PDCH_WALSH</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

```{ (NUM_PDCCH+1) }

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX_DISABLED_TIMER_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TX_DISABLED_TIMER</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_GCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_DRC_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCH_REPETITION</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_RCCH_UPDATE_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>FOR_ACKCH_ASSIGNED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_ACKCH_MODE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_ACKCH_COMB_SEL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_RLGAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RLGAIN_SPICH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_REQCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>RLGAIN_PDCCH_PILOT</td>
<td>0 or 6</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_1_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_TABLE_SEL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_AUTO_TPR</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**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
```
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_PDCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>WALSH_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PDCCH</td>
<td>0 or 3</td>
</tr>
<tr>
<td>NUM_PDCCH + 1 occurrences</td>
<td></td>
</tr>
<tr>
<td>of the following record:</td>
<td></td>
</tr>
<tr>
<td>{ (NUM_PDCCH+1)</td>
<td></td>
</tr>
<tr>
<td>FOR_PDCH_WALSH</td>
<td>0 or 6</td>
</tr>
<tr>
<td>} (NUM_PDCCH+1)</td>
<td></td>
</tr>
<tr>
<td>MAC_ID</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_CQICH_COVER</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FOR_CPCCH_WALSH</td>
<td>0 or 7</td>
</tr>
<tr>
<td>FOR_CPCCH_RATE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_CPCSCH</td>
<td>0 or 7</td>
</tr>
<tr>
<td>PWR_COMB_IND</td>
<td>1</td>
</tr>
<tr>
<td>PDCH_GROUP_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CODE_CHAN_FCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_FCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>CODE_CHAN_DCCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_DCCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_ACKCH_WALSH_INDEX</td>
<td>0 or 6</td>
</tr>
<tr>
<td>FOR_ACKSCH_INDEX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FOR_RCCCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_RCCCH_WALSH_INDEX</td>
<td>0 or 7</td>
</tr>
<tr>
<td>FOR_RCSCH_INDEX</td>
<td>0 or 7</td>
</tr>
<tr>
<td>NUM_FOR_GCH</td>
<td>0 or 2</td>
</tr>
<tr>
<td>NUM_FOR_GCH occurrences</td>
<td></td>
</tr>
<tr>
<td>of the following record:</td>
<td></td>
</tr>
<tr>
<td>{ (NUM_FOR_GCH)</td>
<td></td>
</tr>
<tr>
<td>FOR_GCH_WALSH_INDEX</td>
<td>0 or 8</td>
</tr>
<tr>
<td>} (NUM_FOR_GCH)</td>
<td></td>
</tr>
</tbody>
</table>

(continues on next page)
NUM_SCH occurrences of the following five field record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>PILOT_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CODE_CHAN_SCH</td>
<td>0 or 11</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

If CCSH_INCLUDED is set to ‘1’, include one occurrence of the following field for each of the Forward Supplemental Channel records with PILOT_INCL field set to ‘1’:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCSH_ENCODER_TYPE</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

FUNDICATED_BCMC_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
MOB_QOS 0 or 1
MS_INIT_POS_LOC_SUP_IND 1
RESERVED 0 - 7 (as needed)

RESERVED 0 - 7 (as needed)

USE_TIME - Use action time indicator.

This field indicates whether an explicit action time is specified in this message.
If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**ACTION_TIME** - Action time.

If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET \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.

**HDM_SEQ** - *Universal Handoff Direction Message* sequence number.

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.

The base station shall set this field to the handoff message sequence number, as specified in 2.6.6.2.2.10.

**PARMS_INCL** - Parameters included indicator.

The base station shall set this field to ‘1’, if P_REV and SERV_NEG_TYPE are included; otherwise, the base station shall set this field ‘0’.

**P_REV** - Protocol revision level.

If PARMS_INCL is set to ‘1’, 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; otherwise, the base station shall omit this field.

**SERV_NEG_TYPE** - Service negotiation type.

If PARMS_INCL is set to ‘1’, the base station shall include the field SERV_NEG_TYPE and set this field as described below; otherwise, the base station shall omit this field.

If the mobile station is to use service negotiation, the base station shall set this field to ‘1’. If the mobile station is to use service option negotiation, the base station shall set this field to ‘0’.

**SEARCH_INCLUDED** - Pilot search parameters included.

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’.

**SRCH_WIN_A** - Search window size for the Active Set and Candidate Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SRCH_WIN_A and set this field to a 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.

**SRCH_WIN_N** - Search window size for the Neighbor Set.
If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SRCH_WIN_N and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for the Neighbor Set after completion of the handoff; otherwise, the base station shall omit this field.

SRCH_WIN_R - Search window size for the Remaining Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SRCH_WIN_R and set this field to the window size parameter shown in Table 2.6.6.2.1-1 corresponding to the search window size to be used by mobile stations for the Remaining Set after completion of the handoff; otherwise, the base station shall omit this field.

T_ADD - Pilot detection threshold.

This value is used by the mobile station to trigger the transfer of a pilot from the Neighbor Set or Remaining Set to the Candidate Set (see 2.6.6.2.6) and to trigger the sending of the Pilots Strength Measurement Message or Extended Pilot Strength Measurement Message initiating the handoff process (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_ADD and set this field to the pilot detection threshold, expressed as an unsigned binary number equal to \(-2 \times 10 \times \log_{10} \frac{E_c/I_o}\); otherwise, the base station shall omit this field.

T_DROP - Pilot drop threshold.

This value is used by mobile stations to start a handoff drop timer for pilots in the Active Set and the Candidate Set (see 2.6.6.2.3).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_DROP and set this field to the pilot drop threshold, expressed as an unsigned binary number equal to \(-2 \times 10 \times \log_{10} \frac{E_c/I_o}\); otherwise, the base station shall omit this field.

T_COMP - Active Set versus Candidate Set comparison threshold.

The mobile station transmits a Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message when the strength of a pilot in the Candidate Set exceeds that of a pilot in the Active Set by this margin (see 2.6.6.2.5.2).

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_COMP and set this field to the threshold Candidate Set pilot to Active Set pilot ratio, in units of 0.5 dB; otherwise, the base station shall omit this field.
T_TDROP - Drop timer value. Timer value after which an action is taken by the mobile station for a pilot that is a member of the Active Set or Candidate Set, and whose strength has not become greater than T_DROP. If the pilot is a member of the Active Set, a Pilot Strength Measurement Message or Extended Pilot Strength Measurement Message is issued. If the pilot is a member of the Candidate Set, it will be moved to the Neighbor Set.

If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field T_TDROP and set this field to the T_TDROP value shown in Table 2.6.6.2.3-1 corresponding to the drop timer value to be used by the mobile station; otherwise, the base station shall omit this field.

SOFT_SLOPE - The slope in the inequality criterion for adding a pilot to the Active Set, or dropping a pilot from the Active Set (see 2.6.6.2.3 and 2.6.6.2.5.2). If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field SOFT_SLOPE in the additional fields and set this field as an unsigned binary number; otherwise, the base station shall omit this field.

ADD_INTERCEPT - The intercept in the inequality criterion for adding a pilot to the Active Set (see 2.6.6.2.5.2). If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field ADD_INTERCEPT in the additional fields and set this field as a two’s complement signed binary number in units of 0.5 dB; otherwise, the base station shall omit this field.

DROP_INTERCEPT - The intercept in the inequality criterion for dropping a pilot from the Active Set (see 2.6.6.2.3). If SEARCH_INCLUDED is set to ‘1’, the base station shall include the field DROP_INTERCEPT in the additional fields and set this field as a two’s complement signed binary number in units of 0.5 dB; otherwise, the base station shall omit this field.

EXTRA_PARMS - Extra parameters included. If the base station includes the fields PACKET_ZONE_ID, FRAME_OFFSET, PRIVATE_LCM, RESET_L2, RESET_FPC, SERV_NEG_TYPE, ENCRYPT_MODE, NOM_PWR_EXT, NOM_PWR, RLGAIN_TRAFFIC_PILOT, DEFAULT_RLAG, NUM_PREAMBLE, BAND_CLASS, PERIODIC_SEARCH, or CDMA_FREQ in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PACKET_ZONE_ID - Packet data services zone identifier. If EXTRA_PARMS is set to ‘1’, the base station shall include the field PACKET_ZONE_ID and set this field as described below; otherwise, the base station shall omit this field.
If the base station supports a packet data service zone, the base station shall set this field to the non-zero packet data services zone identifier that the mobile station is to use after completion of the handoff.

If the base station does not support a packet data service zone, the base station shall set this field to ‘00000000’.

**FRAME_OFFSET** - Frame offset.

The Forward and Reverse Traffic Channel frames are delayed FRAME_OFFSET \times 1.25 \text{ ms} relative to system timing (see [2]).

If EXTRA_PARMS is set to ‘1’, the base station shall include the field FRAME_OFFSET and set this field to the Forward and Reverse Traffic Channel frame offset (the frame offset does not apply to the F-PDCH); otherwise, the base station shall omit this field.

**PRIVATE_LCM** - Private long code mask indicator.

This field is used to change the long code mask after a hard handoff.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field PRIVATE_LCM and set this field as described below; otherwise, the base station shall omit this field.

If the private long code mask is to be used after the handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RESET_L2** - Reset acknowledgment procedures command.

This field is used to reset acknowledgment processing in the mobile station.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field RESET_L2 and set this field as described below; otherwise, the base station shall omit this field.

If the field is included and the mobile station is to reset its acknowledgment procedures, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RESET_FPC** - Reset Forward Traffic Channel power control.

This field is used to reset the Forward Traffic Channel power control counters.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field RESET_FPC and set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to ‘0’ if the Forward Traffic Channel power control counters are to be maintained after completion of the handoff. If the counters are to be initialized as specified in 2.6.4.1.1.1, then the base station shall set this field to ‘1’.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCRYPT_MODE</td>
<td>Message encryption mode. If EXTRA_PARMS is set to ‘1’, the base station shall include the field ENCRYPT_MODE and set this field to the ENCRYPT_MODE value shown in Table 3.7.2.3.2.8-2 corresponding to the encryption mode that is to be used for messages sent on the Forward and Reverse Traffic Channels, as specified in 2.3.12.2; otherwise, the base station shall omit this field.</td>
</tr>
<tr>
<td>NOM_PWR_EXT</td>
<td>Extended nominal transmit power. If EXTRA_PARMS is set to ‘1’, the base station shall include this field and set this field as described below; otherwise, the base station shall omit this field. If the mobile station is being handed off to a base station operating in Band Class 0 or Band Class 3, the base station shall set this field to ‘0’; otherwise, the base station shall set it as follows: If the correction factor to be used by the mobile station in the open loop power estimate is between -24 dB and -9 dB inclusive; otherwise (the correction factor is in the range -8 dB to 7 dB inclusive), the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>NOM_PWR</td>
<td>Nominal transmit power offset. If EXTRA_PARMS is set to ‘1’, the base station shall include the field NOM_PWR and set this field to the correction factor to be used by the mobile station in the open loop power estimate, expressed as a two’s complement value in units of 1 dB (see [2]); otherwise, the base station shall omit this field.</td>
</tr>
<tr>
<td>RLGAIN_TRAFFIC_PILOT</td>
<td>Gain adjustment of the Reverse Traffic Channel relative to the Reverse Pilot Channel power for Radio configurations greater than 2. If EXTRA_PARMS is set to ‘1’, the base station shall include this field and set it to the correction factor to be used by mobile stations in setting the power of a reverse traffic channel, expressed as a two’s complement value in units of 0.125 dB (see [2]); otherwise, the base station shall omit this field.</td>
</tr>
<tr>
<td>DEFAULT_RLAG</td>
<td>Default reverse link attribute gain used indicator. If EXTRA_PARMS is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows: If the mobile station is to use the default values for the reverse link attribute gain, as specified in [2] after completion of handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>NUM_PREAMBLE</td>
<td>Number of Traffic Channel preamble.</td>
</tr>
</tbody>
</table>

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If EXTRA_PARMS is set to ‘0’, the base station shall omit the NUM_PREAMBLE field; otherwise, the base station shall include this field and set it to the length of Traffic Channel preamble that the mobile station is to send when performing a handoff; as follows:

If, after the handoff, radio configuration 1 or radio configuration 2 is to be used, the base station shall set NUM_PREAMBLE to the Traffic Channel preamble length in 20 ms units; otherwise, the base station shall set NUM_PREAMBLE to the value shown in Table 3.7.3.3.2.17-1 corresponding to the Traffic Channel preamble length in 1.25 ms units.

**BAND_CLASS** - Band class.

If EXTRA_PARMS is set to ‘1’, the base station shall include the field BAND_CLASS and set this field 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 EXTRA_PARMS is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If a Radio Configuration associated with Spreading Rate 1 is used, 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 as specified in [2]. If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall include the field CDMA_FREQ and set this field to the CDMA Channel number, in the specified CDMA band class, corresponding to the CDMA center SR3 frequency assignment for the CDMA Channel.

**RETURN_IF_HANDOFF_FAIL** - Return on failure flag.

If EXTRA_PARMS is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the base station includes this field, it shall set this field to ‘1’ if the mobile station is to resume the use of the Active Set on the Serving Frequency following an unsuccessful hard handoff attempt, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to ‘0’.

**COMPLETE_SEARCH** - Flag to complete search.

If RETURN_IF_HANDOFF_FAIL is included and is set to ‘1’, the base station shall include the field COMPLETE_SEARCH and set this field as described below; otherwise, the base station shall omit this field.
If the base station includes this field, it shall set this field to '1' if the mobile station is to complete the search of the Candidate Frequency Search Set before resuming the use of the Active Set on the Serving Frequency when an inter-frequency handoff attempt is unsuccessful, as specified in 2.6.6.2.8.2; otherwise, the base station shall set this field to '0'.

PERIODIC_SEARCH - Flag to search the Candidate Frequency periodically. If EXTRA_PARMS is set to '1', the base station shall include the field PERIODIC_SEARCH and set this field as described below; otherwise, the base station shall omit this field.

If the base station includes this field, it shall set this field to '1' if the mobile station is to periodically search the Candidate Frequency, as specified in 2.6.6.2.8.3; otherwise, the base station shall set this field to '0'.

SCR_INCLUDED - Service Configuration Record included indicator. If EXTRA_PARMS is set to '1', the base station shall include the field SCR_INCLUDED and shall set this field as described below; otherwise, the base station shall omit this field.

The base station shall set this field to '1' if it includes the Service Configuration Record in the message; otherwise, the base station shall set this field to '0'.

SERV_CON_SEQ - Connect sequence number. If SCR_INCLUDED is included and is set to '1', the base station shall include the field SERV_CON_SEQ and shall set this field to the connect sequence number pertaining to this service configuration as specified in 3.6.4.1.2.1.2.

If SCR_INCLUDED is included and is set to '1', the base station shall include one occurrence of the following three-field record to specify the service configuration.

RECORD_TYPE - Information record type. If SCR_INCLUDED is included and is set to '1', the base station shall include the field RECORD_TYPE and shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Service Configuration information record.

RECORD_LEN - Information record length. If SCR_INCLUDED is included and is set to '1', the base station shall include the field RECORD_LEN and shall set this field to the number of octets included in the type-specific fields of the Service Configuration information record.

Type-specific fields - Type-specific fields. If SCR_INCLUDED is included and is set to '1', the base station shall include the type specific fields and shall set these fields as specified in 3.7.5.7 for the Service Configuration information record.
NNSCR_INCLUDED - Non-negotiable Service Configuration Record Included indicator

The base station shall omit this field, if EXTRA_PARMS is set to '0'; otherwise, the base station shall include this field and set this field as described below:

The base station shall set this field to '1', if the Non-negotiable Service Configuration record is included in this message; otherwise, the base station shall set this field to '0'.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include one occurrence of the following three-field record to specify the non-negotiable service configuration.

RECORD_TYPE - Information record type.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_TYPE and shall set this field to the record type value shown in Table 3.7.5-1 corresponding to the Non-Negotiable Service Configuration information record.

RECORD_LEN - Information record length.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the field RECORD_LEN and shall set this field to the number of octets included in the type-specific fields of the Non-Negotiable Service Configuration information record.

Type-specific fields - Type-specific fields.

If NNSCR_INCLUDED is included and is set to ‘1’, the base station shall include the type specific fields and shall set these fields as specified in 3.7.5.20 for the Non-Negotiable Service Configuration information record.

USE_PWR_CNTL_STEP - Power control step size indicator.

The base station shall set this field to ‘1’ if the field PWR_CNTL_STEP is included in the message.

PWR_CNTL_STEP - Power control step size.

If USE_PWR_CNTL_STEP is set to ‘1’, then the base station shall include the field PWR_CNTL_STEP and set this field to the step size that the mobile station is to use for closed loop power control, according to Table 3.7.3.3.2.25-1; otherwise, the base station shall omit this field.

CLEAR_RETRY_DELAY - Clear retry delay indicator.

The base station shall set this field to ‘1’ if the mobile station is to clear any existing retry delay which it has stored (see 2.6.6.2.5.1); otherwise, the base station shall set this field to '0'.

SCH_INCL - Supplemental Channel related parameters included indicator.
The base station shall set this field to '1' if this message includes the NUM_FOR_ASSIGN, NUM_REV_ASSIGN, NUM_FOR_SCH, NUM_REV_SCH, and NUM_SCH fields. Otherwise, the base station shall set this field to '0'.

NUM_FOR_ASSIGN - Number of Forward Supplemental Channel assigned. If SCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field to the number of Forward Supplemental Channel assigned.

The base station shall include NUM_FOR_ASSIGN occurrences of the following five fields (FOR_SCH_ID, FOR_SCH_DURATION, FOR_SCH_START_TIME_INCL, FOR_SCH_START_TIME, and SCCL_INDEX).

FOR_SCH_ID - Forward Supplemental Channel identifier. The base station shall set this field to the Identifier of the Forward Supplemental Channel.

FOR_SCH_DURATION - Duration of Forward Supplemental Channel assignment. The base station shall set this field to the duration (see Table 3.7.3.2.37-3), starting at the start time of the message specified by FOR_SCH_START_TIME, during which the mobile station is to process the Forward Supplemental Channel.

The base station shall set this field to '0000' to indicate that the mobile station should stop processing the Forward Supplemental Channel starting at the explicit start time of the message specified by FOR_SCH_START_TIME or at the implicit start time if FOR_SCH_START_TIME_INCL is set to '0'.

The base station shall set this field to '1111' to indicate that the mobile station should process the Forward Supplemental Channel, starting at the start time of the message specified by FOR_SCH_START_TIME, until the start time specified by a subsequent Forward Supplemental Channel assignment corresponding to the same forward Supplemental Channel (see 2.6.6.2.5.1.1).

FOR_SCH_START_TIME_INCL - Start time included indicator.

If FOR_SCH_DURATION is not equal to '0000', the base station shall set this field to '1'. If FOR_SCH_DURATION is equal to '0000', the base station shall set this field as follows:

The base station shall set this field to '1' if FOR_SCH_START_TIME is included in this message; otherwise, the base station shall set this field to '0'.

FOR_SCH_START_TIME - Start time for Forward Supplemental Channel Assignment.
If FOR_SCH_START_TIME_INCL is set to ‘0’, the base station shall omit this field; otherwise, 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 is to start processing if FOR_SCH_DURATION is not equal to ‘0000’ or stop processing if FOR_SCH_DURATION is equal to ‘0000’ the Forward Supplemental Channel specified in this message. The explicit start time to start or stop for processing the Forward Supplemental Channels is the time for which

\[ \left\lfloor \frac{t}{(\text{START_TIME_UNIT}+1)} \right\rfloor - \text{FOR_SCH_START_TIME} \mod 32 = 0, \]

where \( t \) is the System Time in units of 20 ms.

**SCCL_INDEX** - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Forward Supplemental Channel Code list corresponding to the FOR_SCH_ID. The base station shall include an SCCL_INDEX whose SCH Active Set is a subset of the Active Set of the Fundamental Channel, Dedicated Control Channel, or both.

**NUM_REV_ASSIGN** - Number of Reverse Supplemental Channel assigned.

If SCH_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the number of Reverse Supplemental Channel assigned.

The base station shall include NUM_REV_ASSIGN 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 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_INCL - Start time included indicator.

If REV_SCH_DURATION is not equal to ‘0000’, the base station shall set this field to ‘1’. If REV_SCH_DURATION is equal to ‘0000’, the base station shall set this field as follows:

The base station shall set this field to ‘1’ if REV_SCH_START_TIME is included in this message; otherwise, the base station shall set this field to ‘0’.

REV_SCH_START_TIME - Start time for Reverse Supplemental Channel Assignment.

If REV_SCH_START_TIME_INCL is set to ‘0’, the base station shall omit this field; otherwise, 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 or stop transmitting on the Reverse Supplemental Channel specified in this message. The explicit start time to start or stop transmitting on the Reverse Supplemental Channel is the time for which

\[
\left\lfloor \frac{t}{(\text{START\_TIME\_UNIT/s}+1)} \right\rfloor - \text{REV\_SCH\_START\_TIME} \mod 32 = 0,
\]

where t is the System Time in units of 20 ms.

REV_SCH_NUM_BITSIDX - Reverse Supplemental Channel number of bits per frame index granted by the base station.

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 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 that the mobile station may transmit on the Reverse Supplemental Channel identified by REV_SCH_ID to be NUM_BITS[RSCH_NBIT_TABLE_ID[REV_SCH_ID]] [REV_SCH_NUM_BITSIDX] and the Reverse Supplemental Channel number of CRC bits per frame that the mobile station may transmit on the Reverse Supplemental Channel identified by REV_SCH_ID to be CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]] [REV_SCH_NUM_BITSIDX].

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 that of 20 ms frames at a 9600 bps or 14400 bps rate on the Forward Fundamental Channel or the Forward Dedicated Control Channel indicated by FPC_PRI_CHANs. The base station shall set the value in units of 0.25 dB.

USE_PC_TIME - Use power control action time indicator.

This field indicates whether an explicit time [PC_ACTION_TIME] at which a new value for power control sub-channel to traffic ratio [FPC_SUBCHAN_GAIN] takes effect is specified in the message.

If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PC_ACTION_TIME - Power Control Subchannel gain action time.

If the USE_PC_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSETs × 1.25 ms, in units of 80 ms (modulo 64), at which FPC_SUBCHAN_GAIN specified in this message is to take effect. If the USE_PC_TIME field is set to ‘0’, the base station shall omit this field.

CH_IND - Channel Indicator.

The base station shall set this field as shown in Table 3.7.3.3.2.36-1.
### Table 3.7.3.3.2.36-1. Channel Indicator

<table>
<thead>
<tr>
<th>CH_IND (Binary)</th>
<th>Physical Resource(s) Allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Refer to EXT_CH_IND.</td>
</tr>
<tr>
<td>001</td>
<td>Reserved</td>
</tr>
<tr>
<td>010</td>
<td>Dedicated Control Channel</td>
</tr>
<tr>
<td>011</td>
<td>Reserved</td>
</tr>
<tr>
<td>100</td>
<td>Reserved</td>
</tr>
<tr>
<td>101</td>
<td>For Radio Configuration greater than 2, Fundamental Channel and Continuous Reverse Pilot Channel; For Radio Configuration 1 or 2, Fundamental Channel only.</td>
</tr>
<tr>
<td>110</td>
<td>Dedicated Control Channel and Continuous Reverse Pilot Channel</td>
</tr>
<tr>
<td>111</td>
<td>Fundamental Channel, Dedicated Control Channel and Continuous Reverse Pilot Channel</td>
</tr>
</tbody>
</table>

**ACTIVE_SET_REC_LEN** - Active Set record length.

The base station shall set this field to the number of octets in the ACTIVE_SET_REC_FIELDS included in this message.

**ACTIVE_SET_REC_FIELDS** - Active Set record fields.

The Active Set record fields are determined by the value of CH_IND, as described below.

**REV_FCH_GATING_MODE** - Reverse eighth gating mode indicator.

If CH_IND is set to ‘010’ or ‘110’, or if EXT_CH_IND does not signal allocation of R-FCH, then the base station shall omit this field; otherwise, the base station include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is allowed to perform the reverse eighth gating mode after handoff; otherwise, the base station shall set this field to ‘0’.

**REV_PWR_CNTL_DELAY_INCL** - Reverse power control delay included indicator.

If REV_FCH_GATING_MODE is not included, or is included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it 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’.

REV_PWR_CNTL_DELAY - The reverse power control delay.

If REV_PWR_CNTL_DELAY_INCL is not included, or is included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the closed-loop reverse power control delay minus one (the closed-loop reverse power control delay is the time between the end of a gated-on 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.

D_SIG_ENCRYPT_MODE - Dedicated channel signaling encryption mode indicator.

If ENCRYPT_MODE is included and is set to ‘11’, the base station shall include this field and shall set it to the dedicated channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.

ENC_KEY_SIZE - Encryption key size indication.

If ENCRYPT_MODE is included and is set to ‘10’ or ‘11’, the base station shall include this field and set it to the encryption key size, as shown in Table 3.7.4.5-2; otherwise, the base station shall omit this field.

3XFL_1XRL_INCL - 3X Forward Link and 1X Reverse Link indicator.

The base station shall set this field to ‘1’ if the base station is assigning 3X traffic channel on the Forward Link and 1X traffic channel on the Reverse Link; otherwise, the base station shall set this field to ‘0’.

1XRL_FREQ_OFFSET - 1X Reverse Link frequency offset.

If 3XFL_1XRL_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to the value shown in Table 3.7.2.3.2.21-8 corresponding to the frequency offset of the 1X reverse link.
SYNC_ID_INCL - Service Configuration synchronization identifier included indicator.

If the SCR_INCLUDED field is included and is set to ‘1’ or the NNSCR_INCLUDED field is included and is set to ‘1’, or P_REV_IN_USE is equal or greater than 11, the base station shall include this field; otherwise, the base station shall omit this field. If included, the base station shall set this field as follows:

The base station shall set this field to ‘1’ if the SYNC_ID field is included in this message; otherwise, the base station shall set this field to ‘0’.

SYNC_ID_LEN - Service Configuration synchronization identifier length.

If the SYNC_ID_INCL field is not included or is included and 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 length (in octets) of the SYNC_ID field included in this message. The base station shall set this field to a value larger than zero.

SYNC_ID - Service Configuration synchronization identifier.

If the SYNC_ID_INCL field is not included or is included and 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 SCR_INCLUDED field is included and is set to ‘1’ or the NNSCR_INCLUDED field is included and is set to ‘1’, the base station shall set this field to the synchronization identifier corresponding to the service configuration conveyed by this message; otherwise, the base station shall set this field to the updated synchronization identifier corresponding to the current service configuration.

CC_INFO_INCL - Call Control information included indicator.

If the SCR_INCLUDED 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 set it as follows:

The base station shall set this field to ‘1’ if Call Control related parameters (to assign new call(s)) are included in this message; otherwise, the base station shall set this field to ‘0’.
NUM_CALLS_ASSIGN - Number of call assignments.

If the CC_INFO_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 set it as follows:

The base station shall set this field to the number of new call assignments included in this message.

The base station shall include NUM_CALLS_ASSIGN occurrences of the following variable length record (CON_REF, RESPONSE_IND, TAG, BYPASS_ALERT_ANSWER as per the following requirements).

CON_REF - Connection reference.

The base station shall set this field to the connection reference of the service option connection corresponding to this call.

RESPONSE_IND - Response indicator.

The base station shall set this field to '1' if this call assignment is a response to an Enhanced Origination Message from the mobile station; otherwise, the base station shall set this field to '0'.

TAG - Transaction identifier.

If the RESPONSE_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:

The base station shall set this field to the value of the TAG field received in the Enhanced Origination Message to which this call assignment is the response.

BYPASS_ALERT_ANSWER - Bypass alert indicator.

If the RESPONSE_IND field is set to '1', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate for this call, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

CS_SUPPORTED - Concurrent Services supported indicator.

If the base station supports concurrent services, the base
station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

3 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’.

4 CDMA_OFF_TIME_REP_SUP_IND – CDMA off time report supported indicator.

If the base station supports mobile station report for CDMA off time information using the CDMA Off Time Report Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

5 CDMA_OFF_TIME_REP_THRESHOLD_UNIT – CDMA off time report threshold unit

If CDMA_OFF_TIME_REP_SUP_IND is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the time unit used in CDMA_OFF_TIME_REP_THRESHOLD, as specified in Table 3.7.2.3.2.13-5

6 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.

7 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’.

8 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’.

9 GEN_2G_KEY – Generate 2G encryption key indicator.

If the base station is to generate a new CMEAKEY from the current CK, the base station shall set this field to ‘1’ to order the mobile station to perform similar procedures; otherwise, the base station shall set this field to ‘0’.

10 REGISTER_IN_IDLE – Register in idle state indicator.
If the mobile station is to perform registration after transitioning back to the *Mobile Station Idle State*, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PLCM_TYPE_INCL** - The Public Long Code Mask type Included Indicator.

If the mobile station is to change its public long code mask after handoff, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**PLCM_TYPE** - The Public Long Code Mask Type.

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 Public Long Code Mask type to be used by the mobile station after the handoff 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).

**PLCM_39** - The 39 LSBs of the Public Long Code Mask.

If **PLCM_TYPE** is included and set to ‘0001’, the base station shall include this field and set it to the 39 least significant bits of the public long code mask to be used by the mobile station after the handoff as defined in Table 3.6.4.1.10; otherwise, the base station shall omit this field.

**T_TDROP_RANGE_INCL** - Drop timer range value included indicator.

If **SEARCH_INCLUDED** 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 the **T_TDROP_RANGE** field is included in this message; otherwise, the base station shall set this field to ‘0’.

**T_TDROP_RANGE** - Drop timer range value.

Timer range value to use in association with the **T_TDROP** parameter when determining the drop timer expiration.

If **T_TDROP_RANGE_INCL** is not included, or included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the **T_TDROP_RANGE** value shown in Table 2.6.6.2.3-2 corresponding to the timer expiration range value to be used by the mobile station.
FOR_PDCH_SUPPORTED - Forward Packet Data Channel supported indicator.
If the base station supports Forward Packet Data Channel, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

PDCH_CHM_SUPPORTED – PDCH Control Hold Mode supported indicator.
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:
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'.

PILOT_INFO_REQ_SUPPORTED - Pilot information request supported indicator.
If the base station supports mobile station request for pilot information using the “Pilot Information” record in the Base Station Status Request Message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ENC_SUPPORTED – Encryption fields included.
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’.

SIG_ENCRYPT_SUP – Signaling Encryption supported indicator.
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.
This field consists of the subfields shown in Table 2.7.1.3.2.1-5.
If this field is included, the base station shall set the subfields as follows:
The base station shall set the CMEA subfield to ‘1’.
The base station shall set each other subfield to ‘1’ if the corresponding signaling algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.
The base station shall set the RESERVED subfield to ‘00000’.

UI_ENCRYPT_SUP – User information Encryption supported indicator.
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.
This field consists of the subfields shown in Table 2.7.1.3.2.4-9.

The base station shall set each subfield to ‘1’ if the corresponding user information encryption algorithm is supported by the base station; otherwise, the base station shall set the subfield to ‘0’.

**USE_SYNC_ID** - Sync ID supported indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is permitted to include the SYNC_ID field in the Page Response Message, the Reconnect Message, the Origination Message, and the Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

**SID_INCL** - SID included indicator.

If the SID field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**SID** - System identification.

If the SID_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:

The base station shall set this field to the system identification number for this wireless system (see 2.6.5.2).

**NID_INCL** - NID included indicator.

If the NID field is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NID** - Network identification.

If the NID_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:

This field serves as a sub-identifier of a system as defined by the owner of the SID.

The base station shall set this field to the network identification number for this network (see 2.6.5.2).

**SDB_SUPPORTED** - Short Data Burst supported indicator.

The base station shall set this field to ‘1’ if the mobile station is permitted to send a Short Data Burst; otherwise, the base station shall set this field to ‘0’.

**MOB_QOS** - Indicator granting permission to the mobile station to request QoS parameter settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message.
If CS_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to ‘1’, if the mobile station is allowed to include a QoS record in the Origination Message, Origination Continuation Message, or Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

MS_INIT_POS_LOC_SUP_IND - Mobile station initiated position location determination supported indicator.

If the target base station supports mobile station initiated position determination, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_PARMS_INCL - Packet zone hysteresis parameters included indicator.

If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis parameters are included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_SUPPORTED - Reverse Packet Data Channel supported indicator.

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:

If the base station supports the Reverse Packet Data Channel [R-PDCH], the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_ENABLED - Packet zone hysteresis enabled.

If the PACKET_ZONE_ID field is set to ‘00000000’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis feature is to be enabled at the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If PZ_HYST_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the packet zone hysteresis feature is to be enabled at the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_INFO_INCL - Packet zone hysteresis information included indicator.

If the PZ_HYST_ENABLED field is included and is set to ‘1’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.
If the base includes the PZ_HYST_LIST_LEN, PZ_HYST_ACT_TIMER and packet zone hysteresis timer related fields, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

PZ_HYST_LIST_LEN - Packet zone hysteresis list length.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 length of the packet zone hysteresis list minus one. This field shall be within the range ‘0001’ through ‘1111’, inclusive.

PZ_HYST_ACT_TIMER - Packet zone hysteresis activation timer.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 to the value of the packet zone hysteresis activation timer (in units of seconds). This field shall be within the range ‘00000001’ through ‘11111111’, inclusive.

PZ_HYST_TIMER_MUL - Packet zone hysteresis timer multiplier.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to $x \times 8^y$ seconds is the value of the hysteresis timer and $y$ is the value indicated in the PZ_HYST_TIMER_EXP field. The base station shall set this field to a value that is between 1 and 7 inclusive. The value 0 is reserved.

PZ_HYST_TIMER_EXP - Packet zone hysteresis timer exponent.

If the PZ_HYST_INFO_INCL field is included and is set to ‘1’, 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 the field to $y$, where $x \times 8^y$ seconds is the value of the hysteresis timer and $x$ is the value indicated in the PZ_HYST_TIMER_MUL field. The base station shall set this field to a value that is between 0 and 4 inclusive. All the other values are reserved.

BCMC_ON_TRAFFIC_SUP - BCMC on traffic channel supported indicator.

The base station shall set this field to ‘1’ to indicate that the BCMC feature is supported on traffic channel; otherwise, the base station shall set this field to ‘0’.

AUTO_REQ_TRAF_ALLOWED_IND - Autonomous BCMC request on traffic channel allowed indicator.
If the BCMC_ON_TRAFFIC_SUP 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:

The base station shall set this field to ‘1’ to indicate that the mobile station is allowed to request for a BCMC flow autonomously on traffic channel; otherwise, the base station shall set this field to ‘0’.

SCH_BCMC_IND – BCMC on supplemental channel Indicator.

If the BCMC_ON_TRAFFIC_SUP field is set to '0', or if NUM_FOR.Assign field is not included or is included and is set to '00', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the channel assignment in this message contains a Forward Supplemental Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_SCH_INCL – Additional PLCM for forward SCH included indicator.

If the SCH_BCMC_IND field is not included or is included and 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 additional PLCM for forward SCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_SCH_TYPE - The Additional Public Long Code Mask for forward SCH type indicator.

If ADD_PLCM_FOR_SCH_INCL is not included or is included and is set to '0', the base station shall omit this field; otherwise, the base station shall include this field to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

The base station shall set this field to the Public Long Code Mask type ‘0001’ as specified in Table 3.7.2.3.2.21–5. The base station shall set this field to ‘1’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

ADD_PLCM_FOR_SCH_LSB – The LSB bits of the additional Public Long Code Mask for forward SCH.

If ADD_PLCM_FOR_SCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 395 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.

If SCH_BCMC_IND field is included and is set to ‘1’, the base station shall include NUM_FOR.Assign occurrences of the following record:

USE_ADD_PLCM_FOR_SCH - Use additional PLCM indicator for forward SCH.
The base station shall set this field to ‘1’ if the additional PLCM included for forward SCH in this message is to be used for this Forward Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

**FSCH_OUTERCODE_INCL** - Forward Supplemental Channel Outer Code included indicator.

The base station shall set this field to ‘1’ if the Forward Supplemental Channel outer code information is included in this message; otherwise, the base station shall set this field to ‘0’.

**FSCH_OUTERCODE_RATE** - Outer Code Rate of the Forward Supplemental Channel.

If the FSCH_OUTERCODE_INCL field is not included or is included and 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 outer code rate of the Forward Supplemental Channel as specified in Table 3.7.2.3.2.38-3.[2].

**FSCH_OUTERCODE_OFFSET** - Outer Coding Buffer Offset of the Forward Supplemental Channel.

If the FSCH_OUTERCODE_INCL field is not included or is included and 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 outer coding buffer offset of the Forward Supplemental Channel in units of 20ms as specified in [2].

**MAX_ADD_SERV_INSTANCE** - Maximum number of additional service reference identifiers allowed in origination

If the CS_SUPPORTED 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:

The base station shall set this field to the maximum number of additional service reference identifiers that can be included in the Origination Message or Enhanced origination Message.

**USE_CH_CFG_RRM** - Channel configuration request allowed indicator.

The base station shall set this field to ‘1’ to indicate that the mobile station is permitted to include the CH_IND and EXT_CH_IND fields in the Resource Request Message, and the Resource Request Mini Message; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT_INCL** - Transmit Power Limit inclusion for the current base station
If TX_PWR_LIMIT_DEFAULT is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**TX_PWR_LIMIT_DEFAULT** - Use the Default Transmit Power Limit

If TX_PWR_LIMIT_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set to as follows.

The base station shall set this field to ‘1’ if the mobile station is to limit its transmission power in the 1915MHz – 1920MHz block of the PCS band to no more than the default value defined in [11]; otherwise, the base station shall set this field to ‘0’ if the mobile station is to limit its transmission power to no more than the value indicated by TX_PWR_LIMIT.

**TX_PWR_LIMIT** - Transmit Power Limit for the current base station

If TX_PWR_LIMIT_DEFAULT is omitted, or if it is included and set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set to as follows:

The base station shall set this field to thirty dB more than transmit power limit in dBm EIRP, in steps of 1 dB. This field can take the values 30 to 53 corresponding to maximum transmit power values 0 dBm to 23 dBm.

If the CH_IND field is set to ‘101’, the base station shall include the following fields:

**NUM_FOR_SCH** - Number of Forward Supplemental Channel records.

If SCH_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 number of the Forward Supplemental Channel records need to be updated.

If NUM_FOR_SCH is included and not equal to ‘00000’, the base station shall include NUM_FOR_SCH occurrence of the following three fields:

**FOR_SCH_ID** - Forward Supplemental Channel identifier.

The base station shall set this field to the identifier of the Forward Supplemental Channel.

**SCCL_INDEX** - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.

**FOR_SCH_NUM_BITS_IDX** - Forward Supplemental Channel number of information 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.
If USE_FLEX_NUM_BITS 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] and 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].

NumbRevSCH - Number of Reverse Supplemental Channel records.

If SCH_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 number of the Reverse Supplemental Channels need to be updated.

If NUM_REV_SCH is included and not equal to '0000', the base station shall include NUM_REV_SCH occurrence of the following three fields:

REV_SCH_ID - Reverse Supplemental Channel identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel.

REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.

The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting at the rate specified by REV_SCH_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV_WALSH_ID as specified in 2.6.4.2.

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 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].

NUM_PILOTS - Number of pilots included in the message.

The base station shall set this field to the number of pilots included in the message. The base station shall set this field to an integer that is equal to or greater than 1.

SRCH_OFFSET_INCL - Target pilot channel search window offset included.

If the SRCH_OFFSET 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’.

The base station shall include one occurrence of the following record for each of the NUM_PILOTS pilots included in the message:

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.

SRCH_OFFSET - Target pilot channel search window offset.

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 the mobile station for this target pilot. Otherwise, the base station shall omit this field.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.

The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.2.21-9 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

CODE_CHAN_FCH - Code channel on the Fundamental Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Fundamental Channel of the Forward Traffic Channel. If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the code channel index that the mobile station is to use for the Fundamental Channel on the center SR3 frequency.

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 or 8 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.

QOF MASK ID FCH - Quasi-orthogonal function index on the Fundamental Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the index of the Quasi-orthogonal function (see [2]). If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the index of the Quasi-orthogonal function on the center SR3 frequency.

NUM_SCH - Number of Supplemental Channel records.

If SCH_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 number of the Supplemental Channel records need to be updated.
If NUM_SCH is included and not equal to ‘00000’, the base station shall include NUM_SCH occurrence of the following five fields:

- **FOR_SCH_ID** - Forward Supplemental Channel identifier.
  - The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.

- **SCCL_INDEX** - Supplemental Channel Code list index.
  - The base station shall set this field to the index of the record in the Supplemental Channel Code list.

- **PILOT_INCL** - The corresponding pilot included in Supplemental Channel Active Set indicator.
  - The base station shall set this field to ‘1’ if the corresponding pilot is included in the Active Set of Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

- **CODE_CHAN_SCH** - Code channel on the Supplemental Channel.
  - If PILOT_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field.
  - The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Supplemental Channel of the Forward Traffic Channel indexed by SCCL_INDEX.

- **QOF_MASK_ID_SCH** - Quasi-orthogonal function index on the Supplemental Channel.
  - If PILOT_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field.
  - The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

- **3X_FCH_INFO_INCL** - 3X Fundamental Channel information included indicator.
  - If the 3X Fundamental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
  - The base station shall include NUM_PILOTS occurrences of the following record if 3X_FCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

- **3X_FCH_LOW_INCL** - FCH code channel on the lowest SR3 frequency included indicator.
  - If the Fundamental Channel on the lowest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

- **QOF_MASK_ID_FCH_LOW** - QOF index for the Fundamental Channel on the lowest SR3 frequency.
If 3X_FCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the lowest SR3 frequency.

**CODE_CHAN_FCH_LOW** - Code channel for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

**3X_FCH_HIGH_INCL** - FCH code channel on the highest SR3 frequency included indicator.

If the Fundamental Channel on the highest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**QOF_MASK_ID_FCH_HIGH** - QOF index for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the highest SR3 frequency.

**CODE_CHAN_FCH_HIGH** - Code channel for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

**3X_SCH_INFO_INCL** - 3X Supplemental Channel information included indicator.

If SCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
If the 3X Supplemental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_SCH occurrences of the following seven fields record if 3X_SCH_INFO_INCL is included and set to ‘1’.

**FOR_SCH_ID** - Forward Supplemental Channel identifier.

The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.

**3X_SCH_LOW_INCL** - SCH code channel on the lowest SR3 frequency included indicator.

If the Supplemental Channel on the lowest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**QOF_MASK_ID_SCH_LOW** - QOF index for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the lowest SR3 frequency.

**CODE_CHAN_SCH_LOW** - Code channel for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

**3X_SCH_HIGH_INCL** - SCH code channel on the highest SR3 frequency included indicator.

If the Supplemental Channel on the highest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**QOF_MASK_ID_SCH_HIGH** - QOF index for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the highest SR3 frequency.

**CODE_CHAN-_SCH_HIGH** – Code channel for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

**CCSH_INCLUDED** - Code Combining Soft Handoff information included indicator.

The base station shall set this field to ‘1’ if Code Combining Soft Handoff information is included in this message; otherwise, the base station shall set this field to ‘0’.

**USE_CCSH_ENCODER_TIME** - Use Code Combining Soft Handoff Turbo Encoder swapping action time indicator.

If the CCSH_INCLUDED 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.

If an explicit action time at which Turbo Encoder types (CCSH_ENCODER_TYPE) included in this message takes effect is specified, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**CCSH_ENCODER_ACTION_TIME** - Code Combining Soft Handoff Turbo Encoder swapping action time.

If the USE_CCSH_ENCODER_TIME field is included and set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSETS × 1.25 ms, in units of 80ms (modulo 64), at which Turbo Encoder types included in this message are to take effect; otherwise, the base station shall omit this field.

If the CCSH_INCLUDED field is set to ‘1’, the base station shall include one occurrence of the following one field for each of the Forward Supplemental Channel records (as specified by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to ‘1’. The base station shall use the same order for the following field as is used for the Forward Supplemental Channel records.

**CCSH_ENCODER_TYPE** - Code Combining Soft Handoff Turbo Encoder type.
The base station shall set this field to ‘0’ if the Turbo Encoder type to be used on the Forward Supplemental Channel identified by FOR_SCH_ID and SCCL_INDEX is the default encoder type. The base station shall set this field to ‘1’ if the Turbo Encoder to be used is the complementary type.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the ACTIVE_SET_REC_FIELDS record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If the CH_IND field is set to ‘010’ or ‘110’, the base station shall include the following fields:

NUM_FOR_SCH - Number of Forward Supplemental Channel records.

If SCH_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 number of the Forward Supplemental Channel records need to be updated.

If NUM_FOR_SCH is included and not equal to ‘00000’, the base station shall include NUM_FOR_SCH occurrence of the following three fields:

FOR_SCH_ID - Forward Supplemental Channel identifier.

The base station shall set this field to identifier of the Forward Supplemental Channel.

SCCL_INDEX - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.

FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information 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 3.7.3.2.37-4 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.

If USE_FLEX_NUM_BITS 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] and 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_REV_SCH - Number of Reverse Supplemental Channel records.

If SCH_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 number of the Reverse Supplemental Channels need to be updated.

If NUM_REV_SCH is included and not equal to '00000', the base station shall include NUM_REV_SCH occurrence of the following three fields:

REV_SCH_ID - Reverse Supplemental Channel identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel.

REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.

The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting at the rate specified by REV_SCH_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV_WALSH_ID as specified in 2.6.4.2.

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 the REV_SCH_NUM_BITSIDX 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 CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]] [REV_SCH_NUM_BITS_IDX].

NUM_PILOTS - Number of pilots included in the message.

The base station shall set this field to the number of pilots included in the message. The base station shall set this field to an integer that is equal to or greater than 1.
- **SRCH_OFFSET_INCL** - Target pilot channel search window offset included.
  - If the SRCH_OFFSET 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’.

- The base station shall include one occurrence of the following record for each of the NUM_PILOTS pilots included in the message:

- **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.

- **SRCH_OFFSET** - Target pilot channel search window offset.
  - 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 the mobile station for this target pilot. Otherwise, the base station shall omit this field.

- **ADD_PILOT_REC_INCL** - Additional pilot information included indicator.
  - The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

- **PILOT_REC_TYPE** - Pilot record type.
  - If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.
  - If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

- **RECORD_LEN** - Pilot record length.
  - If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.
  - If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

- **Type-specific fields** - Pilot record type-specific fields.
  - If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.
  - If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

- **PWR_COMB_IND** - Power control symbol combining indicator.
If 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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

**CODE_CHAN_DCCH** - Code channel on the Dedicated Control Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the code channel index (see [2]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Dedicated Control Channel of the Forward Traffic Channel. If a Radio Configuration associated with Spreading Rate 3, the base station shall set this field to the code channel index (see [2]), in the range of 1 to 255 inclusive, that the mobile station is to use for the Dedicated Control Channel on the center SR3 frequency.

If Radio Configuration 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 or 8 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.

**QOF_MASK_ID_DCCH** - Quasi-orthogonal function index on the Dedicated Control Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the index of the Quasi-orthogonal function (see [2]). If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

**NUM_SCH** - Number of Supplemental Channel records.

If SCH_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 number of the Supplemental Channel records need to be updated.

If NUM_SCH is included and not equal to ‘00000’, the base station shall include NUM_SCH occurrence of the following five fields:

**FOR_SCH_ID** - Forward Supplemental Channel identifier

The base station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

**SCCL_INDEX** - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.
PILOT_INCL - The corresponding pilot included in Supplemental Channel Active Set indicator. The base station shall set this field to ‘1’ if the corresponding pilot is included in the Active Set of Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

CODE_CHAN_SCH - Code channel on the Supplemental Channel. The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Supplemental Channel of the Forward Traffic Channel indexed by SCCL_INDEX.

QOF_MASK_ID_SCH - Quasi-orthogonal function index on the Supplemental Channel. If SCH_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 index of the Quasi-orthogonal function (see [2]).

3X_DCCH_INFO_INCL – 3X Dedicated Control Channel information included indicator. If the 3X Dedicated Control Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’. The base station shall include NUM_PILOTS occurrences of the following record if 3X_DCCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

3X_DCCH_LOW_INCL – DCCH code channel on the lowest SR3 frequency included indicator. If the Dedicated Control Channel on the lowest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_LOW – QOF index for the Dedicated Control Channel on the lowest SR3 frequency. If 3X_DCCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

CODE_CHAN_DCCH_LOW - Code channel for the Dedicated Control Channel on the lowest SR3 frequency. If 3X_DCCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_DCCH_HIGH_INCL – DCCH code channel on the highest SR3 frequency included indicator.

If the Dedicated Control Channel on the highest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_HIGH – QOF index for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the highest SR3 frequency.

CODE_CHAN_DCCH_HIGH – Code channel for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_SCH_INFO_INCL – 3X Supplemental Channel information included indicator.

If SCH_INFO is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the 3X Supplemental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_SCH occurrences of the following seven fields record if 3X_SCH_INFO_INCL is included and set to ‘1’.

FOR_SCH_ID – Forward Supplemental Channel identifier.

The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.
3X_SCH_LOW_INCL – SCH code channel on the lowest SR3 frequency included indicator.

If the Supplemental Channel on the lowest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_SCH_LOW – QOF index for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the lowest SR3 frequency.

CODE_CHAN_SCH_LOW – Code channel for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the lowest SR3 frequency.

CODE_CHAN_SCH_HIGH – Code channel for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the highest SR3 frequency.

QOF_MASK_ID_SCH_HIGH – QOF index for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the highest SR3 frequency.
The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

**CCSH_INCLUDED** - Code Combining Soft Handoff information included indicator.

The base station shall set this field to '1' if Code Combining Soft Handoff information is included in this message; otherwise, the base station shall set this field to '0'.

**USE_CCSH_ENCODER_TIME** - Use Code Combining Soft Handoff Turbo Encoder swapping action time indicator.

If the CCSH_INCLUDED 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.

If an explicit action time at which Turbo Encoder types (CCSH_ENCODER_TYPE) included in this message takes effect is specified, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

**CCSH_ENCODER_ACTION_TIME** - Code Combining Soft Handoff Turbo Encoder swapping action time.

If the USE_CCSH_ENCODER_TIME field is included and 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 80ms (modulo 64), at which Turbo Encoder types included in this message are to take effect; otherwise, the base station shall omit this field.

If the CCSH_INCLUDED field is set to '1', the base station shall include one occurrence of the following one field for each of the Forward Supplemental Channel records (as specified by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to '1'. The base station shall use the same order for the following field as is used for the Forward Supplemental Channel records.

**CCSH_ENCODER_TYPE** - Code Combining Soft Handoff Turbo Encoder type.

The base station shall set this field to '0' if the Turbo Encoder type to be used on the Forward Supplemental Channel identified by FOR_SCH_ID and SCCL_INDEX is the default encoder type. The base station shall set this field to '1' if the Turbo Encoder to be used is the complementary type.

**FUNDICATED_BCMC_IND** - BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

If FUNDICATED_BCMC_IND field is set to '1', the base station shall include NUM_PILOT occurrences of the following record:
FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code assignment. The base station shall set this field to the Walsh code assignment for the Forward Common Power Control Channel.

FOR_CPCSCH - The Forward Common Power Control Channel Subchannel. The base station shall set this field to the Forward Common Power Control Channel Subchannel associated with this base station.

RESERVED - Reserved bits. The base station shall add reserved bits as needed in order to make the length of the ACTIVE_SET_REC_FIELDS record equal to an integer number of octets. The base station shall set these bits to '0'.

If the CH_IND field is set to ‘111’, the base station shall include the following fields:

NUM_FOR_SCH - Number of Forward Supplemental Channel records. If SCH_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 number of the Forward Supplemental Channel records need to be updated.

If NUM_FOR_SCH is included and not equal to ‘00000’, the base station shall include NUM_FOR_SCH occurrence of the following three fields:

FOR_SCH_ID - Forward Supplemental Channel identifier. The base station shall set this field to the identifier of the Forward Supplemental Channel.

SCCL_INDEX - Supplemental Channel Code list index. The base station shall set this field to the index of the record in the Supplemental Channel Code list.

FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information 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 3.7.3.2.37-4 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.
If USE_FLEX_NUM_BITS 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] and 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_REV_SCH - Number of Reverse Supplemental Channel records.

If SCH_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 number of the Reverse Supplemental Channels need to be updated.

If NUM_REV_SCH is included and not equal to ‘0000’, the base station shall include NUM_REV_SCH occurrence of the following three fields:

REV_SCH_ID - Reverse Supplemental Channel identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel.

REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.

The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting at the rate specified by REV_SCH_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV_WALSH_ID as specified in 2.6.4.2.

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 the REV_SCH_NUM_BITS_IDX 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 information bits per frame, corresponding to REV_WALSH_ID field to be to be CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]] [REV_SCH_NUM_BITS_IDX].

NUM_PILOTS - Number of pilots included in the message.
The base station shall set this field to the number of pilots included in the message. The base station shall set this field to an integer that is equal to or greater than 1.

SRCH_OFFSET_INCL - Target pilot channel search window offset included.
If the SRCH_OFFSET 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’.

The base station shall include one occurrence of the following record for each of the NUM_PILOTS pilots included in the message:

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.

SRCH_OFFSET - Target pilot channel search window offset.
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 the mobile station for this target pilot. Otherwise, the base station shall omit this field.

ADD_PILOT_REC_INCL - Additional pilot information included indicator.
The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.

If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.

If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

PWR_COMB_IND - Power control symbol combining indicator.

If 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’. The base station shall set this field to ‘0’ in the first record in the pilot list.

CODE_CHAN_FCH - Code Channel on the Fundamental Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Fundamental Channel of the Forward Traffic Channel. If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the code channel index that the mobile station is to use for the Fundamental Channel on the center SR3 frequency.

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 or 8 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.

QOF_MASK_ID_FCH - Quasi-orthogonal function index on the Fundamental Channel.

If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the index of the Quasi-orthogonal function (see [2]). If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the index of the Quasi-orthogonal function on the center SR3 frequency.
CODE_CHAN_DCCH - Code channel on the Dedicated Control Channel. If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the code channel index (see [2]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Dedicated Control Channel of the Forward Traffic Channel. If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field to the code channel index in the range of 1 to 255 inclusive, that the mobile station is to use for the Dedicated Control Channel on the center SR3 frequency.

If Radio Configuration 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 or 8 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.

QOF_MASK_ID_DCCH - Quasi-orthogonal function index on the Dedicated Control Channel. If a Radio Configuration associated with Spreading Rate 1 is used, the base station shall set this field to the index of the Quasi-orthogonal function (see [2]). If a Radio Configuration associated with Spreading Rate 3 is used, the base station shall set this field on the center SR3 frequency. If Radio Configuration 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 or 8 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.

NUM_SCH - Number of Supplemental Channel records. The base station shall set this field to the number of the Supplemental Channel records need to be updated. If NUM_SCH is included and not equal to ‘00000’, the base station shall include NUM_SCH occurrence of the following fields:

FOR_SCH_ID - Forward Supplemental Channel identifier. The base station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

SCCL_INDEX - Supplemental Channel Code list index. The base station shall set this field to the index of the record in the Supplemental Channel Code List Table.

PILOT_INCL - The corresponding pilot included in Supplemental Channel Active Set indicator. The base station shall set this field to ‘1’ if the corresponding pilot is included in the Active Set of Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

CODE_CHAN_SCH - Code Channel on the Supplemental Channel. If SCH_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel of the Forward Traffic Channel indexed by SCCL_INDEX.

**QOF_MASK_ID_SCH** - Quasi-orthogonal function index on the Supplemental Channel.

If SCH_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 index of the Quasi-orthogonal function (see [2]).

**3X_FCH_INFO_INCL** – 3X Fundamental Channel information included indicator.

If the 3X Fundamental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**3X_DCCH_INFO_INCL** – 3X Dedicated Control Channel information included indicator.

If the 3X Dedicated Control Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_PILOTS occurrences of the following record if 3X_FCH_INFO_INCL or 3X_FCH_INFO_INCL is set to ‘1’. The base station shall use the same order for the following fields as is used for the PILOT_PN fields listed in this message.

**3X_FCH_LOW_INCL** – FCH code channel on the lowest SR3 frequency included indicator.

If 3X_FCH_INFO_INCL is set to ‘0’, the base station shall set omit this field; otherwise, the base station shall set this field as follows:

If the Fundamental Channel on the lowest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**QOF_MASK_ID_FCH_LOW** – QOF index for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the lowest SR3 frequency.

**CODE_CHAN_FCH_LOW** – Code channel for the Fundamental Channel on the lowest SR3 frequency.

If 3X_FCH_LOW_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:
The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_FCH_HIGH_INCL – FCH code channel on the highest SR3 frequency included indicator.

If 3X_FCH_INFO_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the Fundamental Channel on the highest SR3 frequencies has a different code channel than the Fundamental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_FCH_HIGH – QOF index for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Fundamental Channel on the highest SR3 frequency.

CODE_CHAN_FCH_HIGH – Code channel for the Fundamental Channel on the highest SR3 frequency.

If 3X_FCH_HIGH_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Fundamental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_DCCH_LOW_INCL – DCCH code channel on the lowest SR3 frequency included indicator.

If 3X_DCCH_INFO_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the Dedicated Control Channel on the lowest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_DCCH_LOW – QOF index for the Dedicated Control Channel on the lowest SR3 frequency.
If 3X_DCCH_LOW_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

**CODE_CHAN_DCCH_LOW** - Code channel for the Dedicated Control Channel on the lowest SR3 frequency.

If 3X_DCCH_LOW_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the lowest SR3 frequency.

**3X_DCCH_HIGH_INCL** - DCCH code channel on the highest SR3 frequency included indicator.

If 3X_DCCH_INFO_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the Dedicated Control Channel on the highest SR3 frequencies has a different code channel than the Dedicated Control Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**QOF_MASK_ID_DCCH_HIGH** - QOF index for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Dedicated Control Channel on the highest SR3 frequency.

**CODE_CHAN_DCCH_HIGH** - Code channel for the Dedicated Control Channel on the highest SR3 frequency.

If 3X_DCCH_HIGH_INCL is included and set to ‘1’, the base station shall set this field as follows; otherwise, the base station shall omit this field:
The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Dedicated Control Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_SCH_INFO_INCL – 3X Supplemental Channel information included indicator.

If SCH_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the 3X Supplemental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

The base station shall include NUM_SCH occurrences of the following seven fields record if 3X_SCH_INFO_INCL is included and set to ‘1’.

FOR_SCH_ID - Forward Supplemental Channel identifier.

The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.

3X_SCH_LOW_INCL – SCH code channel on the lowest SR3 frequency included indicator.

If the Supplemental Channel on the lowest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_SCH_LOW – QOF index for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the lowest SR3 frequency.

CODE_CHAN_SCH_LOW - Code channel for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_SCH_HIGH_INCL – SCH code channel on the highest SR3 frequency included indicator.
If the Supplemental Channel on the highest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**QOF_MASK_ID_SCH_HIGH** – QOF index for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the highest SR3 frequency.

**CODE_CHAN_SCH_HIGH** – Code channel for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

**CCSH_INCLUDED** - Code Combining Soft Handoff information included indicator.

The base station shall set this field to ‘1’ if Code Combining Soft Handoff information is included in this message; otherwise, the base station shall set this field to ‘0’.

**USE_CCSH_ENCODER_TIME** - Use Code Combining Soft Handoff Turbo Encoder swapping action time indicator.

If the CCSH_INCLUDED 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.

If an explicit action time at which Turbo Encoder types (CCSH_ENCODER_TYPE) included in this message takes effect is specified, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**CCSH_ENCODER_ACTION_TIME** - Code Combining Soft Handoff Turbo Encoder swapping action time.

If the USE_CCSH_ENCODER_TIME field is included and set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSETₜ × 1.25 ms, in units of 80ms (modulo 64), at which Turbo Encoder types included in this message are to take effect; otherwise, the base station shall omit this field.

If the CCSH_INCLUDED field is set to ‘1’, the base station shall include one occurrence of
the following one field for each of the Forward Supplemental Channel records (as specified by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to ‘1’. The base station shall use the same order for the following field as is used for the Forward Supplemental Channel records.

CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

The base station shall set this field to ‘0’ if the Turbo Encoder type to be used on the Forward Supplemental Channel identified by FOR_SCH_ID and SCCL_INDEX is the default encoder type. The base station shall set this field to ‘1’ if the Turbo Encoder to be used is the complementary type.

FUNDICATED_BCMC_IND – BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_FCH_ASSIGNED – Reverse FCH channel assigned indicator.

If the FUNDICATED_BCMC_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:

If the reverse FCH is assigned in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_INCL – Additional PLCM for forward FCH included indicator.

If the FUNDICATED_BCMC_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:

If the additional PLCM for forward FCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH type indicator.

If ADD_PLCM_FOR_FCH_INCL not included or is included and 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’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask for forward FCH.

If ADD_PLCM_FOR_FCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 39 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.
FOR_CPCCH_INFO_INCL – CPCCH information included indicator.

If the FUNDICATED_BCMC_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:

If the F-CPCCH 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’.

If FOR_CPCCH_INFO_INCL field is included and is set to ‘1’, the base station shall include NUM_PILOT occurrences of the following record:

FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code assignment.

The base station shall set this field to the Walsh code assignment for the Forward Common Power Control Channel.

FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.

The base station shall set this field to the Forward Common Power Control Channel Subchannel associated with this base station.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the ACTIVE_SET_REC_FIELDS record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If the CH_IND field is set to ‘000’, the base station shall include the following fields:

EXT_CH_IND - Extended Channel Indicator.

The base station shall set this field as shown in Table2.7.1.3.2.4-11.

RESERVED - Reserved bits for octet alignment.

Reserved bits to align the octets between ACTIVE_SET_REC_FIELDS and EXT_ACTIVE_SET_REC_FIELDS so that the latter has a length of ACTIVE_SET_REC_LEN-1 bytes.

EXT_ACTIVE_SET_REC_FIELDS - Extended Active Set record fields.

The Active Set record fields are determined by the value of EXT_CH_IND, as described below.

The EXT_ACTIVE_SET_REC_FIELDS shall be:

PDCH_CONTROL_HOLD - Packet Data Channel Control Hold mode indication.

The base station shall set this field to ‘1’ to instruct the mobile station to transition to the Packet Data Channel Control Hold Mode.

If EXT_CH_IND signals the allocation of a F-FCH this field shall be set to ‘0’.

FULL_CI_FEEDBACK_IND - Full C/I feedback rate indicator.
If the mobile station is to send full C/I feedback every 1.25 ms, the base station shall set this field to ‘1’. If the mobile station is to transmit full C/I feedback every 20 ms, the base station shall set this field to ‘0’.

**FOR_CPCCH_RATE** - The Forward Common Power Control Channel 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 rate of the Forward Common Power Control Channel as specified in Table 3.7.2.3.2.21-12. See [2].

**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].

**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.

**NUM_FOR_SCH** - Number of Forward Supplemental Channel records.

If EXT_CH_IND does not signal the allocation of neither a F-FCH nor a F-DCCH, or if SCH_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to the number of Forward Supplemental Channel records that need to be updated.

If NUM_FOR_SCH is included and not equal to ‘00000’, the base station shall include NUM_FOR_SCH occurrence of the following three fields:

**FOR_SCH_ID** - Forward Supplemental Channel identifier.

The base station shall set this field to the identifier of the Forward Supplemental Channel.
SCCL_INDEX - Supplemental Channel Code list index. The base station shall set this field to the index of the record in the Supplemental Channel Code list.

FOR_SCH_NUM_BITS_IDX - Forward Supplemental Channel number of information 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.
If USE_FLEX_NUM_BITS 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] and 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_REV_SCH - Number of Reverse Supplemental Channel records.
If SCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:
The base station shall set this field to the number of the Reverse Supplemental Channels need to be updated.
If NUM_REV_SCH is included and not equal to '0000', the base station shall include NUM_REV_SCH occurrence of the following three fields:
REV_SCH_ID - Reverse Supplemental Channel identifier.
The base station shall set this field to the identifier of the Reverse Supplemental Channel.
REV_WALSH_ID - Reverse Supplemental Channel Walsh cover Identifier.
The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting at the rate specified by REV_SCH_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV_WALSH_ID as specified in 2.6.4.2.
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 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].

NUM_PILOTS - Number of pilots included in the message.

The base station shall set this field to the number of pilots included in the message. The base station shall set this field to an integer that is equal to or greater than 1.

SRCH_OFFSET_INCL - Target pilot channel search window offset included.

If the SRCH_OFFSET 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'.

PDCH_GROUP_IND_INCL - Packet Data Channel Group Indicator included flag.

The base station shall set this field to '1' if the PDCH_GROUP_IND fields are included; otherwise, the base station shall set this field to '0'.

If this field is set to '0', the mobile station is to use PWR_COMB_IND to determine whether the softer or softer reselection parameters are used when re-pointing between pilots in its Active Set (see [3]).

FOR_PDCH_PARMS_INCL - Indicator of the inclusion of Forward Packet Data Channel configuration fields.

The base station shall set this field to '1' if the Forward Packet Data Channel configuration fields are included; otherwise, the base station shall set this field to '0'.

FOR_PDCH_RLGAIN_INCL - Forward Packet Data Channel parameters related to reverse link adjustment gains included indicator.

If FOR_PDCH_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to '1' if the following F-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to '0'.
RLGAIN_ACKCH_PILOT - Reverse Acknowledgment Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows:

The base station shall set this field to the Reverse Acknowledgment Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

RLGAIN_CQICH_PILOT - Reverse Channel Quality Indicator Channel to pilot adjustment gain.

If FOR_PDCH_RLGAIN_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows:

The base station shall set this field to the Reverse Channel Quality Indicator Channel to pilot adjustment gain expressed as a two's complement value in units of 0.125 dB (see [2]).

NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.

If FOR_PDCH_PARMS_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER-SWITCHING_FRAMES - Number of frames for R-CQICH softer switching.

If FOR_PDCH_PARMS_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFT_SWITCHING_SLOTS - Number of slots per frame for R-CQICH soft switching.

If FOR_PDCH_PARMS_INCL is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER_SWITCHING_SLOTS - Number of slots per frame for R-CQICH softer switching.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

CHM_SWITCHING_PARMS_INCL - Control Hold Mode fields included indicator.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the switching parameters for Control Hold Mode are included; otherwise, the base station shall set this field to ‘0’.

NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer switching while in Control Hold.
If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFT_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH soft switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station, while in Control Hold, is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

NUM_SOFTER_SWITCHING_SLOTS_CHM - Number of slots per frame for R-CQICH softer switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching slots within a switching frame, in units of 1.25 ms as specified in Table 3.7.2.3.2.21-10, during which the mobile station, while in Control Hold, is to transmit the cell switch indication by using Walsh cover of target on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

PDCH_SOFT_SWITCHING_DELAY - F-PDCH Soft Switching Delay.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

PDCH_SOFTER_SWITCHING_DELAY - F-PDCH Soft Switching Delay.

If FOR_PDCH_PARMS_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the minimum interruption seen by the mobile station, in units of 10 ms, minus one, when the mobile station is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

If PDCH_GROUP_IND_INCL is set to ‘1’, these groups are indicated by PDCH_GROUP_IND; otherwise, they are indicated by PWR_COMB_IND.

FOR_PDCH_COMMON_PARMS - Common Forward Packet Data Channel configuration fields indicator.

If FOR_PDCH_PARMS_INCL is set to ‘1’, 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 ‘1’ if the following Forward Packet Data Channel configuration fields (WALSH_TABLE_ID, NUM_PDCCH, and FOR_PDCCH_WALSH) are common for all the pilots in the Active Set; otherwise, it shall be set to ‘0’.

WALSH_TABLE_ID - The index of the Walsh Table used.

If FOR_PDCH_PARMS_INCL is set to ‘1’, and FOR_PDCH_COMMON_PARMS is included and set to ‘1’, 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 index of the Walsh Table being used by the Packet Data Channel. (See [3]).

TX_DISABLED_TIMER - Transmitted disabled timer.

If FOR_PDCH_PARMS_INCL is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to the maximum time, in units of 20ms, the mobile station’s transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization.

NUM_PDCCH - The number of Packet Data Control Channels supported.

If FOR_PDCH_PARMS_INCL is set to ‘1’, and FOR_PDCH_COMMON_PARMS is included and set to ‘1’, 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 ‘000’ if the pilot supports one Packet Data Control Channel. The base station shall set this field to ‘001’ if the pilot supports two Packet Data Control Channels. The base station shall not set this field to any other value.

The base station shall include NUM_PDCCH+1 occurrences of the following one-field record:

FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code assignment.

If FOR_PDCH_PARMS_INCL is set to ‘1’, and if FOR_PDCH_COMMON_PARMS is included and set to ‘1’, 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 Walsh code assignment for the Forward Packet Data Control Channel.

If NUM_PDCCH is set to ‘001’, the Walsh code of PDCCH0 shall be included first, followed by the Walsh code for PDCCH1.

TX_DISABLED_TIMER_INCL - Transmitter disabled timer included flag.

The base station shall set this field to ‘1’ if the following TX_DISABLED_TIMER field is included; otherwise, the base station shall set this field to ‘0’.

TX_DISABLED_TIMER - Transmitter disabled timer.

If TX_DISABLED_TIMER_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum time, in units of 20ms, the mobile station’s transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization (see [3]).

FOR_GCH_ASSIGNED - Forward Grant 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 grants on the Forward Grant Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

FOR_RCCH_ASSIGNED - Forward Rate Control 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 follow rate control indicators on the Forward Rate Control Channel; otherwise, the base station shall set this field to ‘0’ (see [3]).

FOR_RCCH_DRC_MODE - Forward Rate Control Channel Dedicated Rate Control Mode Indicator.

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 ‘1’ if the dedicated rate control mode is being used on the Forward Rate Control Channel; otherwise, the base station shall set this field to ‘0’ if the common rate control mode is being used (see [3]).

FOR_RCCH_REPETITION - Forward Rate Control Subchannel repetition factor.

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 subchannel repetition factor of the Rate Control Subchannel on all pilots as specified in Table 3.7.3.2.21-11 (see [2]).

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 3.7.3.2.21-13. 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 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.

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.

The base station shall set this field to '11' if the mobile station is to combine the Forward Acknowledgment Channel from all sectors in the same combining indicator set as the serving sector.

FOR_ACKCH_COMB_SEL - Forward Acknowledgment Channel Combining method selector.

If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_ACKCH_MODE is omitted, or if it is included and set to '00' or '10', or if PDCH_GROUP_IND_INCL is set to '0', the base station shall omit this field; otherwise, it shall include it and set it as follows.

The base station shall set this field to '0' if the mobile station is to use PWR_COMB_IND as a combining indicator when receiving the Forward Acknowledgment Channel; otherwise, it shall set it to '1' if the mobile station is to use PDCH_GROUP_IND as the indicator for combining sectors.

REV_PDCH_PARMS_INCL - Reverse Packet Data Channel related parameters included 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 following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to '0'.

REV_PDCH_RLGAIN_INCL - Reverse Packet Data Channel parameters related to reverse link adjustment gains included indicator.
If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to ‘1’ if the following R-PDCH gain related fields are included in this message; otherwise, the base station shall set this field to ‘0’.

RPGAIN_SPICH_PILOT - Reverse Secondary Pilot Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Secondary Pilot Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

RPGAIN_REQCH_PILOT - Reverse Request Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Request Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

RPGAIN_PDCCH_PILOT - Reverse Packet Data Control Channel to pilot adjustment gain.

If REV_PDCH_RLGAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Packet Data Channel to pilot adjustment gain expressed as a two’s complement value in units of 0.125 dB (see [2]).

REV_PDCH_PARMS_1_INCL - Reverse Packet Data Channel parameters subset included indicator.

If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to ‘1’ if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_TABLE_SEL - Reverse Packet Data Channel Table selector.

If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows. The base station shall set this field to the Reverse Packet Data Channel Table selector (see [2]).

REV_PDCH_MAX_AUTO_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.
If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

The base station shall include NUM_PILOTS occurrences of the following record:

- 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.
- SRCH_OFFSET - Target pilot channel search window offset. If SRCH_OFFSET_INCL equals to ‘1’, then the base station shall include this field and set it to the value shown in Table 2.6.6.2.1-2 corresponding to the search window offset to be used by the mobile station for this target pilot; otherwise, the base station shall omit this field.
- ADD_PILOT_REC_INCL - Additional pilot information included indicator. The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.
- PILOT_REC_TYPE - Pilot record type. If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.
- RECORD_LEN - Pilot record length. If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.
- Type-specific fields - Pilot record type-specific fields. If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the PILOT_REC_TYPE of this pilot record as described in 3.7.6.1. If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.
FOR_PDCH_INCL - Forward Packet Data Channel configuration field included indicator.

The base station shall set this field to ‘1’ if the MS is assigned resources on the PDCH channel; otherwise, the base station shall set this field to ‘0’. This field shall be set to ‘1’ for at least one of the pilots included in this message.

WALSH_TABLE_ID - The index of the Walsh Table used.

If FOR_PDCH_PARMS_INCL is set to ‘1’, FOR_PDCH_INCL is set to ‘1’, and if FOR_PDCH_COMMON_PARMS is included and set to ‘0’, 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 index of the Walsh Table being used by the Packet Data Channel. (See [3]).

NUM_PDCCH - The number of Packet Data Control Channels supported.

If FOR_PDCH_PARMS_INCL is set to ‘1’, FOR_PDCH_INCL is set to ‘1’, and if FOR_PDCH_COMMON_PARMS is included and set to ‘0’, 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 ‘000’ if the pilot supports one Packet Data Control Channel. The base station shall set this field to ‘1’ if the pilot supports two Packet Data Control Channels. The base station shall not set this field to any other value.

The base station shall include NUM_PDCCH+1 occurrences of the following one-field record:

FOR_PDCCH_WALSH - Forward Packet Data Control Channel Walsh code assignment.

If FOR_PDCH_PARMS_INCL is set to ‘1’, FOR_PDCH_INCL is set to ‘1’, and if FOR_PDCH_COMMON_PARMS is included and set to ‘0’, 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 Walsh code assignment for the Forward Packet Data Control Channel.

If NUM_PDCCH is set to ‘001’, the Walsh code of PDCCH0 shall be included first, followed by the Walsh code for PDCCH1.

MAC_ID - Medium Access Control index.

If FOR_PDCH_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 MAC index assigned to the mobile station by this pilot.

The base station shall set this field to an integer value larger than 63.
REV_CQICH_COVER - Reverse Channel Quality Indicator Channel cover.

If FOR_PDCH_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 index of the R-CQICH cover associated with this pilot.

If this pilot is a member of the mobile station’s current Active Set, the base station should assign the same value for the Walsh cover that is in the mobile station’s current Active Set.

If this pilot is not a member of the mobile station’s current Active Set, the base station should assign a value for the Walsh cover that was not recently assigned (See [2]).

FOR_CPCCH_WALSH - The Forward Common Power Control Channel Walsh code assignment.

If EXT_CH_IND signals the allocation of a F-CPCCH, and either of the following conditions is true:

- EXT_CH_IND signals the allocation of a F-FCH or a F-DCCH
- all of the following conditions are true:
  - FOR_PDCH_INCL is set to ‘1’
  - EXT_CH_IND does not signal allocation of a F-FCH
  - EXT_CH_IND does not signal allocation of a F-DCCH

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 Walsh code assignment for the Forward Common Power Control Channel.

FOR_CPCSCH - The Forward Common Power Control Channel Subchannel.

If EXT_CH_IND signals the allocation of a F-CPCCH, and either of the following conditions is true:

- EXT_CH_IND signals the allocation of a F-FCH or a F-DCCH
- all of the following conditions are true:
  - FOR_PDCH_INCL is set to ‘1’
  - EXT_CH_IND does not signal allocation of a F-FCH
  - EXT_CH_IND does not signal allocation of a F-DCCH

The base station shall set this field to the rate of the Forward Common Power Control Channel as specified in Table 3.7.2.3.2.21-12.
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 Forward Common
Power Control Channel Subchannel associated with this base
station.

If FOR_CPCCH_RATE is omitted, or if it is included and set to
‘00’, the base station shall set this field to a value in the range
0 to 243 inclusive. If FOR_CPCCH_RATE is included and set
to ‘01’, the base station shall set this field to a value in the
range 0 to 487 inclusive. If FOR_CPCCH_RATE is included
and set to ‘10’, the base station shall set this field to a
value in the range 0 to 965 inclusive.

PWR_COMB_IND  - Power control symbol combining indicator.

If the Forward Traffic Channel or Forward Common Power
Control 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’.
The base station shall set this field to ‘0’ in the first record in
the pilot list.

PDCH_GROUP_IND  - Packet Data Channel Group Indicator.

If PDCH_GROUP_IND_INCL is set to ‘1’, the base station shall
include this field and shall set it as follows; otherwise, the
base station shall omit this field.

If the mobile station is to use the softer reselection
parameters when re-pointing between this pilot and the
previous pilot in this message that has a F-PDCH assigned to
this mobile station (i.e. FOR_PDCH_INCL is set to ‘1’), the
base station shall set this field to ‘1’ (See [3]).

If the mobile station is to use the soft reselection parameters
when re-pointing between this pilot and the previous pilot in
this message that has a F-PDCH assigned to this mobile
station (i.e. FOR_PDCH_INCL is set to ‘1’), the base station
shall set this field to ‘0’ (See [3]).

The base station shall set this field to ‘0’ in the first record in
the pilot list that has a F-PDCH assigned to this mobile
station (i.e. FOR_PDCH_INCL is set to ‘1’).

CODE_CHAN_FCH  - Code channel on the Fundamental Channel.

If EXT_CH_IND signals the allocation of a F-FCH, the base
station shall include this field and shall set it as follows;
otherwise it shall be omitted.

The base station shall set this field to the code channel index
(see [2]) that the mobile station is to use on the Fundamental
Channel of the Forward Traffic Channel.
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 is used, the base station shall set this field in the range 1 to 127 inclusive.

QOF_MASK_ID_FCH - Quasi-orthogonal function index on the Fundamental Channel.

If EXT_CH_IND signals the allocation of a F-FCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

CODE_CHAN_DCCH - Code channel on the Dedicated Control Channel.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the code channel index (see [2]), in the range of 1 to 127 inclusive, that the mobile station is to use on the Dedicated Control Channel of the Forward Traffic Channel.

If Radio Configuration 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 is used, the base station shall set this field in the range 1 to 127 inclusive.

QOF_MASK_ID_DCCH - Quasi-orthogonal function index on the Dedicated Control Channel.

If EXT_CH_IND signals the allocation of a F-DCCH, the base station shall include this field and shall set it as follows; otherwise it shall be omitted.

The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

FOR_ACKCH_WALSH_INDEX - Walsh Code for the Forward Acknowledgment Channel.

If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND does not signal the allocation of a R-PDCH, the base station shall omit this field; otherwise, it shall include it and set it as follows.

The base station shall set this field to the Walsh code of the Forward Acknowledgment Channel (see [2]).

FOR_ACKSCH_INDEX - Forward Acknowledgment Subchannel Index.

If FOR_ACKCH_ASSIGNED is omitted, or if it is included and set to '0', or if FOR_PDCH_INCL is set to '0', or if EXT_CH_IND does not signal the allocation of a R-PDCH, the base station shall omit this field; otherwise, it shall include it and set it as follows.
The base station shall set this field to the subchannel index of the Forward Acknowledgment Channel (see [2]). The base station should not use FOR_ACKSCH_INDEX = 0, 1, 97, or 98.

FOR_RCCH_INCL - Forward Rate Control Subchannel included flag.

- If FOR_PDCH_INCL is set to '0', or 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 ‘1’ if a Forward Rate Control Channel Subchannel is allocated on this pilot (see [2]); otherwise, the base station shall set this field to ‘0’.

- The base station shall set this field to a non zero value for at least one pilot in this message.

FOR_RCCH_WALSH_INDEX - Walsh Code for the Forward Rate Control Channel Subchannel.

- If FOR_RCCH_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

- The base station shall set this field to the Walsh code of the Forward Rate Control Channel Subchannel (see [2]).

FOR_RCSCH_INDEX - Forward Rate Control Subchannel.

- If FOR_RCCH_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

- The base station shall set this field to the subchannel index of the Rate Control Subchannel on this pilot (see [2]).

- If FOR_RCCH_REPETITION is set to '00' this field shall take values in the range 0 to 96. If FOR_RCCH_REPETITION is set to '01' this field shall take values in the range 0 to 48. If FOR_RCCH_REPETITION is set to '10' this field shall take values in the range 0 to 24.

NUM_FOR_GCH - Number of Forward Grant Channels

- If FOR_PDCH_INCL is set to '0', or if FOR_GCH_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 number of assigned Forward Grant Channels on this pilot. The base station shall set this field to 0, 1, or 2.

- The base station shall set this field to a non zero value for at least one pilot in this message.

- If FOR_PDCH_INCL is set to ‘1’, and if FOR_GCH_ASSIGNED is included and set to ‘1’, the base station shall include NUM_FOR_GCH occurrences of the field FOR_GCH_WALSH_INDEX:
FOR_GCH_WALSH_INDEX - Walsh Code for the Forward Grant Channel.

The base station shall set this field to the Walsh code of the Forward Grant Channels (see [2]).

NUM_SCH - Number of Supplemental Channel records.

If SCH_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to the number of the Supplemental Channel records need to be updated.

If NUM_SCH is included and not equal to '00000', the base station shall include NUM_SCH occurrence of the following five fields:

FOR_SCH_ID - Forward Supplemental Channel identifier.

The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.

SCCL_INDEX - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.

PILOT_INCL - The corresponding pilot included in Supplemental Channel Active Set indicator.

The base station shall set this field to '1' if the corresponding pilot is included in the Active Set of Supplemental Channel; otherwise, the base station shall set this field to '0'.

CODE_CHAN_SCH - Code channel on the Supplemental Channel.

If PILOT_INCL is included and set to '1', 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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel of the Forward Traffic Channel indexed by SCCL_INDEX.

QOF_MASK_ID_SCH - Quasi-orthogonal function index on the Supplemental Channel.

If PILOT_INCL is included and set to '1', 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 index of the Quasi-orthogonal function (see [2]).

CCSH_INCLUDED - Code Combining Soft Handoff information included indicator.

The base station shall set this field to '1' if Code Combining Soft Handoff information is included in this message; otherwise, the base station shall set this field to '0'.

USE_CCSH_ENCODER_TIME - Use Code Combining Soft Handoff Turbo Encoder swapping action time indicator.
If the CCSH_INCLUDED 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.

If an explicit action time at which Turbo Encoder types (CCSH_ENCODER_TYPE) included in this message takes effect is specified, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

CCSH_ENCODER_ACTION_TIME - Code Combining Soft Handoff Turbo Encoder swapping action time.

If the USE_CCSH_ENCODER_TIME field is included and set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET × 1.25 ms, in units of 80 ms (modulo 64), at which Turbo Encoder types included in this message are to take effect; otherwise, the base station shall omit this field.

If the CCSH_INCLUDED field is set to ‘1’, the base station shall include one occurrence of the following one field for each of the Forward Supplemental Channel records (as specified by NUM_PILOTS and NUM_SCH) with PILOT_INCL field set to ‘1’. The base station shall use the same order for the following field as is used for the Forward Supplemental Channel records.

CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

The base station shall set this field to ‘0’ if the Turbo Encoder type to be used on the Forward Supplemental Channel identified by FOR_SCH_ID and SCCL_INDEX is the default encoder type. The base station shall set this field to ‘1’ if the Turbo Encoder to be used is the complementary type.

FUNDICATED_BCMC_IND – BCMC on fundicated channel Indicator.

If the channel assignment in this message contains a Forward Fundicated Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_INCL – Additional PLCM for forward FCH included indicator.

If the FUNDICATED_BCMC_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:

If the additional PLCM for forward FCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_FCH_TYPE - The Additional Public Long Code Mask for forward FCH type indicator.

If ADD_PLCM_FOR_FCH_INCL not included or is included and 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’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

ADD_PLCM_FOR_FCH_39 - The 39 LSB bits of the additional Public Long Code Mask for forward FCH.

If ADD_PLCM_FOR_FCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 39 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.

MOB_QOS - Indicator granting permission to the mobile station to request QoS parameter settings in the Origination Message, Origination Continuation Message, or Enhanced Origination Message.

If CS_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise the base station shall include this field and shall set it as follows:

The base station shall set this field to ‘1’, if the mobile station is allowed to include a QoS record in the Origination Message, Origination Continuation Message, or Enhanced Origination Message; otherwise, the base station shall set this field to ‘0’.

MS_INIT_POS_LOC_SUP_IND - Mobile station initiated position location determination supported indicator.

If the target base station supports mobile station initiated position determination, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the ACTIVE_SET_REC_FIELDS record equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.3.3.2.37 Extended Supplemental Channel Assignment Message

MSG_TAG: ESCAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>START_TIME_UNIT</td>
<td>3</td>
</tr>
<tr>
<td>REV_SCH_DTX_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>USE_T_ADD_ABORT</td>
<td>1</td>
</tr>
<tr>
<td>USE_SCRM_SEQ_NUM</td>
<td>1</td>
</tr>
<tr>
<td>SCRM_SEQ_NUM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>ADD_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

| 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_ID    | 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_ID    | 4             |

(continues on next page)
If FOR_CFG_INCLUDED is set to ‘1’, the base station shall include the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_FOR_CFG_RECS</td>
<td>5</td>
</tr>
</tbody>
</table>

If FOR_CFG_INCLUDED is set to ‘1’, the base station shall include (NUM_FOR_CFG_RECS +1) occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
<tr>
<td>NUM_SUP_SHO</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_SUP_SHO+1 occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PILOT_PN</td>
<td>9</td>
</tr>
<tr>
<td>ADD_PILOT_REC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ACTIVE_PILOT_REC_TYPE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>0 or 3</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>0 or 8 × RECORD_LEN</td>
</tr>
<tr>
<td>CODE_CHAN_SCH</td>
<td>11</td>
</tr>
<tr>
<td>QOF_MASK_ID_SCH</td>
<td>2</td>
</tr>
</tbody>
</table>

NUM_FOR_SCH occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_START_TIME_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH_START_TIME</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
</tbody>
</table>

\{(NUM_FOR_SCH)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_MODE_SCH</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FPC_SCH_INIT_SETPT_OP</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_SEC_CHAN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SUP</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

NUM_SUP occurrences of the following record:

\{(NUM_SUP)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FPC_SCH_FER</td>
<td>5</td>
</tr>
<tr>
<td>FPC_SCH_INIT_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_SCH_MIN_SETPT</td>
<td>8</td>
</tr>
<tr>
<td>FPC_SCH_MAX_SETPT</td>
<td>8</td>
</tr>
</tbody>
</table>

\{(NUM_SUP)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_THRESH_SCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_SETPT_THRESH_SCH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RPC_NUM_SUP</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

Include RPC_NUM_SUP +1 occurrences of the following record:

\{(RPC_NUM_SUP +1)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>RLGAIN_SCH_PILOT</td>
<td>6</td>
</tr>
</tbody>
</table>

\{(RPC_NUM_SUP +1)\} (continues on next page)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3X_SCH_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_3X_CFG</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

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)

CCSHINCLUDED                  | 1             |

(NUM_FOR_CFG_RECS + 1) × (NUM_SUP_SHO + 1) occurrences of the following field if CCSHINCLUDED 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)
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>FOR_SCH_MUX</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>SCH_CC_Type-specific field</td>
<td>Variable (see 3.7.5.7.1)</td>
<td></td>
</tr>
</tbody>
</table>

If REV_SCH_CC_INCL is set to ‘1’, the base station shall include NUM_REV_SCH occurrences of the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_ID</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>REV_SCH_MUX</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>SCH_CC_Type-specific field</td>
<td>Variable (see 3.7.5.7.1)</td>
<td></td>
</tr>
</tbody>
</table>

NUM_FOR_SCH occurrence of the following record if SCH_BCMC_IND is included and set to ‘1’:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_ADD_PLCM_FOR_SCH</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FSCH_OUTERCODE_INCL</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>FSCH_OUTERCODE_RATE</td>
<td>0 or 3</td>
<td></td>
</tr>
<tr>
<td>FSCH_OUTERCODE_OFFSET</td>
<td>0 or 6</td>
<td></td>
</tr>
</tbody>
</table>

FPC_BCMC_CHAN 0 or 1
START_TIME_UNIT - Unit for start time.
The base station shall set this field to indicate the units of start time included in Extended Supplemental Channel Assignment Message, Forward Supplemental Channel Assignment Mini Message, Reverse Supplemental Channel Assignment Mini Message, and Universal Handoff Direction Message. The base station shall set this field to one less than the number of 20 ms frames that determines the START_TIME_UNIT.

REV_SCH_DTX_DURATION - Discontinuous Transmission on Reverse Supplemental Channel.
The base station shall set this field to the maximum duration of time in units of 20 ms that the mobile station is allowed to stop transmission on a Reverse Supplemental Channel within the reverse assignment duration. The base station shall set this field to '0000' if the mobile station is to stop using a Reverse Supplemental Channel once it has stopped transmitting on that Reverse Supplemental Channel. The base shall set this field to '1111' if the mobile station is allowed to resume transmission on a Reverse Supplemental Channel at any time within the reverse assignment duration.

USE_T_ADD_ABORT - Reverse use T_ADD abort indicator.
The base station shall set this field to '1' to indicate that the mobile station is to utilize the T_ADD Reverse Supplemental Channel abort feature for this reverse assignment; otherwise, the base station shall set this field to '0'.

USE_SCRM_SEQ_NUM - Use Supplemental Channel Request Message sequence number indicator.
The base station shall set this field to '1' if the SCRM_SEQ_NUM field is included in this message; otherwise, the base station shall set this field to '0'.

SCRM_SEQ_NUM - Supplemental Channel Request Message sequence number.
If USE_SCRM_SEQ_NUM is set to '1', the base station shall set this field to the sequence number corresponding to the SCRM_SEQ_NUM field in a Supplemental Channel Request Message to which the mobile station is to match this message; otherwise, the base station shall omit this field.

ADD_INFO_INCL - Additional information included indicator.
If the message is to contain the FPC_PRI_CHAN field, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
The base station shall set this field to ‘0’ if any of the following conditions holds:
The message does not contain any Supplemental Channel assignment.

- The mobile station is currently in the Active mode.

**FPC_PRI_CHAN**  -  Power Control Subchannel Indicator.

If the ADD_INFO_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field to '0' if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel. The base station shall set this field to '1' if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel. If the F-CPCCH is assigned, the base station shall multiplex the Power Control Subchannel on the F-CPCCH; otherwise:

If this field is set to '0', the base station shall multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station shall multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

**REV_CFG_INCLUDED**  -  Reverse Supplemental Channel configuration included.

The base station shall set this field to '1' if this message contains a Reverse Supplemental Channel configuration. Otherwise, the base station shall set this field to '0'.

**NUM_REV_CFG_RECS**  -  Number of the Reverse Supplemental Channel configuration Records.

If REV_CFG_INCLUDED is set to ‘1’, the base station shall set this field to one less than the number of reverse supplemental channel configuration records consisting of the following three fields that are included in this message; otherwise, the base station shall omit this field.

The base station shall include NUM_REV_CFG_RECS+1 occurrences of the following three fields only if the REV_CFG_INCLUDED field is set to ‘1’.

**REV_SCH_ID**  -  Reverse Supplemental Channel Identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel.

**REV_WALSH_ID**  -  Reverse Supplemental Channel Walsh cover Identifier.

The base station shall set this field according to Table 3.7.3.3.2.37-1 to indicate the Walsh cover ID that the mobile station is to use when transmitting number of bits per frame specified by REV_NUM_BITS_IDX on the Reverse Supplemental Channel specified by REV_SCH_ID. If only one reverse supplemental channel is assigned, the base station should set this field to the default value for the REV_WALSH_ID as specified in 2.6.4.2.
### Table 3.7.3.3.2.37-1. REV_WALSH_ID Field

<table>
<thead>
<tr>
<th>REV_WALSH_ID (binary)</th>
<th>Walsh Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SCH_ID = '0'</td>
</tr>
<tr>
<td>0</td>
<td>+-</td>
</tr>
<tr>
<td>1</td>
<td>++--</td>
</tr>
</tbody>
</table>

### REVSCH_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

<table>
<thead>
<tr>
<th>REV_SCH_NUM_BITS_IDX (binary)</th>
<th>Number of information bits per frame</th>
<th>Number of CRC bits per frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RC 3, 5</td>
<td>RC 4, 6</td>
</tr>
<tr>
<td>0000</td>
<td>172</td>
<td>267</td>
</tr>
<tr>
<td>0001</td>
<td>360</td>
<td>552</td>
</tr>
<tr>
<td>0010</td>
<td>744</td>
<td>1,128</td>
</tr>
<tr>
<td>0011</td>
<td>1,512</td>
<td>2,280</td>
</tr>
<tr>
<td>0100</td>
<td>3,048</td>
<td>4,584</td>
</tr>
<tr>
<td>0101</td>
<td>6,120</td>
<td>Reserved</td>
</tr>
<tr>
<td>0110</td>
<td>12,264</td>
<td>9,192</td>
</tr>
</tbody>
</table>
Number of information bits per frame

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0111</td>
<td>Reserved</td>
<td>Reserved</td>
<td>Reserved</td>
</tr>
<tr>
<td>1000</td>
<td>Reserved</td>
<td>20,712</td>
<td>16</td>
</tr>
<tr>
<td>RESERVED</td>
<td>All other values are reserved</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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>
<thead>
<tr>
<th>FOR_SCH_DURATION REV_SCH_DURITION</th>
<th>Duration in 20 ms</th>
</tr>
</thead>
<tbody>
<tr>
<td>(binary)</td>
<td></td>
</tr>
<tr>
<td>0001</td>
<td>1</td>
</tr>
<tr>
<td>0010</td>
<td>2</td>
</tr>
</tbody>
</table>
REV_SCH_START_TIME_INCL - Start time included indicator.

If REV_SCH_DURATION is not equal to ‘0000’, the base station shall set this field to ‘1’. If REV_SCH_DURATION is equal to ‘0000’, the base station shall set this field as follows:

The base station shall set this field to ‘1’ if REV_SCH_START_TIME is included in this message; otherwise, the base station shall set this field to ‘0’.

REV_SCH_START_TIME - Start time for Reverse Supplemental Channel assignment.

If REV_SCH_START_TIME_INCL is set to ‘0’, the base station shall omit this field; otherwise, 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 (if REV_SCH_DURATION is not equal to ‘0000’) or stop transmitting (if REV_SCH_DURATION is equal to ‘0000’) on the Reverse Supplemental Channel specified in this message. The explicit start time to start or stop for transmitting on the Reverse Supplemental Channel is the time for which

\[
\lfloor \frac{t}{(\text{START\_TIME\_UNIT}s+1)} \rfloor - \text{REV\_SCH\_START\_TIME} \mod 32 = 0,
\]

where \(t\) is the System Time in units of 20 ms.

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 3.7.3.2.37-2 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]`.

**FOR_CFG_INCLUDED** - Forward Supplemental Channel configuration included.

The base station shall set this field to '1' if this message contains a Forward Supplemental Channel configuration. Otherwise, the base station shall set this field to '0'.

**FOR_SCH_FER_REP** - Forward Supplemental Channel FER report indicator.

If `FOR_CFG_INCLUDED` 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 the mobile station is to report the Supplemental Channel frame counts (see 2.6.4.1.1); otherwise, the base station shall set this field to '0'.

**NUM_FOR_CFG_RECS** - Number of the Forward Supplemental Channel configuration Records.

If `FOR_CFG_INCLUDED` is set to '1', the base station shall set this field to one less than the number of forward supplemental channel configuration records consisting of the following fields that are included in this message; otherwise, the base station shall omit this field.

The base station shall include `NUM_FOR_CFG_RECS+1` occurrences of the following fields only if the `FOR_CFG_INCLUDED` field is set to '1'.

**FOR_SCH_ID** - Forward Supplemental Channel identifier

The base station shall set this field to the identifier of the Forward Supplemental Channel.

**SCCL_INDEX** - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.

**FOR_SCH_NUM_BITS_IDX** - Forward Supplemental Channel number of information bits index.
If \( \text{USE\_FLEX\_NUM\_BITS} \) is equal to '0' or if \( \text{USE\_FLEX\_NUM\_BITS} \) is equal to '1' and \( \text{FSCH\_NBIT\_TABLE\_ID} \) for \( \text{FOR\_SCH\_ID} \) is equal to '0000', then the base station shall set this field according to Table 3.7.3.2.37-4 to indicate the number of information bits per frame and the length of the CRC field for the Forward Supplemental Channel identified by \( \text{FOR\_SCH\_ID} \) corresponding to \( \text{SCCL\_INDEX} \).

### Table 3.7.3.2.37-4. F-SCH Number of Information Bits per Frame

<table>
<thead>
<tr>
<th>( \text{FOR_SCH_NUM_BITS_IDX} ) (binary)</th>
<th>Number of information bits per frame</th>
<th>Number of CRC bits per frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>RC 3, 4, 6, 7</td>
<td>12</td>
</tr>
<tr>
<td>0001</td>
<td>RC 5, 8, 9</td>
<td>16</td>
</tr>
<tr>
<td>0010</td>
<td>744</td>
<td>16</td>
</tr>
<tr>
<td>0011</td>
<td>1,512</td>
<td>16</td>
</tr>
<tr>
<td>0100</td>
<td>3,048</td>
<td>16</td>
</tr>
<tr>
<td>0101</td>
<td>6,120</td>
<td>16</td>
</tr>
<tr>
<td>0110</td>
<td>12,264</td>
<td>16</td>
</tr>
<tr>
<td>0111</td>
<td>Reserved</td>
<td>Reserved</td>
</tr>
<tr>
<td>1000</td>
<td>Reserved</td>
<td>20,712</td>
</tr>
<tr>
<td>RESERVED All other values are reserved</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If \( \text{USE\_FLEX\_NUM\_BITS} \) is equal to '1' and \( \text{FSCH\_NBIT\_TABLE\_ID}[\text{FOR\_SCH\_ID}] \) 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 \( \text{FOR\_SCH\_ID} \) to be \( \text{NUM\_BITS}[\text{FSCH\_NBIT\_TABLE\_ID}[\text{FOR\_SCH\_ID}]][\text{FOR\_SCH\_NUM\_BITS\_IDX}] \) that the number of CRC bits per frame for the Forward Supplemental channel identified by \( \text{FOR\_SCH\_ID} \) to be \( \text{CRC\_LEN\_IDX}[\text{FSCH\_NBIT\_TABLE\_ID}[\text{FOR\_SCH\_ID}]][\text{FOR\_SCH\_NUM\_BITS\_IDX}] \).

\( \text{NUM\_SUP\_SHO} \) - 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 \( \text{NUM\_SUP\_SHO}+1 \) occurrences of the following fields for each Forward Supplemental channel corresponding to the \( \text{FOR\_SCH\_ID} \) and the
SCCL_INDEX whose frames may be soft-combined by the mobile station:

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.

ADD_PILOT_REC_INCL - Additional pilot information included indicator. The base station shall set this field to ‘1’ if additional pilot information listed in PILOT_REC_TYPE and RECORD_LEN fields are included. The base station shall set this field to ‘0’ if the corresponding pilot is the common pilot and there is no additional pilot information included.

PILOT_REC_TYPE - Pilot record type
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the PILOT_REC_TYPE value shown in Table 3.7.2.3.2.21-9 corresponding to the type of Pilot Record specified by this record.
If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

RECORD_LEN - Pilot record length.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall set this field to the number of octets in the type-specific fields of this pilot record.
If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

Type-specific fields - Pilot record type-specific fields.
If ADD_PILOT_REC_INCL is set to ‘1’, the base station shall include type-specific fields based on the ACTIVE_PILOT_REC_TYPE of this pilot record as described in 3.7.6.1.
If ADD_PILOT_REC_INCL is set to ‘0’, the base station shall omit this field.

CODE_CHAN_SCH - Code channel on the Supplemental Channel.
The base station shall set this field to the code channel index (see [2]) that the mobile station is to use on the Supplemental Channel of the Forward Traffic Channel indexed by SCCL_INDEX.

QOF_MASK_ID_SCH - Quasi-orthogonal function index on the Supplemental Channel.
The base station shall set this field to the index of the Quasi-orthogonal function (see [2]).

NUM_FOR_SCH - Number of Forward Supplemental Channels assigned.
The base station shall set this field to the number of forward Supplemental Channel assigned. The base station shall set this field to ‘0’ if the assignment of Supplemental Channel is not included.

The base station shall include NUM_FOR_SCH occurrences of the following five fields (FOR_SCH_ID, FOR_SCH_DURATION, FOR_SCH_START_TIME_INCL, FOR_SCH_START_TIME, and SCCL_INDEX).

FOR_SCH_ID - Forward Supplemental Channel identifier.

The base station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

FOR_SCH_DURATION - Duration of Forward Supplemental Channel assignment.

The base station shall set this field to the duration (see Table 3.7.3.2.37-3), starting at the start time of the message specified by FOR_SCH_START_TIME, during which the mobile station is to process the Forward Supplemental Channel.

The base station shall set this field to ‘0000’ to indicate that the mobile station should stop processing the Forward Supplemental Channel starting at the explicit start time of the message specified by FOR_SCH_START_TIME or at the implicit start time if FOR_SCH_START_TIME_INCL is set to ‘0’.

The base station shall set this field to ‘1111’ to indicate that the mobile station should process the Forward Supplemental Channel, starting at the start time of the message specified by FOR_SCH_START_TIME, until the start time specified by a subsequent Forward Supplemental Channel assignment corresponding to the same Supplemental Channel (see 2.6.6.2.5.1.1).

FOR_SCH_START_TIME_INCL - Start time included indicator.

If FOR_SCH_DURATION is not equal to ‘0000’, the base station shall set this field to ‘1’. If FOR_SCH_DURATION is equal to ‘0000’, the base station shall set this field as follows:

The base station shall set this field to ‘1’ if FOR_SCH_START_TIME is included in this message; otherwise, the base station shall set this field to ‘0’.

FOR_SCH_START_TIME - Start time for Forward Supplemental Channel assignment.

If FOR_SCH_START_TIME_INCL is set to ‘0’, the base station shall omit this field; otherwise, 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 is to start processing (if FOR_SCH_DURATION is not equal to ‘0000’) or stop processing (if FOR_SCH_DURATION is equal to ‘0000’) the Forward Supplemental Channel specified in this message. The explicit start time to start or stop for processing the Forward Supplemental Channels is the time for which
\[ \left\lfloor \frac{t}{(\text{START\_TIME\_UNIT}+1)} \right\rfloor - \text{FOR\_SCH\_START\_TIME} \mod 32 = 0, \]

where \( t \) is the System Time in units of 20 ms.

- **SCCL\_INDEX** - Supplemental Channel Code list index.
  - The base station shall set this field to the index of the record in the Forward Supplemental Channel Code list corresponding to the \text{FOR\_SCH\_ID}. The base station shall include an SCCL\_INDEX whose SCH Active Set is a subset of the Active Set of the Fundamental Channel, Dedicated Control Channel, or both.

- **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\_SCH** - Forward Power Control operational mode indicator used during forward Supplemental Channel assignment interval.
  - If FPC\_INCL is set to ‘1’, the base station shall set the value to the forward power control operation mode (see [2]); otherwise, the base station shall omit this field.

- **FPC\_SCH\_INIT\_SETPT\_OP** - Initial Supplemental Channel Outer Loop Eb/Nt setpoint option.
  - 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’ to indicate that \text{FPC\_SCH\_INIT\_SETPT} contains the absolute value of the initial F-SCH Eb/Nt setpoint. The base station shall set this field to ‘1’ to indicate that \text{FPC\_SCH\_INIT\_SETPT} contains the offset value of the initial F-SCH Eb/Nt setpoint relative to the current value used in the mobile station for the channel carrying the Forward Power Control Subchannel.

- **FPC\_SEC\_CHAN** - Master Supplemental channel index.
  - If FPC\_INCL is set to ‘1’ and FPC\_MODE\_SCH is set to ‘001’, ‘010’, ‘101’, or ‘110’, the base station shall set this field to the master Supplemental Channel index; otherwise, the base station shall omit this field.

- **NUM\_SUP** - Number of Supplemental Channels.
  - If FPC\_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the total number of the Supplemental Channels.

The base station shall include \text{NUM\_SUP} occurrences of the following record:

- **SCH\_ID** - Supplemental Channel index.
  - The base station shall set this field to the Supplemental Channel index.

- **FPC\_SCH\_FER** - Supplemental Channel target Frame Error Rate.
FPC_SCH_INIT_SETPT - Initial Supplemental Channel Output Loop Eb/Nt setpoint
The base station shall set this field to initial Supplemental Channel Outer Loop Eb/Nt setpoint (absolute value or offset value as indicated by FPC_SCH_INIT_SETPT_OP) as follows:
- If FPC_SCH_INIT_SETPT_OP is set to '0', the unit is 0.125 dB;
- If FPC_SCH_INIT_SETPT_OP is set to '1', the unit is 0.125 dB and the offset is expressed as two's complement signed number.

FPC_SCH_MIN_SETPT - Minimum Supplemental Channel outer loop Eb/Nt setpoint.
The base station shall set this field to minimum Supplemental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

FPC_SCH_MAX_SETPT - Maximum Supplemental Channel outer loop Eb/Nt setpoint.
The base station shall set this field to maximum Supplemental Channel Outer Loop Eb/Nt setpoint, in units of 0.125 dB.

FPC_THRESH_SCH_INCL - Supplemental Channel Setpoint Report Threshold Included Indicator.
If FPC_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall set this field as follows:
- If Supplemental Channel setpoint report threshold 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_SETPT_THRESH_SCH - Supplemental Channel Setpoint Report Threshold.
If FPC_THRESH_SCH_INCL is set to '1', the base station shall set this field to the value of the Supplemental Channel setpoint threshold (in units of 0.125 dB) above which the outer loop report message will be sent by the mobile station; otherwise, the base station shall omit this field.

RPC_INCL - Reverse Power Control parameter included indicator.
The base station shall set this field to '1' if RPC_NUM_SUP is included in this message; otherwise the base station shall set this field to '0'.

RPC_NUM_SUP - Number of Supplemental Channels.
If RPC_INCL is set to '1', the base station shall set this field to the total number of the Supplemental Channels minus one; otherwise, the base station shall omit this field.

The base station shall include RPC_NUM_SUP +1 occurrences of the following record:

SCH_ID - Supplemental Channel index.
The base station shall set this field to the Supplemental Channel index.

RLGAIN_SCH_PILOT - Supplemental Channel power offset adjustment relative to Reverse Pilot Channel power for radio configurations greater than 2.

The base station shall set this field to the correction factor to be used by mobile stations setting the power of a Supplemental Channel, expressed as a two’s complement value in units of 0.125 dB.

3X_SCH_INFO_INCL - 3X Supplemental Channel information included indicator.

If the 3X Supplemental Channel information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If FOR_CFG_INCLUDED is set to ‘0’, the base station shall set this field to ‘0’.

NUM_3X_CFG - Number of 3X Supplemental Channels to be configured

If 3X_SCH_INFO_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 number of 3X Forward Supplemental Channels to be configured. The base station shall set this field to ‘00’ if the configuration of Supplemental Channel is not included.

The base station shall include NUM_3X_CFG occurrences of the following record if 3X_SCH_INFO_INCL is included and set to ‘1’.

FOR_SCH_ID - Forward Supplemental Channel identifier.

The base station shall set this field the identifier of the Forward Supplemental Channel pertaining to this record.

NUM_3X_REC - Number of 3X records

The base station shall set this field to the number of instances of the following record minus one included in this message.

The base station shall include NUM_3X_REC+1 occurrences of the following variable-length record.

SCCL_INDEX - Supplemental Channel Code list index.

The base station shall set this field to the index of the record in the Supplemental Channel Code list.

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:

3X_SCH_LOW_INCL - SCH code channel on the lowest SR3 frequency included indicator.
If the Supplemental Channel on the lowest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_SCH_LOW – QOF index for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the lowest SR3 frequency.

CODE_CHAN_SCH_LOW – Code channel for the Supplemental Channel on the lowest SR3 frequency.

If 3X_SCH_LOW_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the lowest SR3 frequency. If Radio Configuration 6 or 8 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.

3X_SCH_HIGH_INCL – SCH code channel on the highest SR3 frequency included indicator.

If the Supplemental Channel on the highest SR3 frequencies has a different code channel than the Supplemental Channel on the center SR3 frequency, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

QOF_MASK_ID_SCH_HIGH – QOF index for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 index of the Quasi-orthogonal function (see [2]) corresponding to the QOF index for the Supplemental Channel on the highest SR3 frequency.

CODE_CHAN_SCH_HIGH – Code channel for the Supplemental Channel on the highest SR3 frequency.

If 3X_SCH_HIGH_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 code channel index (see [2]) that the mobile station is to use on the Supplemental Channel on the highest SR3 frequency. If Radio Configuration 6 or 8 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.

CCSH_INCLUDED - Code Combining Soft Handoff information included indicator.

The base station shall set this field to ‘1’ if Code Combining Soft Handoff information is included in this message; otherwise, the base station shall set this field to ‘0’.

If the CCSH_INCLUDED field is set to ‘1’, the base station shall include one occurrence of the following one field for each of the Forward Supplemental Channel records included in this message (as specified by NUM_FOR_CFG_RECS and NUM_SUP_SHO). The base station shall use the same order for the following field as is used for the Forward Supplemental Channel records.

CCSH_ENCODER_TYPE - Code Combining Soft Handoff Turbo Encoder type.

The base station shall set this field to ‘0’ if the Turbo Encoder type to be used on the Forward Supplemental Channel indexed by FOR_SCH_ID and SCCL_INDEX is the default encoder type. The base station shall set this field to ‘1’ if the Turbo Encoder to be used is the complementary type.

FOR_SCH_CC_INCL - Channel configuration for the Forward Supplemental Channel included indicator.

The base station shall set this field to ‘1’ if the channel configuration information for the Forward Supplemental Channel is included; otherwise, the base station shall set this field to ‘0’.

The base station shall set FOR_SCH_CC_INCL to ‘0’ if NUM_FOR_SCH is set to ‘00’ or if FOR_SCH_DURATION is set to ‘0000’.

If FOR_SCH_CC_INCL is set to ‘1’, the base station shall include NUM_FOR_SCH occurrences of the following three-field record.

FOR_SCH_ID - Forward Supplemental Channel Identifier.

The base station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

FOR_SCH_MUX - Forward Supplemental Channel Multiplex Option.

The base station shall set this field to the Multiplex Option associated with the maximum data rate for this Forward Supplemental Channel (see [3]).

SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

The base station shall set this field as defined in 3.7.5.7.1 for this Forward Supplemental Channel.
REV_SCH_CC_INCL - Channel configuration for the Reverse Supplemental Channel included indicator.

The base station shall set this field to ‘1’ if the channel configuration information for the Reverse Supplemental Channel is included; otherwise, the base station shall set this field to ‘0’.

The base station shall set REV_SCH_CC_INCL to ‘0’ if NUM_REV_SCH is set to ‘00’ or if REV_SCH_DURATION is set to ‘0000’.

If REV_SCH_CC_INCL is set to ‘1’, the base station shall include NUM_REV_SCH occurrences of the following three-field record.

REV_SCH_ID - Reverse Supplemental Channel Identifier.

The base station shall set this field to the identifier of the Reverse Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

REV_SCH_MUX - Reverse Supplemental Channel Multiplex Option.

The base station shall set this field to the Multiplex Option associated with the maximum data rate for this Reverse Supplemental Channel (see [3]).

SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

The base station shall set this field as defined in 3.7.5.7.1 for this Reverse Supplemental Channel.

SCH_BCMC_IND – BCMC on supplemental channel Indicator.

If NUM_FOR_SCH field is set to ‘00’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

If the channel assignment in this message contains a Forward Supplemental Channel used for BCMC transmission, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_SCH_INCL – Additional PLCM for forward SCH included indicator.

If the SCH_BCMC_IND field is not included or is included and 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 additional PLCM for forward SCH is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_PLCM_FOR_SCH_TYPE - The Additional Public Long Code Mask for forward SCH type indicator.

If ADD_PLCM_FOR_SCH_INCL is not included or is included and 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’ to indicate PLCM specified by the base station. The field value ‘0’ is reserved.

ADD_PLCM_FOR_SCH_395 - The 395 LSB bits of the additional Public Long Code Mask for forward SCH.

If ADD_PLCM_FOR_SCH_TYPE field is included and is set to ‘1’, the base station shall include this field and set it to the 395 least significant bits of the public long code mask used by the mobile station; otherwise, the base station shall omit this field.

If SCH_BCMC_IND field is included and is set to ‘1’, the base station shall include NUM_FOR_SCH occurrences of the following record:

USE_ADD_PLCM_FOR_SCH - Use additional PLCM for forward SCH indicator.

The base station shall set this field to ‘1’ if the additional PLCM for forward SCH included in this message is to be used for this Forward Supplemental Channel; otherwise, the base station shall set this field to ‘0’.

FSCH_OUTERCODE_INCL - Forward Supplemental Channel Outer Code included indicator.

The base station shall set this field to ‘1’ if the Forward Supplemental Channel outer code information is included in this message; otherwise, the base station shall set this field to ‘0’.

FSCH_OUTERCODE_RATE - Outer Code Rate of the Forward Supplemental Channel.

If the FSCH_OUTERCODE_INCL field is not included or is included and 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 outer code rate of the Forward Supplemental Channel as specified in Table 3.7.2.3.2.38-3.[2].

FSCH_OUTERCODE_OFFSET - Outer Coding Buffer Offset of the Forward Supplemental Channel.

If the FSCH_OUTERCODE_INCL field is not included or is included and 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 outer coding buffer offset of the Forward Supplemental Channel in units of 20ms as specified in [2].

FPC_BCMC_CHAN - Channel used for secondary power control subchannel.

If FPC_INCL is set to ‘1’ and FPC_MODE_SCH is set to ‘001’, ‘010’, ‘101’, or ‘110’, the base station shall include this field and set it as follows; otherwise, the base station shall omit this field.
If F-FCH is associated with secondary power control subchannel, the base station shall set this field to ‘1’; otherwise, base station shall set this field to ‘0’ to indicate that FPC_SEC_CHAN points to the channel associated with secondary power control subchannel.
3.7.3.3.2.38 Forward Supplemental Channel Assignment Mini Message

MSG_TAG: FSCAMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>FOR_SCH_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>FOR_SCH_START_TIME</td>
<td>5</td>
</tr>
<tr>
<td>SCCL_INDEX</td>
<td>4</td>
</tr>
</tbody>
</table>
FOR_SCH_ID - Forward Supplemental Channel identifier.
The base station shall set this field to the identifier of the Forward Supplemental Channel.

FOR_SCH_DURATION - Duration of Forward Supplemental Channel assignment.
The base station shall set this field to the duration (see Table 3.7.3.3.2.37-3), starting at the start time of the message specified by FOR_SCH_START_TIME, during which the mobile station is to process the Forward Supplemental Channel.

The base station shall set this field to ‘0000’ to indicate that the mobile station should stop processing the Forward Supplemental Channel starting at the start time of the message specified by FOR_SCH_START_TIME.

The base station shall set this field to ‘1111’ to indicate that the mobile station should process the Forward Supplemental Channel, starting at the explicit start time of the message specified by FOR_SCH_START_TIME, until the start time of a subsequent Forward Supplemental Channel assignment corresponding to the same Forward Supplemental Channel (see 2.6.6.2.5.1.1).

FOR_SCH_START_TIME - Start time for Forward Supplemental Channel assignment.
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 is to start processing the Forward Supplemental Channel specified in this message. The start time for processing Forward Supplemental Channels is the time for which

\[
\left\lfloor \frac{t}{(\text{START\_TIME\_UNIT}+1)} \right\rfloor - \text{FOR\_SCH\_START\_TIME} \mod 32 = 0,
\]

where \( t \) is the System Time in units of 20 ms.

SCCL_INDEX - Supplemental Channel Code list index.
The base station shall set this field to the index of the record in the Forward Supplemental Channel Code list corresponding to the FOR_SCH_ID. The base station shall include an SCCL_INDEX whose SCH Active Set is a subset of the Active Set of the Fundamental Channel, Dedicated Control Channel, or both.
1 3.7.3.3.2.39 Reverse Supplemental Channel Assignment Mini Message
2 MSG_TAG: RSCAMM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_ID</td>
<td>1</td>
</tr>
<tr>
<td>REV_SCH_DURATION</td>
<td>4</td>
</tr>
<tr>
<td>REV_SCH_START_TIME</td>
<td>5</td>
</tr>
<tr>
<td>REV_SCH_NUM_BITS_IDX</td>
<td>4</td>
</tr>
</tbody>
</table>
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

\[ \left\lfloor \frac{t}{(\text{START\_TIME\_UNIT} + 1)} \right\rfloor - \text{REV\_SCH\_START\_TIME} \mod 32 = 0, \]

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 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 transmit on the Reverse Supplemental Channel identified by

REV_SCH_ID 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 that the mobile station may transmit on the Reverse Supplemental Channel identified by

REV_SCH_ID to be

CRC_LEN_IDX[RSCH_NBIT_TABLE_ID[REV_SCH_ID]]

[REV_SCH_NUM_BITS_IDX].
3.7.3.3.2.40 Mobile Assisted Burst Operation Parameters Message

**MSG_TAG:** MABOPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDER_FLAG</td>
<td>1</td>
</tr>
</tbody>
</table>

If ORDER_FLAG is set to ‘1’, the base station shall include the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS_MIN_DELTA</td>
<td>3</td>
</tr>
<tr>
<td>ORDER_INTERVAL</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERIODIC_FLAG</td>
<td>1</td>
</tr>
</tbody>
</table>

If PERIODIC_FLAG is set to ‘1’, the base station shall include the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PILOTS</td>
<td>3</td>
</tr>
<tr>
<td>PERIODIC_INTERVAL</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>THRESHOLD_FLAG</td>
<td>1</td>
</tr>
</tbody>
</table>

If THRESHOLD_FLAG is set to ‘1’, the base station shall include the following record:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS_FLOOR_HIGH</td>
<td>6</td>
</tr>
<tr>
<td>PS_FLOOR_LOW</td>
<td>6</td>
</tr>
<tr>
<td>PS_CEILING_HIGH</td>
<td>6</td>
</tr>
<tr>
<td>PS_CEILING_LOW</td>
<td>6</td>
</tr>
<tr>
<td>THRESHOLD_INTERVAL</td>
<td>6</td>
</tr>
</tbody>
</table>

**ORDER_FLAG** - Order change reporting flag.

The base station shall set this field to ‘1’ to indicate that the mobile station is to send a Pilot Strength Measurement Mini Message to the base station whenever a received pilot strength measurement changes its relative order with respect to all other reported pilot strength measurements during supplemental channel burst operations; otherwise, the base station shall set this field to ‘0’.

If ORDER_FLAG is set to ‘1’, the base stations shall include the following two-field record:

**PS_MIN_DELTA** - Minimum power strength delta.
The base station shall set this field to one less than the minimum pilot strength measurement difference between two pilots (in units of 0.5 dB) that must be measured in order for the mobile station to send a Pilot Strength Measurement Mini Messages when the rank order mode is enabled. A difference in pilot strength of at least (PS_MIN_DELTA + 1), in units of 0.5 dB, must be measured for ORDER_INTERVAL successive 20 ms intervals before a rank order based Pilot Strength Measurement Mini Message is generated.

ORDER_INTERVAL - Order interval.

The base station shall set this field to the minimum interval (in 20 ms units) during which the indicated pilot strength measurement difference greater than or equal to (PS_MIN_DELTA + 1), in units of 0.5 dB, must be measured by the mobile station in order for the mobile station to send a Pilot Strength Measurement Mini Messages when the rank order mode is enabled.

PERIODIC_FLAG - Periodic report flag.

The base station shall set this field to ‘1’ to indicate that the mobile station is to send Pilot Strength Measurement Mini Messages periodically during supplemental channel burst operations; otherwise the base station shall set this field to ‘0’.

If PERIODIC_FLAG is set to ‘1’, the base station shall include the following two-field record:

NUM_PILOTS - Number of pilots.

The base station shall set this field to the number of pilots for which the mobile station is to send Pilot Strength Measurement Mini Messages when the periodic mode is enabled.

PERIODIC_INTERVAL - Periodic interval.

The base station shall set this field to the interval (in 20 ms units) between Pilot Strength Measurement Mini Messages when the periodic mode is enabled.

THRESHOLD_FLAG - Threshold reporting flag.

The base station shall set this field to ‘1’ to indicate that the mobile station is to send Pilot Strength Measurement Mini Messages whenever a measured pilot crosses below a lower bound or exceeds an upper bound during Supplemental channel burst operations; otherwise the base station shall set this field to ‘0’.

If THRESHOLD_FLAG is set to ‘1’, the base station shall include the following five-field record:

PS_FLOOR_HIGH - Lower bound reporting high water mark.

The base station shall set this field to the high water mark for the lower bound below which the mobile station is to send Pilot Strength Measurement Mini Messages when the threshold mode is enabled.
The base station shall set this field as an unsigned binary number equal to \(- 2 \times 10 \times \log_{10} \frac{E_c}{I_{0a}}\).

**PS_FLOOR_LOW** - Lower bound reporting low water mark.

The base station shall set this field to the low water mark for the lower bound below which the mobile station is to send *Pilot Strength Measurement Mini Messages* when the threshold mode is enabled.

The base station shall set this field as an unsigned binary number equal to \(- 2 \times 10 \times \log_{10} \frac{E_c}{I_{0a}}\).

**PS_CEILING_HIGH** - Upper bound reporting high water mark.

The base station shall set this field to the high water mark for the upper bound above which the mobile station is to send *Pilot Strength Measurement Mini Messages* when the threshold mode is enabled.

The base station shall set this field as an unsigned binary number equal to \(- 2 \times 10 \times \log_{10} \frac{E_c}{I_{0a}}\).

**PS_CEILING_LOW** - Upper bound reporting low water mark.

The base station shall set this field to the low water mark for the upper bound above which the mobile station is to send *Pilot Strength Measurement Mini Messages* when the threshold mode is enabled.

The base station shall set this field as an unsigned binary number equal to \(- 2 \times 10 \times \log_{10} \frac{E_c}{I_{0a}}\).

**THRESHOLD_INTERVAL** - Threshold reporting interval.

The base station shall set this field to the interval (in 20 ms units) between *Pilot Strength Measurement Mini Messages* when the threshold reporting mode is enabled.
3.7.3.3.2.41 User Zone Reject Message

MSG_TAG: UZRM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REJECT_UZID</td>
<td>16</td>
</tr>
<tr>
<td>REJECT_ACTION_INDI</td>
<td>3</td>
</tr>
<tr>
<td>UZID.Assign_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ASSIGN_UZID</td>
<td>0 or 16</td>
</tr>
</tbody>
</table>

REJECT_UZID - Rejected User Zone identifier.
The base station shall set this field to the User Zone identifier of the User Zone rejected by the base station.

REJECT_ACTION_INDI - Rejection action indicator.
The base station shall set this field to the value shown in Table 3.7.2.3.2.29-1 corresponding to the User Zone rejection action field to identify the mobile station action.

UZID.Assign_INCL - User Zone identifier assignment included indicator.
If assigned UZID information is included, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ASSIGN_UZID - Assigned User Zone identifiers.
The base station shall set this field to the User Zone identifier of the User Zone assigned to the mobile station.
3.7.3.3.2.42 User Zone Update Message

MSG_TAG: UZUM

<table>
<thead>
<tr>
<th>Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UZID</td>
<td>16</td>
</tr>
</tbody>
</table>

UZID - User Zone identifier.

The base station shall set this field to the User Zone identifier supported by the base station.
3.7.3.3.2.43 Call Assignment Message

MSG_TAG: CLAM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESPONSE_IND</td>
<td>1</td>
</tr>
<tr>
<td>TAG</td>
<td>0 or 4</td>
</tr>
<tr>
<td>ACCEPT_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REJECT_PKTDATA_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BYPASS_ALERT_ANSWER</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SO</td>
<td>0 or 16</td>
</tr>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>USE_OLD_SERV_CONFIG</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SR_ID_RESTORE_BITMAP</td>
<td>0 or 6</td>
</tr>
<tr>
<td>ADD_CALL_INFO_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_ADD_CALL_RECORDS</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

NUM_ADD_CALL_RECORDS + 1 occurrences of the following record:

\{
  \(NUM_ADD_CALL_RECORDS + 1\)
\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD_TAG</td>
<td>0 or 4</td>
</tr>
<tr>
<td>ADD_ACCEPT_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_REJECT_PKTDATA_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ADD_SO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ADD_SO</td>
<td>0 or 16</td>
</tr>
<tr>
<td>ADD_CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>ADD_CON_REF</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>
RESPONSE_IND – Response indicator.

The base station shall set this field to ‘1’ if this message is a response to an Enhanced Origination Message from the mobile station; otherwise, the base station shall set this field to ‘0’.

TAG – Transaction identifier.

If the RESPONSE_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:

The base station shall set this field to the value of the TAG or ADD_TAG field of the Enhanced Origination Message to which this message is the response.

ACCEPT_IND – Accepted indicator.

If the RESPONSE_IND field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

If the base station accepts the call request from the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REJECT_PKTDATA_IND – Packet data service option rejection indicator.

If the ACCEPT_IND field is not included or is included and is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

The base station shall set this field to ‘1’ to indicate rejection of the packet data service option requested by the mobile station; otherwise, the base station shall set this field to ‘0’.

BYPASS_ALERT_ANSWER – Bypass alert indicator.

If the RESPONSE_IND field is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

If the mobile station is to bypass the Waiting for Order Substate and the Waiting for Mobile Station Answer Substate for this call, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

SO_INCL – Service option included indicator.

The base station shall set this field to ‘1’ if the SO field is included in this message; otherwise, it the base station shall set this field to ‘0’.

If the USE_OLD_SERV_CONFIG is included and is set to ‘1’, the base station shall set this field to ‘0’.

SO – Service option.

If the SO_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 service option number (as specified in [30]) that the base station proposes for this call.
CON_REF_INCL – Connection reference included indicator.
If the ACCEPT_IND field is not included or is included but is
set to ‘1’, the base station shall set this field to ‘1’; otherwise,
the base station shall set this field to ‘0’.
If the USE_OLD_SERV_CONFIG is included and is set to ’1’,
the base station shall set this field to ‘0’.

CON_REF – Connection reference.
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
that was/will be assigned to the service option connection
corresponding to this call.

USE_OLD_SERV_CONFIG - Use stored service option connection record(s) indicator.
This field may be used by the base station to instruct the
mobile station to use the stored service option connection record(s).
If the ACCEPT_IND field is included and is set to ‘0’, the base
station shall omit this field; otherwise, the base station shall
include this field and shall set it as follows:
If the mobile station is to restore one or more service option
connection record(s) from the stored service configuration, the
base station shall set this field to ‘1’; otherwise, the base
station shall set this field to ‘0’.

SR_ID - Service reference identifier.
If the USE_OLD_SERV_CONFIG field is not included or is
included and 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 mobile station is to restore all remaining service option
connections record from the stored service configuration, the
base station shall set this field to ‘111’; if the mobile station is
to restore more than one but not all remaining service option
connections from the stored service configuration, the base
station shall set this field to ‘000’; otherwise, the base station
shall set this field to the service reference identifier corresponding to the service option connection to be restored.

SR_ID_RESTORE_BITMAP – Bitmap of service reference identifiers to be restored.
If the SR_ID field is included and set to ‘000’, the base station
shall include this field and set it as follows; otherwise, the
base station shall omit this field.
This field consists of the subfields defined in Table 3.7.2.3.2.21-6. The base station shall set a subfield to ‘1’ to
indicate that the mobile station is to restore the service option
connection of the corresponding service reference identifier;
otherwise, the base station shall set the subfield to ‘0’.
ADD_CALL_INFO_INCLUDED – Additional call information included indicator.

If USE_OLD_SERV_CONFIG is not included, or is included and is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

- If at least one occurrence of the additional call record is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

NUM_ADD_CALL_RECORDS – Number of additional call records included.

If ADD_CALL_INFO_INCLUDED is not included or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to one less than the number of occurrences of the call records included in this message.

If NUM_ADD_CALL_RECORDS is included, the base station shall include NUM_ADD_CALL_RECORDS + 1 occurrences of the following variable-field record:

ADD_TAG – Additional transaction identifier.

- If the RESPONSE_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:

  - The base station shall set this field to the value of the TAG or ADD_TAG field of the Enhanced Origination Message to which this message is the response.

ADD_ACCEPT_IND – Additional accepted indicator.

- If the RESPONSE_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:

  - If the base station accepts the call request from the mobile station, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_REJECT_PKTDATA_IND – Additional packet data service option rejection indicator.

- If the ADD_ACCEPT_IND field is not included or is included and is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and shall set it as follows:

  - The base station shall set this field to ‘1’ to indicate rejection of the packet data service option requested by the mobile station; otherwise, the base station shall set this field to ‘0’.

ADD_SO_INCL – Additional service option included indicator.

- The base station shall set this field to ‘1’ if the ADD_SO field is included in this message; otherwise, it the base station shall set this field to ‘0’.

ADD_SO – Additional service option.
If the ADD_SO_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 service option number (as specified in [30]) that the base station proposes for this call.

ADD_CON_REF_INCL – Additional connection reference included indicator.

If the ACCEPT_IND field is not included or is included but is set to ‘1’, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ADD_CON_REF – Connection reference.

If the ADD_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 that was/will be assigned to the service option connection corresponding to this call.
### 3.7.3.3.2.44 Extended Alert With Information Message

**MSG_TAG:** EAWIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_REC</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_REC occurrences of the following record:

```plaintext
// (NUM_REC)
```

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>Type-specific fields</td>
<td>8 \times RECORD_LEN</td>
</tr>
</tbody>
</table>

```plaintext
}; (NUM_REC)
```

**CON_REF_INCL** – Connection reference included indicator.

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 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.

**NUM_REC** – Number of records.

The base station shall set this field to the number of information records included with this message.

The base station shall include NUM_REC occurrences of the following record as specified in 3.7.5.
1    RECORD_TYPE    - Information record type.
2    The base station shall set this field as specified in 3.7.5.
3    RECORD_LEN    - Information record length.
4    The base station shall set this field to the number of octets in
5    the type-specific fields included in this record.
6    Type-specific fields - Type-specific fields.
7    The base station shall include type-specific fields as specified
8    in 3.7.5.
3.7.3.3.2.45 Extended Flash With Information Message

MSG_TAG: EFWIM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CON_REF</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_REC</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_REC occurrences of the following record:

\[
\{(NUMREC)\]

\[
\begin{array}{|l|c|}
\hline
\text{RECORD_TYPE} & 8 \\
\text{RECORD_LEN} & 8 \\
\text{Type-specific fields} & 8 \times \text{RECORD_LEN} \\
\hline
\end{array}
\]

\[
\} (NUMREC)
\]

CON_REF_INCL – Connection reference included indicator.

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 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.

NUM_REC – Number of records.

The base station shall set this field to the number of information records included with this message.

The base station shall include NUM_REC occurrences of the following record as specified in 3.7.5.
1 RECORD_TYPE - Information record type.

2 The base station shall set this field as specified in 3.7.5.

3 RECORD_LEN - Information record length.

4 The base station shall set this field to the number of octets in
5 the type-specific fields included in this record.

6 Type-specific fields - Type-specific fields.

7 The base station shall include type-specific fields as specified
8 in 3.7.5.
3.7.3.2.46 Security Mode Command Message

**MSG_TAG:** SMCM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>0 or 6</td>
</tr>
<tr>
<td>D_SIG_ENCRYPT_MODE</td>
<td>3</td>
</tr>
<tr>
<td>NUM_RECS</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_RECS occurrences of the following record

\{(NUM_RECS)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>UI_ENCRYPT_MODE</td>
<td>3</td>
</tr>
</tbody>
</table>

\{(NUM_RECS)\}

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>CHANGE_KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

**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_ × 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.

**D_SIG_ENCRYPT_MODE** - Dedicated channel encryption mode indicator.

The base station shall set it to signaling encryption mode, as shown in Table 3.7.4.5-1.

**NUM_REC** - Number of user information encryption records.

The base station shall set this field to the number of user information encryption records included in this message.
The base station shall include NUM_REC occurrences of the following two-field record:

- **CON_REF** - Connection reference corresponding to the service option connection requesting for encryption.
  
  If this field is included, the base station shall set this field to the connection reference of the service option connection corresponding to this user information encryption.

- **UI_ENCRYPT_MODE** - Encryption mode indicator for user information privacy.
  
  The base station shall set this field to user information encryption mode for the service option connection identified by CON_REF as shown in Table 3.7.5.7-3.

- **ENC_KEY_SIZE** - Key Size used for user information and signaling encryption.
  
  If D_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.

- **C_SIG_ENCRYPT_MODE_INCL** - Common channel signaling encryption mode included indicator.
  
  If C_SIG_ENCRYPT_MODE is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

- **C_SIG_ENCRYPT_MODE** - Common channel signaling encryption mode indicator.
  
  If C_SIG_ENCRYPT_MODE_INCL is set to ‘1’, the base station shall include this field and shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; 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.
3.7.3.3.2.47 Base Station Status Response Message

MSG_TAG: BSSRSPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAL_INFO_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>QUAL_INFO_LEN</td>
<td>3</td>
</tr>
<tr>
<td>Type-specific fields, (8 \times \text{QUAL_INFO_LEN})</td>
<td></td>
</tr>
<tr>
<td>NUM_RECORDS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_RECORDS occurrences of the following record:

\[
\begin{array}{ll}
\text{RECORD_TYPE} & 8 \\
\text{RECORD_LENGTH} & 8 \\
\text{Record type specific fields} & \text{variable} \\
\text{RESERVED} & 0-7 \text{ (as required)} \\
\end{array}
\]

QUAL_INFO_TYPE – Qualification information type.
The base station shall set this field to the QUAL_INFO_TYPE field in the corresponding Base Station Status Request Message.

QUAL_INFO_LEN – Qualification information length.
The base station shall set this field to the QUAL_INFO_LEN field in the corresponding Base Station Status Request Message.

Type-specific fields – Type-specific fields.
The base station shall set these fields to the qualification information in the corresponding Base Station Status Request Message.

NUM_RECORDS – Number of records included in this message.
The base station shall set this field to the number of occurrences of RECORD_TYPE field in this message.

The base station shall include one occurrence of the following variable-length record for each information record that is included:

RECORD_TYPE – Information record type.
The base station shall set this field to the record type value shown in Table 3.7.3.3.2.47-1 corresponding to the information record included.
### Table 3.7.3.3.2.47-1. Base Station Status Response Information Record

#### Types

<table>
<thead>
<tr>
<th>Information Record Requested</th>
<th>Record Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot Information</td>
<td>00000000</td>
</tr>
<tr>
<td>Reserved</td>
<td>00000001-1111111</td>
</tr>
</tbody>
</table>

- **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:
<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PILOTS</td>
<td>4</td>
</tr>
<tr>
<td>SID_NID_IND</td>
<td>1</td>
</tr>
</tbody>
</table>

NUM_PILOTS occurrences of the following record:

```plaintext
{ 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
```

- **NUM_PILOTS** - Number of Pilots reported.
  
  The base station shall set this field to the number of pilots whose information is reported in this message.

  The base station shall set this field to a number equal or greater than one.

- **SID_NID_IND** - SID, NID included indicator.
  
  The base station shall set this field to ‘1’ if SID, NID information is included in this message; otherwise, it shall set this field to ‘0’.

The base station shall include NUM_PILOTS occurrences of the following variable length record:
RECORD_LEN - Record Length.
The base station shall set this field to the length in octets of this record.

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.

BASE_ID - Base station identification.
The base station shall set this field to the Base Station identification number corresponding to this pilot.

SID_NID_INCL - SID, NID included indicator.
If the SID_NID_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:
If this is the first pilot included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field as follows:
If the SID and NID of this pilot are same as the SID and NID of the previous pilot, the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘1’.

SID - System identification.
If the SID_NID_INCL field is not included or is included and 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 system identification number of the system corresponding to this pilot (see 2.6.5.2).

NID - Network identification.
If the SID_NID_INCL field is not included or is included and 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 network identification number of the network corresponding to this pilot (see 2.6.5.2).
BASE_LAT_LONG_INCL - Base station LAT/LONG included indicator.

The base station shall set this field to ‘1’ if the base station LAT/LONG fields are included in this message; otherwise, the base station shall set this field to ‘0’.

BASE_LAT - Base station latitude.

If the BASE_LAT_LONG_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 its latitude in units of 0.25 second, expressed as a two's complement signed number with positive numbers signifying North latitudes. The base station shall set this field to a value in the range -1296000 to 1296000 inclusive (corresponding to a range of -90° to +90°).

BASE_LONG - Base station longitude.

If the BASE_LAT_LONG_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 its longitude in units of 0.25 second, expressed as a two's complement signed number with positive numbers signifying East longitude. The base station shall set this field to a value in the range -2592000 to 2592000 inclusive (corresponding to a range of -180° to +180°).

RESERVED_1 - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the pilot specific record equal to an integer number of octets. The base station shall set these bits to ‘0’.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the record equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.3.2.48 Authentication Request Message

**MSG_TAG: AUREQM**

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RANDA</td>
<td>128</td>
</tr>
<tr>
<td>CON_SQN</td>
<td>48</td>
</tr>
<tr>
<td>AMF</td>
<td>16</td>
</tr>
<tr>
<td>MAC_A</td>
<td>64</td>
</tr>
</tbody>
</table>

**RANDA** – The Random Challenge Number. The base station shall set this field to the value of the Random Challenge Number in the authentication vector.

**CON_SQN** – Concealed Sequence Number. The base station shall set this field to the value of the Concealed Sequence Number in the authentication vector.

**AMF** – Authentication Management Field. The base station shall set this field to the value of the Authentication Management Field in the authentication vector.

**MAC_A** – Message Authentication Code. The base station shall set this field to the value of the Message Authentication Code in the authentication vector.
1 3.7.3.3.2.49 Rate Change Message
2 MSG_TAG: RATCHGM
<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_TIME</td>
<td>1</td>
</tr>
<tr>
<td>ACTION_TIME</td>
<td>6</td>
</tr>
<tr>
<td>REV_CQICH_RATE_CHANGE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FULL_CI_FEEDBACK_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_CQICH_REPS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>CHM_SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_RECS</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

If NUM_RECS is included NUM_RECS +1 occurrences of the following variable length record:

\[
\{(\text{NUM_RECS} + 1)\]

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

\[
\{(\text{NUM_RECS} + 1)\]

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_ACKCH_RATE_CHANGE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_ACKCH_REPS</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_PDCH_MAX_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_AUTO_TPR</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_NUM_ARQ_ROUNDS_NORMAL</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_PDCH_NUM_ARQ_ROUNDS_BOOST</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>
USE_TIME - Use action time indicator.
This field indicates whether an explicit action time is specified in this order.
If an explicit action time is specified in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

ACTION_TIME - Action time.
If the USE_TIME field is set to ‘1’, the base station shall set this field to the System Time minus FRAME_OFFSET × 1.25 ms, in units of 80 ms (modulo 64), at which the rate change is to take effect. If the USE_TIME field is set to ‘0’, the base station shall set this field to ‘000000’.

REV_CQICH_RATE_CHANGE_INCL - Reverse Channel Quality Indicator Channel rate change included indicator.
If the base station determines to change the rate of R-CQICH, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FULL_CI_FEEDBACK_IND - Full C/I feedback rate indicator.
If REV_CQICH_RATE_CHANGE_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:
If the mobile station is to send full C/I feedback every 1.25 ms, the base station shall set this field to ‘1’. If the mobile station is to transmit full C/I feedback every 20 ms, the base station shall set this field to ‘0’.

REV_CQICH_REPS - Reverse Channel Quality Indicator Channel repetition factor.
If REV_CQICH_RATE_CHANGE_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field according to the Table 3.7.3.3.2.49-1.

<table>
<thead>
<tr>
<th>REV_CQICH_REPS</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>1</td>
</tr>
<tr>
<td>01</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

SWITCHING_PARMS_INCL - R-CQICH switching parameters included indicator.
If the REV_CQICH_RATE_CHANGE_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:
The base station shall set this field to ‘1’ if the parameters for R-CQICH soft and softer switching are included in this message; otherwise, the base station shall set this field to ‘0’.

NUM_SOFT_SWITCHING_FRAMES - Number of frames for R-CQICH soft switching.

If SWITCHING_PARMS_INCL is not included or included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in different groups.

NUM_SOFTER_SWITCHING_FRAMES - Number of frames for R-CQICH softer switching.

If SWITCHING_PARMS_INCL is not included or included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station is to transmit the cell switch sequence on the R-CQICH channel when it switches between two pilots which are in the same group.

CHM_SWITCHING_PARMS_INCL - Control Hold Mode fields included indicator.

If SWITCHING_PARMS_INCL is omitted or equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the switching parameters for Control Hold Mode are included; otherwise, the base station shall set this field to ‘0’.

NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft switching while in Control Hold.

If CHM_SWITCHING_PARMS_INCL is not included or included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in different groups.

NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer switching while in Control Hold.
If CHM_SWITCHING_PARMS_INCL is not included or included and set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell switching period, in units of 20 ms, minus one, during which the mobile station, while in Control Hold, is to transmit the cell switch sequence on the R-CQICH when it switches between two pilots which are in the same group.

**RL_CQICH_ATT_ADJ_GAIN_INCL** - Attribute adjustment gain for Reverse Channel Quality Indicator Channel included indicator.

If REV_CQICH_RATE_CHANGE_INCL is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If the attribute adjustment gain for Reverse Channel Quality Indicator Channel is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**NUM_RECS** - Number of the records.

If RL_CQICH_ATT_ADJ_GAIN_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field.

Otherwise, the base station shall set this field to one less than the number of occurrences of the records included in this message.

If NUM_RECS is included in this message, the base station shall include NUM_RECS+1 occurrences of the following record:

**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** - Attribute adjustment gain for the high power level of Reverse Channel Quality Indicator Channel transmission 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 the high power level of Reverse Channel Quality Indicator Channel transmission for the corresponding rate indicated in REV_CQICH_REPS.
If RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL is not included or included but 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 RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH. The base station shall set the value in the range from –40 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_CQICH_ATT_ADJ_GAIN_LOW_INCL - Attribute adjustment gain for Reverse Channel Quality Indicator Channel transmission Included Indicator.

If the attribute adjustment gain for the low 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_LOW - Attribute adjustment gain for the low power level of Reverse Channel Quality Indicator Channel transmission for the corresponding rate indicated in REV_CQICH_REPS.

If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is not included or included but 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 RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH. The base station shall set the value in the range from –16 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH.

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_ACKCH_RATE_CHANGE_INCL - Reverse Acknowledgment Channel rate change included indicator

If the base station determines to change the rate of R-ACKCH, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
If `REV_CQICH_RATE_CHANGE_INCL` is set to ‘0’, `REV_ACKCH_RATE_CHANGE_INCL` shall be set to ‘1’.

**REV_ACKCH_REPS** - Reverse Acknowledgment Channel repetition factor.

If `REV_ACKCH_RATE_CHANGE_INCL` is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it according to the Table 3.7.3.3.2.49-2.

<table>
<thead>
<tr>
<th><strong>REV_ACKCH_REPS</strong></th>
<th><strong>Value</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>‘00’</td>
<td>1</td>
</tr>
<tr>
<td>‘01’</td>
<td>2</td>
</tr>
<tr>
<td>‘10’</td>
<td>4</td>
</tr>
<tr>
<td>‘11’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**REV_PDCH_MAX_PARMS_INCL** - Reverse Packet Data Channel maximum traffic to pilot ratio included indicator.

The base station shall set this field to ‘1’ if the Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission is included; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_MAX_AUTO_TPR** - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

If `REV_PDCH_MAX_PARMS_INCL` is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

The base station shall set this field to values in the range 0 to 18 dB inclusive in units of 0.125 dB.

**REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET** - Maximum Allowed Reverse PDCH encoder packet size.

If `REV_PDCH_MAX_PARMS_INCL` is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum size encoder packet that the mobile station is allowed to use. (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, and 18456 bits respectively.
**REV_PDCH_PARMS_INCL** - Reverse Packet Data Channel related parameters included indicator.

The base station shall set this field to ‘1’ if the R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

**REV_PDCH_NUM_ARQ_ROUNDS_NORMAL** - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

**REV_PDCH_NUM_ARQ_ROUNDS_BOOST** - Maximum number of allowed HARQ retransmissions on the Reverse PDCH in the boosted mode.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).
### 3.7.3.3.2.50 In-Traffic BCMC Service Parameters Message

**MSG_TAG:** ITBSPM

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO_REQ_TRAF_ALLOWED_IND</td>
<td>1</td>
</tr>
<tr>
<td>BCMC_ON_IDLE_SUP_IND</td>
<td>1</td>
</tr>
<tr>
<td>AUTH_SIGATURE_REQUIRED</td>
<td>1</td>
</tr>
<tr>
<td>NON_DEFAULT_VALUE_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_REQUIRED</td>
<td>1</td>
</tr>
<tr>
<td>NON_DEFAULT_VALUE_INCLUDED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ACH_TIME_STAMP_SHORT_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_LONG_LENGTH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>TIME_STAMP_UNIT</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>8</td>
</tr>
</tbody>
</table>

**NUM_BCMC_PROGRAMS** plus one occurrences of the following variable length record:

\[
(\text{NUM_BCMC}\_\text{PROGRAMS+1})
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>BCMC_PROGRAM_ID_LEN+1</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
</tbody>
</table>

**NUM_FLOW_DISCRIMINATOR**+1 or 1 occurrences of the following variable length record:

\[
(\text{NUM_FLOW_DISCRIMINATOR+1})\ or\ 1
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
<tr>
<td>AUTH_SIGNATURE_REQ_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_FLOW_ON_TRAFFIC_IDLE_IND</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

\[
(\text{NUM_FLOW_DISCRIMINATOR+1})\ or\ 1
\]

\[
(\text{NUM_BCMC}\_\text{PROGRAMS+1})
\]

3.7.3.3.2.50 AUTO_REQ_TRAF_ALLOWED_IND - Autonomous BCMC request on traffic channel allowed indicator.
The base station shall set this field to ‘1’ to indicate that the mobile station is allowed to request for a BCMC flow on traffic channel that is not included in this message; otherwise, the base station shall set this field to ‘0’.

BCMC_ON_IDLE_SUP - BCMC on idle state supported indicator.

The base station shall set this field to ‘1’ to indicate that the BCMC feature is supported on idle state; otherwise, the base station shall set this field to ‘0’.

BCMC_FLOWS_ON_TRAFFIC_ONLY_IND - BCMC flows on traffic channel only indicator.

If the BCMC_ON_IDLE_SUP_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:

The base station shall set this field to ‘1’ if this message contains information only about BCMC flows on traffic channel; otherwise, the base station shall set this field to ‘0’.

AUTH_SIGNATURE_REQUIRED - Authorization signature required indication.

The base station shall set this field to ‘1’ to indicate that the mobile station is to include the authorization signature in the Origination Message, Page Response Message and Enhanced Origination Message that include BCMC_FLOW_ID (see 2.6.13.11) for BCMC flows indicated in this message is included in that message; otherwise, the base station shall set this field to ‘0’.

NON_DEFAULT_VALUE_INCLUDED - Non-default values for Authorization signature included indicator.

If the AUTH_SIGNATURE_REQUIRED 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:

The base station shall set this field to ‘0’ if default values are to be used to generate the Authorization signature; otherwise, the base station shall set this field to ‘1’.

ACH_TIME_STAMP_SHORT_LENGTH - Length of time stamp for use on r-csch.

If the NON_DEFAULT_VALUE_INCLUDED field is not included or is included and 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 length of the time stamp, in units of bits, included on the Origination Message, Page Response Message and Enhanced Origination Message.

TIME_STAMP_LONG_LENGTH - Length of time stamp.

If the NON_DEFAULT_VALUE_INCLUDED field is not included or is included and 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 length of the time stamp, in units of bits, used to generate the Authorization signature.

**TIME_STAMP_UNIT** - Unit for time stamp length.

If the `NON_DEFAULT_VALUE_INCLUDED` field is not included or is included and 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 unit of the time stamp length field as follows: the unit of the time stamp field shall be $2^{(\text{value of this field})}$.

**NUM_BCMC_PROGRAMS** - Number of BCMC Programs.

The base station shall set this field to the number of BCMC programs available in this base station in any one of the frequencies `minus one`.

The base station shall not set this field to '000000'.

The base station shall include `NUM_BCMC_PROGRAMS plus one` occurrences of the following variable length record:

**BCMC_PROGRAM_ID_LEN** - Length of BCMC_PROGRAM_ID field

The base station shall set this field to one less than the length in bits of the BCMC_PROGRAM_ID of this program.

**BCMC_PROGRAM_ID** - BCMC program Identifier

The length of this field shall be one more than the value of `BCMC_PROGRAM_ID_LEN` bits.

The base station shall set this field to the BCMC program identifier of this program.

**BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

The base station shall set this field to the length in bits of the BCMC_FLOW_DISCRIMINATOR of this program.

**NUM_FLOW_DISCRIMINATOR** - Number of BCMC flow discriminators

The length of this field shall be determined by the value of the `BCMC_FLOW_DISCRIMINATOR_LEN` as follows: if `BCMC_FLOW_DISCRIMINATOR_LEN` is set to '000', this field is omitted; otherwise, the length of this field shall be `BCMC_FLOW_DISCRIMINATOR_LEN` bits.

The base station shall set this field to the number of flow discriminators included for this program `minus one`.

If `NUM_FLOW_DISCRIMINATOR` field is included, the base station shall include `NUM_FLOW_DISCRIMINATOR+1` occurrences of the following variable length record; otherwise, the base station shall include 1 occurrence of the following variable length record:

**BCMC_FLOW_DISCRIMINATOR** - BCMC flow discriminator
The length of this field shall be determined by the value of the
BCMC_FLOW_DISCRIMINATOR_LEN as follows: if
BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field
is omitted; otherwise, the length of this field shall be
BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the BCMC flow
discriminator of this flow.

AUTH_SIGNATURE_REQ_IND - Authorization signature required indicator

If the AUTH_SIGNATURE_REQUIRED 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:

The base station shall set this field to ‘1’ if the mobile station is to include the authorization signature in the Origination Message, Page Response Message, and Enhanced Origination Message for this BCMC flow; otherwise, the base station shall set this field to ‘0’.

BCMC_FLOW_ON_TRAFFIC_IDLE_IND - BCMC flow on traffic state or idle state supported indicator.

If the BCMC_FLOWS_ON_TRAFFIC_ONLY_IND field is not included or is included and set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field as specified in Table 3.7.3.3.2.50-1 to indicate the availability of this flow in the traffic state or idle state.

Table 3.7.3.3.2.50-1. BCMC Flow Availability

<table>
<thead>
<tr>
<th>BCMC_FLOW_ON_TRAFFIC_IDLE_IND (Binary)</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Available in Idle State only</td>
</tr>
<tr>
<td>01</td>
<td>Available in Traffic State only</td>
</tr>
<tr>
<td>10</td>
<td>Available in both Idle State and Traffic State</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
3.7.4 Orders

Order Messages are sent by the base station on the f-csch and the f-dsch. The general PDU format used on the f-csch is defined in 3.7.2.3.2.7, and the general PDU format used on the f-dsch is defined in 3.7.3.3.2.1. There are many specific types of Order Messages, as shown in Table 3.7.4-1.

The base station may send on the f-csch any type of order shown in Table 3.7.4-1 with a ‘Y’ in the first column, but shall not send on the f-csch any type of order with an ‘N’ in the first column. The base station may send on the f-dsch any type of order shown in Table 3.7.4-1 with a ‘Y’ in the second column, but shall not send on the f-dsch any type of order with an ‘N’ in the second column.

An order consists of a 6-bit order code and zero or more order-specific fields. The base station shall set the ORDER field in the Order Message to the order code shown in Table 3.7.4-1 corresponding to the type of order being sent.

If the order qualification code in the fourth column of Table 3.7.4-1 is ‘00000000’ and there are no other additional fields as shown by an ‘N’ in the sixth column, the base station shall include no order qualification code or other order-specific fields in the Order Message. The order qualification code of such a message is implicitly ‘00000000’.

If the order qualification code is not ‘00000000’ and there are no other additional fields as shown in Table 3.7.4-1 by an ‘N’ in the sixth column, the base station shall include the order qualification code as the only order specific field in the Order Message.

If there are other additional fields as shown in Table 3.7.4-1 by a ‘Y’ in the sixth column, the base station shall include order-specific fields as specified in the corresponding subsection of this section.
Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch

(Part 1 of 4)

<table>
<thead>
<tr>
<th>f-csch Order</th>
<th>f-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>ACTION_TIME can be specified</th>
<th>Additional Fields other than ORDQ</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>000001</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Abbreviated Alert Order</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>000010</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>All</td>
<td>Base Station Challenge Confirmation Order (see 3.7.4.1)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>000011</td>
<td>00000nnn</td>
<td>Y</td>
<td>N</td>
<td>All</td>
<td>Message Encryption Mode Order (where nn is the mode per Table 3.7.2.3.2.8-2)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>000100</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Reorder Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>000101</td>
<td>000nnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Parameter Update Order (where ‘nnnn’ is the Request Number)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>000110</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Audit Order</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>001001</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Intercept Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>001010</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Maintenance Order</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010000</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Base Station Acknowledgment Order (see [4])</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010001</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Pilot Measurement Request Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010011</td>
<td>Nnnnnnnn (in the range of 00000001 to 11111111)</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
<td>Periodic Pilot Measurement Request Order (see 3.7.4.6)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010010</td>
<td>0001nnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Lock Until Power-Cycled Order (where nnnn is the lock reason)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010010</td>
<td>0010nnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Maintenance Required Order (where nnnn is the maintenance reason)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>010010</td>
<td>11111111</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Unlock Order</td>
</tr>
</tbody>
</table>

10 P_REV_IN_USE equal to “All” implies all values applicable to the Band Class.
### Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch

(Part 2 of 4)

<table>
<thead>
<tr>
<th>f-csch Order</th>
<th>f-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>ACTION_ TIME can be specified</th>
<th>Additional Fields other than ORDQ</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Y</td>
<td>010011</td>
<td>000000000</td>
<td>Y</td>
<td>Y</td>
<td>&lt; 7</td>
<td>Service Option Request Order (Band Class 0 only) (see 3.7.4.2)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010100</td>
<td>000000000</td>
<td>Y</td>
<td>Y</td>
<td>&lt; 7</td>
<td>Service Option Response Order (Band Class 0 only; see 3.7.4.3)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010101</td>
<td>000000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Release Order (no reason given)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>010101</td>
<td>000000010</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Release Order (indicates that requested service option is rejected)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010110</td>
<td>000000000</td>
<td>N</td>
<td>N</td>
<td>≥ 6</td>
<td>Outer Loop Report Request Order</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>000000000</td>
<td>Y</td>
<td>N</td>
<td>All</td>
<td>Long Code Transition Request Order (request public)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>010111</td>
<td>000000001</td>
<td>Y</td>
<td>N</td>
<td>All</td>
<td>Long Code Transition Request Order (request private)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011001</td>
<td>0000nnnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Continuous DTMF Tone Order (where the tone is designated by ‘nnnn’ as defined in Table 2.7.1.3.2.4-4)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011001</td>
<td>11111111</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Continuous DTMF Tone Order (stop continuous DTMF tone)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011010</td>
<td>nnnnnnnnnn</td>
<td>N</td>
<td>N</td>
<td>&lt; 8</td>
<td>Status Request Order (Band Class 0 only; see 3.7.4.4)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>000000000</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Registration Accepted Order (ROAM_INDI not included; see 3.7.4.5)</td>
</tr>
</tbody>
</table>
Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch
(Part 3 of 4)

<table>
<thead>
<tr>
<th>f-csch Order</th>
<th>f-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>ACTION_ TIME can be specified</th>
<th>Additional Fields other than ORDQ</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>00000001</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Registration Request Order</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>00000010</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Registration Rejected Order</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>00000100</td>
<td>N</td>
<td>N</td>
<td>1, ≥ 4</td>
<td>Registration Rejected Order (delete TMSI)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>00001011</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
<td>Registration Accepted Order (ROAM_INDI included but the signaling encryption related fields are not included; see 3.7.4.5)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011011</td>
<td>00001111</td>
<td>N</td>
<td>Y</td>
<td>≥ 7</td>
<td>Registration Accepted Order (ROAM_INDI and the signaling encryption related fields are included; see 3.7.4.5)</td>
</tr>
<tr>
<td>N</td>
<td>Y</td>
<td>011101</td>
<td>nnnnnnnn</td>
<td>Y</td>
<td>N</td>
<td>&lt; 7</td>
<td>Service Option Control Order (Band Class 0 only) (the specific control is designated by ‘nnnnnnnn’ as determined by each service option)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>011110</td>
<td>nnnnnnnn</td>
<td>N</td>
<td>N</td>
<td>All</td>
<td>Local Control Order (the specific order is designated by ‘nnnnnnnn’ as determined by each system)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>011111</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>≥ 6</td>
<td>Slotted Mode Order (transition to the slotted mode operation.)</td>
</tr>
</tbody>
</table>
Table 3.7.4-1. Order and Order Qualification Codes Used on the f-csch and the f-dsch
(Part 4 of 4)

<table>
<thead>
<tr>
<th>f-csch Order</th>
<th>f-dsch Order</th>
<th>Order Code, ORDER (binary)</th>
<th>Order Qualification Code, ORDQ (binary)</th>
<th>ACTION_ TIME can be specified</th>
<th>Additional Fields other than ORDQ</th>
<th>P_REV_IN_USE</th>
<th>Name/Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Y</td>
<td>100000</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
<td>Retry Order (indicates that the requested operation is rejected and retry delay is included, see 3.7.4.7)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>100001</td>
<td>00000000</td>
<td>Y</td>
<td>N</td>
<td>≥ 7</td>
<td>Base Station Reject Order (indicates that the base station can not decrypt an Origination Message or Reconnect Message with ORIG_IND set to ‘1’ from the mobile station)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>100001</td>
<td>00000001</td>
<td>Y</td>
<td>N</td>
<td>≥ 7</td>
<td>Base Station Reject Order (indicates that the base station can not decrypt any message (other than an Origination Message or Reconnect Message with ORIG_IND set to ‘1’) from the mobile station)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>100001</td>
<td>00000010</td>
<td>Y</td>
<td>Y</td>
<td>≥ 10</td>
<td>Base Station Reject Order (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)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>100010</td>
<td>00000000</td>
<td>N</td>
<td>N</td>
<td>≥ 10</td>
<td>Transit to Idle Order (indicates that the mobile station is going to transit to the Idle State from the System Access Substate upon reception of this order)</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>100011</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
<td>BCMC Order (see 3.7.4.10)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>100100</td>
<td>00000000</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
<td>Fast Call Setup Order (indicates base station request for mobile station to operate in reduced slot cycle-fast call setup mode, see 3.7.4.11)</td>
</tr>
<tr>
<td>Y</td>
<td>N</td>
<td>100100</td>
<td>00000001</td>
<td>N</td>
<td>Y</td>
<td>≥ 11</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---------</td>
<td>----------</td>
<td>---</td>
<td>---</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Fast Call Setup Order* (indicates base station response to mobile station’s request to operate in **reduced slot cycle fast call setup** mode, see 3.7.4.11)

<table>
<thead>
<tr>
<th>Y</th>
<th>Y</th>
<th>100101</th>
<th>00000000</th>
<th>N</th>
<th>Y</th>
<th>≥ 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Service Status Order* (indicates status of requested services; see 3.7.4.12)

<table>
<thead>
<tr>
<th>Y</th>
<th>Y</th>
<th>100110</th>
<th>00000001</th>
<th>N</th>
<th>Y</th>
<th>≥ 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Location Services Order* (indicates mobile station is to release current location services session(s), see 3.7.4.13)

<table>
<thead>
<tr>
<th>N</th>
<th>Y</th>
<th>100111</th>
<th>00000000</th>
<th>N</th>
<th>N</th>
<th>≥ 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Shared Channel Configuration Order* (indicates R-FCH assignment)

<table>
<thead>
<tr>
<th>N</th>
<th>Y</th>
<th>100111</th>
<th>00000001</th>
<th>N</th>
<th>N</th>
<th>≥ 11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Shared Channel Configuration Order* (indicates R-FCH release)

All other codes are reserved.
3.7.4.1 Base Station Challenge Confirmation Order

The *Base Station Challenge Confirmation Order* can be sent on either the f-csch or on the f-dsch.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>AUTHBS</td>
<td>18</td>
</tr>
<tr>
<td>RESERVED</td>
<td>6</td>
</tr>
</tbody>
</table>

- **ORDQ** - Order qualification code. The base station shall set this field to ‘00000000’.
- **AUTHBS** - Challenge response. The base station shall set this field as specified in 2.3.12.1.5.
- **RESERVED** - Reserved bits. The base station shall set this field to ‘000000’.
3.7.4.2 Service Option Request Order

The *Service Option Request Order* can be sent only on the f-dsch.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
</tbody>
</table>

- **ORDQ** - Order qualification code. The base station shall set this field to ‘00000000’.
- **SERVICE_OPTION** - Service option. The base station shall set this field to the service option code shown in [30], corresponding to the requested or alternative service option.
3.7.4.3 Service Option Response Order

The *Service Option Response Order* can be sent only on the f-dsch.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
</tbody>
</table>

**ORDQ** - Order qualification code.

The base station shall set this field to ‘00000000’.

**SERVICE_OPTION** - Service option.

The base station shall set this field to the service option code shown in [30], corresponding to the accepted service option, or to ‘0000000000000000’ to reject the last service option requested by the mobile station.
3.7.4.4 Status Request Order

The *Status Request Order* can be sent only on the f-dsch. The ORDQ field of the *Status Request Order* specifies the information record to be returned by the mobile station in the *Status Message*.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
</tbody>
</table>

**Order Specific Field**

<table>
<thead>
<tr>
<th>Information Record Requested</th>
<th>ORDQ (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserved</td>
<td>00000110</td>
</tr>
<tr>
<td>Call Mode</td>
<td>00000111</td>
</tr>
<tr>
<td>Terminal Information</td>
<td>00001000</td>
</tr>
<tr>
<td>Roaming Information</td>
<td>00001001</td>
</tr>
<tr>
<td>Security Status</td>
<td>00001010</td>
</tr>
<tr>
<td>IMSI</td>
<td>00001100</td>
</tr>
<tr>
<td>ESN</td>
<td>00001101</td>
</tr>
<tr>
<td>IMSI_M</td>
<td>00001110</td>
</tr>
<tr>
<td>IMSI_T</td>
<td>00001111</td>
</tr>
</tbody>
</table>

All other ORDQ values are reserved.

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).
3.7.4.5 Registration Accepted Order

The Registration Accepted Order can be sent only on the f-csch.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>ROAM_INDI</td>
<td>0 or 8</td>
</tr>
<tr>
<td>C_SIG_ENCRYPT_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>ENC_KEY_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>MSG_INT_INFO_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>CHANGE_KEYS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>USE_UAK</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

**ORDQ** - Order qualification code.

If only ORDQ is included in the order, the base station shall set this field to ‘00000000’. If only ORDQ and ROAM_INDI are included in the order, the base station shall set this field to ‘00000101’. If ORDQ, ROAM_INDI, and the signaling encryption related fields are included in the order, the base station shall set this field to ‘00000111’.

**ROAM_INDI** - Roaming display indication.

If ORDQ is set to ‘00000000’, the base station shall omit this field.

If ORDQ is set to ‘00000101’ or ‘00000111’, 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 it to the appropriate ROAM_INDI code corresponding to the MS roaming condition. These values are defined in [30].

**C_SIG_ENCRYPT_MODE** - Common channel signaling encryption mode 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.

The base station shall set it to the common channel signaling encryption mode, as shown in Table 3.7.4.5-1; otherwise the base station shall omit this field.
<table>
<thead>
<tr>
<th>C_SIG_ENCRYPT_MOD E Field (binary)</th>
<th>Encryption Mode Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Common Channel Signaling encryption disabled</td>
</tr>
<tr>
<td>001</td>
<td>Enhanced Cellular Message Encryption Algorithm enabled</td>
</tr>
<tr>
<td>010</td>
<td>Rijndael Encryption Algorithm enabled</td>
</tr>
<tr>
<td>011 - 111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
Table 3.7.4.5-1 (Part 2 of 2). Signaling Message Encryption Modes

<table>
<thead>
<tr>
<th>D_SIG_ENCRYPT_MODE Field (binary)</th>
<th>Encryption Mode Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If D_SIG_ENCRYPT_MODE is included and is set to ‘000’ in a Channel Assignment Message or Extended Channel Assignment Message, 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 is included and is set to ‘000’ in a Security Mode Command Message, General Handoff Direction Message or Universal Handoff Direction Message, the mobile station is to disable dedicated channel Signaling encryption.</td>
</tr>
<tr>
<td>001</td>
<td>Enhanced Cellular Message Encryption Algorithm enabled</td>
</tr>
<tr>
<td>010</td>
<td>Rijndael Encryption Algorithm enabled</td>
</tr>
<tr>
<td>011 - 111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

ENC_KEY_SIZE – Key size used for encryption

If C_SIG_ENCRYPT_MODE is included and set to ‘001’, ‘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

<table>
<thead>
<tr>
<th>ENC_KEY_SIZE (binary)</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Reserved</td>
</tr>
<tr>
<td>001</td>
<td>64 bits</td>
</tr>
<tr>
<td>010</td>
<td>128 bits</td>
</tr>
<tr>
<td>011-111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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.

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 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 ‘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 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:

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.

**RESERVED** – Reserved bits.

The base station shall add reserved bits as needed in order to make the total length of the fields included in this order equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.4.6 Periodic Pilot Measurement Request Order

The *Periodic Pilot Measurement Request Order* can be sent only on the f-dsch.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>MIN_PILOT_PWR_THresh</td>
<td>5</td>
</tr>
<tr>
<td>MIN_PILOT_EC_Io_Threshold</td>
<td>5</td>
</tr>
<tr>
<td>INCL_SETPT</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>

**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 ‘11111110’ 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 ‘11111111’ 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:

\[
\left\lceil \frac{(10 \times \log_{10}(\text{pilot}_{\text{ec}}_{\text{thresh}}) + 120)}{2} \right\rceil
\]

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_Io_0_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\(_o\) threshold, expressed as an unsigned binary number equal to:

\[
\left\lfloor -20 \times \log_{10} \text{pilot}_{\text{streng}}_{\text{thresh}} \right\rfloor
\]
where `pilot_streng_thresh` is the threshold of the total received $E_{c}/I_{0}$ of the pilots in Active Set (see 2.6.6.2.2) below which the mobile station is to send the pilot strength measurements periodically to the base station.

<table>
<thead>
<tr>
<th>INCL_SETPT</th>
<th>Include Setpoint information indicator.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The base station shall set this field to ‘1’ to indicate that the mobile station shall include outer loop $E_{b}/N_{t}$ setpoint information in the <em>Periodic Pilot Strength Measurement Message</em>; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>RESERVED</td>
<td>Reserved bits.</td>
</tr>
<tr>
<td></td>
<td>The base station shall set this field to ‘00000’.</td>
</tr>
</tbody>
</table>
3.7.4.7 Retry Order

The *Retry Order* can be sent on either the f-csch or on the f-dsch to indicate the requested service is rejected and specify the retry delay.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>RETRY_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>RETRY_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>5</td>
</tr>
</tbody>
</table>

**ORDQ** - Order qualification code.

The base station shall set this field to ‘00000000’.

**RETRY_TYPE** - Retry delay type.

The base station shall set this field specified as in Table 3.7.4.7-1.
### Table 3.7.4.7-1 Retry Delay Type

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Retry Type</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Clear all</td>
<td>The Retry Order is used to clear any existent retry delay</td>
</tr>
<tr>
<td>001</td>
<td>Origination</td>
<td>The Retry Order specifies the RETRY_DELAY for a Packet Data Origination Message, Reconnect Message, or Enhanced Origination Message</td>
</tr>
<tr>
<td>010</td>
<td>Resource Request</td>
<td>The Retry Order specifies the RETRY_DELAY for a Resource Request Message or Resource Request Mini Message</td>
</tr>
<tr>
<td>011</td>
<td>Supplemental Channel Request</td>
<td>The Retry Order specifies the RETRY_DELAY for a Supplemental Channel Request Message or Supplemental Channel Request Mini Message</td>
</tr>
<tr>
<td>100</td>
<td>Short Data Burst</td>
<td>The Retry Order specifies the RETRY_DELAY for Short Data Burst(^{11}) (see [30], [42])</td>
</tr>
<tr>
<td>101</td>
<td>Origination and Short Data Burst</td>
<td>The Retry Order specifies the RETRY_DELAY for both Short Data Burst (see [30], [42]) and Packet Data Origination Message, Reconnect Message, or Enhanced Origination Message</td>
</tr>
<tr>
<td>100-111</td>
<td>Reserved</td>
<td></td>
</tr>
</tbody>
</table>

---

\(^{11}\) Short Data Burst can be included in *Data Burst Message* or *Reconnect Message*
If RETRY_TYPE is set to ‘001’, the base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.7-2, during which the mobile station is not permitted to send an Origination Message, Reconnect Message, or an Enhanced Origination Message with a Packet Data Service Option. 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’

<table>
<thead>
<tr>
<th>Bits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 (MSB)</td>
<td>Unit for the Retry Delay</td>
</tr>
<tr>
<td></td>
<td>‘0’ – unit is 1s</td>
</tr>
<tr>
<td></td>
<td>‘1’ – unit is 1 min</td>
</tr>
<tr>
<td>6 to 0</td>
<td>Retry Delay interval</td>
</tr>
</tbody>
</table>

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.

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.

---

12 Packet data service option refers to SO 60, SO 61 or any service option in Service Option Group 4 and 5 in [30]
The base station shall set this field to ‘00000’.
1 3.7.4.8 Reserved.
3.7.4.9 Base Station Reject Order

The *Base Station Reject Order* can be sent on either the f-csch or on the f-dsch to indicate the base station does not accept a message from a mobile station due to encryption error, message integrity error, or both.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>REJECT_REASON</td>
<td>4</td>
</tr>
<tr>
<td>REJECTED_MSG_TYPE</td>
<td>8</td>
</tr>
<tr>
<td>REJECTED_MSG_SEQ</td>
<td>3</td>
</tr>
</tbody>
</table>

**ORDQ** - Order qualification code.

The base station shall set this field to ‘00000010’.

**REJECT_REASON** - Reason of rejection.

The base station shall set this field as specified in Table 3.7.4.9-1.

**Table 3.7.4.9-1 Reject Reason Type**

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>Reject Reason</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>The MACI field is missing</td>
<td>The <em>Base Station Reject Order</em> is used to indicate that the MACI field required in the message is missing.</td>
</tr>
<tr>
<td>0001</td>
<td>The MACI field is present but invalid</td>
<td>The <em>Base Station Reject Order</em> is used to indicate that the MACI field is present but is invalid.</td>
</tr>
<tr>
<td>0010</td>
<td>The security sequence number is invalid</td>
<td>The <em>Base Station Reject Order</em> is used to indicate that the security sequence number is invalid.</td>
</tr>
<tr>
<td>0011</td>
<td>The base station has failed to decrypt an encrypted message</td>
<td>The <em>Base Station Reject Order</em> is used to indicate that the base station has failed to decrypt an encrypted message from the mobile station.</td>
</tr>
<tr>
<td>0100-1111</td>
<td>Reserved</td>
<td>Reserved</td>
</tr>
</tbody>
</table>
REJECTED_MSG_TYPE - Message type of the rejected message.

The base station shall set this field to the value of the MSG_TYPE or the MSG_ID (see [4]) field of the message being rejected.

If the MSG_TYPE or the MSG_ID (see [4]) field is not 8 bits, the base station shall set the least significant bits of this field to the value of the MSG_TYPE field and set all the remaining bits to '0'.

REJECTED_MSG_SEQ - The Layer 2 message sequence number (see [4]) of the rejected message.

The base station shall set this field to the Layer 2 message sequence number (see [4]) of the rejected message.
3.7.4.10 BCMC Order

The BCMC Order is sent on f-csch or f-dsch to provide information on the requested BCMC flows.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>ALL_BCMC_FLOWS_IND</td>
<td>1</td>
</tr>
<tr>
<td>CLEAR_ALL_RETRY_DELAY</td>
<td>0 or 1</td>
</tr>
<tr>
<td>ALL_BCMC_REASON</td>
<td>0 or 4</td>
</tr>
<tr>
<td>ALL_BCMC_RETRY_DELAY</td>
<td>0 or 8</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 6</td>
</tr>
</tbody>
</table>

If NUM_BCMC_PROGRAMS field is included, NUM_BCMC_PROGRAMS plus one occurrences of the following record:

/ (NUM_BCMC_PROGRAMS+1)

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>BCMC_PROGRAM_ID_LEN+1</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
</tbody>
</table>

NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:

/ (NUM_FLOW_DISCRIMINATOR+1) or 1

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
<tr>
<td>SAME_AS_PREVIOUS_BCMC_FLOW</td>
<td>1</td>
</tr>
<tr>
<td>CLEAR_RETRY_DELAY</td>
<td>0 or 1</td>
</tr>
<tr>
<td>BCMC_REASON</td>
<td>0 or 4</td>
</tr>
<tr>
<td>BCMC_RETRY_DELAY</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

/ (NUM_FLOW_DISCRIMINATOR+1) or 1

/ (NUM_BCMC_PROGRAMS+1)

ORDQ - Order qualification code.

The base station shall set this field to ‘00000000’.
ALL_BCMC_FLOWS_IND – All BCMC flows indicator.

The base station shall set this field to ‘1’ to indicate the ALL_BCMC_REASON applies to all flows for which mobile station is expecting a response; otherwise the base station shall set this field to ‘0’.

CLEAR_ALL_RETRY_DELAY - Clear all retry delay indicator

If ALL_BCMC_FLOWS_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 ‘1’ to indicate that the mobile station should clear all retry delays associated with each BCMC Flow; otherwise the base station shall set this field to ‘0’.

ALL_BCMC_REASON - All BCMC reason.

If ALL_BCMC_FLOWS_IND is set to ‘0’ or if CLEAR_ALL_RETRY_DELAY is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field as specified in Table 3.7.4.10-1 to indicate the purpose of this order.

Table 3.7.4.10-1 BCMC Reason

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>BCMC_REASON/ALL_BCMC_REASON</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>BCMC_FLOW_ID not available</td>
</tr>
<tr>
<td>0001</td>
<td>BCMC_FLOW_ID not transmitted</td>
</tr>
<tr>
<td>0010</td>
<td>BCMC_FLOW_ID available in idle state</td>
</tr>
<tr>
<td>0011</td>
<td>BCMC Registration Accepted; requested BCMC flow will be transmitted at a later time</td>
</tr>
<tr>
<td>0100</td>
<td>Authorization failure</td>
</tr>
<tr>
<td>0101</td>
<td>Retry later</td>
</tr>
<tr>
<td>0110-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

ALL_BCMC_RETRY_DELAY - All BCMC retry delay.
If the ALL_BCMC_FLOWS_IND is set to ‘0’ or if CLEAR_ALL_RETRY_DELAY is set to ‘1’ or if ALL_BCMC_REASON field is not included or is included and is not set to ‘0101’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.10-2, during which the mobile station is not permitted to request any BCMC flows. The base station shall not set this field to ‘00000000’.

Table 3.7.4.10-2 BCMC Retry Delay

<table>
<thead>
<tr>
<th>Bits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 (MSB)</td>
<td>Unit for the Retry Delay</td>
</tr>
<tr>
<td></td>
<td>‘0’ – unit is 1 s</td>
</tr>
<tr>
<td></td>
<td>‘1’ – unit is 1 min</td>
</tr>
<tr>
<td>6 to 0</td>
<td>BCMC Retry Delay interval</td>
</tr>
</tbody>
</table>

NUM_BCMC_PROGRAMS – Number of BCMC programs included.

If ALL_BCMC_FLOWS_IND is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the number of BCMC programs included in this message minus one.

If the NUM_BCMC_PROGRAMS field is included, the base station shall include NUM_BCMC_PROGRAMS plus one occurrences of the following record:

BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

The base station shall set this field to one less than the length in bits of the BCMC_PROGRAM_ID of this program.

BCMC_PROGRAM_ID - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.

The base station shall set this field to the BCMC program identifier of this program.

BCMC_FLOW_DISCRIMINATOR_LEN - Length of BCMC_FLOW_DISCRIMINATOR field

The base station shall set this field to the length in bits of the BCMC_FLOW_DISCRIMINATOR of this program.
NUM_FLOW_DISCRIMINATOR - Number of BCMC flow discriminators.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the number of flow discriminators included for this program minus one.

If NUM_FLOW_DISCRIMINATOR field is included, the base station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the base station shall include 1 occurrence of the following variable length record:

BCMC_FLOW_DISCRIMINATOR – BCMC Flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to ‘000’, this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the discriminator of the BCMC flow.

SAME_AS_PREVIOUS_BCMC_FLOW – Same As Previous BCMC Flow Identifier.

If CLEAR_RETRY_DELAY, BCMC_REASON and BCMC_RETRY_DELAY are the same for this BCMC_FLOW_ID (see 2.6.13.11) as for the previous BCMC_FLOW_ID, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

CLEAR_RETRY_DELAY – Clear retry delay indicator

If SAME_AS_PREVIOUS_BCMC_FLOW is set to ‘1’, 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’ to indicate that the mobile station should clear retry delay associated with this BCMC Flow; otherwise the base station shall set this field to ‘0’.

BCMC_REASON – BCMC reason.

If SAME_AS_PREVIOUS_BCMC_FLOW is set to ‘1’ or if CLEAR_RETRY_DELAY is set to ‘1’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

The base station shall set this field as specified in Table 3.7.4.10-1 to indicate the purpose for this order.
### Table 3.7.4.10-1 BCMC-Reason

<table>
<thead>
<tr>
<th>Value (binary)</th>
<th>BCMC-Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>BCMC_FLOW_ID not available</td>
</tr>
<tr>
<td>0001</td>
<td>BCMC_FLOW_ID not transmitted</td>
</tr>
<tr>
<td>0010</td>
<td>BCMC_FLOW_ID available in idle state</td>
</tr>
<tr>
<td>0011</td>
<td>BCMC Registration Accepted; requested</td>
</tr>
<tr>
<td></td>
<td>BCM flow will be transmitted at a later time</td>
</tr>
<tr>
<td>0100</td>
<td>Authorization failure</td>
</tr>
<tr>
<td>0101</td>
<td>Retry later</td>
</tr>
<tr>
<td>0110 - 1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

### BCMC_RETRY_DELAY

- BCMC retry delay.

If the **SAME_AS_PREVIOUS_BCMC_FLOW** is set to ‘1’ or if **BCMC_REASON** field is not included or is included and is not set to ‘0101’ or if **CLEAR_RETRY_DELAY** is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the delay interval, as shown in Table 3.7.4.10-2, during which the mobile station is not permitted to request this **BCMC_FLOW_ID**. The base station shall not set this field to ‘00000000’.
### 3.7.4.11 Fast Call Setup Order

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>RSC_MODE_SUPPORTED</td>
<td>1</td>
</tr>
<tr>
<td>MAX_RSC_END_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>MAX_RSC_END_TIME_VALUE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REQ_RSCI</td>
<td>0 or 4</td>
</tr>
<tr>
<td>IGNORE_QPCH</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RER_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RER_MODE_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RER_MAX_NUM_MSGIDX</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RER_TIME</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RER_TIME_UNIT</td>
<td>0 or 2</td>
</tr>
<tr>
<td>MAX_RER_PILOT_LIST_SIZE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>TKZ_MODE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>TKZ_MODE_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>TKZ_MAX_NUM_MSGIDX</td>
<td>0 or 3</td>
</tr>
<tr>
<td>TKZ_UPDATE_PRD</td>
<td>0 or 4</td>
</tr>
<tr>
<td>TKZ_LIST_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>TKZ TIMER</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

**ORDQ** - Order qualification code.

The base station shall set this field to the ORDQ value shown in Table 3.7.4-1.

**RSC_MODE_SUPPORTED** - Reduced slot cycle mode supported indicator.

The base station shall set this field to ‘1’ if it supports the reduced slot cycle mode; otherwise, the base station shall set this field to ‘0’.
MAX_RSC_END_TIME_UNIT – Maximum reduced slot cycle mode end time unit.

If RSC_MODE_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field according to Table 2.7.3.5-1 to indicate the units of the MAX_RSC_END_TIME_VALUE field.

MAX_RSC_END_TIME_VALUE – Maximum reduced slot cycle mode end time value.

If RSC_MODE_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum system time (modulo 16), in units of time specified by MAX_RSC_END_TIME_UNIT (modulo 16), at which the mobile station is to exit the reduced slot cycle mode.

REQ_RSCI – Requested reduced slot cycle index.

If ORDQ is equal to ‘00000000’ and RSC_MODE_SUPPORTED is equal to ‘1’, the base station shall set this field as specified in Table 2.7.1.3.2.1-8 to the reduced slot cycle index value that it is requesting the mobile station to operate with; otherwise, the base station shall omit this field.

IGNORE_QPCH – Ignore QPCH indicators.

If RSC_MODE_SUPPORTED is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ to indicate to the mobile station that it is not to check its assigned paging indicators on the QPCH while operating in the reduced slot cycle mode if the reduced slot cycle index is -3 or -4; otherwise, the base station shall set this field to ‘0’.

RER_MODE_INCL – Radio environment reporting mode information included indicator.

If radio environment reporting mode related fields are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RER_MODE_ENABLED – Radio environment reporting mode enabled indicator.

If RER_MODE_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 radio environment reporting mode is enabled in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RER_MAX_NUM_MSG_IDX – Maximum number of Radio Environment Messages permitted while in radio environment reporting mode index.
If RER_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of Radio Environment Messages that the mobile station is allowed to transmit while in radio environment reporting mode, expressed as $2^{\text{RER_MAX_NUM_MSG_IDX}}$ where $0 \leq \text{RER_MAX_NUM_MSG_IDX} \leq 6$. If the mobile station is allowed to transmit an unlimited number of Radio Environment Messages, then the base station shall set this field to ‘111’.

RER_TIME - Radio environment report timer value.

If RER_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the radio-environment report timer, expressed as $2^{\text{RER_TIME}}$ where $0 \leq \text{RER_TIME} \leq 6$ and in units of RER_TIME_UNIT. If the value of the radio-environment report timer is infinite, then the base station shall set this field to ‘111’.

RER_TIME_UNIT - Radio environment report timer value units.

If RER_MODE_ENABLED is included and set to ‘1’, and RER_TIME is not set to ‘111’, the base station shall include this field and shall set it according to Table 3.7.3.3.2.34-5; otherwise, the base station shall omit this field.

MAX_RER_PILOT_LIST_SIZE - Maximum number of pilots to maintain in RER_PILOT_LIST.

If RER_MODE_ENABLED is not included, or is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of pilots that the mobile station is to maintain in RER_PILOT_LIST (see [4]). The base station shall set this field to a value in the range 1 to 6 inclusive.

TKZ_MODE_INCL - Tracking zone mode information included indicator.

If tracking zone mode related fields are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

TKZ_MODE_ENABLED - Tracking zone mode enabled indicator.

If TKZ_MODE_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 tracking zone mode is enabled in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.
TKZ_MAX_NUM_MSG_IDX - Maximum number of Radio Environment Messages permitted while in tracking zone mode index.

If TKZ_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the maximum number of Radio Environment Messages that the mobile station is allowed to transmit while in tracking zone mode, expressed as $2^{TKZ_MAX_NUM_MSG_IDX}$ where $0 \leq TKZ_MAX_NUM_MSG_IDX \leq 6$. If the mobile station is allowed to transmit an unlimited number of Radio Environment Messages, then the base station shall set this field to ‘111’.

TKZ_UPDATE_PRD - Tracking zone update period.

If TKZ_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field such that the desired tracking zone update timer value is $2^{TKZ_UPDATE_PRD+6}$ seconds. If the value of the timer is infinite, then the base station shall set this field to ‘1111’.

TKZ_LIST_LEN - Tracking zone list length.

If TKZ_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the length of the tracking zone list minus one.

TKZ_TIMER - Tracking zone timer.

If TKZ_MODE_ENABLED is not included, or is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the value of the tracking zone timer (in units of seconds) minus one.
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.

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>SR_ID_BITMAP</td>
<td>6</td>
</tr>
</tbody>
</table>

**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.**

<table>
<thead>
<tr>
<th>Subfield</th>
<th>Length (bits)</th>
<th>Subfield Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR_ID_1</td>
<td>1</td>
<td>SR_ID 1 service status included indicator</td>
</tr>
<tr>
<td>SR_ID_2</td>
<td>1</td>
<td>SR_ID 2 service status included indicator</td>
</tr>
<tr>
<td>SR_ID_3</td>
<td>1</td>
<td>SR_ID 3 service status included indicator</td>
</tr>
<tr>
<td>SR_ID_4</td>
<td>1</td>
<td>SR_ID 4 service status included indicator</td>
</tr>
<tr>
<td>SR_ID_5</td>
<td>1</td>
<td>SR_ID 5 service status included indicator</td>
</tr>
<tr>
<td>SR_ID_6</td>
<td>1</td>
<td>SR_ID 6 service status included indicator</td>
</tr>
</tbody>
</table>

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.
Table 3.7.4.12-2. Service Status Values

<table>
<thead>
<tr>
<th>SERVICE_STATUS Value (binary)</th>
<th>Service Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Service request accepted</td>
</tr>
<tr>
<td>001</td>
<td>Service request rejected</td>
</tr>
<tr>
<td></td>
<td>All other values are reserved.</td>
</tr>
</tbody>
</table>

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the total length of the fields included in this order equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.4.13 Location Services Order

<table>
<thead>
<tr>
<th>Order Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORDQ</td>
<td>8</td>
</tr>
<tr>
<td>REGULATORY_IND_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REGULATORY_IND</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

ORDQ - Order qualification code.

The base station shall set this field to the ORDQ value shown in Table 3.7.4-1.

REGULATORY_IND_INCL - Regulatory indicator included.

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.

REGULATORY_IND - Regulatory indication.

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:

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.
3.7.5 Information Records

On the f-csch, information records may be included in the Feature Notification Message. On the f-dsch, information records may be included in the Alert with Information Message, the Flash with Information Message, the Extended Alert with Information Message, the Extended Flash with Information Message, the Service Request Message, the Service Response Message, the Service Connect Message, the General Handoff Direction Message, and the Universal Handoff Direction Message. Table 3.7.5-1 lists the information record type values that may be used with each message type. The following sections describe the contents of each of the record types in detail.
Table 3.7.5-1. Information Record Types (Part 1 of 3)

<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>Message Type</th>
<th>f-csch</th>
<th>f-dsch</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>00000001</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Called Party Number</td>
<td>00000010</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Calling Party Number</td>
<td>00000011</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Connected Number</td>
<td>00000100</td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td>All</td>
</tr>
<tr>
<td>Signal</td>
<td>00000101</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Message Waiting</td>
<td>00000110</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Service Configuration</td>
<td>00000111</td>
<td>SRQM</td>
<td>N</td>
<td>Y</td>
<td>1, ≥ 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SRPM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SCM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>GHDM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>UHDM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Called Party Subaddress</td>
<td>00001000</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>

13 \( P_{REV\_IN\_USE} \) equal to “All” implies all values applicable to the Band Class.
### Table 3.7.5-1. Information Record Types (Part 2 of 3)

<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>Message Type</th>
<th>f-csch</th>
<th>f-dsch</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calling Party Subaddress</td>
<td>00001001</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Connected Subaddress</td>
<td>00001010</td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td>Redirecting Number</td>
<td>00001011</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Redirecting Subaddress</td>
<td>00001100</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Meter Pulses</td>
<td>00001101</td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Parametric Alerting</td>
<td>00001110</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Line Control</td>
<td>00001111</td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Extended Display</td>
<td>00010000</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
</tbody>
</table>
# Table 3.7.5-1. Information Record Types (Part 3 of 3)

<table>
<thead>
<tr>
<th>Information Record</th>
<th>Record Type (binary)</th>
<th>Message Type</th>
<th>f-csch</th>
<th>f-dsch</th>
<th>P_REV_IN_USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Negotiable Service Configuration</td>
<td>00010011</td>
<td>SCM</td>
<td>N</td>
<td>Y</td>
<td>≥ 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>GHDM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>UHDM</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Multiple Character Extended Display</td>
<td>00010100</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td>≥ 67 but</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td>&lt; 9</td>
</tr>
<tr>
<td>Call Waiting Indicator</td>
<td>00010101</td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td>≥ 67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Enhanced Multiple Character Extended Display</td>
<td>00010110</td>
<td>FNM</td>
<td>Y</td>
<td>N</td>
<td>≥ 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>FWI</td>
<td>N</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Extended Record Type – International</td>
<td>11111110</td>
<td>Country-Specific</td>
<td></td>
<td></td>
<td>≥ 4</td>
</tr>
</tbody>
</table>

All other record type values are reserved.

“AWI” refers to either the *Alert With Information Message* or the *Extended Alert With Information Message*.

“FWI” refers to either the *Flash With Information Message* or the *Extended Flash With Information Message*. 
3.7.5.1 Display

This information record allows the network to supply display information that may be displayed by the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARi</td>
<td>8</td>
</tr>
</tbody>
</table>

One or more occurrences of the following field:

`CHARi`

CHARi - Character.

The base station shall include one occurrence of this field for each character to be displayed. The base station shall set each occurrence of this field to the ASCII representation corresponding to the character entered, as specified in [9], with the most significant bit set to ‘0’.
3.7.5.2 Called Party Number

This information record identifies the called party’s number.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

/ 

CHARi 8

/ 

RESERVED 1

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 called number, as defined in [7], Section 4.5.9.

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 called number, as defined in [7], Section 4.5.9.

14  CHARi - Character.

The base station shall include one occurrence of this field for each character in the called 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’.

20  RESERVED - Reserved bits.

The base station shall set this field to ‘0’.
3.7.5.3 Calling Party Number

This information record identifies the calling party’s number.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
<tr>
<td>PI</td>
<td>2</td>
</tr>
<tr>
<td>SI</td>
<td>2</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

/C/

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.
<table>
<thead>
<tr>
<th></th>
<th>CHARi</th>
<th>Character.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>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'.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>RESERVED</td>
<td>Reserved bits.</td>
</tr>
<tr>
<td>8</td>
<td>The base station shall set this field to ‘00000’.</td>
<td></td>
</tr>
</tbody>
</table>
3.7.5.4 Connected Number

This information record identifies the responding party to a call.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
<tr>
<td>PI</td>
<td>2</td>
</tr>
<tr>
<td>SI</td>
<td>2</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

| CHARi               | 8             |

RESERVED 5

**NUMBER_TYPE** - Type of number.

The base station shall set this field to the NUMBER_TYPE value shown in Table 2.7.1.3.2.4-2 corresponding to the type of the connected number, as defined in [7], Section 4.5.9.

**NUMBER_PLAN** - Numbering plan.

The base station shall set this field to the NUMBER_PLAN value shown in Table 2.7.1.3.2.4-3 corresponding to the numbering plan used for the connected number, as defined in [7], Section 4.5.9.

**PI** - Presentation indicator.

This field indicates whether or not the connected number should be displayed.

The base station shall set this field to the PI value shown in Table 2.7.4.4-1 corresponding to the presentation indicator, as defined in [7], Section 4.5.9.

**SI** - Screening indicator.

This field indicates how the connected number was screened.

The base station shall set this field to the SI value shown in Table 2.7.4.4-2 corresponding to the screening indicator value, as defined in [7], Section 4.5.9.
CHARi - Character.

The base station shall include one occurrence of this field for each character in the connected 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'.

RESERVED - Reserved bits.

The base station shall set this field to ‘00000’.
3.7.5.5 Signal

This information record allows the network to convey information to a user by means of tones and other alerting signals.

The Standard Alert is defined as SIGNALTYPE = ‘10’, ALERT_PITCH = ‘00’ and SIGNAL = ‘000001’.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGNALTYPE</td>
<td>2</td>
</tr>
<tr>
<td>ALERT_PITCH</td>
<td>2</td>
</tr>
<tr>
<td>SIGNAL</td>
<td>6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>6</td>
</tr>
</tbody>
</table>

**SIGNALTYPE** - Signal type.

The base station shall set this field to the signal type value shown in Table 3.7.5.5-1.

**Table 3.7.5.5-1. Signal Type**

<table>
<thead>
<tr>
<th>Description</th>
<th>SIGNALTYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tone signal</td>
<td>00</td>
</tr>
<tr>
<td>ISDN Alerting</td>
<td>01</td>
</tr>
<tr>
<td>IS-54B Alerting</td>
<td>10</td>
</tr>
<tr>
<td>Reserved</td>
<td>11</td>
</tr>
</tbody>
</table>

**ALERT_PITCH** - Pitch of the alerting signal.

This field is ignored by the mobile station unless SIGNALTYPE is ‘10’, IS-54B Alerting.

If SIGNALTYPE is ‘10’, the base station shall set this field to the alert pitch shown in Table 3.7.5.5-2; otherwise, the base station shall set this field to ‘00’.
Table 3.7.5.5-2. Alert Pitch

<table>
<thead>
<tr>
<th>Description</th>
<th>ALERT_PITCH (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium pitch (standard alert)</td>
<td>00</td>
</tr>
<tr>
<td>High pitch</td>
<td>01</td>
</tr>
<tr>
<td>Low pitch</td>
<td>10</td>
</tr>
<tr>
<td>Reserved</td>
<td>11</td>
</tr>
</tbody>
</table>

SIGNAL  -  Signal code.

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.
Table 3.7.5.5-3. Tone Signals (SIGNAL_TYPE = ‘00’)  

<table>
<thead>
<tr>
<th>Description</th>
<th>SIGNAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dial tone on: a continuous 350 Hz tone added to a 440 Hz tone.</td>
<td>000000</td>
</tr>
<tr>
<td>Ring back tone on: a 440 Hz tone added to a 480 Hz tone repeated in a 2 s on, 4 s off pattern.</td>
<td>000001</td>
</tr>
<tr>
<td>Intercept tone on: alternating 440 Hz and 620 Hz tones, each on for 250 ms.</td>
<td>000010</td>
</tr>
<tr>
<td>Abbreviated intercept: alternating 440 Hz and 620 Hz tones, each on for 250 ms, repeated for four seconds.</td>
<td>000011</td>
</tr>
<tr>
<td>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.</td>
<td>000100</td>
</tr>
<tr>
<td>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.</td>
<td>000101</td>
</tr>
<tr>
<td>Busy tone on: a 480 Hz tone added to a 620 Hz tone repeated in a 500 ms on, 500 ms off cycle.</td>
<td>000110</td>
</tr>
<tr>
<td>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.</td>
<td>000111</td>
</tr>
<tr>
<td>Answer tone on: answer tone is not presently used in North American networks.</td>
<td>001000</td>
</tr>
<tr>
<td>Call waiting tone on: a 300 ms burst of 440 Hz tone.</td>
<td>001001</td>
</tr>
<tr>
<td>Pip tone on: four bursts of 480 Hz tone (0.1 s on, 0.1 s off).</td>
<td>001010</td>
</tr>
<tr>
<td>Tones off</td>
<td>111111</td>
</tr>
</tbody>
</table>

All other SIGNAL values are reserved
<table>
<thead>
<tr>
<th>Description</th>
<th>SIGNAL (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Alerting: 2.0 s on, 4.0 s off, repeating</td>
<td>000000</td>
</tr>
<tr>
<td>Intergroup Alerting: 0.8 s on, 0.4 s off,</td>
<td>000001</td>
</tr>
<tr>
<td>0.8 s on, 4.0 s off, repeating</td>
<td></td>
</tr>
<tr>
<td>Special/Priority Alerting: 0.4 s on, 0.2 s off,</td>
<td>000010</td>
</tr>
<tr>
<td>0.4 s on, 0.2 s off, 0.8 s on, 4.0 s off,</td>
<td></td>
</tr>
<tr>
<td>repeating</td>
<td></td>
</tr>
<tr>
<td>Reserved (ISDN Alerting pattern 3)</td>
<td>000011</td>
</tr>
<tr>
<td>“Ping ring”: single burst of 500 ms</td>
<td>000100</td>
</tr>
<tr>
<td>Reserved (ISDN Alerting pattern 5)</td>
<td>000101</td>
</tr>
<tr>
<td>Reserved (ISDN Alerting pattern 6)</td>
<td>000110</td>
</tr>
<tr>
<td>Reserved (ISDN Alerting pattern 7)</td>
<td>000111</td>
</tr>
<tr>
<td>Alerting off</td>
<td>001111</td>
</tr>
</tbody>
</table>

All other SIGNAL values are reserved
Table 3.7.5.5-5.  IS-54B Alerting (SIGNAL_TYPE = ‘10’)

<table>
<thead>
<tr>
<th>Description</th>
<th>SIGNAL (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Tone: Off</td>
<td>000000</td>
</tr>
<tr>
<td>Long: 2.0 s on, 4.0 s off, repeating (standard alert)</td>
<td>000001</td>
</tr>
<tr>
<td>Short-Short: 0.8 s on, 0.4 s off, 0.8 s on, 4.0 s off, repeating</td>
<td>000010</td>
</tr>
<tr>
<td>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</td>
<td>000011</td>
</tr>
<tr>
<td>Short-Short-2: 1.0 s on, 1.0 s off, 1.0 s on, 3.0 s off, repeating.</td>
<td>000100</td>
</tr>
<tr>
<td>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.</td>
<td>000101</td>
</tr>
<tr>
<td>Short-Short-Short-Short: 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.</td>
<td>000110</td>
</tr>
<tr>
<td>PBX Long: 1.0 s on, 2.0 s off, repeating.</td>
<td>000111</td>
</tr>
<tr>
<td>PBX Short-Short: 0.4 s on, 0.2 s off, 0.4 s on, 2.0 off, repeating.</td>
<td>001000</td>
</tr>
<tr>
<td>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.</td>
<td>001001</td>
</tr>
<tr>
<td>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.</td>
<td>001010</td>
</tr>
<tr>
<td>PBX Short-Short-Short-Short: 0.4 s on, 0.2 s off, 0.4 s on, 0.2 s off, 0.2 s off, 0.4 s on, 0.8 s off, repeating.</td>
<td>001011</td>
</tr>
<tr>
<td>Pip-Pip-Pip-Pip: 0.1 s on, 0.1 s off, 0.1 s on, 0.1 s off, 0.1 s off, 0.1 s off.</td>
<td>001100</td>
</tr>
</tbody>
</table>

All other SIGNAL values are reserved

RESERVED - Reserved bits.

The base station shall set this field to ‘000000’.

3-888
3.7.5.6 Message Waiting

This information record conveys to the user the number of messages waiting.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSG_COUNT</td>
<td>8</td>
</tr>
</tbody>
</table>

MSG_COUNT  -  Number of waiting messages.

The base station shall set this field to the number of messages waiting.
3.7.5.7 Service Configuration

For the mobile station, this record is included in a Status Response Message to return the current service configuration, and in a Service Request Message and a Service Response Message to propose a service configuration.

For a base station, this record is included in a Service Request Message and a Service Response Message to propose a service configuration. It is included in a Service Connect Message to specify an actual service configuration to be used. It can be included in a General Handoff Direction Message and Universal Handoff Direction Message to specify an actual service configuration to be used.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_MUX_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>REV_MUX_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>FOR_NUM_BITS</td>
<td>8</td>
</tr>
<tr>
<td>REV_NUM_BITS</td>
<td>8</td>
</tr>
<tr>
<td>NUM_CON_REC</td>
<td>8</td>
</tr>
</tbody>
</table>

NUM_CON_REC occurrences of the following variable-length record:

\{ (NUM_CON_REC) \}
<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>CON_REF</td>
<td>8</td>
</tr>
<tr>
<td>SERVICE_OPTION</td>
<td>16</td>
</tr>
<tr>
<td>FOR_TRAFFIC</td>
<td>4</td>
</tr>
<tr>
<td>REV_TRAFFIC</td>
<td>4</td>
</tr>
<tr>
<td>UI_ENCRYPT_MODE</td>
<td>3</td>
</tr>
<tr>
<td>SR_ID</td>
<td>3</td>
</tr>
<tr>
<td>RLP_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RLP_BLOB_LEN</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RLP_BLOB</td>
<td>0 or (8 × RLP_BLOB_LEN)</td>
</tr>
<tr>
<td>QOS_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>QOS_PARMS_LEN</td>
<td>0 or 5</td>
</tr>
<tr>
<td>QOS_PARMS</td>
<td>0 or variable</td>
</tr>
<tr>
<td>QOS_RESERVED</td>
<td>0-7</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
<tr>
<td>FCH_CC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FCH_FRAME_SIZE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FOR_FCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_FCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>DCCH_CC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DCCH_FRAME_SIZE</td>
<td>0 or 2</td>
</tr>
<tr>
<td>FOR_DCCH_RC</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_DCCH_RC</td>
<td>0 or 5</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_CC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

NUM_FOR_SCH occurrences of the following record

{(NUM_FOR_SCH)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_ID</td>
<td>2</td>
</tr>
<tr>
<td>FOR_SCH_MUX</td>
<td>16</td>
</tr>
<tr>
<td>SCH_CC_Type-specific field</td>
<td>Variable (see 3.7.5.7.1)</td>
</tr>
</tbody>
</table>

} (NUM_FOR_SCH)

{(NUM_REV_SCH)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_CC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

NUM_REV_SCH occurrences of the following record

{(NUM_REV_SCH)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_ID</td>
<td>2</td>
</tr>
<tr>
<td>REV_SCH_MUX</td>
<td>16</td>
</tr>
<tr>
<td>SCH_CC_Type-specific field</td>
<td>Variable (see 3.7.5.7.1)</td>
</tr>
</tbody>
</table>

} (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)

FOR_MUX_OPTION - Forward multiplex option.

If P_REV_IN_USEs is less than eight, the mobile station shall set this field as follows:
For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present (e.g., 1 corresponds to Multiplex Option 1).

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

If $P_{REV\_IN\_USE_s}$ is greater than or equal to eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both (e.g., 1 corresponds to Multiplex Option 1), according to the value as specified by $FCH\_DCCH\_MUX\_OPTION\_IND$.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by $FCH\_DCCH\_MUX\_OPTION\_IND$.

If neither the Forward Fundamental Channel nor Forward Dedicated Control Channel configuration is assigned, then the mobile station shall set this field to 0.

If $MOB\_P\_REV$ is less than eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, if both are present.

If $MOB\_P\_REV$ is greater than or equal to eight, the base station shall set this field as follows:
For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

For a *Service Connect Message, General Handoff Direction Message,* and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Forward Fundamental Channel, Forward Dedicated Control Channel, or both, according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

If neither the Forward Fundamental Channel nor Forward Dedicated Control Channel configuration is assigned, the base station shall set this field to 0.

**REV_MUX_OPTION** - Reverse multiplex option.

If P_REV_IN_USE₈ is less than eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present (e.g., 1 corresponds to Multiplex Option 1).

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

If P_REV_IN_USE₈ is greater than or equal to eight, the mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both [e.g., 1 corresponds to Multiplex Option 1], according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

If neither the Reverse Fundamental Channel nor Reverse Dedicated Control Channel configuration is assigned, the mobile station shall set this field to 0.
If MOB_P_REVP is less than eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

For a *Service Connect Message, General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, if both are present.

If MOB_P_REVP is greater than or equal to eight, the base station shall set this field as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

For a *Service Connect Message, General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Reverse Fundamental Channel, Reverse Dedicated Control Channel, or both, according to the value as specified by FCH_DCCH_MUX_OPTION_IND.

**FOR_NUM_BITS** - Set of number of bits per frame of the Forward Fundamental Channel.

The mobile station shall set this field as follows:

The mobile station shall use the Forward Fundamental Channel transmission set of number of bits per frame specified in 2.7.4.28 for the specified Forward Traffic Channel multiplex option.

For a *Status Response Message*, the mobile station shall set the subfields corresponding to the Forward Traffic Channel transmission set of number of bits per frame of the current service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If FOR_MUX_OPTION is equal to 1 or 2, the mobile station shall set RESERVED to ‘0000’. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.
For a *Service Request Message* and a *Service Response Message*, the mobile station shall set the subfields corresponding to the Forward Traffic Channel transmission set of number of bits per frame of the proposed service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If FOR_MUX_OPTION is equal to 1 or 2, the mobile station shall set RESERVED to ‘0000’. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

The base station shall set this field as follows:

The base station shall set this field to the Forward Fundamental Channel transmission set of number of bits per frame specified in 2.7.4.28 for the specified Forward Traffic Channel multiplex option.

For a *Service Request Message* or a *Service Response Message*, the base station shall set the subfields corresponding to the Forward Fundamental Channel transmission set of number of bits per frame of the proposed service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If FOR_MUX_OPTION is equal to 1 or 2, the base station shall set RESERVED to ‘0000’. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

For a *Service Connect Message, General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set the subfields corresponding to the Forward Fundamental Channel transmission set of number of bits per frame of the actual service configuration to be used to ‘1’, and shall set the remaining subfields to ‘0’. If FOR_MUX_OPTION is equal to 1 or 2, the base station shall set RESERVED to ‘0000’. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

**REV_NUM_BITS** - Set of number of bits per frame of the Reverse Fundamental Channel.

The mobile station shall set this field as follows:

The mobile station shall use the Reverse Fundamental Channel transmission set of number of bits per frame specified in 2.7.4.28 for the specified Reverse Traffic Channel multiplex option.
For a *Status Response Message*, the mobile station shall set the subfields corresponding to the Reverse Traffic Channel transmission set of number of bits per frame of the current service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If REV_MUX_OPTION is equal to 1 or 2, the mobile station shall set RESERVED to ‘0000’.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set the subfields corresponding to the Reverse Traffic Channel transmission set of number of bits per frame of the current service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If REV_MUX_OPTION is equal to 1 or 2, the mobile station shall set RESERVED to ‘0000’.

The base station shall set this field as follows:

The base station shall set this field to the Reverse Fundamental Channel transmission set of number of bits per frame specified in 2.7.4.28 for the specified Reverse Traffic Channel multiplex option.

For a *Service Request Message* or a *Service Response Message*, the base station shall set the subfields corresponding to the Reverse Fundamental Channel transmission set of number of bits per frame of the proposed service configuration to ‘1’, and shall set the remaining subfields to ‘0’. If REV_MUX_OPTION is equal to 1 or 2, the base station shall set RESERVED to ‘0000’.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set the subfields corresponding to the Reverse Fundamental Channel transmission set of number of bits per frame of the proposed service configuration to be used to ‘1’, and shall set the remaining subfields to ‘0’. If REV_MUX_OPTION is equal to 1 or 2, the base station shall set RESERVED to ‘0000’.

**NUM_CON_REC** - Number of service option connection records.

The mobile station shall set this field as follows:

The mobile station shall set this field to the number of service option connection records included in the message.

The base station shall set this field as follows:

The base station shall set this field to the number of service option connection records included in the message.

For a *Status Response Message*, the mobile station shall include one occurrence of the
following variable-length record for each service option connection of the current service configuration. For a Service Request Message and a Service Response Message, the mobile station shall include one occurrence of the following variable-length record for each service option connection of the proposed service configuration.

For a Service Request Message or a Service Response Message, the base station shall include one occurrence of the following variable-length record for each service option connection of the proposed service configuration.

For a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message, the base station shall include one occurrence of the following variable-length record for each service option connection of the actual service configuration to be used.

RECORD_LEN - Service option connection record length.

The mobile station shall set this field as follows:

The mobile station shall set this field to the number of octets included in this service option connection record including this field.

The base station shall set this field as follows:

The base station shall set this field to the number of octets included in this service option connection record including this field.

CON_REF - Service option connection reference.

The mobile station shall set this field as follows:

For a Status Response Message, the mobile station shall set this field to the service option connection reference.

For a Service Request Message and a Service Response Message, if the service option connection is part of the current service configuration, the mobile station shall set this field to the service option connection reference; otherwise, the mobile station shall set this field to ‘00000000’.

The base station shall set this field as follows:

For a Service Request Message or a Service Response Message: if the service option connection is part of the current service configuration, the base station shall set this field to the service option connection reference; otherwise, the base station shall set this field to ‘00000000’.
For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the service option connection reference assigned to the service option connection.

**SERVICE_OPTION** - Service option.

The mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the service option in use with the service option connection.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the service option to be used with the service option connection.

The base station shall set this field as follows:

The base station shall set this field to the service option to be used with the service option connection.

**FOR_TRAFFIC** - Forward Traffic Channel traffic type.

The mobile station shall set this field as follows:

For a *Status Response Message*, the mobile station shall set this field to the FOR_TRAFFIC code shown in Table 3.7.5.7-1 corresponding to the Forward Traffic Channel traffic type in use with the service option connection.

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the FOR_TRAFFIC code shown in Table 3.7.5.7-1 corresponding to the Forward Traffic Channel traffic type to be used with the service option connection.

The base station shall set this field as follows:

The base station shall set this field to the FOR_TRAFFIC code shown in Table 3.7.5.7-1 corresponding to the Forward Traffic Channel traffic type to be used with the service option connection.
**Table 3.7.5.7-1. FOR_TRAFFIC Codes**

<table>
<thead>
<tr>
<th>FOR_TRAFFIC (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>The service option connection does not use Forward Traffic Channel traffic.</td>
</tr>
<tr>
<td>0001</td>
<td>The service option connection uses primary traffic on the Forward Traffic Channel.</td>
</tr>
<tr>
<td>0010</td>
<td>The service option connection uses secondary traffic on the Forward Traffic Channel.</td>
</tr>
<tr>
<td>0011</td>
<td>The service option connection uses signaling traffic on the Forward Traffic Channel.</td>
</tr>
<tr>
<td>0100</td>
<td>The service option connection uses the Forward Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.</td>
</tr>
</tbody>
</table>

All other FOR_TRAFFIC codes are reserved.

**REV_TRAFFIC** - Reverse Traffic Channel traffic type.

The mobile station shall set this field as follows:

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.

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.

The base station shall set this field as follows:

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.
Table 3.7.5.7-2. REV_TRAFFIC Codes

<table>
<thead>
<tr>
<th>REV_TRAFFIC (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>The service option connection does not use Reverse Traffic Channel traffic.</td>
</tr>
<tr>
<td>0001</td>
<td>The service option connection uses primary traffic on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>0010</td>
<td>The service option connection uses secondary traffic on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>0011</td>
<td>The service option connection uses signaling traffic on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>0100</td>
<td>The service option connection uses the Reverse Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.</td>
</tr>
</tbody>
</table>

All other REV_TRAFFIC codes are reserved.

UI_ENCRYPT_MODE - Encryption mode indicator for user information privacy.

The mobile station shall set this field as follows:

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.

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.

The base station shall set this field as follows:

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.

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.
Table 3.7.5.7-3. User information Encryption Modes

<table>
<thead>
<tr>
<th>UI_ENCRYPT_MODE Field (binary)</th>
<th>Encryption Mode Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>User information Encryption disabled</td>
</tr>
<tr>
<td>001</td>
<td>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.</td>
</tr>
</tbody>
</table>
| 010                           | 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.  
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). |
| 011-111                       | Reserved                                                                                                                                              |

SR_ID — Service reference identifier.

The mobile station shall set this field as follows:

For a Status Response Message, the mobile station shall set this field to the service reference identifier in use.

For a Service Request Message and a Service Response Message, the mobile station shall set this field as follows:
If the service option connection is a part of the current service configuration, the mobile station shall set this field to the service reference identifier in use.

If the service option connection is not a part of the current service configuration, the mobile station shall perform the following:

- If this service option connection request is initiated by the base station, the mobile station shall set this field to the value sent by the base station.

- If this service option connection request is initiated by the mobile station, the mobile station shall perform the following: if the service instance provides a service reference identifier, the mobile station shall set this field to the service reference identifier specified by the service instance; otherwise, the mobile station shall set this field to the smallest unused service reference identifier value between 1 and 6 inclusive.

The base station shall set this field as follows:

For a Service Request Message, a Service Response Message, a Service Connect Message, a General Handoff Direction Message, or a Universal Handoff Direction Message, the base station shall set this field as follows:

If the service option connection is a part of the current service configuration, the base station shall set this field to the service reference identifier in use.

If the service option connection is not a part of the current service configuration, the base station shall perform the following:

- If this service option connection request is initiated by the mobile station, the base station shall set this field to the value sent by the mobile station.

- If this service option connection request is initiated by the base station, the base station shall perform the following: if the service instance provides a service reference identifier, the base station shall set this field to the service reference identifier specified by the service instance; otherwise, the base station shall set this field to the highest unused service reference identifier value between 1 and 6 inclusive.

RLP_INFO_INCL - RLP information included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’ if the RLP_BLOB field is included in this record; otherwise, it shall set this field to ‘0’.
The base station shall set this field as follows:

The base station shall set this field to ‘1’ if the RLP_BLOB field is included in this record; otherwise, it shall set this field to ‘0’.

**RLP_BLOB_LEN** - RLP information block of bits length.

The mobile station shall set this field as follows:

If the RLP_INFO_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, it shall include this field and set it as follows:

The mobile station shall set this field to the size of the RLP_BLOB field in integer number of octets.

The base station shall set this field as follows:

If the RLP_INFO_INCL field is set to ‘0’, the base station shall omit this field; otherwise, it shall include this field and set it as follows:

The base station shall set this field to the size of the RLP_BLOB field in integer number of octets.


The mobile station shall set this field as follows:

If the RLP_INFO_INCL field is set to ‘0’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

For a *Status Response Message*, the mobile station shall set this field to the Radio Link Protocol block of bits for this service option connection.

For a *Service Request Message* or *Service Response Message*, the mobile station shall set this field to the proposed Radio Link Protocol block of bits for this service option connection, and shall add ‘0’ bits to the end of the field as needed in order to make the length of this field equal to an integer number of octets.

The base station shall set this field as follows:
If the RLP_INFO_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:

The base station shall set this field to the Radio Link Protocol block of bits for this service option connection, and shall add ‘0’ bits to the end of the field as needed in order to make the length of this field equal to an integer number of octets.

**QOS_PARMS_INCL** - Presence indicator for the QoS parameters.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if QOS_PARMS field is included in the record; otherwise the base station shall set this field to ‘0’.

The base station shall set this field as follows:

The base station shall set this field to ‘1’, if QOS_PARMS field is included in the record; otherwise, the base station shall set this field to ‘0’.

**QOS_PARMS_LEN** - Length of the block of QoS parameters.

The mobile station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the mobile station shall set this field to the combined length in octets, of the QOS_PARMS field and the immediately following QOS_RESERVED field; otherwise, the mobile station shall omit this field.

The base station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the base station shall set this field to the combined length in octets, of the QOS_PARMS field and the immediately following QOS_RESERVED field; otherwise, the base station shall omit this field.

**QOS_PARMS** - QoS parameters block.

The mobile station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the mobile station shall include this field in the record as follows:

For a *Status Response Message*, the mobile station shall set this field to the set of QoS parameters configured for this service option connection.
For a *Service Request Message* or *Service Response Message*, the mobile station shall set this field to the set of QoS parameters requested for the respective connection.

The base station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the base station shall include this field in the record and set it to the set of QoS parameters requested or required for the respective connection.

**QOS_RESERVED** - Padding bits.

The mobile station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the mobile station shall include the minimum number of ‘0’ bits necessary to ensure that the combined length of the QOS_PARMS field and of this field is an integer number of octets; otherwise, the mobile station shall omit this field.

The base station shall set this field as follows:

If QOS_PARMS_INCL is set to ‘1’, the base station shall include the minimum number of ‘0’ bits necessary to ensure that the combined length of the QOS_PARMS field and of this field is an integer number of octets; otherwise, the base station shall omit this field.

**RESERVED** - Reserved bits.

The mobile station shall set this field as follows:

The mobile 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 mobile station shall set these bits to ‘0’.

The base station shall set this field as follows:

The base station shall add reserved bits as needed in order to make the length of this record equal to an integer number of octets. The base station shall set these bits to ‘0’.

**FCH_CC_INCL** - Channel configuration for the Fundamental Channel included indicator.

The mobile station shall set this field as follows:
The mobile station shall set this field to ‘1’, if Fundamental Channel Configuration information is included in the record; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Fundamental Channel are to be used.

The base station shall set this field as follows:

The base station shall set this field to ‘1’, if the channel configuration information for the Fundamental 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 Fundamental Channel are to be used.

**FCH_FRAME_SIZE** - Fundamental Channel frame size supported indicator.

The mobile station shall set this field as follows:

If FCH_CC_INCL field is set to ‘1’, the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set this field to ‘1’, if the 5ms frame size is used in the Forward Fundamental Channel (if specified in this record) and Reverse Fundamental Channel, in addition to the 20ms frame size, for the current service configuration; otherwise, 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 ‘1’ if the 5ms frame size is used in the Forward Fundamental Channel (if specified in this record) and Reverse Fundamental Channel, in addition to the 20ms frame size, for the proposed service configuration; otherwise the mobile station shall set this field to ‘0’.

The base station shall set this field as follows:

If the FCH_CC_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the service configuration includes the use of 5 ms frame size in addition to 20ms frame size for the Forward Fundamental Channel (if specified in this record) and Reverse Fundamental Channel; otherwise, the base station shall set this field to ‘0’.

**FOR_FCH_RC** - Forward Fundamental Channel Radio Configuration.

The mobile station shall set this field as follows:
If FCH_CC_INCL field is set to ‘1’, the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set this field to the Forward Fundamental Channel Radio Configuration (see [2]) for the current service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a *Service Request Message* or *Service Response Message*, the mobile station shall set this field to the Forward Fundamental Channel Radio Configuration for the proposed service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

The base station shall set this field as follows:

If the FCH_CC_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

For a *Service Request Message* or a *Service Response Message*, the base station shall set this field to the Forward Fundamental Channel Radio Configuration in the proposed service configuration. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

For a *Service Connect Message*, a *General Handoff Direction Message*, or a *Universal Handoff Direction Message*, the base station shall set this field to the actual Forward Fundamental Channel Radio Configuration to be used. If the Forward Fundamental Channel configuration is not specified in this record, then the base station shall set this field to 0.

---

**REV_FCH_RC** - Reverse Fundamental Channel Radio Configuration.

The mobile station shall set this field as follows:

If FCH_CC_INCL field is set to ‘1’, the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a *Status Response Message*, the mobile station shall set field to the Reverse Fundamental Channel Radio Configuration (see [2]) for the current service configuration.

For a *Service Request Message* or a *Service Response Message*, the mobile station shall set this field to the Reverse Fundamental Channel Radio Configuration for the proposed service configuration.
The base station shall set this field as follows:

If the FCH_CC_INCL field is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

For a *Service Request Message* or a *Service Response Message*, the base station shall set this field to the Reverse Fundamental Channel Radio Configuration (see [2]) in the proposed service configuration.

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 Reverse Fundamental Channel Radio Configuration to be used.

**DCCH_CC_INCL** - Channel configuration for the Dedicated Control Channel included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if DCCH channel configuration information is included in this record; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Dedicated Control Channel are to be used.

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>
<thead>
<tr>
<th>DCCH_FRAME_SIZE (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Reserved</td>
</tr>
<tr>
<td>01</td>
<td>20 ms frame size only</td>
</tr>
<tr>
<td>10</td>
<td>5 ms frame size only</td>
</tr>
<tr>
<td>11</td>
<td>Both 5 ms and 20 ms frame sizes</td>
</tr>
</tbody>
</table>

**FOR_DCCH_RC** - Forward Dedicated Control Channel Radio Configuration.

The mobile station shall set this field as follows:

If DCCH_CC_INCL field is set to ‘1’, the mobile station shall include this field and set it as described below; otherwise, the mobile station shall omit this field.

For a **Status Response Message**, the mobile station shall set this field to the Forward Dedicated Control Channel Radio Configuration (see [2]) for the current service configuration. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a **Service Request Message** or a **Service Response Message**, the mobile station shall set this field to the Forward Dedicated Control Channel Radio Configuration for the proposed service configuration. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

The base station shall set this field as follows:
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.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the Reverse Dedicated Control Channel Radio Configuration 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 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 Reverse Dedicated Control Channel Radio Configuration to be used (see [2]).

For a Service Request Message or a Service Response Message, the base station shall set this field to the Reverse Dedicated Control Channel Radio Configuration for the proposed service configuration.

FOR_SCH_CC_INCL - Channel configuration for the Forward Supplemental Channel included indicator.
The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if the Forward Supplemental Channel Configuration information is included; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Forward Supplemental Channel are to be used.

The base station shall set this field as follows:

The base station shall set this field to ‘1’, if the channel configuration information for the Forward Supplemental 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 Forward Supplemental Channel are to be used.

NUM_FOR_SCH - Number of Forward Supplemental Channels.

The mobile station shall set this field as follows:

If FOR_SCH_CC_INCL field is set to ‘1’, the mobile station shall include this field and set it as describe below; otherwise, the mobile station shall omit this field.

For a Status Response Message, the mobile station shall set this field to the number of Forward Supplemental Channels for the current service configuration and include one occurrence of the following three-field SCH record for each Supplemental Channel Configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the number of Forward Supplemental Channels for the proposed service configuration and include one occurrence of the following three-field SCH record for each Supplemental Channel Configuration.

The base station shall set this field as follows:

If the FOR_SCH_CC_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the number of Forward Supplemental Channels associated with this service configuration.

If the FOR_SCH_CC_INCL field is set to ‘1’, the base station shall not set this field to ‘00’.

If the NUM_FOR_SCH field is present, the base station shall include one occurrence of the following three-field record for each Forward Supplemental Channel included in this record:

FOR_SCH_ID - Forward Supplemental Channel Identification

The mobile station shall set this field as follows:
The mobile station shall set this field to the identification of the Supplemental Channel included in this Forward Supplemental Channel Configuration record.

The mobile station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

Table 3.7.5.7-5. SCH Identifier

<table>
<thead>
<tr>
<th>FOR_SCH_ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_ID (binary)</td>
<td></td>
</tr>
<tr>
<td>00</td>
<td>Supplemental Channel 0</td>
</tr>
<tr>
<td>01</td>
<td>Supplemental Channel 1</td>
</tr>
<tr>
<td>10-11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

The base station shall set this field as follows:

The base station shall set this field as defined in 3.7.5.7.1 for this Forward Supplemental Channel.

FOR_SCH_MUX - Forward Supplemental Channel Multiplex Option.

The mobile station shall set this field as follows:

The mobile station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

FOR_SCH_MUX - Forward Supplemental Channel Multiplex Option.

The mobile station shall set this field as follows:

The mobile station shall set this field to the Multiplex Option associated with the maximum data rate for this Forward Supplemental Channel (see [3]).

The base station shall set this field as follows:

The base station shall set this field to the Multiplex Option associated with the maximum data rate for this Forward Supplemental Channel (see [3]).

SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

The mobile station shall set this field as follows:

The mobile station shall set this field to the subfields of the Channel Configuration record defined in 3.7.5.7.1, for this Forward Supplemental Channel included in the service configuration.

The base station shall set this field as follows:

The base station shall set this field as defined in 3.7.5.7.1 for this Forward Supplemental Channel.
REV_SCH_CC_INCL - Channel configuration for the Reverse Supplemental Channel included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if the Reverse Supplemental Channel Configuration information is included; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Reverse Supplemental Channel are to be used.

The base station shall set this field as follows:

The base station shall set this field to ‘1’ if the channel configuration information for the Reverse Supplemental 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 Reverse Supplemental Channel are to be used.

NUM_REV_SCH - Number of Reverse Supplemental Channels.

The mobile station shall set this field as follows:

If REV_SCH_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 number of Reverse Supplemental Channels for the current service configuration and include one occurrence of the following three-field record for each reverse Supplemental Channel Configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the number of Reverse Supplemental Channels for the proposed service configuration and include one occurrence of the following three-field record for each reverse Supplemental Channel Configuration.

The base station shall set this field as follows:

If the REV_SCH_CC_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the number of Reverse Supplemental Channels associated with this service configuration.

If the REV_SCH_CC_INCL field is set to ‘1’, the base station shall not set this field to ‘00’.

If the NUM_REV_SCH field is present, the base station shall include one occurrence of the following three-field record for each Reverse Supplemental Channel included in this record:

REV_SCH_ID - Reverse Supplemental Channel Identification
The mobile station shall set this field as follows:

The mobile station shall set this field to the identifier of the Supplemental Channel included in this Reverse Supplemental Channel Configuration record.

The mobile station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

The base station shall set this field as follows:

The base station shall set this field to the identifier of the Reverse Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

REV_SCH_MUX - Reverse Supplemental Channel Multiplex Option

The mobile station shall set this field as follows:

The mobile station shall set this field to the Multiplex Option associated with the maximum data rate for this Reverse Supplemental Channel (see [3]).

The base station shall set this field as follows:

The base station shall set this field to the identifier of the Reverse Supplemental Channel pertaining to this record.

The base station shall set this field to the Supplemental Channel identifier, shown in Table 3.7.5.7-5.

SCH_CC_Type-specific field - Supplemental Channel Configuration Information.

The mobile station shall set this field as follows:

The mobile station shall set this field to the subfields of the Channel Configuration record defined in 3.7.5.7.1, for this Reverse Supplemental Channel included in the service configuration.

The base station shall set this field as follows:

The base station shall set this field as defined in 3.7.5.7.1 for this Reverse Supplemental Channel.

FCH_DCCH_MUX_OPTION_IND - FCH and DCCH Multiplex Option Indicator

The mobile station shall set this field according to Table 3.7.5.7-6.

The base station shall set this field according to Table 3.7.5.7-6.
Table 3.7.5-7-6. FCH_DCCH_MUX_OPTION_IND USAGE

<table>
<thead>
<tr>
<th>FCH_DCCH_MUX_OPTION_IND</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>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.</td>
</tr>
<tr>
<td>01</td>
<td>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.</td>
</tr>
<tr>
<td>10</td>
<td>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.</td>
</tr>
<tr>
<td>11</td>
<td>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.</td>
</tr>
</tbody>
</table>

FOR_DCCH_MUX_OPTION — Forward DCCH Multiplex Option.

If FCH_DCCH_MUX_OPTION_IND is set to a value other than ‘11’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set as follows:

For a Status Response Message, the mobile station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel (e.g., 1 corresponds to Multiplex Option 1). If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a Service Request Message and a Service Response Message, the mobile station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

If FCH_DCCH_MUX_OPTION_IND is set to a value other than ‘11’, the base station shall omit this field; otherwise, the base station shall include this field and set as follows:
For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel. If the Forward Dedicated Control Channel configuration is not specified in this record, then the mobile station shall set this field to 0.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Forward Dedicated Control Channel. 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_MUX_OPTION** – Reverse DCCH Multiplex Option.

If FCH_DCCH_MUX_OPTION_IND is set to a value other than ‘11’, the mobile station shall omit this field; otherwise, the mobile station shall include this field and set as follows:

For a *Status Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Dedicated Control Channel (e.g., 1 corresponds to Multiplex Option 1).

For a *Service Request Message* and a *Service Response Message*, the mobile station shall set this field to the number of the multiplex option for the Reverse Dedicated Control Channel.

If DCCH_MUX_OPTION_INCL is set to a value other than ‘11’, the base station shall omit this field; otherwise, the base station shall include this field and set as follows:

For a *Service Request Message* and a *Service Response Message*, the base station shall set this field to the number of the multiplex option for the Reverse Dedicated Control Channel.

For a *Service Connect Message*, *General Handoff Direction Message*, and a *Universal Handoff Direction Message*, the base station shall set this field to the number of the multiplex option for the Reverse Dedicated Control Channel.

**FOR_PDCH_CC_INCL** – Channel configuration for the Forward Packet Data Channel included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if channel configuration information for the Forward Packet Data Channel is included in this Service Configuration Record; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Forward Packet Data Channel are to be used.
The base station shall set this field as follows:

The base station shall set this field to ‘1’, if channel configuration information for the Forward Packet Data 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 Forward Packet Data Channel are to be used.

FOR_PDCH_MUX_OPTION - Forward Packet Data Channel Multiplex Option.

The mobile station shall set this field as follows:

If FOR_PDCH_CC_INCL is set to ‘0’, then the mobile station shall omit this field; otherwise, the mobile station shall set this field to the Multiplex Option associated with the Forward Packet Data Channel (see [3]).

The base station shall set this field as follows:

If FOR_PDCH_CC_INCL is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall set this field to the Multiplex Option associated with the Forward Packet Data Channel (see [3]).

FOR_PDCH_RC - Forward Packet Data Channel Radio Configuration.

The mobile station shall set this field as follows:

If FOR_PDCH_CC_INCL is set to ‘0’, then the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

For a Status Response Message, the mobile station shall set this field to the Forward Packet Data Channel Radio Configuration (see [2]) for the current service configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the Forward Packet Data Channel Radio Configuration (see [2]) for the proposed service configuration.

The base station shall set this field as follows:

If FOR_PDCH_CC_INCL field is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 Packet Data Channel Radio Configuration to be used (see [2]).
For a Service Request Message or a Service Response Message, the base station shall set this field to the Forward Packet Data Channel Radio Configuration (see [2]) for the proposed service configuration.

REV_PDCH_CC_INCL - Channel configuration for the Reverse Packet Data Channel included indicator.

The mobile station shall set this field as follows:

The mobile station shall set this field to ‘1’, if channel configuration information for the Reverse Packet Data Channel is included in this Service Configuration Record; otherwise, the mobile station shall set this field to ‘0’ to indicate the current values of Channel configuration for the Reverse Packet Data Channel are to be used.

The base station shall set this field as follows:

The base station shall set this field to ‘1’, if channel configuration information for the Reverse Packet Data 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 Reverse Packet Data Channel are to be used.

REV_PDCH_MUX_OPTION_HIGH_RATE - Reverse Packet Data Channel Multiplex Option for Higher Data Rates.

The mobile station shall set this field as follows:

If REV_PDCH_CC_INCL is set to ‘0’, then the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

For a Status Response Message, the mobile station shall set this field to the Multiplex Option for Higher Data Rates associated with the Reverse Packet Data Channel (see [3]) for the current service configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the Multiplex Option for Higher Data Rates associated with the Reverse Packet Data Channel (see [3]) for the proposed service configuration.

The base station shall set this field as follows:

If REV_PDCH_CC_INCL field is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 Multiplex Option for Higher Data Rates associated with the Reverse Packet Data Channel to be used (see [3]).
For a Service Request Message or a Service Response Message, the base station shall set this field to the Multiplex Option for Higher Data Rates associated with the Reverse Packet Data Channel (see [3]) for the proposed service configuration.

REV_PDCH_MUX_OPTION_LOW_RATE - Reverse PDCH Mux Option for Lower Data Rates

The mobile station shall set this field as follows:

If REV_PDCH_CC_INCL is set to '0', then the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:

This field shall be set to 0x1, 0x1301, or 0x1305.

For a Status Response Message, the mobile station shall set this field to the Multiplex Option for Lower Data Rates associated with the Reverse Packet Data Channel (see [3]) for the current service configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the Multiplex Option for Lower Data Rates associated with the Reverse Packet Data Channel (see [3]) for the proposed service configuration.

The base station shall set this field as follows:

If REV_PDCH_CC_INCL field is set to '0', then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 Multiplex Option for Lower Data Rates associated with the Reverse Packet Data Channel to be used (see [3]).

For a Service Request Message or a Service Response Message, the base station shall set this field to the Multiplex Option for Lower Data Rates associated with the Reverse Packet Data Channel (see [3]) for the proposed service configuration.

REV_PDCH_RC - Reverse Packet Data Channel Radio Configuration.

The mobile station shall set this field as follows:

If REV_PDCH_CC_INCL is set to ‘0’, then the mobile station shall omit this field; otherwise, the mobile station shall include this field and set it as follows:
For a Status Response Message, the mobile station shall set this field to the Reverse Packet Data Channel Radio Configuration (see [2]) for the current service configuration.

For a Service Request Message or a Service Response Message, the mobile station shall set this field to the Reverse Packet Data Channel Radio Configuration (see [2]) for the proposed service configuration.

The base station shall set this field as follows:

If REV_PDCH_CC_INCL field is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

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 Reverse Packet Data Channel Radio Configuration to be used (see [2]).

For a Service Request Message or a Service Response Message, the base station shall set this field to the Reverse Packet Data Channel Radio Configuration (see [2]) for the proposed service configuration.

RESERVED - Reserved bits.

The mobile station shall set this field as follows:

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’.

The base station shall set this field as follows:

The base station shall add reserved bits as needed in order to make the length of the entire message equal to an integer number of octets. The base station shall set these bits to ‘0’.

RESERVED - Reserved bits.
3.7.5.7.1 Channel Configuration for the Supplemental Channel

The channel configuration information for the Supplemental Channel consists of the following subfields:

<table>
<thead>
<tr>
<th>Subfields</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCH_REC_LEN</td>
<td>4</td>
</tr>
<tr>
<td>SCH_RC</td>
<td>5</td>
</tr>
<tr>
<td>CODING</td>
<td>1</td>
</tr>
<tr>
<td>FRAME_40_USED</td>
<td>1</td>
</tr>
<tr>
<td>FRAME_80_USED</td>
<td>1</td>
</tr>
<tr>
<td>MAX_RATE</td>
<td>4</td>
</tr>
</tbody>
</table>

SCH_REC_LEN - Supplemental Channel channel configuration record length. The mobile station or base station shall set this field to the number of octets included in this Supplemental Channel channel configuration record including this SCH_REC_LEN field.

SCH_RC - Supplemental Channel Radio Configuration. The mobile station or base station shall set this field to the Radio Configuration for this Supplemental Channel. Radio Configurations are defined in [2].

CODING - Coding type. The mobile station or base station shall set this field to ‘1’ if the mobile station or the base station is to use Convolutional Coding when the number of channel bits per frame is less than 360 and Turbo Coding when the number of channel bits per frame is equal to or greater than 360. The mobile station or base station shall set this field to ‘0’ if the mobile station or the base station uses Convolution Coding for all block sizes.

FRAME_40_USED - 40ms frame used indicator. The mobile station or base station shall set this field to ‘1’ if 40ms frame is used; otherwise, the mobile station or base station shall set this field to ‘0’.

If a f-dtch logical channel corresponding to the same sr_id is mapped to both forward Supplemental Channels 0 and 1, then the mobile station or base station shall specify the same frame length for both forward Supplemental Channels 0 and 1.
If a r-dtch logical channel corresponding to the same sr_id is mapped to both reverse Supplemental Channels 0 and 1, then the mobile station or base station shall specify the same frame length for both forward Supplemental Channels 0 and 1.

The base station shall not set both FRAME_40_USED and FRAME_80_USED fields set to ‘1’.

FRAME_80_USED - 80ms frame used indicator.

The mobile station or base station shall set this field to ‘1’ if 80ms frame is to be used; otherwise, the mobile station or base station shall set this field to ‘0’.

If a f-dtch logical channel corresponding to the same sr_id is mapped to both forward Supplemental Channels 0 and 1, then the mobile station or base station shall specify the same frame length for both forward Supplemental Channels 0 and 1.

Then the base station shall not set both FRAME_40_USED and FRAME_80_USED fields set to ‘1’.

MAX_RATE - Maximum supplemental channel rate

The mobile station or base station shall set this field according to Table 2.7.4.27.3-2 to indicate the maximum forward or reverse supplemental channel data rate supported.
3.7.5.8 Called Party Subaddress

This information record identifies the called party subaddress.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
/ CHARi 8 /
```

5  EXTENSION_BIT - The extension bit.

The base station shall set this field to ‘1’.

7  SUBADDRESS_TYPE - Type of subaddress.

The base station shall set this field to the SUBADDRESS_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.8.

12 ODD/EVEN_INDICATOR - The indicator of odd/even bits.

The base station shall set this field to the ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.8. It is only used when the type of subaddress is “User specified” and the coding is BCD.

18  RESERVED - Reserved bits.

The base station shall set this field to ‘000’.

20  CHARi - Character.

The base station shall include one occurrence of this field for each character in the called party subaddress.

When the SUBADDRESS_TYPE field is equal to ‘000’, the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS_TYPE field is set to ‘010’, user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets. When interworking with [36] networks, BCD coding should be applied.
3.7.5.9 Calling Party Subaddress

This information record identifies the calling party subaddress.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
CHARi
```

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’.

CHARi - 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.
3.7.5.10 Connected Subaddress

This information record identifies the subaddress of the responding party.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
{ CHARi 8 }
```

EXTENSION_BIT - The extension bit.

The base station shall set this field to ‘1’.

SUBADDRESS_TYPE - Type of subaddress.

The base station shall set this field to the SUBADDRESS_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [7], Section 4.5.14.

ODD/EVEN_INDICATOR - The indicator of odd/even bits.

The base station shall set this field to the ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [7], Section 4.5.14. It is only used when the type of subaddress is “User specified” and the coding is BCD.

RESERVED - Reserved bits.

The base station shall set this field to ‘000’.

CHARi - Character.

The base station shall include one occurrence of this field for each character in the connected subaddress.

When the SUBADDRESS_TYPE field is equal to ‘000’, the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS_TYPE field is set to ‘010’, user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets.

When interworking with [36] networks, BCD coding should be applied.
3.7.5.11 Redirecting Number

This information record identifies the Redirecting Number.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT_1</td>
<td>1</td>
</tr>
<tr>
<td>NUMBER_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>NUMBER_PLAN</td>
<td>4</td>
</tr>
<tr>
<td>EXTENSION_BIT_2</td>
<td>0 or 1</td>
</tr>
<tr>
<td>PI</td>
<td>0 or 2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 or 3</td>
</tr>
<tr>
<td>SI</td>
<td>0 or 2</td>
</tr>
<tr>
<td>EXTENSION_BIT_3</td>
<td>0 or 1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REDIRECTION_REASON</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
CHARI
```

EXTENSION_BIT_1 - The extension bit.

If the PI and SI are included in this record, the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘1’.

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 redirecting number, as defined in [34].

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 redirecting number, as defined in [34].

EXTENSION_BIT_2 - The extension bit.
If the EXTENSION_BIT_1 is set to ‘0’ and REDIRECTION_REASON is included in this record, the base station shall set this field to ‘0’. If the EXTENSION_BIT_1 is set to ‘0’ and REDIRECTION_REASON is not included in this record, the base station shall set this field to ‘1’. If the EXTENSION_BIT_1 is set to ‘1’, the base station shall omit this field.

**PI** - Presentation indicator.

This field indicates whether or not the redirecting number should be displayed.

if the EXTENSION_BIT_1 is set to ‘0’, 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 [34]; otherwise, the base station shall omit this field.

**RESERVED** - Reserved bits.

If the EXTENSION_BIT_1 is set to ‘0’, the base station shall set this field to ‘000’; otherwise, the base station shall omit this field.

**SI** - Screening indicator.

This field indicates how the redirecting number was screened.

If the EXTENSION_BIT_1 is set to ‘0’, 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 [34]; otherwise, the base station shall omit this field.

**EXTENSION_BIT_3** - The extension bit.

If the EXTENSION_BIT_2 is set to ‘0’, the base station shall set this field to ‘1’; otherwise, the base station shall omit this field.

**RESERVED** - Reserved bits.

If the EXTENSION_BIT_2 is set to ‘0’, the base station shall set this field to ‘000’; otherwise, the base station shall omit this field.

**REDIRECTION_REASON** - The reason for redirection.

If the EXTENSION_BIT_2 is set to ‘0’, the base station shall set this field to the REDIRECTION_REASON value shown in Table 3.7.5.5.11-1 corresponding to the redirection reason, as defined in [34]; otherwise, the base station shall omit this field.
### Table 3.7.5.11-1. Redirection Reason

<table>
<thead>
<tr>
<th>Description</th>
<th>REDIRECTION-REASON (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>0000</td>
</tr>
<tr>
<td>Call forwarding busy or called DTE busy</td>
<td>0001</td>
</tr>
<tr>
<td>Call forwarding no reply (circuit-mode only)</td>
<td>0010</td>
</tr>
<tr>
<td>Called DTE out of order (packet-mode only)</td>
<td>1001</td>
</tr>
<tr>
<td>Call forwarding by the called DTE (packet-mode only)</td>
<td>1010</td>
</tr>
<tr>
<td>Call forwarding unconditional or Systematic call redirection</td>
<td>1111</td>
</tr>
<tr>
<td>Reserved</td>
<td>others</td>
</tr>
</tbody>
</table>

**CHARi** - Character.

The base stations shall include one occurrence of this field for each character in the Redirecting Number. The base station shall set each occurrence of this field to the ASCII representation corresponding to the character, as specified in [9], with the most significant bit set to ‘0’.
3.7.5.12 Redirecting Subaddress

This information record identifies the subaddress of the responding party.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTENSION_BIT</td>
<td>1</td>
</tr>
<tr>
<td>SUBADDRESS_TYPE</td>
<td>3</td>
</tr>
<tr>
<td>ODD/EVEN_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>3</td>
</tr>
</tbody>
</table>

Zero or more occurrences of the following field:

```
/
```

```
CHARi  8
```

EXTENSION_BIT - The extension bit.
The base station shall set this field to ‘1’.

SUBADDRESS_TYPE - Type of subaddress.
The base station shall set this field to the SUBADDRESS_TYPE value shown in Table 2.7.4.19-1 corresponding to the type of the subaddress, as defined in [34].

ODD/EVEN_INDICATOR - The indicator of odd /even bits.
The base station shall set this field to the ODD/EVEN_INDICATOR value shown in Table 2.7.4.19-2 corresponding to the indicator of even/odd bits, as defined in [34]. It is only used when the type of subaddress is “User specified” and the coding is BCD.

RESERVED - Reserved bits.
The base station shall set this field to ‘000’.

CHARi - Character.
The base station shall include one occurrence of this field for each character in the redirecting subaddress.

When the SUBADDRESS_TYPE field is equal to ‘000’, the NSAP address shall be encoded using the preferred binary encoding specified in [35].

When the SUBADDRESS_TYPE field is set to ‘010’, user-specified subaddress field is encoded according to the user specification, subject to a maximum length of 20 octets.

When interworking with [36] networks, BCD coding should be applied.
3.7.5.13 Meter Pulses

This information record identifies the number of meter pulses and frequency of the alert tone.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PULSE_FREQUENCY</td>
<td>11</td>
</tr>
<tr>
<td>PULSE_ON_TIME</td>
<td>8</td>
</tr>
<tr>
<td>PULSE_OFF_TIME</td>
<td>8</td>
</tr>
<tr>
<td>PULSE_COUNT</td>
<td>4</td>
</tr>
<tr>
<td>RESERVED</td>
<td>1</td>
</tr>
</tbody>
</table>

- **PULSE_FREQUENCY** - Pulse frequency. The base station shall set this field to the frequency of the alert signals in units of 10 Hz or to zero to indicate that line polarity control is to be used. If this field is set to zero, the PULSE_ON_TIME and PULSE_OFF_TIME shall be the period of line polarity reversal and normal line polarity, respectively.

- **PULSE_ON_TIME** - Pulse on time. The base station shall set this field to the period of the meter pulses in units of 5 ms.

- **PULSE_OFF_TIME** - Pulse off time. The base station shall set this field to the period of the inter-pulse spacing in units of 5 ms.

- **PULSE_COUNT** - Pulse count. The base station shall set this field to the number of meter pulses.

- **RESERVED** - Reserved bits. The base station shall set this field to ‘0’.
3.7.5.14 Parametric Alerting

This information record allows the network to convey information to a user by means of programmable alerting signals.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADENCE_COUNT</td>
<td>8</td>
</tr>
<tr>
<td>NUM_GROUPS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_GROUPS occurrences of the following record:

```
/ (NUM_GROUPS)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMPLITUDE</td>
<td>8</td>
</tr>
<tr>
<td>FREQ_1</td>
<td>10</td>
</tr>
<tr>
<td>FREQ_2</td>
<td>10</td>
</tr>
<tr>
<td>ON_TIME</td>
<td>8</td>
</tr>
<tr>
<td>OFF_TIME</td>
<td>8</td>
</tr>
<tr>
<td>REPEAT</td>
<td>4</td>
</tr>
<tr>
<td>DELAY</td>
<td>8</td>
</tr>
</tbody>
</table>

/ (NUM_GROUPS)
```

CADENCE_COUNT - Cadence count.

The base station shall set this field to the number of times the cadence of tone groups will be generated between 0x01 and 0xFE. The base station shall set this field to 0x00 to indicate that the mobile station should end alert tone generation. The base station shall set this field to 0xFF to indicate that the cadence will repeat indefinitely.

NUM_GROUPS - Number of groups.

The base station shall set this field to the number of groups.

AMPLITUDE - Amplitude.

The base station shall set this field to the amplitude level of the tone group in units of -1 dBm.

FREQ_1 - Tone frequency 1.

The base station shall set this field to the first frequency of the tone group in units of 5 Hz.

FREQ_2 - Tone frequency 2.
The base station shall set this field to the second frequency of the tone group in units of 5 Hz. Setting this field to zero creates a single frequency tone.

ON_TIME - On time.

The base station shall set this field to the duration of the tone group in units of 50 ms.

OFF_TIME - Off time.

The base station shall set this field to the duration of the spacing between tones in units of 50 ms.

REPEAT - Repeat.

The base station shall set this field to the number of times the tone group should repeat. The base station shall set this field to 0xFF to indicate that the tone group will repeat indefinitely.

DELAY - Delay.

The base station shall set this field to the length of time before the next tone group begins in units of 50 ms.

CADENCE_TYPE - Parametric Alerting cadence type.

The base station shall set this field to indicate that the alert should be conveyed to the user as specified in Table 3.7.5.14.

Table 3.7.5.14. Cadence Types

<table>
<thead>
<tr>
<th>CADENCE_TYPE</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Not specified</td>
</tr>
<tr>
<td>01</td>
<td>Acoustic earpiece or similar device</td>
</tr>
<tr>
<td>10</td>
<td>Device other than acoustic earpiece or similar device (Eg. Ringer)</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

RESERVED - Reserved bits.

The base station shall set this field to ‘00’.
3.7.5.15 Line Control

This information record allows the network to convey line control information.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLARITY_INCLUDED</td>
<td>1</td>
</tr>
<tr>
<td>TOGGLE_MODE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REVERSE_POLARITY</td>
<td>0 or 1</td>
</tr>
<tr>
<td>POWER_DENIAL_TIME</td>
<td>8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 - 7 (as needed)</td>
</tr>
</tbody>
</table>

POLARITY_INCLUDED - Polarity parameter included.

If the mobile station is to change the line polarity, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

TOGGLE_MODE - If POLARITY_INCLUDED is set to ‘1’, the base station shall include this field and set it to ‘1’ to toggle the line polarity or to ‘0’ to set the polarity to the absolute value indicated in the REVERSE_POLARITY field.

REVERSE_POLARITY - Reverse polarity.

If POLARITY_INCLUDED is set to ‘1’ and TOGGLE_MODE is set to ‘1’, the base station shall include this field and set it to ‘0’; otherwise, the base station shall omit this field.

POWER_DENIAL_TIME - Power denial timeout.

The base station shall include this field and set it to the duration of the power denial in increments of 5 ms.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire message equal to an integer number of octets. The base station shall set these bits to ‘0’.
3.7.5.16 Extended Display

This information record allows the network to supply supplementary service display information that may be displayed by the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXT_DISPLAY_IND</td>
<td>1</td>
</tr>
<tr>
<td>DISPLAY_TYPE</td>
<td>7</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

```plaintext
{/}

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':

```plaintext
{/ (DISPLAY_LEN)

CHARi 8
}
```

<table>
<thead>
<tr>
<th>5</th>
<th>EXT_DISPLAY_IND</th>
<th>- The indicator of Extended Display Information record. The base station shall set this field to ‘1’.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>DISPLAY_TYPE</td>
<td>- The type of display. The base station shall set this field to the DISPLAY_TYPE value shown in Table 3.7.5.16-1 corresponding to the type of display, as defined in [8] Annex D.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>DISPLAY_TYPE (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>00000000</td>
</tr>
</tbody>
</table>

All other DISPLAY_TYPE values are reserved.

| 14 | DISPLAY_TAG | - The indicator of the display information. There are three types of display tags: mandatory control tags (Blank and Skip), display text tags, and optional control tags, see [8] Annex D. |

3-935
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.
<table>
<thead>
<tr>
<th>Description</th>
<th>DISPLAY_TAG (binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank</td>
<td>10000000</td>
</tr>
<tr>
<td>Skip</td>
<td>10000001</td>
</tr>
<tr>
<td>Continuation</td>
<td>10000010</td>
</tr>
<tr>
<td>Called Address</td>
<td>10000011</td>
</tr>
<tr>
<td>Cause</td>
<td>10000100</td>
</tr>
<tr>
<td>Progress Indicator</td>
<td>10000101</td>
</tr>
<tr>
<td>Notification Indicator</td>
<td>10000110</td>
</tr>
<tr>
<td>Prompt</td>
<td>10000111</td>
</tr>
<tr>
<td>Accumulated Digits</td>
<td>10001000</td>
</tr>
<tr>
<td>Status</td>
<td>10001001</td>
</tr>
<tr>
<td>Inband</td>
<td>10001010</td>
</tr>
<tr>
<td>Calling Address</td>
<td>10001011</td>
</tr>
<tr>
<td>Reason</td>
<td>10001100</td>
</tr>
<tr>
<td>Calling Party Name</td>
<td>10001101</td>
</tr>
<tr>
<td>Called Party Name</td>
<td>10001110</td>
</tr>
<tr>
<td>Original Called Name</td>
<td>10001111</td>
</tr>
<tr>
<td>Redirecting Name</td>
<td>10010000</td>
</tr>
<tr>
<td>Connected Name</td>
<td>10010001</td>
</tr>
<tr>
<td>Originating Restrictions</td>
<td>10010010</td>
</tr>
<tr>
<td>Date &amp; Time of Day</td>
<td>10010011</td>
</tr>
<tr>
<td>Call Appearance ID</td>
<td>10010100</td>
</tr>
<tr>
<td>Feature Address</td>
<td>10010101</td>
</tr>
<tr>
<td>Redirection Name</td>
<td>10010110</td>
</tr>
<tr>
<td>Redirection Number</td>
<td>10010111</td>
</tr>
<tr>
<td>Redirecting Number</td>
<td>10011000</td>
</tr>
<tr>
<td>Original Called Number</td>
<td>10011001</td>
</tr>
<tr>
<td>Connected Number</td>
<td>10011010</td>
</tr>
<tr>
<td>Text (e.g., ASCII)</td>
<td>10011110</td>
</tr>
</tbody>
</table>
DISPLAY_LEN - The display length.
The base station shall set this field to the number of octets of display text. See [8] Annex D.

CHARi - Character.
The base station shall include DISPLAY_LEN occurrences of this field, one for each character to be displayed, except for blank and skip. The base station shall set each occurrence of this field to the ASCII representation corresponding to the character entered, as specified in [9], with the most significant bit set to ‘0’.
3.7.5.17 Extended Record Type - International

The use of this record type is country-specific. The first ten bits of the type-specific fields shall include the Mobile Country Code (MCC) associated with the national standards organization administering the use of the record type. Encoding of the MCC shall be as specified in 2.3.1.3. The remaining six bits of the first two octets of the type-specific fields shall be used to specify the country-specific record type.
1  3.7.5.18 Reserved
1  3.7.5.19 Reserved
3.7.5.20 Non-Negotiable Service Configuration

This record is included in a Service Connect Message to specify the non-negotiable service configuration parameters to be used by the mobile station. This record can be included in a General Handoff Direction Message or a Universal Handoff Direction Message to specify the non-negotiable service configuration parameters to be used by the mobile station.
<table>
<thead>
<tr>
<th><strong>Type Specific Field</strong></th>
<th><strong>Length (bits)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>FPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FPC_PRI_CHAN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_MODE</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FPC_OLPC_FCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_FCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_FCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_FCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_OLPC_DCCH_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FPC_DCCH_FER</td>
<td>0 or 5</td>
</tr>
<tr>
<td>FPC_DCCH_MIN_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>FPC_DCCH_MAX_SETPT</td>
<td>0 or 8</td>
</tr>
<tr>
<td>GATING_RATE_INCL</td>
<td>1</td>
</tr>
<tr>
<td>PILOT_GATING_RATE</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Type Specific Field</strong></th>
<th><strong>Length (bits)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>FOR_SCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_FOR_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

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)
```

<table>
<thead>
<tr>
<th><strong>Type Specific Field</strong></th>
<th><strong>Length (bits)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_SCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>NUM_REV_SCH</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

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)
```

<table>
<thead>
<tr>
<th><strong>Type Specific Field</strong></th>
<th><strong>Length (bits)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>LPM_IND</td>
<td>2</td>
</tr>
<tr>
<td>NUM_LPM_ENTRIES</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>
If LPM_IND = '01', include NUM_LPM_ENTRIES occurrences of the following record:

\[
\{ \text{NUM_LPM_ENTRIES} \}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR_ID</td>
<td>3</td>
</tr>
<tr>
<td>LOGICAL_RESOURCE</td>
<td>4</td>
</tr>
<tr>
<td>PHYSICAL_RESOURCE</td>
<td>4</td>
</tr>
<tr>
<td>FORWARD_FLAG</td>
<td>1</td>
</tr>
<tr>
<td>REVERSE_FLAG</td>
<td>1</td>
</tr>
<tr>
<td>PRIORITY</td>
<td>4</td>
</tr>
</tbody>
</table>

\[
\} \text{NUM_LPM_ENTRIES}
\]

NUM_REC occurrences of the following record:

\[
\{ \text{NUM_REC} \}
\]

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_LEN</td>
<td>8</td>
</tr>
<tr>
<td>SR_ID</td>
<td>3</td>
</tr>
<tr>
<td>SDB_SO_OMIT</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (as needed)</td>
</tr>
</tbody>
</table>

\[
\} \text{NUM_REC}
\]
<table>
<thead>
<tr>
<th>Type Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_FLEX_NUM_BITS</td>
<td>1</td>
</tr>
<tr>
<td>NUM_BITS_TABLES_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_BITS_TABLES_COUNT</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

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) \\
\quad NUM_BITS_TABLE_ID 4 \\
\quad NUM_RECS 4 \\
\}

If USE_FLEX_NUM_BITS is equal to ‘1’, then NUM_RECS +1 occurrences of the following record:

\[
\{ (NUM_RECS+1) \\
\quad NUM_BITS_IDX 4 \\
\quad NUM_BITS 16 \\
\quad CRC_LEN_IDX 3 \\
\}
\]

\[
\} (NUM_RECS+1) \\
\} (NUM_BITS_TABLES_COUNT+1)
\]

(continues on next page)
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:

\[
\begin{array}{ll}
\text{VAR_RATE_TABLE_ID} & 3 \\
\text{NUM_RECS} & 4 \\
\end{array}
\]

If USE_VAR_RATE is equal to ‘1’, include NUM_RECS +1 occurrences of the following record:

\[
\begin{array}{ll}
\text{NUM_BITS_IDX} & 4 \\
\text{MASK} & \text{NUM_BITS_IDX} \\
\end{array}
\]

If USE_FLEX_NUM_BITS is equal to ‘1’, include the following fields:

\[
\begin{array}{ll}
\text{USE_OLD_FLEX_MAPPING} & 1 \\
\text{FSCH0_NBIT_TABLE_ID} & 0 \text{ or } 4 \\
\end{array}
\]

(continues on next page)
<table>
<thead>
<tr>
<th>Type Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSCH0_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FSCH1_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RSCH1_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FFCH_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RFCH_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FDCCH_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>FDCCH_NBITS_IDX</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RDCCH_NBIT_TABLE_ID</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RDCCH_NBITS_IDX</td>
<td>0 or 4</td>
</tr>
</tbody>
</table>

If USE_VAR_RATE is equal to ‘1’, include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_OLD_VAR_MAPPING</td>
<td>1</td>
</tr>
<tr>
<td>FSCH0_VAR_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RSCH0_VAR_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FSCH1_VAR_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RSCH1_VAR_TABLE_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>R_INC_RATE_ALLOWED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>F_INC_RATE_ALLOWED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>LTU_INFO_INCL</td>
<td>1</td>
</tr>
<tr>
<td>LTU_TABLES_INCL</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

NUM_LTU_TABLES 0 or 2

Include NUM_LTU_TABLES + 1 occurrences of the following record:

```plaintext
{ (NUM_LTU_TABLES+1)

| LTU_TABLE_ID | 3 |
```

(continues on next page)
<table>
<thead>
<tr>
<th>Type Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_ROWS</td>
<td>4</td>
</tr>
</tbody>
</table>

NUM_ROWS + 1 occurrences of the following records

\{(NUM_ROWS+1)\}

| NBIT_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)
<table>
<thead>
<tr>
<th>Type Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM_PARTITIONS</td>
<td>3</td>
</tr>
</tbody>
</table>

NUM_PARTITIONS + 1 occurrences of the following record:

\{(NUM_PARTITIONS+1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR_ID</td>
<td>3</td>
</tr>
<tr>
<td>SRV_NUM_BITS</td>
<td>9</td>
</tr>
</tbody>
</table>

\{(NUM_PARTITIONS+1)

\{(NUM_ROWS+1)

\{(NUM_PARTITION_TABLES+1)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USE_OLD_PART_MAPPING</td>
<td>0 or 1</td>
</tr>
<tr>
<td>FFCH_PART_TAB_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RFCH_PART_TAB_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FDCCH_PART_TAB_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>RDCCH_PART_TAB_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>USE_ERAM</td>
<td>0 or 1</td>
</tr>
<tr>
<td>SWITCHING_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>NUM_SOFT_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>NUM_SOFTER_SWITCHING_FRAMES_CHM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>RPC_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RPC_NUM_REC</td>
<td>0 or 2</td>
</tr>
</tbody>
</table>

If RPC INCL is set to ‘1’, RPC_NUM_REC occurrences of the following record:

\{(RPC_NUM_REC)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPC_ADJ_REC_TYPE</td>
<td>4</td>
</tr>
<tr>
<td>RPC_ADJ_REC_LEN</td>
<td>5</td>
</tr>
<tr>
<td>EXT_RPC_ADJ_REC_LEN</td>
<td>0 or 10</td>
</tr>
</tbody>
</table>

Type-specific fields

\{8× RPC_ADJ_REC_LEN, or 8× EXT_RPC_ADJ_REC_LEN

\{(RPC_NUM_REC)

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCMC_LPM_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BCMC_LPM_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS</td>
<td>0 or 6</td>
</tr>
<tr>
<td>NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:</td>
<td></td>
</tr>
<tr>
<td>(NUM_BCMC_PROGRAMS+1)</td>
<td></td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID_LEN</td>
<td>5</td>
</tr>
<tr>
<td>BCMC_PROGRAM_ID</td>
<td>BCMC_PROGRAM_ID_LEN + 1</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
<td>3</td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
<tr>
<td>NUM_FLOW_DISCRIMINATOR</td>
<td>NUM_FLOW_DISCRIMINATOR+1 or 1 occurrences of the following variable length record:</td>
</tr>
<tr>
<td>(NUM_FLOW_DISCRIMINATOR+1) or 1</td>
<td></td>
</tr>
<tr>
<td>BCMC_FLOW_DISCRIMINATOR</td>
<td>BCMC_FLOW_DISCRIMINATOR_LEN</td>
</tr>
<tr>
<td>BCMC_FLOW_ID_LEN_IND</td>
<td>0 or 2</td>
</tr>
<tr>
<td>BCMC_NUM_LPM_ENTRIES</td>
<td>0 or 4</td>
</tr>
<tr>
<td>BCMC_NUM_LPM_ENTRIES occurrences of the following record:</td>
<td></td>
</tr>
<tr>
<td>+(BCMC_NUM_LPM_ENTRIES)</td>
<td></td>
</tr>
<tr>
<td>BCMC_FLOW_ID</td>
<td>16, 24 or 32</td>
</tr>
<tr>
<td>PHYSICAL_RESOURCE</td>
<td>4</td>
</tr>
<tr>
<td>FORWARD_FLAG</td>
<td>1</td>
</tr>
<tr>
<td>REVERSE_FLAG</td>
<td>1</td>
</tr>
<tr>
<td>BSR_ID_INCL</td>
<td>1</td>
</tr>
<tr>
<td>BSR_ID</td>
<td>0 or 3</td>
</tr>
<tr>
<td>FOR_TRAFFIC</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_TRAFFIC</td>
<td>0 or 4</td>
</tr>
<tr>
<td>+ (NUM_FLOW_DISCRIMINATOR+1) or 1</td>
<td></td>
</tr>
<tr>
<td>(BCMC_NUM_LPM_ENTRIES)</td>
<td></td>
</tr>
<tr>
<td>+ (NUM_BCMC_PROGRAMS+1)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_PARMS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_PARMS_1_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_AUTO_TPR</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>REV_PDCH_NUM_ARQ_ROUNDS_NORMAL</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_PDCH_OPER.PARAMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCH_DEFAULT_PERSISTENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_RESET_PERSISTENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_GRANT_PRECEDENCE</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_MSIB_SUPPORTED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_ALWAYS_ACK_FINAL_ROUND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_SOFT_HANDOFF_RESET_IND</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH(boost).BOOST_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_NUM_ARQ_ROUNDS_BOOST</td>
<td>0 or 2</td>
</tr>
<tr>
<td>REV_PDCH_BOOST_OVERSHOOT</td>
<td>0 or 57</td>
</tr>
<tr>
<td>REV_REQCH_ENABLED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_REQCH_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_REQCH_QUICK_REPEAT_ALLOWED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_REQCH_POWER_REPORTS_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_REQCH_POWER_HEADROOM_INCREASE</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_REQCH_POWER_HEADROOM_DECREASE</td>
<td>0 or 5</td>
</tr>
<tr>
<td>REV_REQCH_HEADROOM_DURATION</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_REQCH_MAX_POWER_UPDATE_PARMS_INCL</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCH_CRC_PARMS_INCL</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_INIT_TARGET_TPR</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Parameter</td>
<td>Value</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>REV_PDCH_MAX_TARGET_TPR</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCH_QUICK_START_THRESH</td>
<td>0 or 7</td>
</tr>
<tr>
<td>REV_PDCH_EP_MAP_LEN</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_EP_MAP</td>
<td>0 or ((11 \times \text{(REV_PDCH_EP_MAP_LEN + 1)}))</td>
</tr>
</tbody>
</table>

If \text{REV_PDCH_CRC_PARMS_INCL} is included and equals ‘1’,

\{( \text{weight(REV_PDCH_EP_MAP)} )\}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_STEP_UP</td>
<td>8</td>
</tr>
<tr>
<td>REV_PDCH_STEP_DOWN</td>
<td>8</td>
</tr>
</tbody>
</table>

\{( \text{weight(REV_PDCH_SR_ID_MAP)} )\}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_SR_ID_MAP</td>
<td>0 or 7</td>
</tr>
</tbody>
</table>

\{( \text{weight(REV_PDCH_SR_ID_MAP)} )\}

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_PDCH_BOOST_ALLOWED</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_PDCH_AUTO_ALLOWED</td>
<td>0 or 1</td>
</tr>
</tbody>
</table>

\{( \text{weight(REV_PDCH_SR_ID_MAP)} )\}

(continues on next page)
If `REV_REQCH_PARMS_INCL` is included and equals ‘1’

\[
\{( \text{weight(REV_PDCH_SR_ID_MAP)+1} ) \} 
\]

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_REQCH_MIN_DURATION</td>
<td>8</td>
</tr>
<tr>
<td>REV_REQCH_USE_POWER_REPORTS</td>
<td>0 or 1</td>
</tr>
<tr>
<td>REV_REQCH_USE_BUFFER_REPORTS</td>
<td>1</td>
</tr>
<tr>
<td>REV_REQCH_USE_WATERMARKS</td>
<td>1</td>
</tr>
<tr>
<td>REV_REQCH_USE_DEFAULT_TAB</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_BUF_QUANT_PARM_1</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_REQCH_BUF_QUANT_PARM_2</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_REQCH_USE_WATERMARKS</td>
<td>1</td>
</tr>
<tr>
<td>REV_REQCH_HIGH_WATERMARK_-_1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_HIGH_WATERMARK_-_2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_LOW_WATERMARK_-_1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_LOW_WATERMARK_-_2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_CEILING_1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_CEILING_2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_FLOOR_1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>REV_REQCH_FLOOR_2</td>
<td>0 or 3</td>
</tr>
</tbody>
</table>

\[( \text{weight(REV_PDCH_SR_ID_MAP)+1} ) \]

**RESERVED** | 0-7 (as needed)

**FPC_INCL** - Forward power control information included indicator.

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’.

**FPC_PRI_CHAN** - Power Control Subchannel indicator.

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:

The base station shall set this field to ‘0’ if the mobile station is to perform the primary inner loop estimation on the received Forward Fundamental Channel; the base station shall set this field to ‘1’ if the mobile station is to perform the primary inner loop estimation on the received Forward Dedicated Control Channel.
If only Fundamental Channel is assigned, the base station shall set this field to ‘0’. If only the Dedicated Control Channel is assigned, the base station shall set this field to ‘1’.

If the F-CPCH is assigned, the base station will multiplex the Power Control Subchannel on the F-CPCH; otherwise:

If this field is set to ‘0’, the base station will multiplex the Power Control Subchannel on the Forward Fundamental Channel; otherwise, the base station will multiplex the Power Control Subchannel on the Forward Dedicated Control Channel.

FPC_MODE - Forward Power Control operation mode indicator.

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:

The base station shall set this field to the value of the forward power control operation mode (see [2]).

FPC_OLPC_FCH_INCL - Fundamental Channel Outer Loop Power Control parameter included indicator.

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:

If the forward link Fundamental Channel outer loop power control parameters are included in this record, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FPC_FCH_FER - Fundamental Channel target Frame Error Rate.

If FPC_OLPC_FCH_INCL is included and set to ‘1’, the base station shall set this field to the target Frame Error Rate on the Forward Fundamental Channel, as specified in Table 3.7.3.3.2.25-2; otherwise, the base station shall omit this field.

FPC_FCH_MIN_SETPT - Minimum Fundamental Channel Outer Loop Eb/Nt setpoint.

If FPC_OLPC_FCH_INCL is included and set to ‘1’, the base station shall set this field to minimum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise, the base station shall omit this field.

FPC_FCH_MAX_SETPT - Maximum Fundamental Channel Outer Loop Eb/Nt setpoint.

If FPC_OLPC_FCH_INCL is set to ‘1’, the base station shall set this field to maximum Fundamental Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise, the base station shall omit this field.

FPC_OLPC_DCCH_INCL - Dedicated Control Channel Outer Loop Power Control parameter included indicator.

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:
If the forward link Dedicated Control Channel outer loop power control parameters are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**FPC_DCCH_FER** - Dedicated Control Channel target Frame Error Rate.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to the target Frame Error Rate on the Forward Dedicated Control Channel, as specified in Table 3.7.3.3.2.25-2; otherwise, the base station shall omit this field.

**FPC_DCCH_MIN_SETPT** - Minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to minimum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise, the base station shall omit this field.

**FPC_DCCH_MAX_SETPT** - Maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint.

If FPC_O LPC_DCCH_INCL is included and set to ‘1’, the base station shall set this field to maximum Dedicated Control Channel Outer Loop Eb/Nt setpoint, in units of 0.125dB; otherwise, the base station shall omit this field.

**GATING_RATE_INCL** - Reverse Pilot Channel Gating rate included flag.

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’.

**PILOT_GATING_RATE** - Reverse Pilot Channel Gating rate.

If the GATING_RATE_INCL field 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 PILOT_GATING_RATE field shown in Table 3.7.5.20-1 corresponding to the gating rate on the Reverse Pilot Channel.

<table>
<thead>
<tr>
<th>PILOT_GATING_RATE field (binary)</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Gating rate 1</td>
</tr>
<tr>
<td>01</td>
<td>Gating rate ½</td>
</tr>
<tr>
<td>10</td>
<td>Gating rate ¼</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**FOR_SCH_INCL** - Forward Supplemental Channel information included indicator.
The base station shall set this field to ‘1’, if the forward Supplemental Channel information is included; otherwise, the base station shall set this field to ‘0’.

NUM_FOR_SCH - Number of Forward Supplemental Channels.

If the FOR_SCH_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the number of Forward Supplemental Channels associated with this service configuration.

If the NUM_FOR_SCH field is present and is set to any value other than ‘00’, the base station shall include one occurrence of the following two-field record for each Forward Supplemental Channel included in this record:

FOR_SCH_ID - Forward Supplemental Channel Identification.

The base station shall set this field to the identifier of the Forward Supplemental Channel pertaining to this record.

FOR_SCH_FRAME_OFFSET - Forward Supplemental Channel multiple frame offset.

The base station shall set this field to the multiple frame offset of this Forward Supplemental Channel. The frames of this Forward Supplemental Channel are delayed by

\[(FRAME_{OFFSET} \times 1.25 + FOR\_SCH\_FRAME\_OFFSET \times 20)\] ms relative to system timing (see [2]).

REV_SCH_INCL - Reverse Supplemental Channel information included indicator.

The base station shall set this field to ‘1’ if the reverse Supplemental Channel information is included; otherwise, the base station shall set this field to ‘0’.

NUM_REV_SCH - Number of Reverse Supplemental Channels.

If the REV_SCH_INCL field is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to the number of Reverse Supplemental Channels associated with this service configuration.

If the NUM_REV_SCH field is present and is set to any value other than ‘00’, the base station shall include one occurrence of the following two-field record for each Reverse Supplemental Channel included in this record:

REV_SCH_ID - Reverse Supplemental Channel Identification.

The base station shall set this field to the identifier of the Reverse Supplemental Channel pertaining to this record.

REV_SCH_FRAME_OFFSET - Reverse Supplemental Channel multiple frame offset.

The base station shall set this field to the multiple frame offset with this Reverse Supplemental Channel. The frames of this Reverse Supplemental Channel are delayed by

\[(FRAME_{OFFSET} \times 1.25 + REV\_SCH\_FRAME\_OFFSET \times 20)\] ms relative to system timing (see [2]).

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

<table>
<thead>
<tr>
<th>LPM_IND Field (binary)</th>
<th>Logical-to-Physical Mapping indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>Use the default Logical-to-Physical Mapping</td>
</tr>
<tr>
<td>01</td>
<td>Use the Logical-to-Physical Mapping included in this record</td>
</tr>
<tr>
<td>10</td>
<td>Use the previously stored Logical-to-Physical Mapping</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>LOGICAL_RESOURCE (binary)</th>
<th>Logical Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>dtch</td>
</tr>
<tr>
<td>0001</td>
<td>dsch</td>
</tr>
<tr>
<td>0010 – 1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>PHYSICAL_RESOURCE (binary)</th>
<th>Physical Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>FCH</td>
</tr>
<tr>
<td>0001</td>
<td>DCCH</td>
</tr>
<tr>
<td>0010</td>
<td>SCH0</td>
</tr>
<tr>
<td>0011</td>
<td>SCH1</td>
</tr>
<tr>
<td>0100</td>
<td>PDCH</td>
</tr>
<tr>
<td>0101 – 1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

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.

3-958
The base station shall set this field to the number of the following variable-length records included in the message.

The base station shall include one occurrence of the following variable-length record for each service option connection for which this record needs to be specified.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECORD_LEN</td>
<td>Record length. The base station shall set this field to the number of octets included in this variable-length record including this field.</td>
</tr>
<tr>
<td>SR_ID</td>
<td>Service reference identifier. The base station shall set this field to the identifier of the service reference associated with this service-specific record.</td>
</tr>
<tr>
<td>SDB_SO_OMIT</td>
<td>Short Data Burst service option number omitted indicator. The base station shall set this field to ‘1’ if the mobile station is required to omit the service option number when sending Short Data Burst (see IS-707-A-2) for this service option connection; otherwise, the base station shall set this field to ‘0’.</td>
</tr>
<tr>
<td>RESERVED</td>
<td>Reserved bits. The base station shall add reserved bits as needed in order to make the length of this record equal to an integer number of octets. The base station shall set these bits to ‘0’.</td>
</tr>
<tr>
<td>USE_FLEX_NUM_BITS</td>
<td>Use flexible (non-default) number of bits per frame indicator. The base station shall set this field to ‘0’ to indicate that the mapping between the number of information bits per frame [NUM_BITS], and a four-bit index field [NUM_BITS_IDX], shall follow the default mapping identified in Table 3.7.3.3.2.37-2 and Table 3.7.3.3.2.37-4. The base station shall set this field to ‘1’ to indicate a non-default mapping between the number of information bits per frame, [NUM_BITS], and a four-bit index field [NUM_BITS_IDX] is used for at least a forward or reverse traffic channel.</td>
</tr>
<tr>
<td>NUM_BITS_TABLES_INCL</td>
<td>Flexible Rate Tables included indicator. If the USE_FLEX_NUM_BITS 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: If the Flexible 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’.</td>
</tr>
<tr>
<td>NUM_BITS_TABLES_COUNT</td>
<td>Number of instances of the Flexible Rate Table included in this message.</td>
</tr>
</tbody>
</table>
If the NUM_BITS_TABLES_INCL field 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 Flexible Rate Table included in this message; otherwise, the base station shall omit this field.

If NUM_TABLES_INCL is included and is equal to ‘1’, the base station shall include NUM_BITS_TABLES_COUNT+1 instances of the Flexible Rate Table.

NUM_BITS_TABLE_ID - Flexible Rate Table ID.

The base station shall set this field to the ID of the Flexible Rate Table that follows. The base station shall not set this field to ‘0000’.

NUM_RECS - Number of records in the Flexible Rate Table.

The base station shall set this field to one less than the number of three-field records that follows.

The base station shall include NUM_RECS+1 instances of the following three-field record:

NUM_BITS_IDX - Index to the number of bits array.

The base station shall set this field to the index to the array that identifies the number of bits per frame.

NUM_BITS - Number of bits array.

The base station shall set this field to the number of information bits per frame corresponding to the index specified by NUM_BITS_IDX. The base station shall set the number of information bits per frame specified by the service option numbers included in the service configuration record.

CRC_LEN_IDX - Array of Number of CRC bits.

The base station shall set this field to specify the number of CRC bits per frame corresponding to the index specified by NUM_BITS_IDX according to Table 3.7.5.20-5. The base station shall not specify more than one value of the CRC length for the same number of bits per frame for a specific channel (i.e., for a given channel, the number of information bits per frame uniquely specifies the length of the CRC field).
### Table 3.7.5.20-5. CRC_LENIDX

<table>
<thead>
<tr>
<th>CRC_LENIDX (binary)</th>
<th>Number of CRC bits per frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0</td>
</tr>
<tr>
<td>001</td>
<td>6</td>
</tr>
<tr>
<td>010</td>
<td>8</td>
</tr>
<tr>
<td>011</td>
<td>10</td>
</tr>
<tr>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>101</td>
<td>16</td>
</tr>
<tr>
<td>110-111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

1. **USE_VAR_RATE** - Use variable rate on supplemental channels indicator.

   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).

   The base station shall set this bit to ‘0’ to indicate that variable rate on supplemental channels are not allowed.

2. **VAR_TABLES_INCL** - Variable Rate Tables included indicator.

   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:

   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’.

3. **VAR_RATE_TABLES_COUNT** - Number of instances of the Variable Rate Mask table included in this message.

   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:

   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.

4. **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’.

5. **NUM_RECS** - Number of records in the Variable Rate Mask table.
The base station shall set this field to one less than the number of two-field records that follows.

The base station shall include NUM_RECS+1 instances of the following two fields:

**NUM_BITS_IDX** - Index to the number of bits array.

The base station shall set this field to the index to the array that identifies the number of bits per supplemental channel frame.

**MASK** - Number of bits array.

The base station shall set this field to a mask that identifies the other members of the Variable Rate Set. The base station shall set the \( i \)th LSB bit (\( i=1, \ldots, \text{NUM_BITS_IDX} \)) of this field to ‘1’ to indicate that the number of bits per frame specified by the index NUM_BITS_IDX-i is to be included in the Supplemental Variable Rate Set.

**USE_OLD_FLEX_MAPPING** - Use the previously downloaded mapping between the channels and Flexible Rate Tables.

If the USE_FLEX_NUM_BITS 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:

The base station shall set this field to ‘1’ to indicate that the mobile station is to use the previously downloaded mapping between the channels and Flexible Rate Tables. The base station shall set this field to ‘0’, if the following eight fields are included in this message.

**FSCH0_NBIT_TABLE_ID** - Forward Supplemental Channel 0 Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to Forward Supplemental Channel 0. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for Forward Supplemental 0 and the default table specified in 3.7.3.3.2.37-4 shall be used.

**RSCH0_NBIT_TABLE_ID** - Reverse Supplemental Channel 0 Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to Reverse Supplemental Channel 0. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for Reverse Supplemental 0 and the default table specified in 3.7.3.3.2.37-2 shall be used.

**FSCH1_NBIT_TABLE_ID** - Forward Supplemental Channel 1 Flexible Rate Table ID.
If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to Forward Supplemental Channel 1. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for Forward Supplemental 1 and the default table specified in 3.7.3.2.37-4 shall be used.

**RSCH1_NBIT_TABLE_ID** - Reverse Supplemental Channel 1 Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to Reverse Supplemental Channel 1. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for Reverse Supplemental 1 and the default table specified in 3.7.3.2.37-2 shall be used.

**FFCH_NBIT_TABLE_ID** - Forward Fundamental Channel Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to the Forward Fundamental Channel. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for the Forward Fundamental Channel.

**RFCH_NBIT_TABLE_ID** - Reverse Fundamental Channel Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to the Reverse Fundamental Channel. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for the Reverse Fundamental Channel.

**FDCCH_NBIT_TABLE_ID** - Forward Dedicated Control Channel Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to the Forward Dedicated Control Channel. The base station shall set this field to ‘0000’ to indicate that the Flexible Rate feature is not used for the Forward Dedicated Control Channel.
FDCCH_NBITS_IDX - Forward Dedicated Control Channel number of information bits per frame index.

If the FDCCH_NBIT_TABLE_ID field is included and is not equal to '0000', the base station shall include this field and set this field to indicate the number of information bits per Forward Dedicated Control Channel frame; otherwise, the base station shall omit this field.

The number of information bits per frame is specified by the Flexible Rate Table associated with Forward Dedicated Control Channel and FDCCH_NBITS_IDX as the index to the table (i.e., NUM_BITSs[FDCCH_NBIT_TABLE_IDr][FDCCH_NBITS_IDX].

RDCCH_NBIT_TABLE_ID - Reverse Dedicated Control Channel Flexible Rate Table ID.

If the USE_OLD_FLEX_MAPPING field is included and is equal to '0', the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Flexible Rate Table corresponding to the Reverse Dedicated Control Channel. The base station shall set this field to '0000' to indicate that the Flexible Rate feature is not used for the Reverse Dedicated Control Channel.

RDCCH_NBITS_IDX - Reverse Dedicated Control Channel number of information bits per frame index.

If the RDCCH_NBIT_TABLE_ID field is included and is not equal to '0000', the base station shall include this field and set this field to indicate the number of information bits per Reverse Dedicated Control Channel frame; otherwise, the base station shall omit this field.

The number of information bits per frame is specified by the Flexible Rate Table associated with Reverse Dedicated Control Channel and RDCCH_NBITS_IDX as the index to the table (i.e., NUM_BITSs[RDCCH_NBIT_TABLE_IDr][RDCCH_NBITS_IDX].

USE_OLD_VAR_MAPPING - Use the previously downloaded mapping between the channels and Variable Rate Mask Tables.

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:

The base station shall set this field to '1' to indicate that the mobile station is to use the previously downloaded mapping between the channels and Variable Rate Mask Tables. The base station shall set this field to '0', if the following four fields are included in this message.
FSCH0_VAR_TABLE_ID  - Forward Supplemental Channel 0 Variable Rate Mask Table ID.  

If the USE_OLD_VAR_MAPPING field is included and is equal to '0', the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Variable Rate Mask Table corresponding to Forward Supplemental Channel 0. The base station shall set this field to '000' to indicate that no variable rate operation is performed on the F-SCH0.

RSCH0_VAR_TABLE_ID  - Reverse Supplemental Channel 0 Variable Rate Mask Table ID.  

If the USE_OLD_VAR_MAPPING field is included and is equal to '0', the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Variable Rate Mask Table corresponding to Reverse Supplemental Channel 0. The base station shall set this field to '000' to indicate that the mobile station is not to autonomously change the rate of the R-SCH0.

FSCH1_VAR_TABLE_ID  - Forward Supplemental Channel 1 Variable Rate Mask Table ID.  

If the USE_OLD_VAR_MAPPING field is included and is equal to '0', the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Variable Rate Mask Table corresponding to Forward Supplemental Channel 1. The base station shall set this field to '000' to indicate that no variable rate operation is performed on the F-SCH1.

RSCH1_VAR_TABLE_ID  - Reverse Supplemental Channel 1 Variable Rate Mask Table ID.  

If the USE_OLD_VAR_MAPPING field is included and is equal to '0', the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the ID of the Variable Rate Mask Table corresponding to Reverse Supplemental Channel 1. The base station shall set this field to '000' to indicate that the mobile station is not to autonomously change the rate of the R-SCH1.

R_INC_RATE_ALLOWED  - Reverse increase rate within Variable Rate Set Allowed indicator.  

If the USE_VAR_RATE field is included and is equal to ‘1’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:
The base station shall set this field to ‘1’ to indicate that the mobile station is allowed to switch between any of the rates (i.e., number of bits per frame) in the Variable Rate Set for the Reverse Supplemental channels. The base station shall set this field to ‘0’ to indicate that only a downward transition in rate within the rates (i.e., number of bits per frame) in the Variable Rate Set for the Reverse Supplemental channels is allowed.

**F_INC_RATE_ALLOWED** - Forward increase rate within Variable Rate Set Allowed indicator.

If the USE_VAR_RATE field is included and is equal to ‘1’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to ‘1’ to indicate that the base station is allowed to switch between any of the rates (i.e., number of bits per frame) in the Variable Rate Set for the Forward Supplemental channels. The base station shall set this field to ‘0’ to indicate that only a downward transition in rate within the rates (i.e., number of bits per frame) in the Variable Rate Set for the Forward Supplemental channels is possible.

**LTU_INFO_INCL** - LTU Tables included indicator.

The base station shall set this field to ‘1’ if the base station includes LTU related information in this message; otherwise, the base station shall set this field to ‘0’.

The base station shall set this field to ‘0’ if the mobile station indicates that it does not support downloadable LTU Table in the capability information (i.e., the \texttt{F\_SCH\_LTU\_TAB\_SUPPORTED} and \texttt{R\_SCH\_LTU\_TAB\_SUPPORTED} fields in the capability information are equal to ‘0’).

**LTU_TABLES_INCL** - LTU Tables included indicator.

If the LTU_INFO_INCL field is equal to ‘0’, the base station shall omit this field; otherwise, the base stations shall include this field and set this field as follows:

If the LTU 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’.

If LTU_TABLES_INCL is included and is equal to ‘1’, the base station shall include the following fields related to the LTU Table information:

**NUM_LTU_TABLES** - Number of LTU tables included.

The base station shall set this field to the number of LTU Tables minus one included in this message.

If LTU_TABLES_INCL is included and is equal to ‘1’, then the base station shall include \texttt{NUM_LTU_TABLES} + 1 occurrences of the following fields:
LTU_TABLE_ID - LTU Table ID.
The base station shall set this field to the ID of the LTU Table that follows. The base station shall not set this field to ‘000’.

NUM_ROWS - Number of configurations associated with the LTU Table identified by LTU_TABLE_ID.
The base station shall set this field to one less than the number of rows of the LTU Table identified by LTU_TABLE_ID.

If LTU_TABLES_INCL is included and is equal to ‘1’, then the base station shall include the NUM_ROWS + 1 occurrences of the following fields:

NBITS_IDX - Number of bits per frame index.
The base station shall set this field to the 4-bit index that specified the number of information bits per supplemental channel frame.

NUM_LTUS - Number of LTUs per physical layer supplemental channel frame.
The base station shall specify the number of LTUs per physical layer supplemental channel frame corresponding to the number of information bits per supplemental channel frame specified by NBITS_IDX according to Table 3.7.5.20-6. The base station shall set this field to ‘0000’ to indicate that no LTUs are supported for the number of information bits per frame specified by NBITS_IDX.

Table 3.7.5.20-6. NUM_LTUS

<table>
<thead>
<tr>
<th>NUM_LTUS (binary)</th>
<th>Number of LTUs per supplemental channel frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>0</td>
</tr>
<tr>
<td>0001</td>
<td>2</td>
</tr>
<tr>
<td>0010</td>
<td>3</td>
</tr>
<tr>
<td>0011</td>
<td>4</td>
</tr>
<tr>
<td>0100</td>
<td>5</td>
</tr>
<tr>
<td>0101</td>
<td>6</td>
</tr>
<tr>
<td>0110</td>
<td>7</td>
</tr>
<tr>
<td>0111</td>
<td>8</td>
</tr>
<tr>
<td>1000-1111</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

USE_OLD_LTU_MAPPING - Use the previously downloaded mapping between the channels and LTU Tables.

If the LTU_INFO_INCL 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:

The base station shall set this field to ‘1’ to indicate that the mobile station is to use the previously downloaded mapping between the channels and LTU Tables. The base station shall set this field to ‘0’ if the following four fields are included in this message.

**FSCH0_LTU_TAB_ID** - Forward Supplemental Channel LTU Table ID.

If USE_OLD_LTU_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the LTU Table ID to be used for the Forward Supplemental Channel 0. The base station shall set this field to ‘000’ to indicate that the default number of LTUs are to be used (see [3]). The base station shall set this field to ‘000’ if MuxPDU Type 5 is not used on this channel (see [3]).

**RSCH0_LTU_TAB_ID** - Reverse Supplemental Channel LTU Table ID.

If USE_OLD_LTU_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the LTU Table ID to be used for the Reverse Supplemental Channel 0. The base station shall set this field to ‘000’ to indicate that the default number of LTUs are to be used (see [3]). The base station shall set this field to ‘000’ if MuxPDU Type 5 is not used on this channel (see [3]).

**FSCH1_LTU_TAB_ID** - Forward Supplemental Channel LTU Table ID.

If USE_OLD_LTU_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the LTU Table ID to be used for the Forward Supplemental Channel 1. The base station shall set this field to ‘000’ to indicate that the default number of LTUs are to be used (see [3]). The base station shall set this field to ‘000’ if MuxPDU Type 5 is not used on this channel (see [3]).

**RSCH1_LTU_TAB_ID** - Reverse Supplemental Channel LTU Table ID.

If USE_OLD_LTU_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the LTU Table ID to be used for the Reverse Supplemental Channel 1. The base station shall set this field to ‘000’ to indicate that the default number of LTUs are to be used (see [3]). The base station shall set this field to ‘000’ if MuxPDU Type 5 is not used on this channel (see [3]).
PARTITION_TABLES_INFO_INCL - Partition Tables information included indicator.

If USE_FLEX_NUM_BITS 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:

If Partition Tables 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’.

PARTITION_TABLES_INCL - Partition Tables included indicator.

If PARTITION_TABLES_INFO_INCL 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:

If the Partition 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’.

If PARTITION_TABLES_INCL is included and is equal to ‘1’, then the base station shall include the following fields

NUM_PARTITION_TABLES - Number of partition tables.

The base station shall set this field to one less than the number of Partition Tables corresponding to an FCH or DCCH included in this message.

If PARTITION_TABLES_INCL is included and is equal to ‘1’, then the base station shall include the NUM_PARTITION_TABLES + 1 occurrences of the following fields:

PARTITION_TABLE_ID - Partition Table ID.

The base station shall set this field to the ID of the Partition Table that follows. The base station shall not set this field to ‘000’.

NUM_ROWS - Number of configurations associated with the Partition Table identified by PARTITION_TABLE_ID.

The base station shall set this field to one less than the number of rows of the Partition Table identified by PARTITION_TABLE_ID.

If PARTITION_TABLES_INCL is included and is equal to ‘1’, then the base station shall include NUM_ROWS + 1 occurrences of the following fields:

CATEGORY - Category number.

The base station shall set this field to the category number of the entry of the Partition Table identified by number of bits per each service as specified below. The base station shall not set this field to ‘00001’ or ‘00010’. The base station shall place rows of the Partition Table corresponding to the same number of total information bits per frame consecutively. See [3].

MUX_HEADER_LEN - Multiplex Sublayer Header Length.
The base station shall set this field to the length of the multiplex sublayer header corresponding to the entry of the Partition Table identified by number of bits per each service as specified below.

**MUX_HEADER** - Multiplex Sublayer Header.

The base station shall set this field to the multiplex sublayer header corresponding to the entry of the Partition Table identified by number of bits per each service as specified below.\(^\text{14}\)

**NUM_PARTITIONS** - Number of partitions.

The base station shall set this field to one less than the number of partitions corresponding to each service (including signaling) included in the entry of the Partition Table identified by CATEGORY.

If **PARTITION_TABLES_INCL** is included and is equal to ‘1’, then the base station shall include **NUM_PARTITIONS + 1** occurrences of the following fields:

**SR_ID** - Service Reference ID.

The base station shall set this field to the sr_id of the service (sr_id = ‘000’ for signaling) present in this category.

**SRV_NUM_BITS** - Number of bits allocated to the service.

The base station shall set this field to the number of bits allocated to the service (including signaling) identified by **SR_ID**.

**USE_OLD_PART_MAPPING** - Use the previously downloaded mapping between the channels and Partition Tables.

If **PARTITION_TABLES_INFO_INCL** is equal to ‘1’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to ‘1’ to indicate that the mobile station is to use the previously downloaded mapping between the channels and Partition Tables. The base station shall set this field to ‘0’, if the following four fields are included in this message.

**FFCH_PART_TAB_ID** - Forward Fundamental Channel Partition Table ID.

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\(^{14}\) 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.
If USE_OLD_PART_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the Partition Table ID to be used for the Forward Fundamental Channel. The base station shall set this field to ‘000’ to indicate that the default number of bits per service is to be used (see MuxPDU Type 1 and 2 Categories and Formats for the FCH and DCCH in [3]). The base station shall set this field to a value other than ‘000’ if the FFCH_NBIT_TABLE_ID field is included in this message and is not set to ‘0000’.

**RFCH_PART_TAB_ID** - Reverse Fundamental Channel Partition Table ID.

If USE_OLD_PART_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the Partition Table ID to be used for the Reverse Fundamental Channel. The base station shall set this field to ‘000’ to indicate that the default number of bits per service is to be used (see MuxPDU Type 1 and 2 Categories and Formats for the FCH and DCCH in [3]). The base station shall set this field to a value other than ‘000’ if the RFCH_NBIT_TABLE_ID is included in this message and field is not set to ‘0000’.

**FDCCH_PART_TAB_ID** - Forward Dedicated Control Channel Partition Table ID.

If USE_OLD_PART_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the Partition Table ID to be used for the Forward Dedicated Control Channel. The base station shall set this field to ‘000’ to indicate that the default number of bits per service is to be used (see MuxPDU Type 1 and 2 Categories and Formats for the FCH and DCCH in [3]). The base station shall set this field to a value other than ‘000’ if the FDCCH_NBIT_TABLE_ID field is included in this message and is not set to ‘0000’.

**RDCCH_PART_TAB_ID** - Reverse Dedicated Control Channel Partition Table ID.

If USE_OLD_PART_MAPPING is included and is equal to ‘0’, the base station shall include this field and set this field as follows; otherwise, the base station shall omit this field:

The base station shall set this field to the Partition Table ID to be used for the Reverse Dedicated Control Channel. The base station shall set this field to ‘000’ to indicate that the default number of bits per service is to be used (see MuxPDU Type 1
and 2 Categories and Formats for the FCH and DCCH in [3]).  
The base station shall set this field to a value other than ‘000’  
if the RDCCH_NBIT_TABLE_ID field is included in this  
message and is not set to ‘0000’.

USE_ERAM - Use the Enhanced Rate Adaptation Mode indicator.

The base station shall include this field only if  
USE_FLEX_NUM_BITS or USE_VAR_RATE is equal to ‘1’. If  
included, the base station shall set this field to ‘1’ if the base  
station is to use lower rate turbo codes for RC4 and RC5  
Forward Supplemental Channel and the mobile station is to  
use lower rate turbo codes for RC4 Reverse Supplemental  
Channel to match the desired channel interleaver block size  
instead of pure code symbol repetition; otherwise, the base  
station shall set this field to ‘0’.

SWITCHING_PARMS_INCL - R-CQICH switching parameters included indicator.

If the GATING_RATE_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:

The base station shall set this field to ‘1’ if the parameters for  
R-CQICH soft and softer switching are included in this  
message; otherwise, the base station shall set this field to ‘0’.

NUM_SOFT_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH soft  
switching while in Control Hold.

If SWITCHING_PARMS_INCL is not included or included and  
set to ‘0’, then the base station shall omit this field; otherwise,  
the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell  
switching period, in units of 20 ms, minus one, during which  
the mobile station, while in Control Hold, is to transmit the  
cell switch sequence on the R-CQICH when it switches  
between two pilots which are in different groups.

NUM_SOFTER_SWITCHING_FRAMES_CHM - Number of frames for R-CQICH softer  
switching while in Control Hold.

If SWITCHING_PARMS_INCL is not included or included and  
set to ‘0’, then the base station shall omit this field; otherwise,  
the base station shall include this field and set it as follows:

The base station shall set this field to the duration of the cell  
switching period, in units of 20 ms, minus one, during which  
the mobile station, while in Control Hold, is to transmit the  
cell switch sequence on the R-CQICH when it switches  
between two pilots which are in the same group.

RPC_INCL - Reverse Link Power Control parameter included indicator.

If the reverse 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’.

RPC_NUM_REC - Number of records for Reverse Link Power Control.
If RPC_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field to one less than the number of records included in this message.

If RPC_NUM_REC is included in this message, the base station shall include RPC_NUM_REC occurrences of the following record:

RPC_ADJ_REC_TYPE - Reverse Link Power Control adjustment record type.

The base station shall set this field to the value shown in Table 3.7.3.3.2.25-3 corresponding to the type of adjustment that is to be used.

RPC_ADJ_REC_LEN - Reverse Link Power Control adjustment record length.

If RPC_ADJ_REC_TYPE is not equal to ‘0100’, the base station shall set this field to the number of octets in the type-specific fields of this adjustment record as given in Table 3.7.3.3.2.25-3.

If RPC_ADJ_REC_TYPE is equal to ‘0100’, the base station shall set this field to ‘0000’.

EXT_RPC_ADJ_REC_LEN - Reverse Link Power Control adjustment record length.

If RPC_ADJ_REC_TYPE is not equal to ‘0100’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

If RPC_ADJ_REC_TYPE is equal to ‘0100’, the base station shall set this field to the number of octets in the type-specific fields of this adjustment record as given in Table 3.7.3.3.2.25-3.

Type-specific fields - Reverse Link Power Control adjustment record type-specific fields.

The base station shall include type-specific fields based on the RPC_ADJ_REC_TYPE of this adjustment record, as specified as below.

If RPC_ADJ_REC_TYPE is equal to ‘0000’, the base station shall set type-specific fields as specified in Table 3.7.5.20-4.
Table 3.7.5.20-4. Type Specific Fields for RECORD_TYPE

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>FCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>DCCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>DCCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SCH0_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SCH0_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>SCH1_INCL</td>
<td>1</td>
</tr>
<tr>
<td>SCH1_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_ACKCH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_ACKCH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_CQICH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_CQICH_CHAN_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

| RESERVED                     | 0-7 (if needed) |

FCH_INCL - FCH channel adjustment gain included indicator.

If FCH_CHAN_ADJ_GAIN is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

FCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Fundamental Channel.

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.

DCCH_INCL - DCCH channel adjustment gain included indicator.

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’.

DCCH_CHAN_ADJ_GAIN - Channel adjustment gain for the Reverse Dedicated Control Channel.
If DCCH_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 Dedicated Control 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.

SCH0_INCL - SCH0 channel adjustment gain included indicator.

If SCH0_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’.

SCH0_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Supplemental Channel 0.

If SCH0_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 Supplemental Channel 0. 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.

SCH1_INCL - SCH1 channel adjustment gain included indicator.

If SCH1_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’.

SCH1_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Supplemental Channel 1.

If SCH1_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 Supplemental Channel 1. 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.

REV_ACKCH_INCL - Reverse Acknowledgment Channel channel adjustment gain included indicator.

If REV_ACKCH_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’.

REV_ACKCH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Acknowledgment Channel.
If REV_ACKCH_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 Acknowledgment 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 -24 to 24 inclusive.

REV_CQICH_INCL - Reverse Channel Quality Indicator Channel channel adjustment gain included indicator.

If REV_CQICH_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’.

REV_CQICH_CHAN_ADJ_GAIN - Channel adjustment gain for Reverse Channel Quality Indicator Channel.

If REV_CQICH_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 Channel Quality Indicator 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 -16 to 16 inclusive.

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 ‘0001’, the base station shall set type-specific fields as specified in Table 3.7.5.20-5.
<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RC3_RC5_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1500</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2700</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_3600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>5MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600_5MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1350_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_9600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800_40MS</td>
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<tr>
<td>RL_ATT_ADJ_GAIN_3600_40MS</td>
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</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_2400_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_4800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>Fields</td>
<td>Length (Bits)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------</td>
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<tr>
<td>RL_ATT_ADJ_GAIN_9600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_3600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_7200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_14400_80MS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

| RESERVED                          | 0-7 (if needed) |

1. **RL_ATT_ADJ_GAIN_TYPE** - Reverse Link Attribute Adjustment Gain value type indicator. If the following fields are set to the nominal attribute gain adjustment values that the mobile station is to use for the transmission attributes (relative to Nominal_Attribute_Gain specified in [2]), the base station shall set this field to ‘0’. If the following fields are set to the pilot reference level adjustment values that the mobile station is to use for the transmission attributes (relative to Pilot_Reference_Level specified in [2]), the base station shall set this field to ‘1’.

2. **RC3_RC5_20MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame included indicator. If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 20 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

3. **RL_ATT_ADJ_GAIN_1500** - Reverse Link Attribute Adjustment Gain for the transmission rate 1500 bits/s. If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field. If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive. If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1500 bits/s, convolutional code and 20ms frame.
The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

- **RL_ATT_ADJ_GAIN_2700** - Reverse Link Attribute Adjustment Gain for the transmission rate 2700 bits/s.

  If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

  If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 2700 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

  If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 2700 bits/s, convolutional code and 20ms frame.

  The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

- **RL_ATT_ADJ_GAIN_4800** - Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

  If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

  If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

  If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 20ms frame.

  The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

- **RL_ATT_ADJ_GAIN_9600** - Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.

  If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC4_RC6_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 20ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 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’.

RL_ATT_ADJ_GAIN_1800 - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_3600 - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_7200 - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_14400 - Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

5MS_INCL    - 5ms frame Reverse Link Attribute Adjustment Gain included indicator.

If Reverse Link Attribute Adjustment Gain for 5ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_9600_5MS    - Reverse Link Attribute Adjustment Gain for the transmission rate 9600 bits/s with 5ms frame.

If 5MS_INCL is set to ‘0’, the base station shall omit this field.

If 5MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 5ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If 5MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 5ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC3_RC5_40MS_INCL    - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 40 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1350_40MS    - Reverse Link Attribute Adjustment Gain for the transmission rate 1350 bits/s.

If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1350 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_40MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1350 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_2400_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 2400 bits/s.

If RC3_RC5_40MS_INCL is set to '0', the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 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.

**RL_ATT_ADJ_GAIN_4800_40MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

If RC3_RC5_40MS_INCL is set to '0', the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 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.

**RL_ATT_ADJ_GAIN_9600_40MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.
If RC3_RC5_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC4_RC6_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1800_40MS - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_3600_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_7200_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_14400_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80 ms frame included indicator.

If Reverse Link Attribute adjustment Gain for Radio Configuration 3 or 5 of 80 ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 1200 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1200 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 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.

RL_ATT_ADJ_GAIN_2400_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 2400 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 2400 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_4800_80MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 4800 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 4800 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 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.

**RL_ATT_ADJ_GAIN_9600_80MS** - Reverse Link Attribute Gain Adjustment for the transmission rate 9600 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 9600 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 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.

**RC4_RC6_80MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame included indicator.
If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_1800_80MS - Reverse Link Attribute Gain Adjustment for the transmission rate 1800 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 1800 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_3600_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 3600 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 3600 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_7200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 7200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 7200 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_14400_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 14400 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 14400 bits/s, convolutional code and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RESERVED - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire record equal to an integer number of octets. The base station shall set these bits to ‘0’.

If RPC_ADJ_REC_TYPE is equal to ‘0010’, the base station shall set type-specific fields as specified in Table 3.7.5.20-6.
### Table 3.7.5.20-6. Type Specific Fields for RECORD_TYPE

#### ‘0010’

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CODE_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RC3_RC5_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_307200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_614400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_20MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_230400</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_460800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_1036800</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_307200_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_40MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200_40MS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

(continues on next page)
<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL ATT_ADJ_GAIN_230400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL ATT_ADJ_GAIN_518400_40MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC3_RC5_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_19200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_38400_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_76800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_153600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RC4_RC6_80MS_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_28800_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_57600_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_115200_80MS</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_ATT_ADJ_GAIN_259200_80MS</td>
<td>0 or 8</td>
</tr>
</tbody>
</table>

| RESERVED                          | 0-7 (if needed) |

1 CODE_TYPE - Coding type indicator.

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'.

8 RL_ATT_ADJ_GAIN_TYPE - Reverse Link Attribute adjustment Gain value type indicator.

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.

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.
If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_38400 - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_76800 - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_153600 - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_307200 - Reverse Link Attribute Adjustment Gain for the transmission rate 307200 bits/s.

If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_614400 - Reverse Link Attribute Adjustment Gain for the transmission rate 614400 bits/s.
If RC3_RC5_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 614400 bits/s and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 614400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC4_RC6_20MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 20ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 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’.

RL_ATT_ADJ_GAIN_28800 - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_57600 - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.
If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_115200** - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_230400** - Reverse Link Attribute Adjustment Gain for the transmission rate 230400 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s and 20ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_460800 - Reverse Link Attribute Adjustment Gain for the transmission rate 460800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 460800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 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.

RL_ATT_ADJ_GAIN_1036800 - Reverse Link Attribute Adjustment Gain for the transmission rate 1036800 bits/s.

If RC4_RC6_20MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_20MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 1036800 bits/s, and 20ms frame. The base station shall set the value in the range from –48 to 48 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.

RC3_RC5_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40ms frame included indicator.
If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_19200_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

If **RC3_RC5_40MS_INCL** is set to ‘0’, the base station shall omit this field.

If **RC3_RC5_40MS_INCL** is set to ‘1’ and **RL_ATT_ADJ_GAIN_TYPE** is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If **RC3_RC5_40MS_INCL** is set to ‘1’ and **RL_ATT_ADJ_GAIN_TYPE** is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_38400_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If **RC3_RC5_40MS_INCL** is set to ‘0’, the base station shall omit this field.

If **RC3_RC5_40MS_INCL** is set to ‘1’ and **RL_ATT_ADJ_GAIN_TYPE** is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If **RC3_RC5_40MS_INCL** is set to ‘1’ and **NORM_ATT_GAIN_TYPE** is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_76800_40MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If **RC3_RC5_40MS_INCL** is set to ‘0’, the base station shall omit this field.
If `RC3_RC5_40MS_INCL` is set to ‘1’ and `RL_ATT_ADJ_GAIN_TYPE` is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If `RC3_RC5_40MS_INCL` is set to ‘1’ and `RL_ATT_ADJ_GAIN_TYPE` is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

`RL_ATT_ADJ_GAIN_153600_40MS` - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If `RC3_RC5_40MS_INCL` is set to ‘0’, the base station shall omit this field.

If `RC3_RC5_40MS_INCL` is set to ‘1’ and `NORM_ATT_GAIN_TYPE` is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If `RC3_RC5_40MS_INCL` is set to ‘1’ and `NORM_ATT_GAIN_TYPE` is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

`RL_ATT_ADJ_GAIN_307200_40MS` - Reverse Link Attribute Adjustment Gain for the transmission rate 307200 bits/s.

If `RC3_RC5_40MS_INCL` is set to ‘0’, the base station shall omit this field.

If `RC3_RC5_40MS_INCL` is set to ‘1’ and `RL_ATT_ADJ_GAIN_TYPE` is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC3_RC5_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 307200 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

RC4_RC6_40MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 40ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

RL_ATT_ADJ_GAIN_28800_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_57600_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_40MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_115200_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_230400_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 230400 bits/s.

If RC4_RC6_40MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 230400 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_518400_40MS - Reverse Link Attribute Adjustment Gain for the transmission rate 518400 bits/s.
If RC4_RC6_40MS_INCL is set to '0', the base station shall omit this field.

If RC4_RC6_40MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 518400 bits/s, and 40ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_40MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 518400 bits/s and 40ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RC3_RC5_80MS_INCL - Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 3 or 5 of 80ms frame is included in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

RL_ATT_ADJ_GAIN_19200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 19200 bits/s.

If RC3_RC5_80MS_INCL is set to '0', the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '0', the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to '1' and RL_ATT_ADJ_GAIN_TYPE is set to '1', the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 19200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_38400_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 38400 bits/s.

If RC3_RC5_80MS_INCL is set to '0', the base station shall omit this field.
If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 38400 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_76800_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 76800 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 76800 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_153600_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 153600 bits/s.

If RC3_RC5_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC3_RC5_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If `RC3_RC5_80MS_INCL` is set to ‘1’ and `RL_ATT_ADJ_GAIN_TYPE` is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 153600 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RC4_RC6_80MS_INCL** - Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame included indicator.

If Reverse Link Attribute Adjustment Gain for Radio Configuration 4 or 6 of 80ms frame is included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

**RL_ATT_ADJ_GAIN_28800_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 28800 bits/s.

If `RC4_RC6_80MS_INCL` is set to ‘0’, the base station shall omit this field.

If `RC4_RC6_80MS_INCL` is set to ‘1’ and `RL_ATT_ADJ_GAIN_TYPE` is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If `RC4_RC6_80MS_INCL` is set to ‘1’ and `NORM_ATT_GAIN_TYPE` is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 28800 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

**RL_ATT_ADJ_GAIN_57600_80MS** - Reverse Link Attribute Adjustment Gain for the transmission rate 57600 bits/s.

If `RC4_RC6_80MS_INCL` is set to ‘0’, the base station shall omit this field.

If `RC4_RC6_80MS_INCL` is set to ‘1’ and `NORM_ATT_GAIN_TYPE` is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.
If RC4_RC6_80MS_INCL is set to ‘1’ and NORM_ATT_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 57600 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_115200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 115200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 115200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_ATT_ADJ_GAIN_259200_80MS - Reverse Link Attribute Adjustment Gain for the transmission rate 259200 bits/s.

If RC4_RC6_80MS_INCL is set to ‘0’, the base station shall omit this field.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes with transmission rate 259200 bits/s, and 80ms frame. The base station shall set the value in the range from –48 to 48 inclusive.

If RC4_RC6_80MS_INCL is set to ‘1’ and RL_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes with transmission rate 259200 bits/s and 80ms frame.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RESERVED - Reserved bits.
The base station shall add reserved bits as needed in order to make the length of the entire record equal to an integer number of octets. The base station shall set these bits to '0'.

If RPC_ADJ_REC_TYPE is equal to '0011', the base station shall set type-specific fields as specified in Table 3.7.5.20-7.

**Table 3.7.5.20-7. Type Specific Fields for RECORD_TYPE = ‘0011’**

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_TYPE</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_HIGH</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW_INCL</td>
<td>1</td>
</tr>
<tr>
<td>RL_CQICH_ATT_ADJ_GAIN_LOW</td>
<td>0 or 8</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

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:
If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH. The base station shall set the value in the range from –40 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the high power level of R-CQICH.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

RL_CQICH_ATT_ADJ_GAIN_LOW_INCL - Reverse Channel Quality Indicator Channel attribute adjustment gain for the low power level included indicator.

If the attribute adjustment gain for the low 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_LOW - Attribute adjustment gain for Reverse Channel Quality Indicator Channel for the low Channel Quality Indicator gain power level.

If RL_CQICH_ATT_ADJ_GAIN_LOW_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall set this field as follows:

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘0’, the base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH. The base station shall set the value in the range from –16 to 16 inclusive.

If RL_CQICH_ATT_ADJ_GAIN_TYPE is set to ‘1’, the base station shall set this field to the value of the pilot reference level adjustment that the mobile station is to make for the transmission attributes for the low power level of R-CQICH.

The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.
If RPC_ADJ_REC_TYPE is equal to ‘0100’, the base station shall set type-specific fields as specified in Table 3.7.5.20-8.

Table 3.7.5.20-8. Type Specific Fields for RECORD_TYPE = ‘0100’

<table>
<thead>
<tr>
<th>Fields</th>
<th>Length (Bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REV_REQCH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_REQCH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_SPICH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_SPICH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_SPICH_EP_SIZE</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCCH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCCH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCCH_ATTRIBUTE_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCCH_EP_SIZE_NUM</td>
<td>0 or 4</td>
</tr>
<tr>
<td>(REV_PDCCH_EP_SIZE_NUM +1)</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCCH_ATTRIBUTE_ADJ_GAIN</td>
<td>8</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>(REV_PDCCH_EP_SIZE_NUM +1)</td>
<td></td>
</tr>
<tr>
<td>REVPDCCH_BOOST_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>REVPDCCH_BOOST_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>REVPDCCH_PAYLOAD_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REVPDCCH_EP_SIZE_NUM_1</td>
<td>0 or 4</td>
</tr>
<tr>
<td>(REVPDCCH_EP_SIZE_NUM_1 +1)</td>
<td></td>
</tr>
<tr>
<td>REVPDCCH_PAYLOAD_ADJ_GAIN</td>
<td>8</td>
</tr>
<tr>
<td>(REVPDCCH_EP_SIZE_NUM_1 +1)</td>
<td></td>
</tr>
<tr>
<td>Fields</td>
<td>Length (Bits)</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>REV_PDCH_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>REV_PDCH_PAYLOAD_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_EP_SIZE_NUM</td>
<td>0 or 4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>{ (REV_PDCH_EP_SIZE_NUM +1)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_PAYLOAD_ADJ_GAIN</td>
<td>8</td>
</tr>
<tr>
<td>} (REV_PDCH_EP_SIZE_NUM +1)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_BOOST_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>{ 2</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_BOOST_ADJ_GAIN</td>
<td>0 or 8</td>
</tr>
<tr>
<td>} 2</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_SUBPACKET_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_RETRX_NUM</td>
<td>0 or 2</td>
</tr>
<tr>
<td>{ (REV_PDCH_RETRX_NUM+1)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_SUBPACKET_ADJ_GAIN</td>
<td>8</td>
</tr>
<tr>
<td>} (REV_PDCH_RETRX_NUM+1)</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_ATTRIBUTE_ADJ_INCL</td>
<td>1</td>
</tr>
<tr>
<td>REV_PDCH_EP_SIZE_NUM_1</td>
<td>0 or 4</td>
</tr>
<tr>
<td>REV_PDCH_RETRX_NUM_1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>{ (REV_PDCH_EP_SIZE_NUM_1 +1)</td>
<td></td>
</tr>
<tr>
<td>{ (REV_PDCH_RETRX_NUM_1+1)</td>
<td></td>
</tr>
<tr>
<td>{ 2</td>
<td></td>
</tr>
<tr>
<td>REV_PDCH_ATTRIBUTE_ADJ_GAIN</td>
<td>8</td>
</tr>
<tr>
<td>} 2</td>
<td></td>
</tr>
<tr>
<td>} (REV_PDCH_EP_SIZE_NUM_1 +1)</td>
<td></td>
</tr>
<tr>
<td>RESERVEd</td>
<td>0-7 (if needed)</td>
</tr>
</tbody>
</table>

1. REV_REQCH_ADJ_INCL - Reverse Request Channel Adjustment included field.
2. 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’.
3. 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 $-324$ to $540$ 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.

If the attribute adjustment gains for the Reverse Secondary Pilot 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_SPICH_ADJ_GAIN** - Reverse Secondary Pilot Channel Adjustment Gain.

If REV_SPICH_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-SPICH.

The base station shall set the value in the range from $-216$ to $648$ 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_EP_SIZE** - Minimum Encoder Packet Size for which the Reverse Secondary Pilot Channel is used.

If REV_SPICH_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 minimum encoder packet size for which the Reverse Secondary Pilot Channel is used (see [2] and [3]).

This field shall take the values 0 to 10 corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

**REV_PDCCH_ADJ_INCL** - Reverse Packet Data Control Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control 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_PDCCH_ADJ_GAIN - Reverse Packet Data Control Channel Adjustment Gain.

If REV_PDCCH_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-PDCCH.

The base station shall set the value in the range from \(-432\) to \(432\) 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_PDCCH_ATTRIBUTE_ADJ_INCL - Reverse Packet Data Control Channel Attribute Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control Channel are included per encoder packet size and per boost mode in this message, the base station shall set this field to '1'; otherwise, the base station shall set this field to '0'.

REV_PDCCH_EP_SIZE_NUM - Number of occurrences of Reverse Packet Data Control Channel Attribute Adjustment Gains.

If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than half the number of occurrences of the field included hereafter. The records are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCCH_ATTRIBUTE_ADJ_INCL is set to ‘1’, the base station shall include REV_PDCCH_EP_SIZE_NUM+1 occurrences of the following record:

The base station shall include 2 occurrences of the following field. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

REV_PDCCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Control Channel Attribute Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCCH, for the i-th encoder packet size, and for the non-boosted and boosted modes.

The base station shall set the value in the range from \(-432\) to \(432\) 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_PDCCH_BOOST_ADJ_INCL - Reverse Packet Data Control Channel Boost

Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control Channel per boosted mode are included in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If REV_PDCCH_BOOST_ADJ_INCL is set to ‘1’, the base station shall include two occurrences of the following record:

REV_PDCCH_BOOST_ADJ_GAIN - Reverse Packet Data Control Channel Boost Adjustment Gains.

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-PDCCH, for the appropriate mode.

The base station shall set the value in the range from $-\frac{1}{4}$ to $\frac{1}{4}$-inclusive.

The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode. 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_PDCCH_PAYLOAD_ADJ_INCL - Reverse Packet Data Control Channel Payload Attribute Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Control Channel are included per encoder packet size in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCCH_EP_SIZE_NUM_1 - Number of occurrences of Reverse Packet Data Control Channel Payload Attribute Adjustment Gain records.

If REV_PDCCH_PAYLOAD_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the field included hereafter. The fields are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCCH_PAYLOAD_ADJ_INCL is set to ‘1’, the base station shall include $(REV_PDCCH_EP_SIZE_NUM_1+1)\times2$ occurrences of the following record:
REV_PDCCH_PAYLOAD_ADJ_GAIN  -  Reverse Packet Data Control Channel Payload Attribute Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCCH, for the i-th encoder packet size, and for the non-boosted and boosted modes. In each set for the i-th encoder packet, the first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

The base station shall set the value in the range from $-\frac{432}{40}$ to $\frac{432}{40}$ 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_PDCH_ADJ_INCL  -  Reverse Packet Data Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data 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_PDCH_ADJ_GAIN  -  Reverse Packet Data Channel Adjustment Gain.

If REV_PDCH_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-PDCH.

The base station shall set the value in the range from $-\frac{440}{656}$ to $\frac{440}{656}$ inclusive. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

REV_PDCH_PAYLOAD_ADJ_INCL  -  Reverse Packet Data Channel Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per encoder packet size in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_EP_SIZE_NUM  -  Number of occurrences of Reverse Packet Data Channel Payload Adjustment Gains.

If REV_PDCH_PAYLOAD_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following field. The fields are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCH_PAYLOAD_ADJ_INCL is set to ‘1’, the base station shall include
REV_PDCH_EP_SIZE_NUM+1 occurrences of the following record:

REV_PDCH_PAYLOAD_ADJ_GAIN  - Reverse Packet Data Channel Payload Adjustment Gain. 
The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH, for the i-th encoder packet size.

The base station shall set the value in the range from $-440$ to $656$–inclusive. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

REV_PDCH_BOOST_ADJ_INCL  - Reverse Packet Data Channel Adjustment included field. 

If the attribute adjustment gains for the Reverse Packet Data Channel are included per boosted mode in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

If REV_PDCH_BOOST_ADJ_INCL is set to ‘1’, the base station shall include two occurrences of the following record. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.

REV_PDCH_BOOST_ADJ_GAIN  - Reverse Packet Data Channel Boost-dependent Adjustment Gain. 
The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH.

The base station shall set the value in the range from $-440$ to $656$–inclusive. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode. The base station shall set this field to the correction factor expressed as a two’s complement value in units of 0.125 dB.

REV_PDCH_SUBPACKET_ADJ_INCL  - Reverse Packet Data Channel Subpacket Adjustment included field. 

If the attribute adjustment gains for the Reverse Packet Data Channel are included per subpacket transmission round in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_RETRX_NUM  - Number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains. 

If REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following field.

If REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘1’, the base station shall include
(REV_PDCH_RETRX_NUM+1) occurrences of the following record:

REV_PDCH_SUBPACKET_ADJ_GAIN  - Reverse Packet Data Channel Subpacket Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH on the i-th transmission round.

The base station shall set the value in the range from \(-40\) to \(46\) inclusive. The base station shall set this field to the correction factor expressed as a two's complement value in units of 0.125 dB.

REV_PDCH_ATTRIBUTE_ADJ_INCL  - Reverse Packet Data Channel Attribute Adjustment included field.

If the attribute adjustment gains for the Reverse Packet Data Channel are included per encoder packet size and per subpacket transmission round in this message, the base station shall set this field to ‘1’; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_EP_SIZE_NUM_1  - Number of occurrences of the Reverse Packet Data Channel Attribute Adjustment Gains record.

If REV_PDCH_ATTRIBUTE_ADJ_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

The base station shall set this field to one less than the number of occurrences of the following subrecord. The subrecords are listed per encoder packet size, in the following ascending order: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCH_ATTRIBUTE_ADJ_INCL REV_PDCH_SUBPACKET_ADJ_INCL is set to ‘1’, the base station shall include (REV_PDCH_EP_SIZE_NUM_1+1) occurrences of the following subrecord:

REV_PDCH_RETRX_NUM_1  - Number of occurrences of the Reverse Packet Data Channel Subpacket Adjustment Gains.

The base station shall set this field to one less than the number of occurrences of the following field.

The base station shall include (REV_PDCH_RETRX_NUM_1+1) occurrences of the following record:

The base station shall include 2 occurrences of the following field. The first occurrence of this field is for the non-boosted mode, while the second is for the boosted mode.
REV_PDCH_ATTRIBUTE_ADJ_GAIN - Reverse Packet Data Channel Attribute

Adjustment Gain.

The base station shall set this field to the value of the nominal attribute gain adjustment that the mobile station is to make for the transmission attributes for the power level of R-PDCH, for the i-th encoder packet size on a j-th transmission round, using the non-boosted or boosted mode.

The base station shall set the value in the range from \(-440\) to \(656\) 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.

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'.

BCMC_LPM_INCL - BCMC Logical to Physical Mapping included indicator.

The base station shall set this field to ‘1’ if BCMC Logical to Physical Mapping is included in this message; otherwise, the base station shall set this field to ‘0’.

BCMC_LPM_IND - BCMC Logical to Physical Mapping indicator.

If the BCMC_LPM_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:

The base station shall set this field to ‘01’ or ‘10’ as shown in Table 3.7.5.20-2 corresponding to the Logical to Physical Mapping indicator.

NUM_BCMC_PROGRAMS - Number of BCMC Programs

If the BCMC_LPM_IND field is not included or is included and is not set to ‘01’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the number of BCMC programs included in this LPM record minus 1.

The base station shall include NUM_BCMC_PROGRAMS+1 occurrences of the following variable length record:

BCMC_PROGRAM_ID_LEN - Length of BCMC_PROGRAM_ID field

The base station shall set this field to one less than the length, in bits, of the BCMC_PROGRAM_ID of this program.

BCMC_PROGRAM_ID - BCMC program Identifier

The length of this field shall be one more than the value of BCMC_PROGRAM_ID_LEN bits.
The base station shall set this field to the identifier of the BCMC program to which this Logical to Physical Mapping entry applies.

**BCMC_FLOW_DISCRIMINATOR_LEN** - Length of BCMC_FLOW_DISCRIMINATOR field

The base station shall set this field to the length, in bits, of the BCMC_FLOW_DISCRIMINATOR of this program.

**NUM_FLOW_DISCRIMINATOR** - Number of flow discriminators

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the number of flow discriminators included for this program.

If **NUM_FLOW_DISCRIMINATOR** field is included, the base station shall include NUM_FLOW_DISCRIMINATOR+1 occurrences of the following variable length record; otherwise, the base station shall include 1 occurrence of the following variable length record:

**BCMC_FLOW_DISCRIMINATOR** – BCMC Flow discriminator.

The length of this field shall be determined by the value of the BCMC_FLOW_DISCRIMINATOR_LEN as follows: if BCMC_FLOW_DISCRIMINATOR_LEN is set to '000', this field is omitted; otherwise, the length of this field shall be BCMC_FLOW_DISCRIMINATOR_LEN bits.

The base station shall set this field to the number of flow discriminators included for this program.

The base station shall set this field to the BCMC flow discriminator to which this Logical to Physical Mapping entry applies.

**BCMC_FLOW_ID_LEN_IND** – BCMC Flow Identifier Length Indicator

If the BCMC_LPM_IND field is not included or is included and is not set to ‘01’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The mobile station shall set this field to indicate the length of the BCMC flow identifier as specified in Table 3.7.2.3.2.38-1.

**BCMC_NUM_LPM_ENTRIES** – Number of BCMC Logical-to-Physical Mapping entries

If the BCMC_LPM_IND field is not included or is included and is not set to ‘01’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the number of Logical-to-Physical Mapping entries that are included in this record.
If the BCMC_NUM_LPM_ENTRIES field is included and is not equal to ‘0000’, the base
station shall include BCMC_NUM_LPM_ENTRIES occurrences of the following record for
each BCMC Logical-to-Physical Mapping entry:

BCMC_FLOW_ID – BCMC Flow Identifier.

The base station shall set this field to the identifier of the
BCMC flow to which this Logical to Physical Mapping entry applies.

PHYSICAL_RESOURCE - Physical resource identifier.

The base station shall set this field to the physical resource
identifier ‘0000’, ‘0001’, ‘0010’, ‘0011’ as shown in Table
3.7.5.20-4 to which the logical BCMC traffic channel
corresponding to BCMC_FLOW_ID specified in this BCMC
Logical to Physical Mapping entry is to be mapped.

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’.

BSR_ID_INCL - BSR_ID included indicator.

The base station shall set this field to ‘1’ if BSR_ID_LEN_IND,
BSR_ID fields are included in this message; otherwise, the
base station shall set this field to ‘0’ and include
FOR_TRAFFIC, REV_TRAFFIC fields in this message.

BSR_ID_LEN_IND – BCMC Service Reference Identifier length indicator

If the BSR_ID_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:

The base station shall set this field to ‘1’ if the length of the
BCMC Service Reference Identifier is 3 bits; the base station
shall set this field to ‘0’ if the length of the BCMC Service
Reference Identifier is 16 bits.

BSR_ID - BCMC Service Reference Identifier

If the BSR_ID_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:

The base station shall set this field to the BCMC Service
Reference identifier corresponding to this BCMC flow to which
this Logical to Physical Mapping entry applies.
The base station shall not set this field to a value of 0.

FOR_TRAFFIC - Forward Traffic Channel traffic type.

If the BSR_ID_INCL field is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the FOR_TRAFFIC code shown in Table 3.7.5.20-5 corresponding to the Forward Traffic Channel traffic type to be used with the BCMC flow to which this Logical to Physical Mapping entry applies.

Table 3.7.5.20-5. FOR_TRAFFIC Codes

<table>
<thead>
<tr>
<th>FOR_TRAFFIC (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>The BCMC flow does not use Forward Traffic Channel traffic.</td>
</tr>
<tr>
<td>0001</td>
<td>The BCMC flow uses primary traffic on the Forward Traffic Channel.</td>
</tr>
<tr>
<td>0010</td>
<td>The BCMC flow uses secondary traffic on the Forward Traffic Channel.</td>
</tr>
<tr>
<td>0011</td>
<td>Reserved.</td>
</tr>
<tr>
<td>0100</td>
<td>The BCMC flow uses the Forward Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.</td>
</tr>
</tbody>
</table>

All other FOR_TRAFFIC codes are reserved.

REV_TRAFFIC - Reverse Traffic Channel traffic type.

If the BSR_ID_INCL field is set to ‘1’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to the REV_TRAFFIC code shown in Table 3.7.5.20-6 corresponding to the Reverse Traffic Channel traffic type to be used with the BCMC flow to which this Logical to Physical Mapping entry applies.
### Table 3.7.5.20-6. REV_TRAFFIC Codes

<table>
<thead>
<tr>
<th>REV_TRAFFIC (binary)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>The BCMC flow does not use Reverse Traffic Channel traffic.</td>
</tr>
<tr>
<td>0001</td>
<td>The BCMC flow uses primary traffic on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>0010</td>
<td>The BCMC flow uses secondary traffic on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>0011</td>
<td>Reserved.</td>
</tr>
<tr>
<td>0100</td>
<td>The BCMC flow uses the Reverse Traffic Channel, but does not classify the traffic as primary, secondary, or signaling traffic.</td>
</tr>
</tbody>
</table>

All other REV_TRAFFIC codes are reserved.

---

2. REV_PDCH_PARMS_INCL - Reverse PDCH Parameters Included indicator.

   The base station shall set this field to ‘1’ if the reverse Packet Data Channel parameters are included; otherwise, the base station shall set this field to ‘0’.

3. REV_PDCH_PARMS_1_INCL - Reverse Packet Data Channel parameters subset included indicator.

   If REV_PDCH_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field, and set it as follows.

   The base station shall set this field to ‘1’ if the following R-PDCH parameters are included in this message; otherwise, the base station shall set this field to ‘0’.

4. REV_PDCH_MAX_AUTO_TPR - Reverse Packet Data Channel maximum traffic to pilot ratio for autonomous transmission.

   If REV_PDCH_PARMS_1_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

   The base station shall set this field to the maximum traffic to pilot ratio for autonomous transmission on the Reverse Packet Data Channel (see [2] and [3]).

   The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

5. REV_PDCH_NUM_ARQ_ROUNDS_NORMAL - Maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode.

   If REV_PDCH_PARMS_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.
The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the non-boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

**REV_PDCH_OPER_PARMS_INCL** - Reverse Packet Data Channel operational parameters included indicator.

If REV_PDCH_PARMS_INCL is set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to '1' if the following PDCH operational parameters are included in this message; otherwise, the base station shall set this field to '0'.

**REV_PDCH_MAX_SIZE_ALLOWED_ENCODER_PACKET** - Maximum Allowed Reverse PDCH encoder packet size.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum size encoder packet that the mobile station is allowed to use. (see [2] and [3]).

The base station shall set this field to a value in the range 0 to 10 inclusive, corresponding to the encoder packet sizes 192, 408, 792, 1560, 3096, 6168, 9240, 12312, 15384, and 18456 bits respectively.

**REV_PDCH_DEFAULT_PERSISTENCE** - Reverse Packet Data Channel default initial persistence.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if the mobile station is to be persistent at the call setup; otherwise, the base station shall set this field to '0' (See [3]).

**REV_PDCH_RESET_PERSISTENCE** - Reverse Packet Data Channel reset persistence indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to '1' if, at the end of a persistent grant, the mobile station shall reset its persistent indicator to persistent; otherwise, the base station shall set this field to '0' if the mobile station shall reset its persistent indicator to non-persistent (See [3]).

**REV_PDCH_GRANT_PRECEDENCE** - Reverse Packet Data Channel Grant Precedence Indicator.
If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if unicast Forward Grant Channel messages have precedence over Rate Control commands; otherwise, the base station shall set this field to ‘0’ to indicate that Rate Control down commands from non-serving sectors have precedence over Forward Grant Channel messages (see [3]).

REV_PDCH_MSIB_SUPPORTED - Reverse Packet Data Channel MSIB usage indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to use the MSIB bit on the Reverse Packet Data Control Channel; otherwise, the base station shall set this field to ‘0’ (See [3]).

REV_PDCH_ALWAYS_ACK_FINAL_ROUND - Reverse Packet Data Channel Final Round Always Acknowledged

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if all of the following conditions are true:

- The Forward Acknowledgment Channel is assigned to the mobile station,
- The base station does not send an acknowledgment on the assigned Forward Acknowledgment Channel whenever a Reverse Packet Data Channel transmission is not successfully decoded on the last ARQ round, and
- The base station sends an acknowledgment on the assigned Forward Acknowledgment Channel to the mobile station whenever a Reverse Packet Data Channel transmission is successfully decoded on the last ARQ round,

Otherwise, the base station shall set this field to ‘0’.

REV_PDCH_MSIB_SUPPORTED - Reverse PDC-H MSIB usage indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:
The base station shall set this field to ‘1’ if the mobile station is to use the MSIB bit on the Reverse Packet Data Control Channel; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_SOFT_HANDBOFF_RESET_IND - Reverse Packet Data Channel soft handoff reset indicator.

If REV_PDCH_OPER_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if the mobile station is to initialize RPDCHCF when soft selection occurs in the FPDCHCF; otherwise, the base station shall set this field to ‘0’ (see [3]).

REV_PDCH_BOOST_PARMS_INCL - Reverse Packet Data Channel boosted mode parameters included indicator.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to ‘1’ if the Reverse Packet Data Channel boosted mode parameters are included; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_NUM_ARQ_ROUNDS_BOOST - Maximum number of allowed ARQ rounds on the Reverse PDCH in the boosted mode.

If REV_PDCH_BOOST_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to one less the maximum number of allowed ARQ rounds on the Reverse PDCH in the boosted mode. The base station shall set this field to 0, 1, or 2 corresponding to 1, 2, or 3 rounds respectively (See [3]).

REV_PDCH_BOOST_OVERSHOOT - Reverse Packet Data Channel Boost Overshoot.

If REV_PDCH_BOOST_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the boosted QoS parameter that defines the overshoot allowed by boosted QoS on the Reverse Packet Data Channel (see [3]).

The base station shall set this field to a value in the range 0 to 3.875 dB inclusive in units of 0.125 dB.

REV_REQCH_ENABLED - Reverse Request Channel Enabled.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.
The base station shall set this field to ‘1’ if the mobile station
is to enable the Reverse Request Channel; otherwise, the base
station shall set this field to ‘0’.

**REV_REQCH_PARMS_INCL** - Reverse Request Channel Parameters Included Indicator.

If **REV_REQCH_ENABLED** or **REV_PDCH_PARMS_INCL** is
omitted, or if it is included and 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 the Reverse
Request Channel Parameters are included hereafter;
otherwise, the base station shall set this field to ‘0’.

**REV_REQCH_QUICK_REPEAT_ALLOWED** - Reverse Request Channel Quick Repeat
Allowed indicator.

If **REV_REQCH_PARMS_INCL** is omitted, or if it is included
and set to ‘0’, the base station shall omit this field; otherwise,
the base station shall include this field and set it as follows.

The base station shall set this field to ‘1’ if quick repeats are
allowed on the Reverse Request Channel; otherwise, the base
station shall set this field to ‘0’ (see [3]).

**REV_REQCH_POWER_REPORTS_PARMS_INCL** - Reverse Request Channel Power
Parameters Included indicator.

If **REV_REQCH_PARMS_INCL** is omitted, or if it is included
and set to ‘0’, the base station shall omit this field; otherwise,
the base station shall include this field and set it as follows.

The base station shall set this field to ‘1’ if the parameters
needed for power status reports are included hereafter;
otherwise, the base station shall set this field to ‘0’.

**REV_REQCH_POWER_HEADROOM_INCREASE** - Reverse Request Channel Power
headroom increase delta to trigger power report.

If **REV_REQ_CH_POWER_REPORTS_PARMS_INCL** is omitted,
or if it is included and set to ‘0’, the base station shall omit
this field; otherwise, the base station shall include this field
and set it as follows.

The base station shall set this field to the power headroom
increase delta that triggers a power report (see [3]).

The base station shall set this field to a value in the range 0 to
18 dB inclusive in units of 1 dB, or to 31 which means plus
infinity.

**REV_REQCH_POWER_HEADROOM_DECREASE** - Reverse Request Channel Power
headroom decrease delta to trigger power report.

If **REV_REQCH POWER REPORTS_PARMS_INCL** is omitted,
or if it is included and set to ‘0’, the base station shall omit
this field; otherwise, the base station shall include this field
and set it as follows.

The base station shall set this field to the power headroom
decrease delta that triggers a power report (see [3]).
The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 1 dB, or to 31 which means plus infinity.

REV_REQCH_HEADROOM_DURATION - Reverse Request Channel minimum power headroom update trigger interval.

If REV_REQCH_POWER_REPORTS_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the minimum power headroom update trigger interval (see [3]).

The base station shall set this field to a value in the range 0 to 5.10 seconds inclusive in units of 20 ms.

REV_REQCH_MAX_POWER_UPDATE_DURATION - Reverse Request Channel maximum power headroom update trigger interval.

If REV_REQCH_POWER_REPORTS_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum power headroom update trigger interval (see [3]).

The base station shall set this field to a value in the range 0.02 to 5.10 seconds inclusive in units of 20 ms, or to 0 which means plus infinity.

REV_PDCH_CRC_PARMS_INCL - Reverse Packet Data Channel Common Rate Control Parameters Included Indicator.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to ‘1’ if Reverse Packet Data Channel Common Rate Control Parameters are included hereafter; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_INIT_TARGET_TPR - Reverse Packet Data Channel initial target traffic to pilot ratio.

If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the initial target traffic to pilot ratio on the Reverse Packet Data Channel (see [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

REV_PDCH_MAX_TARGET_TPR - Reverse Packet Data Channel maximum target traffic to pilot ratio.
If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the maximum target traffic to pilot ratio on the Reverse Packet Data Channel (see [3]).

The base station shall set this field to a value in the range 0 to 18 dB inclusive in units of 0.125 dB.

**REV_PDCH_QUICK_START_THRESH** - Reverse Packet Data Channel quick start threshold.

If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the quick start threshold on the Reverse Packet Data Channel (see [3]).

The base station shall set this field to a value in the range 0 to 9 dB inclusive in units of 0.125 dB.


If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to ‘0’ (the only length of the Encoder Packet size map length supported is 11 bits; the base station shall set this field to ‘0’; otherwise, the base station shall set this field to ‘1’ if the length of the Encoder Packet size map is 22 bits).

**REV_PDCH_EP_MAP** - Number of Reverse PDCH Encoder Packet sizes.

If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set the i-th bit to ‘1’ for each encoder packet size for which a subrecord is included hereafter. The first 11 bits correspond to the following encoder packet sizes: 192, 408, 792, 1560, 3096, 4632, 6168, 9240, 12312, 15384, 18456 bits.

If REV_PDCH_CRC_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit the following subrecord; otherwise, the base station shall include the following subrecord for each bit set to ‘1’ in REV_PDCH_EP_MAP:

**REV_PDCH_STEP_UP** - Reverse Packet Data Channel Step “up” for rate control.
The base station shall set this field to the step “up” value of the rate control on the Reverse Packet Data Channel for the i-th encoder packet size signaled in REV_PDCH_EP_MAP (see [3]).

The base station shall set this field to a value in the range 0 to 7.96875 dB inclusive in units of 0.03125 dB.

REV_PDCH_STEP_DOWN - Reverse Packet Data Channel Step “down” for rate control.

The base station shall set this field to the step “down” value of rate control on the Reverse Packet Data Channel for the i-th encoder packet size signaled in REV_PDCH_EP_MAP (see [3]).

The base station shall set this field to a value in the range 0 to 7.96875 dB inclusive in units of 0.03125 dB.

REV_PDCH_SR_ID_MAP - Number of Reverse PDCH Encoder Packet sizes.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set the i-th bit to ‘1’ for each SR_ID associated with the Reverse Packet Data Channel. The LSB corresponds to SR_ID 0. The MSB corresponds to SR_ID 6.

The base station shall include the following subrecord for each bit set to ‘1’ in REV_PDCH_SR_ID_MAP:

REV_PDCH_BOOST_ALLOWED - Reverse PDCH TPR Boost Allowed indicator.

If REV_PDCH_PARMS_INCL is omitted or is included and is set to ‘0’, then the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if TPR (traffic to pilot ratio) power boost on the Reverse PDCH is allowed; otherwise, the base station shall set this field to ‘0’.

REV_PDCH_AUTO_ALLOWED - Reverse PDCH Autonomous Transmission Allowed indicator.

If REV_PDCH_PARMS_INCL is set to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows:

The base station shall set this field to ‘1’ if autonomous transmission on the Reverse PDCH is allowed; otherwise, the base station shall set this field to ‘0’.

If REV_REQCH_PARMS_INCL, is not included or is included and is set to ‘0’, the base station shall omit the following fields; otherwise, the base station shall include the following subrecord as described hereafter:

• The base station shall include an occurrence of the following subrecord for each bit set to ‘1’ in REV_PDCH_SR_ID_MAP:

• Additionally, the base station shall include an additional subrecord for the aggregate traffic across all SR_ID’s, and...
The base station shall set REV_REQCH_USE_POWER_REPORTS,
REV_REQCH_USE_BUFFER_REPORTS, or REV_REQCH_USE_WATERMARKS to ‘1’
in at least one of these subrecords.

REV_REQCH_MIN_DURATIoN - Reverse Request Channel Minimum Duration.
The base station shall set this field to the minimum duration,
which is the minimum duration between REQCH messages for this sr_id[see [3]].
The base station shall set this field to a value in the range 0 to
5.10 seconds inclusive in units of 20 ms.

REV_REQCH_USE_POWER_REPORTS - Reverse Request Channel Use of Power Status
Reports indicator.
If REV_REQCH_POWER_REPORTS_PARMS_INCL is omitted, or if it is included and set to ‘0’, the base station shall omit
this field; otherwise, the base station shall include this field
and set it as follows.
The base station shall set this field to the value ‘1’ if power status
reports are allowed; otherwise, the base station shall set this
field to ‘0’.

REV_REQCH_USE_BUFFER_REPORTS - Reverse Request Channel Use of Buffer Status
Reports indicator.
The base station shall set this field to the value ‘1’ if buffer status
reports are allowed; otherwise, the base station shall set this
field to ‘0’.

REV_REQCH_USE_WATERMARKS - Reverse Request Channel Use of Watermark Reports
indicator.
The base station shall set this field to the value ‘1’ if watermark reports
are allowed; otherwise, the base station shall set this
field to ‘0’.

REV_REQCH_USE_DEFAULT_TAB - Reverse Packet Data Channel use default buffer
size table indicator.
If REV_REQCH_USE_POWER_REPORTS is included and set
to ‘1’, or if REV_REQCH_USE_BUFFER_REPORTS is set
to ‘1’, or if REV_REQCH_USE_WATERMARKS is set to ‘1’, the
base station shall include this field and set it according to
Table 3.7.5.20.7; otherwise, the base station shall omit this
field.

Table 3.7.5.20.7. Encoding of REV_REQCH_USE_DEFAULT_TAB

<table>
<thead>
<tr>
<th>REV_REQCH_USE_DEFAULT_TAB</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘000’</td>
<td>Use the REV_REQCH_BUF_QUANT_PARM_1 field and REV_REQCH_BUF_QUANT_PARM_2 field to generate a buffer size table</td>
</tr>
<tr>
<td>‘001’</td>
<td>Use the default buffer size table as shown in</td>
</tr>
<tr>
<td>'010'</td>
<td>Use the default buffer size table as shown in Table 3.7.5.20.9</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>'011' – ‘111’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

**Table 3.7.5.20.8. Default Buffer Size Table (REV_REQCH_USE_DEFAULT_TAB = ‘001’)***

<table>
<thead>
<tr>
<th>Row</th>
<th>Buffer Size (in units of 96 bytes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>9</td>
<td>32</td>
</tr>
<tr>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>11</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>96</td>
</tr>
<tr>
<td>13</td>
<td>128</td>
</tr>
</tbody>
</table>

**Table 3.7.5.20.9. Default Buffer Size Table (REV_REQCH_USE_DEFAULT_TAB = ‘010’)***

<table>
<thead>
<tr>
<th>Row</th>
<th>Buffer Size (in units of 512 bytes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>16</td>
</tr>
</tbody>
</table>
REV_REQCH_BUF_QUANT_PARM_1 - Reverse Request Channel First Buffer Quantization Parameter.

If REV_REQCH_USE_DEFAULT_TAB is omitted, or if it is included and not set to '000', 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 first Reverse Packet Data Channel buffer size quantization parameter.

The base station shall not set this field to '0000000' if REV_REQCH_BUF_QUANT_PARM_2 is equal to '00000000' (see [3]).

REV_REQCH_BUF_QUANT_PARM_2 - Reverse Request Channel Second Buffer Quantization Parameter.

If REV_REQCH_USE_DEFAULT_TAB is omitted, or if it is included and not set to '000', 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 second Reverse Packet Data Channel buffer size quantization parameter.

The base station shall not set this field to '0000000' if REV_REQCH_BUF_QUANT_PARM_1 is equal to '00000000' (see [3]).

REV_REQCH_USE_WATERMARKS - Reverse Request Channel Use of Watermark Reports indicator.

The base station shall set this field to the '1' if watermark reports are allowed; otherwise, the base station shall set this field to '0'.

REV_REQCH_HIGH_WATERMARK_1 - Reverse Request Channel First High Watermark Parameter.

If REV_REQCH_USE_WATERMARKS is equal to '0', the base station shall omit this field; otherwise, the base station shall include this field and set it to the first high watermark parameter (for high priority reports) for this sr_id:

REV_REQCH_HIGH_WATERMARK_2 - Reverse Request Channel Second High Watermark Parameter.
If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the second high watermark parameter (for high priority report) for this sr_id.

**REV_REQCH_LOW_WATERMARK_1** - Reverse Request Channel First Low Watermark Parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the first low watermark parameter (for high priority reports) for this sr_id.

**REV_REQCH_LOW_WATERMARK_2** - Reverse Request Channel Second Low Watermark Parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the second low watermark parameter for this sr_id.

**REV_REQCH_CEILING_1** - Reverse Request Channel Ceiling first parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the first high ceiling level parameter for this sr_id.

**REV_REQCH_CEILING_2** - Reverse Request Channel Ceiling second parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the second high ceiling level parameter for this sr_id.

**REV_REQCH_FLOOR_1** - Reverse Request Channel Floor first parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the first low floor level parameters for this sr_id.

**REV_REQCH_FLOOR_2** - Reverse Request Channel Floor second parameter.

If REV_REQCH_USE_WATERMARKS is equal to ‘0’, the base station shall omit this field; otherwise, the base station shall include this field and set it to the second low floor level parameter for this sr_id.

**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’.
3.7.5.21 Multiple Character Extended Display

If P_REV_IN_USE is equal to or greater than nine, the base station shall not transmit this information record to the mobile station.

This information record allows the network to supply supplementary service multiple character display information that may be displayed by the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC_EXT_DISPLAY_IND</td>
<td>1</td>
</tr>
<tr>
<td>DISPLAY_TYPE</td>
<td>7</td>
</tr>
</tbody>
</table>

One or more occurrences of the following record:

\[
\{ \\
\quad \text{DISPLAY_TAG} 8 \\
\quad \text{NUM_RECORD} 8 \\
\} \ (\text{NUM_RECORD})
\]

NUM_RECORD occurrences of the following record

\[
\{ (\text{NUM_RECORD}) \\
\quad \text{DISPLAY_ENCODING} 8 \\
\quad \text{NUM_FIELDS} 8 \\
\} (\text{NUM_FIELDS})
\]

NUM_FIELDS occurrences of the following field:

\[
\{ (\text{NUM_FIELDS}) \\
\quad \text{CHARi} \text{ Variable} \\
\} (\text{NUM_FIELDS})
\]

\[
\} (\text{NUM_RECORDS})
\]

| RESERVED               | 0 - 7 (as needed) |

7

MC_EXT_DISPLAY_IND - The indicator of Multiple Character Extended Display information record. The base station shall set this field to ‘1’.

DISPLAY_TYPE - The type of display. The base station shall set this field to the DISPLAY_TYPE value shown in Table 3.7.5.16-1 corresponding to the type of display, as defined in [8] Annex D.

DISPLAY_TAG - The indicator of the display information. There are three types of display tags: mandatory control tags (Blank and Skip), display text tags, and optional control tags, see [8] Annex D.
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.

**NUM_RECORD** - The number of records displaying.

The base station shall set this field to the number of records of display text.

If the DISPLAY_TAG field is equal to ‘10000000’ or ‘10000001’, the base station shall set this field to ‘00000000’.

The base station shall include NUM_RECORD occurrences of the following record.

**DISPLAY_ENCODING** - Display encoding.

If the DISPLAY_TAG field is not equal to ‘10000000’ or ‘10000001’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The three most significant bits of this field shall be set to ‘000’ and the five least significant bit of this field shall be set to a value as specified in [30] to indicate the display encoding type used.

Support of an encoding method does not imply that the entire encodable character set must be supported. In general, once the supported character set is determined, various subsets of the character set can be supported. If a message is comprised entirely of characters from a supported subset of a character set, it can be displayed. If a message contains an unsupported character of a character set, it can be discarded.

**NUM_FIELDS** - Number of occurrences of the CHARi field.

If the DISPLAY_TAG field is not equal to ‘10000000’ or ‘10000001’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the number of characters included in this record.

**CHARi** - Character.

The base station shall include NUM_FIELDS occurrences of this field, one for each character to be displayed, except for blank and skip.

**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’.
3.7.5.22 Call Waiting Indicator

This information record allows the base station to inform the mobile station that a call waiting call is available. This indicator may be used to suppress the generation of the local dial tone in mobile stations that provide locally generated dial tone.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALL_WAITING_INDICATOR</td>
<td>1</td>
</tr>
<tr>
<td>RESERVED</td>
<td>7</td>
</tr>
</tbody>
</table>

CALL_WAITING_INDICATOR - Call waiting indicator.

The base station shall set this field to a ‘1’ to indicate to the mobile station that a call is waiting. The base station shall set this field to a ‘0’ if the call waiting call is not answered by the mobile station and the call waiting call goes away.

RESERVED - Reserved bits.

The base station shall set this field to ‘0000000’.
3.7.5.23 Enhanced Multiple Character Extended Display

This information record allows the network to supply supplementary service multiple character display information that may be displayed by the mobile station.

<table>
<thead>
<tr>
<th>Type-Specific Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISPLAY_TYPE</td>
<td>7</td>
</tr>
<tr>
<td>NUM_DISPLAYS</td>
<td>8</td>
</tr>
</tbody>
</table>

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)
  
  | CHARi          | Variable |

{ (NUM_FIELDS)
  
  | RESERVED       | 0 - 7 (as needed) |

{ (NUM_RECORD)
  
  | RESERVED_1     | 0 - 7 (as needed) |

5  DISPLAY_TYPE - The type of display.

The base station shall set this field to the DISPLAY_TYPE value shown in Table 3.7.5.16-1 corresponding to the type of display, as defined in [8] Annex D.

9  NUM_DISPLAYS - The number of occurrences of display text included.

The base station shall set this field to one less than the number of occurrences of display text included.

13  DISPLAY_TAG - The indicator of the display information.

The base station shall include NUM_DISPLAYS + 1 occurrences of the following variable-field record:
There are three types of display tags: mandatory control tags (Blank and Skip), display text tags, and optional control tags, see [8] Annex D.

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.

**NUM_RECORD** - The number of records displaying.

The base station shall set this field to the number of records of display text.

**RECORD_LENGTH** - Display text record length.

If the DISPLAY_TAG field is not equal to ‘10000000’ or ‘10000001’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The base station shall set this field to the number of octets included in this display text record, of specified encoding, including this field.

**DISPLAY_ENCODING** - Display encoding.

If the DISPLAY_TAG field is not equal to ‘10000000’ or ‘10000001’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows.

The three most significant bits of this field shall be set to ‘000’ and the five least significant bit of this field shall be set to a value as specified in [30] to indicate the display encoding type used.

Support of an encoding method does not imply that the entire encodable character set must be supported. In general, once the supported character set is determined, various subsets of the character set can be supported. If a message is comprised entirely of characters from a supported subset of a character set, it can be displayed. If a message contains an unsupported character of a character set, it can be discarded.

**NUM_FIELDS** - Number of occurrences of the CHARi field.

If the DISPLAY_TAG field is not equal to ‘10000000’ or ‘10000001’, the base station shall omit this field; otherwise, the base station shall include this field and set it as follows. The base station shall set this field to the number of characters included in this record.

**CHARi** - Character.
The base station shall include NUM_FIELDS occurrences of this field, one for each character to be displayed, except for blank and skip.

**RESERVED** - Reserved bits.

The base station shall add reserved bits as needed in order to make the length of the entire record, of specified encoding, equal to an integer number of octets. The base station shall set these bits to '0'.

**RESERVED_1** - Reserved bits for octet alignment.

The mobile station shall add the minimum number of bits necessary to make the record length in bits an integral multiple of 8. The mobile station shall set these bits to ‘0’.
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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3.7.6.1-1. TD Transmit Power Level

<table>
<thead>
<tr>
<th>TD_POWER_LEVEL</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>01</td>
<td>6 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>10</td>
<td>3 dB below the Forward Pilot Channel transmit power</td>
</tr>
<tr>
<td>11</td>
<td>Same as the Forward Pilot Channel transmit power</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>TD_MODE</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>OTD (Orthogonal Transmit Diversity) mode</td>
</tr>
<tr>
<td>01</td>
<td>STS (Space Time Spreading) mode</td>
</tr>
<tr>
<td>10-11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

1. RESERVED - Reserved bits. The base station or mobile station shall set this field to ‘000000’.

2. If PILOT_REC_TYPE is equal to ‘001’, the base station or mobile station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

3. QOF - Quasi-orthogonal function index. The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]).

4. WALSH_LENGTH - Length of the Walsh Code. The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot.
Table 3.7.6.1-3. Walsh Code Length

<table>
<thead>
<tr>
<th>WALSH_LENGTH (binary)</th>
<th>Length of the Walsh Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘000’</td>
<td>64</td>
</tr>
<tr>
<td>‘001’</td>
<td>128</td>
</tr>
<tr>
<td>‘010’</td>
<td>256</td>
</tr>
<tr>
<td>‘011’</td>
<td>512</td>
</tr>
<tr>
<td>‘100’ – ‘111’</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

AUX_PILOT_WALSH - Walsh Code for the Auxiliary Pilot.

The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary pilot.

RESERVED - Reserved bits.

The base station or mobile station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.

If PILOT_REC_TYPE is equal to ‘010’, the base station or mobile station shall include the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>AUX_TD_POWER_LEVEL</td>
<td>2</td>
</tr>
<tr>
<td>TD_MODE</td>
<td>2</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 to 7 (as needed)</td>
</tr>
</tbody>
</table>

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_TDPOWERLEVEL - 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

<table>
<thead>
<tr>
<th>AUX_TDPOWERLEVEL</th>
<th>Transmit Power Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>9 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>01</td>
<td>6 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>10</td>
<td>3 dB below the Auxiliary Pilot Channel transmit power</td>
</tr>
<tr>
<td>11</td>
<td>Same as the Auxiliary Pilot Channel transmit power</td>
</tr>
</tbody>
</table>

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.

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SR3_PRIMARY_PILOT (Binary)</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>The primary pilot is on the lowest SR3 frequency</td>
</tr>
<tr>
<td>01</td>
<td>The primary pilot is on the center SR3 frequency</td>
</tr>
<tr>
<td>10</td>
<td>The primary pilot is on the highest SR3 frequency</td>
</tr>
<tr>
<td>11</td>
<td>Reserved</td>
</tr>
</tbody>
</table>

SR3_PILOT_POWER1 – The primary SR3 pilot power level relative to that of the pilot on the lower frequency of the two remaining SR3 frequencies. The base station or mobile station shall set this field to the value shown in Table 3.7.6.1-6 corresponding to the power level of the primary pilot with respect to the pilot on the lower frequency of the two remaining SR3 frequencies.

Table 3.7.6.1-6. Pilot Transmission Power

<table>
<thead>
<tr>
<th>SR3_PILOT_POWER1, SR3_PILOT_POWER2 (Binary)</th>
<th>Relative Transmission Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>0dB</td>
</tr>
<tr>
<td>001</td>
<td>1dB</td>
</tr>
<tr>
<td>010</td>
<td>2dB</td>
</tr>
<tr>
<td>011</td>
<td>3dB</td>
</tr>
<tr>
<td>100</td>
<td>4dB</td>
</tr>
<tr>
<td>101</td>
<td>5dB</td>
</tr>
<tr>
<td>110</td>
<td>6dB</td>
</tr>
<tr>
<td>111</td>
<td>7dB</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Field</th>
<th>Length (bits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR3_PRIMARY_PILOT</td>
<td>2</td>
</tr>
<tr>
<td>SR3_PILOT_POWER1</td>
<td>3</td>
</tr>
<tr>
<td>SR3_PILOT_POWER2</td>
<td>3</td>
</tr>
<tr>
<td>QOF</td>
<td>2</td>
</tr>
<tr>
<td>WALSH_LENGTH</td>
<td>3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH</td>
<td>WALSH_LENGTH+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL1</td>
<td>1</td>
</tr>
<tr>
<td>QOF1</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH1</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>0 or WALSH_LENGTH1+6</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>1</td>
</tr>
<tr>
<td>QOF2</td>
<td>0 or 2</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>0 or 3</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>0 or WALSH_LENGTH2+6</td>
</tr>
<tr>
<td>RESERVED</td>
<td>0 – 7 (as needed)</td>
</tr>
</tbody>
</table>

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.

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.
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.

Quasi-orthogonal function index.

The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the frequency of the primary pilot.

Length of the Walsh Code.

The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the frequency of the primary pilot.

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 on the frequency of the primary pilot.

Additional information included for the pilot on the lower frequency of the two remaining SR3 frequencies.

If the additional information for the pilot on the lower frequencies of the two remaining SR3 frequencies is the same as pilot on the primary frequency, the base station or mobile station shall set this field to '0'; otherwise, the base station or mobile station shall set this field to ‘1’.

Quasi-orthogonal function index for the pilot on the lower frequency of the two remaining SR3 frequencies.

If ADD_INFO_INCL1 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:

The base station or mobile station shall set this field to the index of the Quasi-orthogonal function (see [2]) on the lower frequency of the two remaining SR3 frequencies.

Length of the Walsh Code for the pilot on the lower frequency of the two remaining SR3 frequencies.

If ADD_INFO_INCL1 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:

The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the lower frequency of the two remaining SR3 frequencies.
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUX_PILOT_WALSH1</td>
<td>Walsh Code for the Auxiliary Pilot on the lower frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td></td>
<td>If ADD_INFO_INCL1 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the lower frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td>ADD_INFO_INCL2</td>
<td>Additional information included for the pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td></td>
<td>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 or mobile station shall set this field to ‘0’; otherwise, the base station or mobile station shall set this field to ‘1’.</td>
</tr>
<tr>
<td>QOF2</td>
<td>Quasi-orthogonal function index for the pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td></td>
<td>If ADD_INFO_INCL2 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station or mobile 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.</td>
</tr>
<tr>
<td>WALSH_LENGTH2</td>
<td>Length of the Walsh Code for the pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td></td>
<td>If ADD_INFO_INCL2 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station or mobile station shall set this field to the WALSH_LENGTH value shown in Table 3.7.6.1-3 corresponding to the length of the Walsh code for the pilot that is used as the Auxiliary pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td>AUX_PILOT_WALSH2</td>
<td>Walsh Code for the Auxiliary Pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td></td>
<td>If ADD_INFO_INCL2 is set to ‘0’, the base station or mobile station shall omit this field; otherwise, the base station or mobile station shall set this field as follows:</td>
</tr>
<tr>
<td></td>
<td>The base station or mobile station shall set this field to the Walsh code corresponding to the Auxiliary pilot on the higher frequency of the two remaining SR3 frequencies.</td>
</tr>
<tr>
<td>RESERVED</td>
<td>Reserved bits.</td>
</tr>
<tr>
<td></td>
<td>The base station or mobile station shall set all the bits of this field to ‘0’ to make the entire record octet-aligned.</td>
</tr>
</tbody>
</table>
1  No text.
No text.
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
RSCAMM: Reverse Supplemental Channel Assignment Mini Message

HCM: (Extended) Handoff Complete Message

**Mobile Station**
- Detects user-initiated call.
- Sends *Origination Message*.
- Sends *Origination Continuation Message*.
- Sets up Traffic Channel.
- Receives $N_{5m}$ consecutive valid frames.
- Begins sending the Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Begins processing primary traffic in accordance with Service Option 1.

**Base Station**
- Sets up Traffic Channel.
- Begins sending null Traffic Channel data.
- Sends *Channel Assignment Message*.
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order*.

Optional
- Sends *Service Option Response Order*.
- Sends *Alert With Information Message* (ring back tone).

Optional
- Sends *Alert With Information Message* (tones off).

**Figure B-1A. Simple Call Flow, Mobile Station Origination Example Using Service Option Negotiation with Service Option 1**
### Mobile Station

- Detects user-initiated call.
- Sends *Origination Message*. > Access Channel >
- Sets up Traffic Channel. < Paging Channel <
- Receives $N_{5m}$ consecutive valid frames.
- Begins sending the Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Begins processing primary traffic in accordance with Service Option 1.
- Sends *Service Connect Completion Message*. > Reverse Traffic Channel

**Optional**

- Sends *Origination Continuation Message*. > Reverse Traffic Channel

**Optional**

- Applies ring back in audio path. < Forward Traffic Channel <

**Optional**

- Removes ring back from audio path. < Forward Traffic Channel <

 *(User conversation)*

### Base Station

- Sets up Traffic Channel.
- Begins sending null Traffic Channel data.
- Sends *Channel Assignment Message*.<br>
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order*.<br>
- Sends *Service Connect Message*.<br>

**Optional**

- Sends *Alert With Information Message* (ring back tone).<br>
- Sends *Alert With Information Message* (tones off).<br>
  *(User conversation)*

---

**Figure B-1B. Simple Call Flow, Mobile Station Origination Example Using Service Negotiation with Service Option 1**
**Mobile Station**

- Sends *Page Response Message*.
- Sets up Traffic Channel.
- Receives $N_{5m}$ consecutive valid frames.
- Begins sending the Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Begins processing primary traffic in accordance with Service Option 1.
- Starts ringing.
- User answers call.
- Stops ringing.
- Sends *Connect Order*.
- Begins sending primary traffic packets from the Service Option 1 application.

(For user conversation)

**Base Station**

- Sends *General Page Message*.
- Sets up Traffic Channel.
- Begins sending null Traffic Channel data.
- Sends *Channel Assignment Message*.
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order*.
- Sends *Service Option Response Order*.
- Sends *Alert With Information Message* (ring).

(For user conversation)

**Figure B-2A. Simple Call Flow, Mobile Station Termination Example Using Service Option Negotiation with Service Option 1**
**Figure B-2B. Simple Call Flow, Mobile Station Termination Example Using Service Negotiation with Service Option 1**

### Mobile Station
- Sends *Page Response Message.*
- Sets up Traffic Channel.
- Receives N₅m consecutive valid frames.
- Begins sending the Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Begins processing primary traffic in accordance with Service Option 1.
- Sends *Service Connect Completion Message.*
- Starts ringing.
- User answers call.
- Stops ringing.
- Sends *Connect Order.*
- Begins sending primary traffic packets from the Service Option 1 application.

### Base Station
- Sends *General Page Message.*
- Sets up Traffic Channel.
- Begins sending null Traffic Channel data.
- Sends *Channel Assignment Message.*
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order.*
- Sends *Service Connect Message.*
- Sends *Alert With Information Message* (ring).
- Sends *Alert With Information Message* (ring).

(User conversation)
Mobile Station

- Detects user-initiated disconnect.
- Sends *Release Order*.
- Enters the *System Determination Substate* of the *Mobile Station Initialization State*.

Base Station

- Sends *Release Order*.
- Reverse Traffic Channel
- Forward Traffic Channel

**Figure B-3.** Simple Call Flow, Mobile Station Initiated Call Disconnect Example

Mobile Station

- Sends *Release Order*.
- Enters the *System Determination Substate* of the *Mobile Station Initialization State*.

Base Station

- Detects call disconnect.
- Sends *Release Order*.
- Forward Traffic Channel
- Reverse Traffic Channel

**Figure B-4.** Simple Call Flow, Base Station Initiated Call Disconnect Example
### Mobile Station

*User conversation*
- Detects request for third party to be added to conversation.
- Sends *Flash With Information Message* (dialed digits).

**Optional**
- Applies ring back in audio path.

**Optional**
- Removes ring back tone from audio path.

*Two-way conversation with added party; original party held*
- Detects user request to establish three-way conversation.
- Sends *Flash With Information Message*.

*Three-way conversation*

### Base Station

*User conversation*
- MSC mutes speech.

**Optional**
- Sends *Alert With Information Message* (ring back tone).

*(Called party answers)*
- MSC unmutes speech from added party.

*Two-way conversation with added party; original party held*
- MSC reconnects original party.

*(Three-way conversation)*

---

**Figure B-5. Simple Call Flow, Three-Party Calling Example**
### Mobile Station

<table>
<thead>
<tr>
<th>(User conversation with first party)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional</td>
</tr>
<tr>
<td>• Applies call waiting tone in audio path.</td>
</tr>
<tr>
<td>• Detects user request to change parties.</td>
</tr>
<tr>
<td>• Sends Flash With Information Message.</td>
</tr>
<tr>
<td>(User conversation with second party; first party held)</td>
</tr>
<tr>
<td>• Detects user request to change parties.</td>
</tr>
<tr>
<td>• Sends Flash With Information Message.</td>
</tr>
<tr>
<td>(User conversation with first party; second party held)</td>
</tr>
</tbody>
</table>

### Base Station

<table>
<thead>
<tr>
<th>(User conversation with first party)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional</td>
</tr>
<tr>
<td>• Detects incoming call.</td>
</tr>
<tr>
<td>&lt; Forward Traffic Channel</td>
</tr>
<tr>
<td>• Sends Alert or Flash With Information Message (call waiting tone).</td>
</tr>
<tr>
<td>&gt; Reverse Traffic Channel</td>
</tr>
<tr>
<td>• MSC mutes speech path to first party, connects second party.</td>
</tr>
<tr>
<td>(User conversation with second party; first party held)</td>
</tr>
<tr>
<td>&gt; Reverse Traffic Channel</td>
</tr>
<tr>
<td>• MSC mutes speech path to second party, connects first party.</td>
</tr>
<tr>
<td>(User conversation with first party; second party held)</td>
</tr>
</tbody>
</table>

---

**Figure B-6. Simple Call Flow, Call-Waiting Example**

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.
### Mobile Station

*User conversation using A*
- Pilot B strength exceeds T_ADD.
- Sends *Pilot Strength Measurement Message.*

- Receives *Extended Handoff Direction Message.*
- Acquires B; begins using Active Set \{A, B\}.
- Sends *Handoff Completion Message.*

- Handoff drop timer of pilot A expires.
- Sends *Pilot Strength Measurement Message.*
- Receives *Extended Handoff Direction Message.*
- Stops diversity combining; begins using Active Set \{B\}.
- Sends *Handoff Completion Message.*

*User conversation using B*

### Base Station

*User conversation using A*
- A receives *Pilot Strength Measurement Message.*
- B begins transmitting traffic on the Forward Traffic Channel and acquires the Reverse Traffic Channel.
- A sends *Extended Handoff Direction Message* to use A and B.

- A and B receive *Handoff Completion Message.*
- A and B receive *Pilot Strength Measurement Message.*
- A and B send *Extended Handoff Direction Message* to use B only.

- A and B receive *Handoff Completion Message.*
- A stops transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic Channel.

*User conversation using B*

---

**Figure B-7. Call Processing During Soft Handoff**
### Mobile Station

(User conversation using A and B)

- Handoff drop timer of pilot A expires and pilot C strength exceeds $T_{ADD}$.
- Sends *Pilot Strength Measurement Message*.
- Receives *Extended Handoff Direction Message*.
- Stops diversity combining A and B; starts diversity combining B and C.
- Sends *Handoff Completion Message*.

(Continued on next page)

### Base Station

(User conversation using A and B)

- A and B receive *Pilot Strength Measurement Message*, determine that new Active Set should contain B and C.
- C begins transmitting traffic on the Forward Traffic Channel and acquires the Reverse Traffic Channel.
- A and B send *Extended Handoff Direction Message* to use B and C.
- A, B, and C receive *Handoff Completion Message*.
- A stops transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic Channel.
- B and C receive *Pilot Strength Measurement Message*.

(Continued on next page)

---

**Figure B-8. Call Processing During Sequential Soft Handoff (Part 1 of 2)**
<table>
<thead>
<tr>
<th><strong>Mobile Station</strong></th>
<th><strong>Base Station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>• Receives <em>Extended Handoff Direction Message</em>.</td>
<td>&lt; Forward Traffic Channel</td>
</tr>
<tr>
<td>• Stops diversity combining; begins using Active Set {C}.</td>
<td>&lt; <strong>B and C send Extended Handoff Direction Message</strong> to use C only.</td>
</tr>
<tr>
<td>• Sends <em>Handoff Completion Message</em>.</td>
<td>&gt; Reverse Traffic Channel</td>
</tr>
<tr>
<td>(User conversation using C)</td>
<td>&gt; <strong>B and C receive Handoff Completion Message.</strong></td>
</tr>
<tr>
<td></td>
<td>• B stops transmitting on the Forward Traffic Channel and receiving on the Reverse Traffic Channel.</td>
</tr>
<tr>
<td></td>
<td>(User conversation using C)</td>
</tr>
</tbody>
</table>

**Figure B-8. Call Processing During Sequential Soft Handoff (Part 2 of 2)**
### Mobile Station

- User initiates priority call.
- Sends *Origination Message*.
- Indicates to user that priority call has been queued as a PACA call, and indicates queue position. Uses non-slotted mode operation while waiting for channel assignment.
- Indicates updated queue position to user.
- Sends *Origination Message* again.
- Indicates to user that PACA call is proceeding, sets up Traffic Channel.
- Receives $N_{5m}$ consecutive valid frames.
- Begins sending Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Begins processing primary traffic in accordance with Service Option 1.
- Sends *Service Connect Completion Message*.

### Base Station

- Determines that no Traffic Channels are available and that call is a priority call.
- Sends *PACA Message* to inform user that priority call has been queued as a PACA call, and to indicate queue position.
- Sends *PACA Message* periodically to update PACA call queue position.
- Sends *PACA Message* to instruct mobile station to re-originate PACA call.
- Sets up Traffic Channel.
- Sends *Channel Assignment Message*.
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order*.
- Sends *Service Connect Message*.

(Continued on next page)
### Mobile Station

<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sends <em>Origination Continuation Message</em>.</td>
</tr>
<tr>
<td>• Alerts user with distinct PACA alert.</td>
</tr>
<tr>
<td>• User answers call.</td>
</tr>
<tr>
<td>• Stops alerting.</td>
</tr>
<tr>
<td>• Sends <em>Connect Order</em>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Applies ring back in audio path.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Removes ring back from audio path.</td>
</tr>
</tbody>
</table>

| (User conversation) |

### Base Station

<table>
<thead>
<tr>
<th>(Continued from previous page)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Reverse Traffic Channel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt; Forward Traffic Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sends <em>Alert With Information Message</em> (distinct PACA alert).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt; Forward Traffic Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sends <em>Alert With Information Message</em> (ring back tone).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt; Forward Traffic Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sends <em>Alert With Information Message</em> (tones off).</td>
</tr>
</tbody>
</table>

| (User conversation) |

---

**Figure B-9. PACA Call Processing (Part 2 of 2)**

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.
**Figure B-10. Call Flow for Same Frequency Hard Handoff Failure Recovery**

**Mobile Station**

(Serving Frequency = F1)

- Receives General Handoff Direction Message.
  Saves current configuration. Discontinues use of serving Active Set.

- Attempts to hand off to target Active Set.
  *(Handoff attempt fails)*

- Restores old configuration. Resumes use of serving Active Set.

- Sends Candidate Frequency Search Report Message reporting pilots in target Active Set.

*(Continues communication using serving Active Set)*

**Base Station**

(Serving Frequency = F1)

(Decides to hand off mobile station to new Active Set)

(Starts transmitting on Forward Traffic Channel corresponding to target Active Set)

- Sends General Handoff Direction Message
  (target Active Set disjoint from serving Active Set; RETURN_IF_HO_FAIL = ‘1’; Target Frequency = F1).

*(Maintains Forward and Reverse Traffic Channels corresponding to serving Active Set)*


*(Discontinues use of target Active Set)*

*(Continues communication using serving Active Set)*
<table>
<thead>
<tr>
<th><strong>Mobile Station</strong></th>
<th><strong>Base Station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(Serving Frequency = F1)</em></td>
<td><em>(Serving Frequency = F1)</em></td>
</tr>
<tr>
<td><em>(Candidate Frequency Search Set is empty)</em></td>
<td><em>(Decides to hand off mobile station to Active Set on F2)</em></td>
</tr>
<tr>
<td>- Receives General Handoff Direction Message. Saves current configuration. Discontinues use of serving Active Set.</td>
<td>- Sends General Handoff Direction Message <em>(target Active Set; RETURN_IF_HO_FAIL = ‘1’; Target Frequency = F2)</em></td>
</tr>
<tr>
<td>- Tunes to F2. Attempts to hand off to target Active Set. <em>(Handoff attempt fails)</em></td>
<td>- Sends Candidate Frequency Search Report Message <em>(Discontinues use of Active Set on F2)</em></td>
</tr>
<tr>
<td>- Sends Candidate Frequency Search Report Message reporting pilots in target Active Set.</td>
<td>- Receives Candidate Frequency Search Report Message. <em>(Continues communication on F1)</em></td>
</tr>
<tr>
<td><em>(Continues communication on F1)</em></td>
<td><em>(Continues communication on F1)</em></td>
</tr>
</tbody>
</table>

**Figure B-11. Call Flow for Inter-Frequency Hard Handoff Failure Recovery without Search**
### Mobile Station

(Serving Frequency = F1)
- Receives Candidate Frequency Search Request Message.
- Computes search time for Candidate Frequency Search Set.
  Sends Candidate Frequency Search Response Message.
- Receives Candidate Frequency Search Control Message.
- Saves current configuration. Discontinues use of serving Active Set.
- Tunes to F2.
- Searches pilots in Candidate Frequency Search Set.
- Re-tunes to F1.
  Restores old configuration.
  Resumes use of serving Active Set.
- Sends Candidate Frequency Search Report Message reporting pilots in Candidate Frequency Search Set above CF_T_ADD.

(Continues communication on F1)

(Continued on next page)

### Base Station

(Serving Frequency = F1)
- Sends Candidate Frequency Search Request Message (non-empty Search Set; Candidate Frequency = F2).
- Receives Candidate Frequency Search Response Message.
  (Decides to initiate single search)
- Sends Candidate Frequency Search Control Message (perform single search; Candidate Frequency = F2).

(Continues communication on F1)

(Continued on next page)
Mobile Station

(Continued from previous page)

- Receives General Handoff Direction Message. Saves current configuration. Discontinues use of serving Active Set.
- Tunes to F2. Attempts to hand off to target Active Set. (Handoff attempt succeeds) (Starts transmitting on Reverse Traffic Channel on F2)
- Sends Handoff Completion Message.

(Continues communication on F2)

Base Station

(Continued from previous page)

(Decides to hand off mobile station to Active Set on F2) (Starts transmitting on Forward Traffic Channel on F2)
- Sends General Handoff Direction Message (RETURN_IF_HO_FAIL = ‘1’; Target Frequency = F2). (Maintains Forward and Reverse Traffic Channels on F1)
- Receives Handoff Completion Message.
- Discontinues use of Active Set on F1
- Continues communication on F2

Figure B-12. Call Flow for Inter-Frequency Handoff (Single Search Using Candidate Frequency Search Control Message) (Part 2 of 2)
**Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate Frequency Search Control Message) (Part 1 of 3)**
Mobile Station

(Continued from previous page)

- Re-tunes to F1.
  Restores old configuration.
  Resumes use of serving Active Set.

- Sends Candidate Frequency Search Report Message reporting pilots in Candidate Frequency Search Set above CF_T_ADD.

(Continues communication on F1)

(Periodic search timer expires)

- Initializes and enables periodic search timer.

(Continues periodic search on F2 by repeating the search described above, once every search period)

(Continued on next page)

Base Station

(Continued from previous page)

> Reverse Traffic Channel on F1


(Continues communication on F1)

(Decides to hand off mobile station to Active Set on F2)

(Starts transmitting on Forward Traffic Channel on F2)

(Continued on next page)

Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate Frequency Search Control Message) (Part 2 of 3)
Mobile Station

(Continued from previous page)

- Receives General Handoff Direction Message.
  Disables periodic search timer.
  Saves current configuration.
  Discontinues use of serving Active Set.
- Tunes to F2.
  Attempts to hand off to target Active Set.

(Handoff attempt succeeds)

(Starts transmitting on Reverse Traffic Channel on F2)

- Sends Handoff Completion Message.

(Continues communication on F2)

Base Station

(Continued from previous page)

- Sends General Handoff Direction Message
  (RETURN_IF_HO_FAIL = ‘1’;
   Target Frequency = F2).

(Maintains Forward and Reverse Traffic Channels on F1)

(Starts receiving on Reverse Traffic Channel on F2)

- Receives Handoff Completion Message.

(Discontinues use of Active Set on F1)

(Continues communication on F2)

> Reverse Traffic Channel on F2

> Reverse Traffic Channel on F2

Figure B-13. Call Flow for Inter-Frequency Handoff (Periodic Search Using Candidate Frequency Search Control Message) (Part 3 of 3)
Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 1 of 3)
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>• Re-tunes to F1. Restores old configuration. Resumes use of serving Active Set.</td>
<td>&gt; Reverse Traffic Channel on F1</td>
</tr>
<tr>
<td></td>
<td>• Sends Candidate Frequency Search Report Message reporting pilots in target Active Set and pilots in Candidate Frequency Search Set above CF_T_ADD. (Continues communication on F1)</td>
</tr>
<tr>
<td></td>
<td>(Continues communication on F1)</td>
</tr>
<tr>
<td></td>
<td>(Continues communication on F1)</td>
</tr>
<tr>
<td></td>
<td>(Decides to hand off mobile station to new Active Set on F2) (Starts transmitting on Forward Traffic Channel on F2)</td>
</tr>
<tr>
<td></td>
<td>(Continued on next page)</td>
</tr>
<tr>
<td></td>
<td>(Continued on next page)</td>
</tr>
</tbody>
</table>

Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 2 of 3)
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>(Starts transmitting on Reverse Traffic Channel on F2)</td>
<td>(Starts receiving on Reverse Traffic Channel on F2)</td>
</tr>
<tr>
<td>• Sends Handoff Completion Message.</td>
<td>• Receives Handoff Completion Message.</td>
</tr>
<tr>
<td>(Continues communication on F2)</td>
<td>(Discontinues use of Active Set on F1)</td>
</tr>
<tr>
<td></td>
<td>(Continues communication on F2)</td>
</tr>
</tbody>
</table>

Figure B-14. Call Flow for Inter-Frequency Handoff (Single Search Using General Handoff Direction Message) (Part 3 of 3)
<table>
<thead>
<tr>
<th><strong>Mobile Station</strong></th>
<th><strong>Base Station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{(Serving Frequency = F1)})</td>
<td>(\text{(Serving Frequency = F1)})</td>
</tr>
<tr>
<td>• Receives Candidate Frequency Search Request Message.</td>
<td>• Sends Candidate Frequency Search Request Message (non-empty Search Set; Candidate Frequency = F2).</td>
</tr>
<tr>
<td>• Computes search time for Candidate Frequency Search Set. Sends Candidate Frequency Search Response Message.</td>
<td>• Receives Candidate Frequency Search Response Message. (Decides to hand off mobile station to Active Set on F2) (Starts transmitting on Forward Traffic Channel on F2)</td>
</tr>
<tr>
<td>• Receives General Handoff Direction Message. Saves current configuration. Discontinues use of serving Active Set.</td>
<td>• Sends General Handoff Direction Message (target Active Set; (\text{RETURN_IF_HO_FAIL} = '1'); (\text{PERIODIC_SEARCH} = '1'); Target Frequency = F2). (Maintains Forward and Reverse Traffic Channels on F1)</td>
</tr>
<tr>
<td>• Tunes to F2. Attempts to hand off to target Active Set. (\text{(Handoff attempt fails)})</td>
<td></td>
</tr>
<tr>
<td>• Searches pilots in Candidate Frequency Search Set.</td>
<td></td>
</tr>
<tr>
<td>• Re-tunes to F1. Restores old configuration. Resumes use of serving Active Set. (\text{(Continued on next page)})</td>
<td>(Continued on next page)</td>
</tr>
</tbody>
</table>

**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 1 of 4)**
**Mobile Station**

(Continued from previous page)

- Sends *Candidate Frequency Search Report Message* reporting pilots in target Active Set and pilots in Candidate Frequency Search Set above CF_T_ADD.
- Initializes and enables periodic search timer.

(Continues communication on F1)

(Periodic search timer running)

- Performs a search of Candidate Frequency Search Set by executing the following actions before periodic search timer expires:
  - Saves current configuration. Discontinues use of serving Active Set.
  - Tunes to F2.
  - Searches pilots in Candidate Frequency Search Set.
  - Re-tunes to F1. Restores old configuration. Resumes use of serving Active Set.

(Continued on next page)

**Base Station**

(Continued from previous page)

  (Discontinues use of Active Set on F2)

(Continues communication on F1)

**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 2 of 4)**
### Mobile Station

(Continued from previous page)

- Sends *Candidate Frequency Search Report Message* reporting pilots in Candidate Frequency Search Set above CF_T_ADD.

(Continues communication on F1)

(Periodic search timer expires)
- Initializes and enables periodic search timer.

(Continues periodic search on F2 by repeating the search described above, once every search period)

- Receives *General Handoff Direction Message*.
  Disables periodic search timer.
  Saves current configuration.
  Discontinues use of serving Active Set.
- Tunes to F2.
  Attempts to hand off to target Active Set.

(Continued on next page)

### Base Station

(Continued from previous page)

> Reverse Traffic Channel on F1

- Receives *Candidate Frequency Search Report Message*.

(Continues communication on F1)

(Decides to hand off mobile station to new Active Set on F2)

(Starts transmitting on Forward Traffic Channel on F2)

< Forward Traffic Channel on F1

- Sends *General Handoff Direction Message* (new target Active Set; RETURN_IF_HO_FAIL = ‘1’; Target Frequency = F2).

(Maintains Forward and Reverse Traffic Channels on F1)

(Continued on next page)

---

**Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 3 of 4)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(Continued from previous page)</em></td>
<td><em>(Continued from previous page)</em></td>
</tr>
<tr>
<td><em>(Handoff attempt succeeds)</em></td>
<td><em>(Starts receiving on Reverse Traffic Channel on F2)</em></td>
</tr>
<tr>
<td><em>(Starts transmitting on Reverse Traffic Channel on F2)</em></td>
<td>• Receives Handoff Completion Message.</td>
</tr>
<tr>
<td>• Sends Handoff Completion Message.</td>
<td><em>(Discontinues use of Active Set on F1)</em></td>
</tr>
<tr>
<td><em>(Continues communication on F2)</em></td>
<td><em>(Continues communication on F2)</em></td>
</tr>
</tbody>
</table>

Figure B-15. Call Flow for Inter-Frequency Handoff (Periodic Search Using General Handoff Direction Message) (Part 4 of 4)
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(Serving Frequency = F1)</em></td>
<td><em>(Serving Frequency = F1)</em></td>
</tr>
<tr>
<td>• Receives Candidate Frequency Search Request Message.</td>
<td>• Sends Candidate Frequency Search Request Message</td>
</tr>
<tr>
<td></td>
<td>(non-empty Search Set; Candidate Frequency = F2).</td>
</tr>
<tr>
<td>• Computes search time for Candidate Frequency Search Set.</td>
<td>• Receives Candidate Frequency Search Response Message.</td>
</tr>
<tr>
<td></td>
<td><em>(Decides to initiate periodic search)</em></td>
</tr>
<tr>
<td>Sends Candidate Frequency Search Response Message.</td>
<td>• Sends Candidate Frequency Search Control Message</td>
</tr>
<tr>
<td></td>
<td>(start periodic search; Candidate Frequency = F2).</td>
</tr>
<tr>
<td>• Receives Candidate Frequency Search Control Message.</td>
<td><em>(Decides to hand off mobile station to Active Set on F3)</em></td>
</tr>
<tr>
<td>Initializes and enables periodic search timer.</td>
<td><em>(Starts transmitting on Forward Traffic Channel on F3)</em></td>
</tr>
<tr>
<td><em>(Performs periodic search on F2)</em></td>
<td><em>(Continued on next page)</em></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><em>(Continued on next page)</em></td>
<td></td>
</tr>
</tbody>
</table>

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)
**Mobile Station**

(Continued from previous page)

- Receives *General Handoff Direction Message*.  
  Disables periodic search timer.  
  Saves current configuration.  
  Discontinues use of serving Active Set.

- Tunes to F3.  
  Attempts to hand off to target Active Set.

*(Handoff attempt fails)*

- Re-tunes to F1.  
  Restores old configuration.  
  Resumes use of serving Active Set.  
  Initializes and enables periodic search timer.

(Continued on next page)

**Base Station**

(Continued from previous page)

- Sends *General Handoff Direction Message*  
  (target Active Set;  
  RETURN_IF_HO_FAIL = ‘1’;  
  PERIODIC_SEARCH = ‘1’;  
  Target Frequency = F3).  
  *(Maintains Forward and Reverse Traffic Channels on F1)*

(Continued on next page)

---

2 **Figure B-16. Call Flow for Periodic Search on F2 from F1, Failed Handoff Attempt to F3, Continued Periodic Search of F2 from F1 (Part 2 of 3)**
Mobile Station

(Continued from previous page)

- Sends Candidate Frequency Search Report Message reporting pilots in target Active Set.

(Continues communication on F1)

(Performs periodic search on F2)

(Continues communication on F1)

Base Station

(Continued from previous page)


(Discontinues use of Active Set on F3)

(Continues communication on F1)

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)
### Mobile Station

(Serving Frequency = F1)

- Receives Candidate Frequency Search Request Message.
- Computes search time for Candidate Frequency Search Set.
- Sends Candidate Frequency Search Response Message.
- Receives Candidate Frequency Search Control Message.
  Initializes and enables periodic search timer.
  (Performs periodic search on F2)
- Receives General Handoff Direction Message.
  Disables periodic search timer.
  Saves current configuration.
  Discontinues use of serving Active Set.

(Continued on next page)

### Base Station

(Serving Frequency = F1)

- Sends Candidate Frequency Search Request Message (non-empty Search Set; Candidate Frequency = F2).
- Receives Candidate Frequency Search Response Message.
  (Decides to initiate periodic search)
- Sends Candidate Frequency Search Control Message (start periodic search; Candidate Frequency = F2).
- Receives Candidate Frequency Search Control Message (start periodic search; Candidate Frequency = F2).
- Sends General Handoff Direction Message
  (target Active Set; RETURN_IF_HO_FAIL = ‘1’; PERIODIC_SEARCH = ‘1’; Target Frequency = F3).
  (Maintains Forward and Reverse Traffic Channels on F1)

(Continued on next page)

**Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3, Continued Periodic Search on F2 from F3 (Part 1 of 2)**
Figure B-17. Call Flow for Periodic Search on F2 from F1, Successful Handoff to F3, Continued Periodic Search on F2 from F3 (Part 2 of 2)
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Packet arrives.</td>
<td>• Sets up Traffic Channel</td>
</tr>
<tr>
<td>• Sends <em>Origination Message</em> with “High Speed Packet Service Option.”</td>
<td>• Begins sending null Traffic Channel data.</td>
</tr>
<tr>
<td>• Sets up Traffic Channel.</td>
<td>• Sends <em>Channel Assignment Message</em> (GRANTED_MODE = ‘01’).</td>
</tr>
<tr>
<td>• Receives $N_{5m}$ consecutive valid frames.</td>
<td>• Acquires the Reverse Traffic Channel.</td>
</tr>
<tr>
<td>• Begins sending the Traffic Channel preamble.</td>
<td>• Sends <em>Base Station Acknowledgment Order</em>.</td>
</tr>
<tr>
<td>• Begins transmitting null Traffic Channel data.</td>
<td>• Sends <em>Service Connect Message</em>.</td>
</tr>
<tr>
<td>• Sends <em>Service Request Message</em> (FOR_MUX_OPTION and REV_MUX_OPTION indicates max number of Supplemental Code Channels).</td>
<td>• Sends packet.</td>
</tr>
<tr>
<td>• Begins processing primary traffic in accordance with Service Option n.</td>
<td>• Sends packet.</td>
</tr>
<tr>
<td>• Sends <em>Service Connect Completion Message</em>.</td>
<td>• Sends <em>Service Connect Message</em>.</td>
</tr>
<tr>
<td>• Sends packet.</td>
<td></td>
</tr>
</tbody>
</table>

(Continued on next page)

(Continued on next page)

**Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission on Forward Supplemental Code Channels (Part 1 of 2)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>&lt; Forward Fundamental Channel</td>
<td>• Base station decides that it requires to change the number of Supplemental Channels (e.g., it has a “large” packet to send).</td>
</tr>
<tr>
<td>&lt; Forward Fundamental and Supplemental Code Channels</td>
<td>• Send <em>Supplemental Channel Assignment Message</em>.</td>
</tr>
<tr>
<td>(User traffic)</td>
<td>• Begin transmitting on the Supplemental Code Channels for the duration specified in <em>Supplemental Channel Assignment Message</em>.</td>
</tr>
<tr>
<td>(User traffic)</td>
<td>(User traffic)</td>
</tr>
</tbody>
</table>

**Figure B-18. Simple Call Flow Mobile Station Origination Example with Transmission on Forward Supplemental Code Channels (Part 2 of 2)**
### Mobile Station

- Packet arrives.
- Sends *Origination Message* with “High Speed Packet Service Option.”
- Sets up Traffic Channel.
- Receives $N_{5m}$ consecutive valid frames.
- Begins sending the Traffic Channel preamble.
- Begins transmitting null Traffic Channel data.
- Sends *Service Request Message* *(FOR_MUX_OPTION and REV_MUX_OPTION indicates max number of Supplemental Code Channels).*
- Begins processing primary traffic in accordance with Service Option $n$.
- Sends *Service Connect Completion Message*.
- Sends packet.

### Base Station

- Sets up Traffic Channel.
- Begins sending null Traffic Channel data.
- Sends *Channel Assignment Message* *(GRANTED_MODE = '01').*
- Acquires the Reverse Traffic Channel.
- Sends *Base Station Acknowledgment Order*.
- Sends *Service Connect Message*.
- Sends packet.

*(Continued on next page)*

---

**Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission on Reverse Supplemental Code Channels (Part 1 of 2)**
**Mobile Station**

(Continued from previous page)

- Mobile station has a “large” packet to send.
- Continue transmitting on the Fundamental Channel.
- Sends *Supplemental Channel Request Message.*
- Begins transmitting on the Reverse Supplemental Code Channels.

(User traffic)

<table>
<thead>
<tr>
<th>Base Station</th>
</tr>
</thead>
</table>

(Continued from previous page)

<table>
<thead>
<tr>
<th>Forward Fundamental Channel</th>
<th>Reverse Fundamental &amp; Supplemental Code Channels</th>
</tr>
</thead>
</table>

• Send *Supplemental Channel Assignment Message.*

(User traffic)

---

**Figure B-19. Simple Call Flow Mobile Station Origination Example with Transmission on Reverse Supplemental Code Channels (Part 2 of 2)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sends Page Response Message.</td>
<td>• Packet arrives.</td>
</tr>
<tr>
<td>• Sends Page Response Message.</td>
<td>• Sends General Page Message with “High Speed Packet Service Option.”</td>
</tr>
<tr>
<td>• Sets up Traffic Channel.</td>
<td>• Sets up Traffic Channel</td>
</tr>
<tr>
<td>&lt; Paging Channel</td>
<td>&lt; Paging Channel</td>
</tr>
<tr>
<td>• Receives N₅ₐₜₜ m consecutive valid frames.</td>
<td>• Begins sending null Traffic Channel data.</td>
</tr>
<tr>
<td>• Begins sending the Traffic Channel preamble.</td>
<td>• Sends Extended Channel Assignment Message (GRANTED_MODE = ‘00’).</td>
</tr>
<tr>
<td>• Begins transmitting null Traffic Channel data.</td>
<td>&lt; Forward Fundamental Channel</td>
</tr>
<tr>
<td>• Processes Service Request Message.</td>
<td>&lt; Forward Fundamental Channel</td>
</tr>
<tr>
<td>&lt; Forward Fundamental Channel</td>
<td>• Acquires the Reverse Fundamental Channel.</td>
</tr>
<tr>
<td>(Continued on next page)</td>
<td>• Sends Base Station Acknowledgment Order.</td>
</tr>
<tr>
<td></td>
<td>• Sends Service Request Message (FOR_MUX_OPTION and REV_MUX_OPTION indicates the maximum number of Supplemental Forward and Reverse Code Channels).</td>
</tr>
</tbody>
</table>

(Continued on next page)

**Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 1 of 3)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
</tbody>
</table>

- Sends *Service Response Message* to accept Service Option with FOR_MUX_OPTION and REV_MUX_OPTION to indicate the maximum number of Supplemental Forward and Reverse Code Channels supported by the mobile station.

- Begins processing primary traffic in accordance with Service Option and multiplex option.

- Sends *Service Connect Completion Message*.

- Sends packet, if any, on the Fundamental Channel.

<table>
<thead>
<tr>
<th>&gt; Reverse &gt;</th>
<th>&gt; Reverse &gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; Reverse &gt;</td>
<td>&gt; Reverse &gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt; Forward &lt;</th>
<th>&lt; Forward &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; Forward &lt;</td>
<td>&lt; Forward &lt;</td>
</tr>
</tbody>
</table>

- Sends *Service Connect Message*.

- Sends packet, if any, on the Fundamental Channel.

(Continued on next page)

2 **Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 2 of 3)**
• Base station decides that it requires to use Supplemental Channels to send a “large” packet.

• Sends Supplemental Channel Assignment Message.

• Begins transmitting on the Supplemental Code Channel(s) for the duration specified in Supplemental Channel Assignment Message.

(User traffic)

Figure B-20. Simple Call Flow, Mobile Station Termination Example with Transmission on Forward Supplemental Code Channel(s) (Part 3 of 3)
<table>
<thead>
<tr>
<th><strong>Mobile Station</strong></th>
<th><strong>Base Station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Sends Page Response Message.</td>
<td>- Packet arrives</td>
</tr>
<tr>
<td>- Sends Page Response Message.</td>
<td>- Sends General Page Message with “High Speed Packet Service Option.”</td>
</tr>
<tr>
<td>- Sets up Traffic Channel.</td>
<td>- Sets up Traffic Channel.</td>
</tr>
<tr>
<td>- Receives ( N_{5m} ) consecutive valid frames.</td>
<td>- Begins sending null Traffic Channel data.</td>
</tr>
<tr>
<td>- Begins sending the Traffic Channel preamble.</td>
<td>- Sends Extended Channel Assignment Message ((\text{GRANTED_MODE} = '00')).</td>
</tr>
<tr>
<td>- Begins transmitting null Traffic Channel data.</td>
<td>- Acquires the Reverse Fundamental Channel.</td>
</tr>
<tr>
<td>- Processes Service Request Message.</td>
<td>- Sends Base Station Acknowledgment Order.</td>
</tr>
</tbody>
</table>

(Continued on next page)

**Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 1 of 3)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>• Sends Service Response Message to accept Service Option, with FOR_MUX_OPTION and REV_MUX_OPTION to indicate the maximum number of Supplemental Code Channels supported by the mobile station.</td>
<td>&gt; Reverse Fundamental Channel</td>
</tr>
<tr>
<td>• Begins processing primary traffic in accordance with the service configuration.</td>
<td>&lt; Forward Fundamental Channel</td>
</tr>
<tr>
<td>• Sends Service Connect Completion Message.</td>
<td>&gt; Reverse Fundamental Channel</td>
</tr>
<tr>
<td>• Sends packet data.</td>
<td>&lt; Forward Fundamental Channel</td>
</tr>
<tr>
<td>• Mobile station has a “large” packet to send, so begins transmitting packet.</td>
<td>&gt; Reverse Fundamental Channel</td>
</tr>
</tbody>
</table>

(Continued on next page)

**Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 2 of 3)**
<table>
<thead>
<tr>
<th>Mobile Station</th>
<th>Base Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Continued from previous page)</td>
<td>(Continued from previous page)</td>
</tr>
<tr>
<td>• Sends <em>Supplemental Channel Request Message</em>, and continues transmitting on the Reverse Fundamental Channel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Reverse Fundamental Channel</td>
</tr>
<tr>
<td></td>
<td>&lt; Forward Fundamental Channel</td>
</tr>
<tr>
<td></td>
<td>&gt; Reverse and Supplemental Code Channels</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>• Begins transmitting on the Reverse Supplemental Code Channel(s), in addition to continuing on the Reverse Fundamental Channel.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt; Reverse Fundamental and Supplemental Code Channels</td>
</tr>
<tr>
<td>(User traffic)</td>
<td>(User traffic)</td>
</tr>
</tbody>
</table>

Figure B-21. Simple Call Flow, Mobile Station Termination Example with Transmission on Reverse Supplemental Code Channel(s) (Part 3 of 3)
Figure B-22. Active/Control Hold to Idle State Transition; Release all services (BS Initiated)
Figure B-23. Active/Control Hold to Idle State Transition; Release all services (MS Initiated)
Figure B-24. Active to Control Hold State Transition (BS Initiated)
**Figure B-25. Active to Control Hold State Transition (MS Initiated)**

- **MS L3 (Active)**
  - RRRM (GATING_DISCONNECT_IND=1)
  - RRRMM (GATING_DISCONNECT_IND=1)
  - ERMM (CH_IND)
  - ERMM (CH_IND)
  - UHDM (CH_IND)
- **BS L3 (Active)**
  - MS stops transmitting/processing on the indicated channels and starts reverse pilot gating at the action time

- **Control Hold**

*CH_IND* is a subset of the channels currently being processed.
MS starts transmitting/processing on the indicated channels and starts continuous reverse pilot at action time.

Figure B-26. Control Hold to Active Transition (BS Initiated)
Figure B-27. Control Hold to Active Transition (MS Initiated)
Enhanced Origination Message
(SO<sub>y</sub>, TAG<sub>y</sub>, (Dialed Digits))

Call Assignment Message
(RESPONSE_IND=1,
TAG<sub>y</sub>, CON_REF<sub>y</sub>)

SCM / GHDM / UHDM
(SCR += (SO<sub>y</sub>, CON_REF<sub>y</sub>))

OR

SCM / GHDM / UHDM
(CC_INFO_INCL=1,
RESPONSE_IND=1, TAG<sub>y</sub>,
SCR += (SO<sub>y</sub>, CON_REF<sub>y</sub>))

Figure B-28. Connecting an Additional Service (MS Initiated)
Figure B-29. Connecting an Additional Service (BS Initiated)
Figure B-30. Releasing a Service that is not the last one connected (MS Initiated)
Figure B-31. Releasing a Service that is not the last one connected (BS Initiated)
ANNEX C ADDITIONAL CDMA CALL FLOW EXAMPLES

1. Regular Call Setup

C-1.1 Call setup with F-PDCH and no F-Fundicated

Figure C-1. 1 Call setup with F-PDCH and no F-Fundicated
C-1.2 Call setup with F-PDCH and F-Fundicated

Figure C-1.2 Call setup with F-PDCH and F-Fundicated
C-1.3 Call setup with F/R-PDCH

1. **MS** sends **Origination Message/Page Response Message** (FOR_PDCH_SUPPORTED=1, REV_PDCH_SUPPORTED=1)

2. **BS** sends **ECAM** (ASSIGN_MODE=101, EXT_CH_IND = 01000)

3. **BS** assigns F/R-PDCH only

4. **MS** acquires FL, transmits preamble, starts CQI reporting & starts monitoring

5. **MS** monitors F-PDCCH/F-PDCH

6. **BS** acquires RL & detects CQI reports

7. **BS** sends BS Ack Order

8. **MS** sends R-ACKCH: ACK

9. **BS** sends Service Connect Msg (SCR+NNSCR)

10. **MS** sends Service Conn Compl Msg

11. **BS** sends User Traffic
Figure C-1. 3 Call setup with F/R-PDCH
**C-2. Fast Call Setup Enhancements**

### C-2.1 Direct Channel Assignment - Normal setup

![Diagram of Direct Channel Assignment - Normal setup](image-url)

- **f-csch:** ECAM
  - (DIRECT_CH_ASSIGN_IND=1, RESPONSE_IND=0)
- **f-dsch:** BS Ack Order
- **r-dsch:** MS Ack Order
- **f-dtch:** Service Connect Msg (SCR+NNSCR) to BS
- **r-dsch:** Service Conn Compl Msg to MS
- **Traffic Channel Initialization**

- **MS acquires FL; transmits preamble**
- **BS acquires RL**

---

**Figure C-2.1 Direct Channel Assignment - Normal setup**
C-2.2  Direct Channel Assignment - With unassured page response

Figure C-2. 2 Direct Channel Assignment - With unassured page response
C-2.3 Direct Channel Assignment - With failure recovery

Figure C-2. 3 Direct Channel Assignment - With failure recovery
C-2.4 Radio Environment Reporting Mode Example

1. **MS**
   - Traffic: Active Set = \{A, B, C\}
   - f-dsch: ERM
     - (RER_MODE_ENABLED=1, RER_MAX_NUM_MSG_DX=2, RER_TIME=3, RER_TIME_UNIT=01, MAX_RER_PILOT_LIST_SIZE=3)
   - MS releases all physical channels, RER_PILOT_LIST = \{A, B, C\}
   - MS operates in Radio Environment Reporting Mode.
   - MS performs Idle HO to pilot not in RER_PILOT_LIST.
   - RER_PILOT_LIST = \{A, D, E\}
   - MS exits Radio Environment Reporting Mode after specified time or # of reports.

2. **BS**
   - Traffic: Active Set = \{A, B, C\}
   - r-dsch: ERM
   - BS releases all physical channels
   - BS stores MS location as cell A, B, or C
   - r-csch: REM
     - L2 RER fields include pilots D, A, E
   - BS stores MS location as cell A, D, or E

3. BS stores MS location as cell A, B, or C

4. BS stores MS location as cell A, D, or E
MS operates in Radio Environment Reporting Mode

Traffic Active Set = \{A, B, C\}

BS releases all physical channels, RER_PILOT_LIST = \{A, B, C\}

Traffic Active Set = \{A, B, C\}

BS releases all physical channels

Idle

Traffic Active Set = \{A, B, C\}

f-dsch: ERM (RSC_MODE_ENABLED=1, RER_MAX_NUM_MSG_IDX=2, RER_TIME=3, RER_TIME_UNIT=01, MAX_RER_PILOT_LIST_SIZE=3)

idle

r-dsch: ERM

BS releases all physical channels

Idle

BS stores MS location as cell A, B, or C

r-dsch: REM

L2 RER fields include pilots D, A, E

BS stores MS location as cell A, D, or E

MS releases all physical channels, RER_PILOT_LIST = \{A, B, C\}

MS performs Idle HO to pilot not in RER_PILOT_LIST

RER_PILOT_LIST = \{A, D, E\}

MS exits Radio Environment Reporting Mode after specified time or # of reports

Figure C-2. 4 Radio Environment Reporting Mode Example
C-2.5 Tracking zone reporting example

- f-dsch: ERM (TKZ_INFO_INCL=1)
- r-csch: ERRM
- f-csch: ESPM/A41SPM (TKZ_ID x)
- f-csch: ESPM/A41SPM (TKZ_ID y)

forward traffic
Figure C-2. 5 Tracking zone reporting example

MS detects a TKZ_ID

forward traffic

f-dsch: ERM
   (TKZ_MODE_ENABLED= 1)

(System Determination Substate)
Idle State

f-csch: ESPM/A41SPM
   (TKZ_ID x)

f-csch: ESPM/A41SPM
   (TKZ_ID y)

r-csch: REM
C.2.6 Call setup with bypass two good frames

Figure C-2.6 Call setup with bypass two good frames
C-2.7 Call setup with fixed duration preamble transmission

-MS/user decides to initiate a call
-Sets up Traffic Channel.
-Receive a BS Ack Order within T80m

After TCH_INIT_NUM_PREAMBLE, MS starts transmitting data.

-MS receives a BS Ack Order within T80m

-BS Ack Order
-MS Ack Order

Figure C-2.7 Call setup with fixed duration preamble transmission
C.2.8 Call setup with bypass two good frames + fixed duration preamble transmission

- MS/user decides to initiate a call
- Sets up Traffic Channel and starts waiting for the Forward Traffic Channel.
  - Begins sending the Traffic Channel preamble
- Receives N5m consecutive valid frames.
- After TCH_INIT_NUM_PREAMBLE, MS starts transmitting data.
- MS receives BS Ack Order

- BS
  - Sets up Traffic Channel
  - Starts waiting for the Reverse Traffic Channel
  - Acquires the reverse link at some point
  - Might miss some RL data.
  - Receives MS Ack Order and Null Traffic
  - Stops sending BS Ack orders
Figure C-2. 8 Call setup with bypass two good frames + fixed duration preamble transmission
C-2.9 Reduced Slot Cycle Mode - MS initiated release; MS request

Figure C-2.9 Reduced Slot Cycle Mode - MS initiated release; MS request
C-2.10 Reduced Slot Cycle Mode - MS initiated release; BS request

**Figure C-2. 10 Reduced Slot Cycle Mode (MS Initiated Release; BS Request)**
C-2.11 Reduced Slot Cycle Mode - BS initiated release; BS request

Figure C-2.11 Reduced Slot Cycle Mode - BS initiated release; BS request
C-2.12 Reduced Slot Cycle Mode - BS initiated release; MS request

**Figure C-2. 12 Reduced Slot Cycle Mode - BS initiated release; MS request**
C-2.13 Reduced Slot Cycle Mode - MS initiated in Idle State

Figure C-2. 13 Reduced Slot Cycle Mode - MS initiated in Idle State
C-2.14 Reduced Slot Cycle Mode - BS initiated in Idle State

Figure C-2. 14 Reduced Slot Cycle Mode - BS initiated in Idle State
C-2.15 Direct to Idle transition example

MS releases all physical channels, transitions directly to Idle

BS releases all physical channels

**Figure C-2.15 Direct to Idle Transition Example (BS Initiated Release to BCCH)**
C-3  _SYNC_ID enhancements_

C-3.1  _SYNC_ID_ in Origination/Page Response/Reconnect Message and BS grants it via ECAM or SCM

*Figure C-3. 1 SYNC_ID in Origination/Page Response/Reconnect Message and BS grants it via ECAM or SCM*
C.3.2 SYNC_ID in Origination/Page Response/Reconnect Message and BS assigns a different one in ECAM or SCM

Figure C-3. 2 SYNC_ID in Origination/Page Response/Reconnect Message and BS assigns a different one in ECAM or SCM
C-3.3 Incremental restoration of stored service option connections with SYNC_ID (ORM + EOM example)
Figure C-3. 3 Incremental restoration of stored service option connections with SYNC_ID (ORM + EOM example)
C-3.4 Initiate M of N service option connections from SYNC_ID
C-4 — DV Control Hold

C-4.1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-DCCH)

Figure C-4. 1 BS initiated transition from DV Control Hold Mode (F-PDCH without F-DCCH)
C-4.2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)

If layer 3 message or MAC-ControlHoldTrafficReceive d.Indication is received, MS starts transmitting/processing on the indicated channels and starts continuous reverse pilot and R-CQICH at action time indicated in the layer 3 message or transition_time indicated in the MAC-ControlHoldTrafficReceive d.Indication.

Figure C-4. 2 BS initiated transition from DV Control Hold Mode (F-PDCH with F-DCCH)
C.5 — Multiple Services Support

C-5.1 Initiate multiple calls in Origination Message

Figure C-5.1 Initiate multiple calls in Origination Message
C-5.2 Request release of multiple calls via RRRM

Figure C-5. 2 Request release of multiple calls via RRRM
C-6 — BCMC

C-6.1 Initiating BCMC monitoring in idle state that results in Registration Message

User desires to monitor BCMC_FLOW_IDx; MS reads BSPM and determines flow available on a different frequency fx

MS sends BCMC registration notifying frequency change

MS tunes to fx and starts to receive BCMC flow

BS

r-csch: Registration Message
(REG_TYPE = BCMC Registration,
BCMC_FLOW_IDx,
BCMC_CDMA_FREQ = fx)

f-csch: BS Ack Order

BCMC flow
User desires to monitor BCMC_FLOW_IDx; MS reads BSPM and determines flow available on a different frequency fx

MS sends BCMC registration notifying frequency change

MS tunes to fx and starts to receive BCMC flow

r-csch: Registration Message (REG_TYPE = BCMC Registration, BCMC_FLOW_IDx, BCMC_CDMA_FREQ = fx)

f-csch: BS Ack Order

Figure C-6. 1 Initiating BCMC monitoring in idle state that results in Registration Message
C-6.2 Initiating BCMC monitoring in idle state that results in Origination Message and directed to Idle State BCMC

Figure C-6.2 Initiating BCMC monitoring in idle state that results in Origination Message and directed to Idle State BCMC
C-6.3 Initiating BCMC monitoring in idle state that results in Origination Message and assigned to Traffic State BCMC

**Figure C-6.3** Initiating BCMC monitoring in idle state that results in Origination Message and assigned to Traffic State BCMC
C-6.4 Dynamic BCMC in idle state

User desires to monitor BCMC_FLOW_IDx; MS reads BSPM and determines flow available but current not transmitting

MS sends BCMC registration requesting BCMC_FLOW_IDx

MS starts to receive BCMC flow

BS initiates transmission of BCMC_FLOW_IDx and updates BSPM

Figure C-6. 4 Dynamic BCMC in idle state
C-6.5 Initiating BCMC in traffic state

Figure C-6.5 Initiating BCMC in traffic state
C-6.6 Traffic State BCMC to Idle State BCMC transition

Figure C-6. 6 Traffic State BCMC to Idle State BCMC transition
C-6.7 Concurrent BCMC flows monitoring

Traffic channel initialization

f-dsch: UHDM
(ADD_PLCM_FOR_SCH_INCL=1,
SCR/NNSCR with
BCMC_FLOW_ID=1, F-SCH=0,
BSR_ID=1 and other required BCMC
information)

F-SCH=0 with
(BCMC_FLOW_ID=1,
BSR_ID=1)
**Figure C-6. 7 Concurrent BCMC flows monitoring**

- **MS**
  - r-csch: ORM
    - (BCMC_INCL=1, BCMC_FLOW_ID=1)
  - f-csch: ECAM

- **BS**
  - BS starts transmitting BCMC_FLOW_ID 1 on shared F-SCH 0 with the specified PLCM
  - F-SCH=0 with
    - (BCMC_FLOW_ID=1, BSR_ID=1)
  - f-dsch: UHDM
    - (ADD_PLCM_FOR_SCH_INCL=1, SCR/NNSCR with
      - BCMC_FLOW_ID=1, F-SCH=0, BSR_ID=1 and other required BCMC information)

MS begins to use the PLCM received in UHDM to decode the channel
Figure C-6. 8 Concurrent BCMC and Point-to-Point call
ANNEX D CDMA CONSTANTS

Annex D is a normative annex which contains tables that give specific values for the constant identifiers. These identifiers take the forms such as $T_{20m}$ and $N_{5m}$. The subscripted numbers vary to identify the particular constant. Typically the subscripted letter “m” refers to the mobile station and the subscripted letter “b” refers to the base station. The following tables provide values for identifiers given in the text:

Table D-1. Time Limits

Table D-2. Other Constants

<table>
<thead>
<tr>
<th>Time Limit</th>
<th>Description</th>
<th>Value</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T_{5m}$</td>
<td>Limit of the Forward Traffic Channel fade timer</td>
<td>5 s</td>
<td>2.6.4.1.8</td>
</tr>
<tr>
<td>$T_{20m}$</td>
<td>Maximum time to remain in the Pilot Channel Acquisition Substate of the Mobile Station Initialization State</td>
<td>15 s</td>
<td>2.6.1.2</td>
</tr>
<tr>
<td>$T_{21m}$</td>
<td>Maximum time to receive a valid Sync Channel message</td>
<td>1 s</td>
<td>2.6.1.3</td>
</tr>
<tr>
<td>$T_{30m}$</td>
<td>Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message</td>
<td>3 s</td>
<td>2.6.2.1.1.1</td>
</tr>
<tr>
<td>$T_{31m}$</td>
<td>Maximum time for which configuration parameters are considered valid</td>
<td>600 s</td>
<td>2.6.2.2</td>
</tr>
<tr>
<td>$T_{32m}$</td>
<td>Maximum time to enter the Update Overhead Information Substate of the System Access State to respond to an SSD Update Message, Base Station Challenge Confirmation Order, Authentication Challenge Message, and Authentication Request Message</td>
<td>5 s</td>
<td>2.6.2.4 2.6.4</td>
</tr>
</tbody>
</table>
Table D-1. Time Limits (Part 2 of 5)

<table>
<thead>
<tr>
<th>Time Limit</th>
<th>Description</th>
<th>Value</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>T33m</td>
<td>Maximum time to enter the <code>Update Overhead Information Substate of the System Access State</code> (except in response to authentication messages)</td>
<td>0.3 s</td>
<td>2.6.2, 2.6.5.5.2.3</td>
</tr>
<tr>
<td>T34m</td>
<td>Maximum time to enter the <code>Update Overhead Information Substate</code> or the <code>Mobile Station Idle State</code> after receiving a <code>Channel Assignment Message</code> with <code>ASSIGN_MODEr</code> equal to ‘001’ or ‘101’ or <code>Extended Channel Assignment Message</code> with <code>ASSIGN_MODEr</code> equal to ‘001’</td>
<td>3 s</td>
<td>2.6.3.3</td>
</tr>
<tr>
<td>T40m</td>
<td>Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message before aborting an access attempt (see T72m)</td>
<td>3 s</td>
<td>2.6.3.1.8</td>
</tr>
<tr>
<td>T41m</td>
<td>Maximum time to obtain updated overhead messages arriving on the Paging Channel or Broadcast Control Channel</td>
<td>4 s</td>
<td>2.6.3.2</td>
</tr>
<tr>
<td>T42m</td>
<td>Maximum time to receive a delayed Layer 3 response following the receipt of an acknowledgment for an access probe in the <code>System Access State</code>. The maximum time to receive a Layer 3 response to an <code>Enhanced Origination Message</code> on the <code>Mobile Station Control on the Traffic Channel State</code>. The maximum time to receive connection reference after call control instance is instantiated.</td>
<td>12 s</td>
<td>2.6.3.1.1.2, 2.6.3.3, 2.6.3.5, 2.6.4</td>
</tr>
</tbody>
</table>
| T50m | When a F-CPCCH is **not** assigned:  
|      | • Maximum time to obtain \((N_{5m} \times 20)\) ms of  
|      |   sufficient signal quality on the physical channel corresponding to FPC_PRI_CHAN when in the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State |
|      | When a F-CPCCH is **not** assigned:  
|      | • 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 Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State |
|      | 1 s  | 2.6.4.2 |

| T51m | Maximum time for the mobile station to receive a forward dedicated channel acquired 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 Waiting for Order Substate of the Call Control processing that transits Call Control instance to a different substate or state | 5 s | 2.6.10.1.1 |
Table D-1. Time Limits (Part 3 of 5)

<table>
<thead>
<tr>
<th>Time Limit</th>
<th>Description</th>
<th>Value</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>T53m</td>
<td>Maximum time to receive a message in the Waiting for Mobile Station Answer Substate of Call Control processing that transits the Call Control instance to a different substate or state</td>
<td>65 s</td>
<td>2.6.10.1.2</td>
</tr>
<tr>
<td>T54m</td>
<td>Maximum time for the Call Control instance to send an Origination Continuation Message upon entering the Conversation Substate</td>
<td>0.2 s</td>
<td>2.6.10.2</td>
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<tr>
<td>T55m</td>
<td>Maximum time to receive a message in the Release Substate of the Mobile Station Control on the Traffic Channel State that transits the mobile station to a different substate or state</td>
<td>2 s</td>
<td>2.6.4.4</td>
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<tr>
<td>T56m</td>
<td>Default maximum time to respond to a received message or order on the Forward Traffic Channel</td>
<td>0.2 s</td>
<td>2.6.4               2.6.6</td>
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<tr>
<td>T57m</td>
<td>Limit of the power-up registration timer</td>
<td>20 s</td>
<td>2.6.5.1.1 2.6.5.5.1.3</td>
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<tr>
<td>T58m</td>
<td>Maximum time for the mobile station to respond to a service option request</td>
<td>5 s</td>
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</tr>
<tr>
<td>T59m</td>
<td>Maximum time for the mobile station to respond to a Service Request Message or a Service Response Message</td>
<td>5 s</td>
<td>2.6.4.1.2.2</td>
</tr>
<tr>
<td>T60m</td>
<td>Maximum time to execute a hard handoff without return on failure involving a new frequency assignment using the same base station</td>
<td>0.06 s</td>
<td>2.6.6.2.8.1</td>
</tr>
<tr>
<td>T61m</td>
<td>Maximum time to execute a hard handoff without return on failure involving a new frequency assignment using a different base station</td>
<td>0.08 s</td>
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### Table D-1. Time Limits (Part 4 of 5)

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<td>T62m</td>
<td>Maximum time to execute a hard handoff without return on failure involving the same frequency assignment</td>
<td>0.02 s</td>
<td>2.6.6.2.8.1</td>
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<td>T63m</td>
<td>Maximum time to execute a CDMA-to-Analog handoff</td>
<td>0.1 s</td>
<td>2.6.6.2.9</td>
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<tr>
<td>T64m</td>
<td>Maximum time to wait for a Base Station Challenge Confirmation Order</td>
<td>10 s</td>
<td>2.3.12.1.5</td>
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<tr>
<td>T65m</td>
<td>Maximum time for the mobile station to wait for a Service Connect Message while the Waiting for Service Connect Message Subfunction is active</td>
<td>5 s</td>
<td>2.6.4.1.2.2.4</td>
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<tr>
<td>T66m</td>
<td>Maximum time for the mobile station to delete the TMSI after TMSI expiration time has exceeded the System Time</td>
<td>200 s</td>
<td>2.6.2</td>
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<tr>
<td>T68m</td>
<td>Maximum time for the mobile station to wait for a Service Request Message, Service Response Message, or Service Connect Message while the Waiting for Service Request Message Subfunction or Waiting for Service Response Message Subfunction is active</td>
<td>5 s</td>
<td>2.6.4.1.2.2.2, 2.6.4.1.2.2.3</td>
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<td>T69m</td>
<td>Fixed portion of the full-TMSI timer</td>
<td>24 s</td>
<td>2.6.3.1.6</td>
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<td>T70m</td>
<td>Maximum time between the mobile station’s obtaining a measurement and sending a Candidate Frequency Search Report Message which contains that measurement</td>
<td>0.8 s</td>
<td>2.6.6.2.8.3, 2.6.6.2.10</td>
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<tr>
<td>T71m</td>
<td>Maximum time for the mobile station to send a Candidate Frequency Search Report Message after completing a search</td>
<td>0.04 s</td>
<td>2.6.6.2.8.3</td>
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<tr>
<td>T72m</td>
<td>Maximum time to receive a valid Paging Channel or Forward Common Control Channel/Broadcast Control Channel message before aborting an access attempt, when there exists at least one access handoff candidate pilot for the access attempt (see also T40m)</td>
<td>1 s</td>
<td>2.6.3.1.8</td>
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<tr>
<td>T73m</td>
<td>Maximum time for the mobile station to send a Handoff Completion Message after the action time of a received handoff message directing the mobile station to perform a hard handoff without return on failure</td>
<td>0.3 s</td>
<td>2.6.6.2.5.2</td>
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<td>T74m</td>
<td>Default value of the slotted timer</td>
<td>0.0 s</td>
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### Table D-1. Time Limits (Part 5 of 5)

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<td>T75m</td>
<td>Default value of the key set-up timer</td>
<td>10 s</td>
<td>2.3.12.5</td>
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<tr>
<td>T78m</td>
<td>Maximum time for the mobile station to receive a Physical Layer PDCH SDU destined for this mobile station when in the Traffic Channel State</td>
<td>30 s</td>
<td>2.6.4.1.8.2</td>
</tr>
<tr>
<td>T79m</td>
<td>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 Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State and when early reverse link transmission is allowed. When a F-CPCCH is not assigned: 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 when in the Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State.</td>
<td>0.1s</td>
<td>2.6.4.2</td>
</tr>
<tr>
<td>T80m</td>
<td>Default maximum time the mobile station's transmitter can be disabled before the MAC Layer is to perform Forward Packet Data Channel initialization.</td>
<td>0.1s</td>
<td>2.6.3.3, 2.6.3.5</td>
</tr>
<tr>
<td>T81m</td>
<td>Maximum time the mobile station is allowed to remain in the Traffic Channel Substate of the Mobile Station Control on the Traffic Channel State while waiting for the Base Station Acknowledgment Order.</td>
<td>0.1s</td>
<td>3.6.4.2</td>
</tr>
<tr>
<td>T&lt;sub&gt;1b&lt;/sub&gt;</td>
<td>Maximum period between subsequent transmissions of an overhead message on the Paging Channel by the base station</td>
<td>1.28 s</td>
<td>3.6.2.2</td>
</tr>
<tr>
<td>T&lt;sub&gt;2b&lt;/sub&gt;</td>
<td>Maximum time for the base station to send a Release Order after receiving a Release Order</td>
<td>0.8 s</td>
<td>3.6.4</td>
</tr>
<tr>
<td>T&lt;sub&gt;3b&lt;/sub&gt;</td>
<td>Minimum time the base station continues to transmit on a code channel after sending or receiving a Release Order</td>
<td>0.3 s</td>
<td>3.6.4.5</td>
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<tr>
<td>T&lt;sub&gt;4b&lt;/sub&gt;</td>
<td>Maximum time for the base station to respond to a service option request</td>
<td>5 s</td>
<td>3.6.4.1.2.2.1</td>
</tr>
<tr>
<td>T&lt;sub&gt;5b&lt;/sub&gt;</td>
<td>Minimum time a base station should wait before assigning a Forward Common Power Control Channel subchannel to another mobile station in the case of Forward Packet Data Channel operation and when the mobile station previously assigned the subchannel did not respond to the Layer 3 message sent to release the call.</td>
<td>10 s</td>
<td>3.6.4.4</td>
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Table D-2. Other Constants (Part 1 of 2)

<table>
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<tr>
<th>Constant</th>
<th>Description</th>
<th>Value</th>
<th>References</th>
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<tr>
<td>N²m</td>
<td>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</td>
<td>12</td>
<td>2.6.4.1.8.1</td>
</tr>
<tr>
<td>N³m</td>
<td>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</td>
<td>2</td>
<td>2.6.4.1.8.1</td>
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<tr>
<td>N⁴m</td>
<td>Reserved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N⁵m</td>
<td>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 Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State</td>
<td>2</td>
<td>2.6.4.2</td>
</tr>
<tr>
<td>N⁶m</td>
<td>Supported Traffic Channel Active Set size</td>
<td>6</td>
<td>2.6.6.2.6.1 3.6.6.2.2.2 3.6.6.2.2.10</td>
</tr>
<tr>
<td>N⁷m</td>
<td>Supported Traffic Channel Candidate Set size</td>
<td>10</td>
<td>2.6.6.2.6.2</td>
</tr>
<tr>
<td>N⁸m</td>
<td>Minimum supported Neighbor Set size</td>
<td>40</td>
<td>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</td>
</tr>
<tr>
<td>N⁹m</td>
<td>Minimum supported zone list size</td>
<td>7</td>
<td>2.6.5.1.5</td>
</tr>
<tr>
<td>N¹⁰m</td>
<td>SID/NID list size</td>
<td>4</td>
<td>2.6.5</td>
</tr>
</tbody>
</table>
Table D-2. Other Constants (Part 2 of 2)

| \(N_{11m}\) | 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 |
| \(N_{16m}\) | 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 Traffic Channel Initialization Substate of the Mobile Station Control on the Traffic Channel State | 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 |
ANNEX E CDMA RETRIEVABLE AND SETTABLE PARAMETERS

This is a normative annex which describes the parameters that can be retrieved and set in the mobile station using the Retrieve Parameters Message, the Parameters Response Message, and the Set Parameters Message.

PARAMETER_ID values from 0 through 32767 are reserved for definition by this standard and shall not be defined by mobile station manufacturers. PARAMETER_ID values from 32768 through 65535 may be defined by mobile station manufacturers.
<table>
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<tr>
<th>Parameter Identifier</th>
<th>Value of PARAMETER_ID (decimal)</th>
<th>Length (bits) (PARAMETER_LEN is Length - 1)</th>
<th>Support Required? (Y or N)</th>
<th>Settable Parameter? (Y or N)</th>
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<td>Y</td>
<td>Y</td>
<td>[3]</td>
</tr>
<tr>
<td>RPDCH_TOTAL_48X</td>
<td>660</td>
<td>24</td>
<td>Y</td>
<td>Y</td>
<td>[3]</td>
</tr>
</tbody>
</table>
ANNEX F MOBILE STATION DATABASE

F.1 Introduction

This is an informative annex which lists the numeric indicators that are described by this document and stored in the mobile station's permanent or semi-permanent memory. Some of these indicators are required; other indicators are optional and are so noted.

The indicators are organized in this annex according to two categories:

• Mobile station indicators These indicators are global to the mobile station and independent of the mobile station’s NAMs.

• NAM indicators These indicators specify parameters associated with the mobile station’s NAM.

The description of each indicator below includes the indicator’s name, the number of bits it contains, and the section in this document where it is defined. Permanent indicators are denoted by the “p” subscript; semi-permanent indicators are denoted by the “s-p” subscript.
F.2 Mobile Station Indicators

Mobile station indicators are organized into permanent mobile station indicators and semi-permanent mobile station indicators.

F.2.1 Permanent Mobile Station Indicators

Permanent mobile station indicators specify physical station configuration and attributes, independent of NAM. The indicators are listed in Table F.2.1-1.

Table F.2.1-1. Permanent Mobile Station Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of Bits</th>
<th>Where Defined</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESN&lt;sub&gt;p&lt;/sub&gt;</td>
<td>32</td>
<td>2.3.2.1</td>
<td>See 2.3.14 for special ESN storage and protection requirements. Includes MOB_MFG_CODE&lt;sub&gt;p&lt;/sub&gt;.</td>
</tr>
<tr>
<td>MEID&lt;sub&gt;p&lt;/sub&gt;</td>
<td>56</td>
<td>2.3.2.2</td>
<td></td>
</tr>
<tr>
<td>ACCOLC&lt;sub&gt;p&lt;/sub&gt;</td>
<td>4</td>
<td>2.3.5</td>
<td></td>
</tr>
<tr>
<td>SCM&lt;sub&gt;p&lt;/sub&gt;</td>
<td>8</td>
<td>2.3.3</td>
<td></td>
</tr>
<tr>
<td>SLOT_CYCLE_INDEX&lt;sub&gt;p&lt;/sub&gt;</td>
<td>4</td>
<td>2.3.11</td>
<td>This is a signed integer that can take the values between -4 and +7 inclusive.</td>
</tr>
<tr>
<td>MOB_FIRM_REV&lt;sub&gt;p&lt;/sub&gt;</td>
<td>16</td>
<td>2.3.14</td>
<td></td>
</tr>
<tr>
<td>MOB_MODEL&lt;sub&gt;p&lt;/sub&gt;</td>
<td>8</td>
<td>2.3.14</td>
<td></td>
</tr>
<tr>
<td>MOB_MFG_CODE&lt;sub&gt;p&lt;/sub&gt;</td>
<td>8</td>
<td>2.3.14</td>
<td></td>
</tr>
</tbody>
</table>

For each band class supported:

| MOB_P_REV<sub>p</sub> | 8 | 2.3.14 |
F.2.2 Semi-permanent Mobile Station Indicators

Semi-permanent mobile station indicators are retained when the mobile station power is turned off. These indicators are associated with mobile station registration and lock. They are independent of the NAM in use. CDMA indicators are listed in Table F.2.2-1.

Table F.2.2-1. CDMA Semi-permanent Mobile Station Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of Bits</th>
<th>Where Defined</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZONE_LISTs-p</td>
<td>12</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>REG_ZONEs-p</td>
<td>15</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>SID_s-p</td>
<td>16</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>NID_s-p</td>
<td>15</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>SID_NID_LISTs-p</td>
<td>16</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>BASE_LAT_REGs-p</td>
<td>22</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>BASE_LONG_REGs-p</td>
<td>23</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>REG_DIST_REGs-p</td>
<td>11</td>
<td>2.3.4</td>
<td></td>
</tr>
<tr>
<td>LCKRSN_Ps-p</td>
<td>4</td>
<td>2.3.13</td>
<td></td>
</tr>
<tr>
<td>MAINTRNSPs-p</td>
<td>4</td>
<td>2.3.13</td>
<td></td>
</tr>
</tbody>
</table>
F.3 NAM Indicators

Each mobile station contains one or more NAMs. Table F.3-1 lists the permanent and semi-permanent values associated with each NAM.

Table F.3-1. NAM Indicators (Part 1 of 2)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of Bits</th>
<th>Where Defined</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A_KEY</td>
<td>64</td>
<td>2.3.12.1.5</td>
<td></td>
</tr>
<tr>
<td>SSD_As-p</td>
<td>64</td>
<td>2.3.12.1.1</td>
<td>Shared Secret Data A</td>
</tr>
<tr>
<td>SSD_Bs-p</td>
<td>64</td>
<td>2.3.12.1.1</td>
<td>Shared Secret Data B</td>
</tr>
<tr>
<td>COUNTs-p</td>
<td>6</td>
<td>2.3.12.1.3</td>
<td></td>
</tr>
<tr>
<td>IMSI_M_CLASSp</td>
<td>1</td>
<td>2.3.1</td>
<td></td>
</tr>
<tr>
<td>IMSI_T_CLASSp</td>
<td>1</td>
<td>2.3.1</td>
<td></td>
</tr>
<tr>
<td>IMSI_M_Sp</td>
<td>34</td>
<td>2.3.1.1</td>
<td>Includes IMSI_M_S1p and IMSI_M_S2p.</td>
</tr>
<tr>
<td>IMSI_T_Sp</td>
<td>34</td>
<td>2.3.1.1</td>
<td>Includes IMSI_T_S1p and IMSI_T_S2p.</td>
</tr>
<tr>
<td>IMSI_M_ADDR_NUMp</td>
<td>3</td>
<td>2.3.1</td>
<td>Applies to IMSI_M.</td>
</tr>
<tr>
<td>IMSI_T_ADDR_NUMp</td>
<td>3</td>
<td>2.3.1</td>
<td>Applies to IMSI_T.</td>
</tr>
<tr>
<td>IMSI_M_11_12p</td>
<td>7</td>
<td>2.3.1.2</td>
<td></td>
</tr>
<tr>
<td>IMSI_T_11_12p</td>
<td>7</td>
<td>2.3.1.1</td>
<td></td>
</tr>
<tr>
<td>MCC_Mp</td>
<td>10</td>
<td>2.3.1.1</td>
<td></td>
</tr>
<tr>
<td>MCC_Tp</td>
<td>10</td>
<td>2.3.1.1</td>
<td></td>
</tr>
<tr>
<td>MDNp</td>
<td>See Notes</td>
<td>2.3.1.4</td>
<td>An MDN consists of up to 15 digits based on manufacturer specific coding.</td>
</tr>
<tr>
<td>ASSIGNING_TMSI_ZONE_LENs-p</td>
<td>4</td>
<td>23.15.2</td>
<td></td>
</tr>
<tr>
<td>ASSIGNING_TMSI_-ZONEEs-p</td>
<td>64</td>
<td>2.3.15.2</td>
<td></td>
</tr>
<tr>
<td>TMSI_CODEs-p</td>
<td>32</td>
<td>2.3.15.2</td>
<td></td>
</tr>
<tr>
<td>TMSI_EXP_TIMES-p</td>
<td>24</td>
<td>2.3.15.2</td>
<td></td>
</tr>
<tr>
<td>HOME_SIDp</td>
<td>15</td>
<td>2.3.8</td>
<td></td>
</tr>
</tbody>
</table>
### Table F.3-1. NAM Indicators (Part 2 of 2)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Number of Bits</th>
<th>Where Defined</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SID&lt;sub&gt;p&lt;/sub&gt;</td>
<td>15</td>
<td>2.3.8</td>
<td></td>
</tr>
<tr>
<td>NID&lt;sub&gt;p&lt;/sub&gt;</td>
<td>16</td>
<td>2.3.8</td>
<td></td>
</tr>
<tr>
<td>MOB_TERM_HOME&lt;sub&gt;p&lt;/sub&gt;</td>
<td>1</td>
<td>2.3.8</td>
<td></td>
</tr>
<tr>
<td>MOB_TERM_FOR_SID&lt;sub&gt;p&lt;/sub&gt;</td>
<td>1</td>
<td>2.3.8</td>
<td></td>
</tr>
<tr>
<td>MOB_TERM_FOR_NID&lt;sub&gt;p&lt;/sub&gt;</td>
<td>1</td>
<td>2.3.8</td>
<td></td>
</tr>
<tr>
<td>IMSI&lt;sub&gt;10_Mp&lt;/sub&gt;</td>
<td>4</td>
<td>2.3.1.1</td>
<td></td>
</tr>
<tr>
<td>IMSI&lt;sub&gt;10_Tp&lt;/sub&gt;</td>
<td>4</td>
<td>2.3.1.1</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX G CDMA EXTENDED ENCRYPTION CALL FLOW EXAMPLES

This is an informative annex, which contains examples of extended encryption call flow. The diagrams follow these conventions:

- All messages are received without error
- Acknowledgments are not shown

For all the call flow diagrams, the following conventions hold:

- The following message acronyms are defined:
  - RGM: Registration Message
  - ORM: Origination Message
  - CAM: Channel Assignment Message
  - ECAM: Extended Channel Assignment Message
  - SMCM: Security Mode Command Message

- The following short forms are defined:
  - enc.k1: encrypt the message with key k1
  - csch_enc_req: C_SIG_ENCRYPT_REQ
  - dsch_enc_req: D_SIG_ENCRYPT_REQs
  - csch_enc: C_SIG_ENCRYPT_MODE
  - dsch_enc: D_SIG_ENCRYPT_MODE
  - A <- B: assign value B to variable A
Upon power-up:
\[ C_{SIG\_ENCRYPT\_MODEs} \leftarrow '000' \]
\[ ENC\_KEY \leftarrow NULL \]

\[ ENC\_KEY = \text{null} \]

Registration Msg (csch_enc_req = on)

Reg. Accepted Order (csch_enc = on)

\[ \text{enc.k1[Some Msg]} \]

\[ \text{enc.k1[ORM(dialed digits, dsch_enc_req = on)]} \]

\[ \text{enc.k1[CAM/ECAM(dsch_enc = on)]} \]

\[ ENC\_KEY \leftarrow k1 \]

ON

\[ \text{enc.k2[Release Order]} \]

\[ \text{enc.k2[Release Order]} \]

\[ ENC\_KEY \leftarrow k2 \]

Upon power-up:
\[ C_{SIG\_ENCRYPT\_MODEs} \leftarrow '000' \]
\[ ENC\_KEY \leftarrow NULL \]

\[ ENC\_KEY \leftarrow \text{null} \]

Figure G-1. Power-Up Registration, Origination, and Call Release (BS waits for the new CMEAKEY before sending CAM/ECAM)

\[ C_{SIG\_ENCRYPT\_MODEs} \]

D_{SIG\_ENCRYPT\_MODEs} Initial value set by CAM/ECAM

CMEAKEY obtained from VLR or AuC

= successful key exchange
= unsuccessful key exchange
\( k \) = CMEAKEY generated in MS
CAM/ECAM specifies that dsch_enc = '000' meaning the BS is waiting for the new key. MS just continues with the current encryption mode.

**Figure G-2. Quick Channel Assignment (BS does not wait for the new key before sending CAM/ECAM)**
Figure G-3. MS Initiates Call Origination During the Registration Access Substate
Figure G-4. Implicit Registration (MS crosses a SID/NID boundary during MS Idle State. MS originates before registering)
Figure G-5. BS Lost the Stored Key (A rare out-of-sync case)
Figure G-6. MS Fails to Decrypt Messages (MS recovers by re-synchronizing the crypto-sync)
Figure G-7. MS Fails to Decrypt Messages (MS recovers by re-registering after failing to re-sync the crypto-sync)
BS can not decrypt msg 1

Security Mode Request Msg (24-bit crypto-sync, csch_enc_req/dsch_enc_req = on)

Security Mode Command Msg (csch_enc/dsch_enc = on)

Can decrypt now.

Figure G-8. BS Fails to Decrypt Messages (BS recovers by re-synchronizing the crypto-sync)
Figure G-9. BS Fails to Decrypt Messages (BS recovers by forcing the MS to re-register after failing to re-synchronize the crypto-sync)