3GPP TSG CN Plenary Meeting #16   **NP-020154**
5th - 7th June 2002. Marco Island, USA.

Title:	**GERAN Review of CRs to 24.007**
Source:	**TSG-GERAN**
Agenda item:	**5.2**
Document for:	**INFORMATION**

3GPP TSG-GERAN Meeting #9   GP-021150
Seattle, USA, 15.-19. April 2002

To: TSG-CN WG1
Cc: TSG-CN
Response to: -

Contact Person:
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Attachments: 24007_r99, 24007_rel4

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1. Overall Description:

TSG-GERAN WG2 has reviewed the CRs to 24.007 (RR protocol message type octet, TSG-CN WG1 tdocs N1-020885, N1-020886), which were already agreed in TSG-CN WG1#23 meeting. TSG-GERAN WG2 has identified enhancements for the CRs. The proposed enhancements are highlighted with yellow colour in the revised CRs, and provided for TSG-CN WG1 review and agreement in the attachment.

TSG-GERAN WG2 hopes that the proposed enhancements could be reviewed by TSG-CN WG1 and that already agreed CRs could be replaced with attached CRs after TSG-CN WG1 review and agreement.

2. Actions:

Action to TSG-CN WG1 : Review the enhancements proposed by TSG-GERAN WG2

3. Dates of Next TSG-GERAN WG2 Meetings:

TSG-GERAN WG2 #9bis	wk22'02	27.–31. May 2002	Sophia-Antipolis
TSG-GERAN WG2 #10	wk26'02	25.–27. Jun 2002	Helsinki
TSG-GERAN WG2 #11	wk35'02	27.–29. Aug 2002	Los Angeles
TSG-GERAN WG2 #11bis	wk41'02	7.–11. Oct 2002	Atlanta
TSG-GERAN WG2 #12	wk47'02	19.– 21. Nov 2002	[Sophia-Antipolis]

3GPP TSG-GERAN Meeting #9
Seattle, USA, 15.-19.April 2002

Tdoc GP-02xxxx~~1148~~

3GPP TSG-CN1 Meeting #23
Fort Lauderdale, Florida, USA 08. - 12. April 2002

Tdoc N1-020885
Revision of N1-020709

CR-Form-v5

CHANGE REQUEST

| ⌘ | **24.007** CR **046** | ⌘ **rev** | **2**
~~1~~ | ⌘ | Current version: | **3.8.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network **X**

Title: ⌘	RR protocol message type octet	
Source: ⌘	Nokia	
Work item code: ⌘	GSM-UMTS interworking	*Date:* ⌘ 9.4.2002
Category: ⌘ **F**		*Release:* ⌘ R99

Use <u>one</u> of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can
be found in 3GPP <u>TR 21.900</u>.

Use <u>one</u> of the following releases:
2   (GSM Phase 2)
R96   (Release 1996)
R97   (Release 1997)
R98   (Release 1998)
R99   (Release 1999)
REL-4 (Release 4)
REL-5 (Release 5)

Reason for change: ⌘	24.007 assumes that only bits 1-6 are used for the message type indication in L3 protocols. However, RR protocol has already run out of 6-bit message type code points in and therefore 7 bits are already used for the RR message types. This makes the current 24.007 text not applicable to RR protocol.
Summary of change: ⌘	Align 24.007 subclause 11.2.3.2 with R99 RR message types which are defined in 04.18.
Consequences if not approved: ⌘	Contradiction between 04.18 and 24.007. RR message may be rejected by implementation following 24.007.

Clauses affected: ⌘	11.2.3.2
Other specs affected: ⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	This CR aligns 24.007 with what has already been specified in 04.18 so no changes in GERAN specifications are needed. GERAN should be given a chance to review this CR if it is agreed by CN1.

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

11.2.3.2   Message type octet

11.2.3.2.1   Message type octet (when accessing Release 98 and older networks only)

The message type octet is the second octet in a standard L3 message.

When a standard L3 message is expected, and a message is received that is less than 16 bit long, that message shall be ignored.

When the radio connection started with a core network node of a Release 98 or older network, the message type IE is coded as shown in figure 11.10a and 11.10x.

Bit 8 is encoded as "0"; value "1" is reserved for possible future use as an extension bit. A protocol entity expecting a standard L3 message, and receiving a message containing bit 8 of octet 2 encoded as "1" shall diagnose a " message not defined for the PD" error and treat the message accordingly.

In messages of MM, CC, SS, GCC, BCC and LCS protocol sent using the transmission functionality provided by the RR layer to upper layers, and sent from the mobile station or the LMU to the network, bit 7 of octet 2 is used for send sequence number, see section 11.2.3.2.3.

In all other standard layer 3 messages, except for RR messages, bit 7 is set to a default value. A protocol entity expecting a standard L3 message, and not using the transmission functionality provided by the RR layer, and receiving a message containing bit 7 of octet 2 encoded different to the default value shall diagnose a "message not defined for the PD" error and treat the message accordingly.

The default value for bit 7 is 0 except for the SM protocol where the default value is 1. No default value for bit 7 is specified for RR protocol. For RR message types see 3GPP TS 04.18.
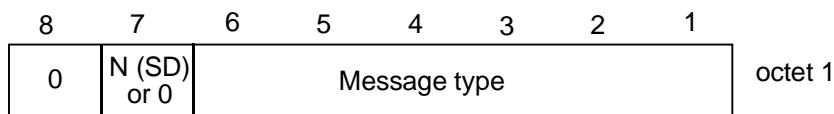
8	7	6	5	4	3	2	1	
0	N (SD) or 0		Message type					octet 1

Figure 11.10a: Message type IE (MM, CC, SS, GCC, BCC and LCS)

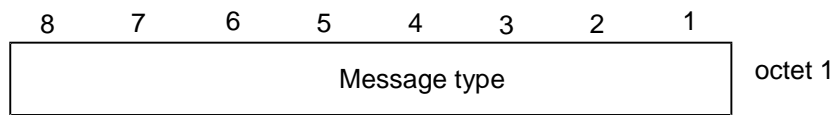| 8	7	6	5	4	3	2	1	
			Message type					octet 1

Figure 11.10x: Message type IE (protocol other than MM, CC, SS, GCC, BCC and LCS)

Bit For MM, CC, SS, GCC, BCC and LCS protocols bits 1 to 6 of octet 2 of standard L3 messages contain the message type. For all other L3 protocols bits 1 to 8 of octet 2 of standard L3 message contain the message type.

The message type determines the function of a message within a protocol in a given direction and for a given lower layer SAP. The meaning of the message type is therefore dependent on the protocol (the same value may have different meanings in different protocols), the direction (the same value may have different meanings in the same protocol, when sent from the Mobile Station to the network and when sent from the network to the Mobile Station) and the lower layer SAP (the same value may have different meanings, e.g., whether the message was sent on the SACCH or on the main DCCH).

Each protocol defines a list of allowed message types for each relevant SAP. A message received analysed as a standard L3 message, and with a message type not in the corresponding list leads to the diagnosis "message not defined for the PD". Some message types may correspond to a function not implemented by the receiver. They are then said to be non implemented by the receiver.

The reaction of a protocol entity expecting a standard L3 message and receiving a message with message type not defined for the PD or not implemented by the receiver and the reception conditions is defined in the relevant protocol specification. As a general rule, a protocol specification should not force the receiver to analyse the message further.

11.2.3.2.2   Message type octet (when accessing Release 99 and newer networks)

The message type octet is the second underline octet in a standard L3 message.

When a standard L3 message is expected, and a message is received that is less than 16 bit long, that message shall be ignored.

When the radio connection started with a core network node of a Release 99 or later network, the message type IE is coded dependent on the PD as shown in figures 11.10b, c and d.

In messages of MM, CC and SS protocol sent using the transmission functionality provided by the RR and/or access stratum layer to upper layers, and sent from the mobile station or the LMU to the network, bits 7 and 8 of octet 2 are used for send sequence number, see section 11.2.3.2.3.

In messages of GCC, BCC and LCS protocol sent using the transmission functionality provided by the RR layer to upper layers, and sent from the mobile station to the network or, for LCS, sent from the LMU to the network, only bit 7 of octet 2 is used for send sequence number. Bit 8 is set to the default value.

In all other standard layer 3 messages, except for RR messages, bits 7 and 8 are set to the default value. A protocol entity expecting a standard L3 message, and not using the transmission functionality provided by the RR and/or access stratum layer, and receiving a message containing bit 7 or bit 8 of octet 2 encoded different to the default value shall diagnose a "message not defined for the PD" error and treat the message accordingly.

In messages of the RR protocol entity, bit 8 of octet 2 is set to the default value. The other value is reserved for possible future use as an extension bit. If an RR protocol entity expecting a standard L3 message receives message containing bit 8 of octet 2 encoded different from the default value it shall diagnose a "message not defined for the PD" error and treat the message accordingly.

The default value for bit 8 is 0. The default value for bit 7 is 0 except for the SM protocol which has a default value of 1. No default value for bit 7 is specified for RR protocol. For RR message types see 3GPP TS 04.18.
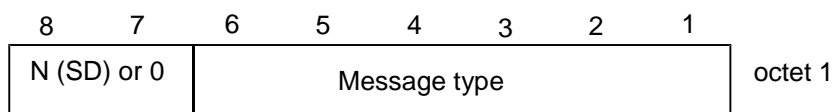
8	7	6	5	4	3	2	1	
N (SD) or 0		Message type						octet 1

Figure 11.10b: Message type IE (MM, CC and SS)

8	7	6	5	4	3	2	1	
0	N (SD) or 0	Message type						octet 1

Figure 11.10c: Message type IE (GCC, BCC and LCS)

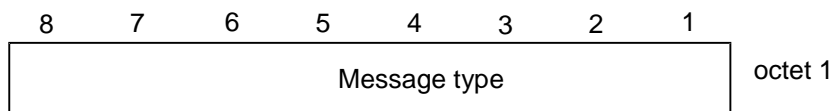| 8	7	6	5	4	3	2	1	
Message type								octet 1

Figure 11.10d: Message type IE (protocol other than MM, CC, SS, GCC, BCC and LCS)

Bit For MM, CC, SS, GCC, BCC and LCS protocols bits 1 to 6 of octet 2 of standard L3 messages contain the message type. For all other L3 protocols bits 1 to 8 of octet 2 of standard L3 message contain the message type.

The message type determines the function of a message within a protocol in a given direction and for a given lower layer SAP. The meaning of the message type is therefore dependent on the protocol (the same value may have different meanings in different protocols), the direction (the same value may have different meanings in the same protocol, when sent from the Mobile Station to the network and when sent from the network to the Mobile Station) and the lower layer SAP (the same value may have different meanings, e.g., whether the message was sent on the SACCH or on the main DCCH).

Each protocol defines a list of allowed message types for each relevant SAP. A message received analysed as a standard L3 message, and with a message type not in the corresponding list leads to the diagnosis "message not defined for the

PD". Some message types may correspond to a function not implemented by the receiver. They are then said to be non implemented by the receiver.

The reaction of a protocol entity expecting a standard L3 message and receiving a message with message type not defined for the PD or not implemented by the receiver and the reception conditions is defined in the relevant protocol specification. As a general rule, a protocol specification should not force the receiver to analyse the message further.

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* 04.18 clause 10.4 annexed for information: *

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10.4   Message Type

The message type IE and its use are defined in 3GPP TS 24.007 [20]. Tables 10.1.1/3GPP TS 04.18 and
10.4.2/3GPP TS 04.18 define the value part of the message type IE used in the Radio Resource management protocol.
Table 10.4.3/3GPP TS 04.18 defines the value part of the message type IE used in the GPRS Transparent Transport
protocol.

Table 10.4.1/3GPP TS 04.18: Message types for Radio Resource management

```
8 7 6 5 4 3 2 1
0 0 1 1 1 - - -  Channel establishment messages:
        1 0 0  - RR INITIALISATION REQUEST
        0 1 1  - ADDITIONAL ASSIGNMENT
        1 1 1  - IMMEDIATE ASSIGNMENT
        0 0 1  - IMMEDIATE ASSIGNMENT EXTENDED
        0 1 0  - IMMEDIATE ASSIGNMENT REJECT
0 1 0 0 1 0 0 0  - DTM ASSIGNMENT FAILURE
0 1 0 0 1 0 0 1  - DTM REJECT
0 1 0 0 1 0 1 0  - DTM REQUEST
0 1 0 0 1 0 1 1  - PACKET ASSIGNMENT
0 0 1 1 0 - - -  Ciphering messages:
        1 0 1  - CIPHERING MODE COMMAND
        0 1 0  - CIPHERING MODE COMPLETE

0 0 1 1 0 - - -  Configuration change messages:
        0 0 0  - CONFIGURATION CHANGE COMMAND
        0 0 1  - CONFIGURATION CHANGE ACK.
        0 1 1  - CONFIGURATION CHANGE REJECT
0 0 1 0 1 - - -  Handover messages:
        1 1 0  - ASSIGNMENT COMMAND
        0 0 1  - ASSIGNMENT COMPLETE
        1 1 1  - ASSIGNMENT FAILURE
        0 1 1  - HANDOVER COMMAND
        1 0 0  - HANDOVER COMPLETE
        0 0 0  - HANDOVER FAILURE
        1 0 1  - PHYSICAL INFORMATION
0 1 0 0 1 1 0 1  - DTM ASSIGNMENT COMMAND

0 0 0 0 1 0 0 0  - RR-CELL CHANGE ORDER
0 0 1 0 0 0 1 1  - PDCH ASSIGNMENT COMMAND
0 0 0 0 1 - - -  Channel release messages:
        1 0 1  - CHANNEL RELEASE
        0 1 0  - PARTIAL RELEASE
        1 1 1  - PARTIAL RELEASE COMPLETE
0 0 1 0 0 - - -  Paging and Notification messages:
        0 0 1  - PAGING REQUEST TYPE 1
        0 1 0  - PAGING REQUEST TYPE 2
        1 0 0  - PAGING REQUEST TYPE 3
        1 1 1  - PAGING RESPONSE
        0 0 0  - NOTIFICATION/NCH
        1 0 1  - Reserved (see NOTE)
        1 1 0  - NOTIFICATION/RESPONSE
0 0 0 0 1 0 1 1  - Reserved (see NOTE)
0 1 1 0 0 - - -  - 3G Specific messages
        0 0 0  - UTRAN Classmark Change
        0 1 0  - cdma 2000 Classmark Change
        0 1 1  - Inter System to UTRAN Handover Command
        1 0 0  - Inter System to cdma2000 Handover Command
0 0 0 1 1 - - -  System information messages:
        0 0 0  - SYSTEM INFORMATION TYPE 8
        0 0 1  - SYSTEM INFORMATION TYPE 1
        0 1 0  - SYSTEM INFORMATION TYPE 2
        0 1 1  - SYSTEM INFORMATION TYPE 3
        1 0 0  - SYSTEM INFORMATION TYPE 4
        1 0 1  - SYSTEM INFORMATION TYPE 5
        1 1 0  - SYSTEM INFORMATION TYPE 6
        1 1 1  - SYSTEM INFORMATION TYPE 7
0 0 0 0 0 - - -  System information messages:
        0 1 0  - SYSTEM INFORMATION TYPE 2bis
        0 1 1  - SYSTEM INFORMATION TYPE 2ter
        1 1 1  - SYSTEM INFORMATION TYPE 2quater
        1 0 1  - SYSTEM INFORMATION TYPE 5bis
        1 1 0  - SYSTEM INFORMATION TYPE 5ter
        1 0 0  - SYSTEM INFORMATION TYPE 9
        0 0 0  - SYSTEM INFORMATION TYPE 13
```

```
8 7 6 5 4 3 2 1
0 0 1 1 1 - - -   System information messages:
          1 0 1   - SYSTEM INFORMATION TYPE 16
          1 1 0   - SYSTEM INFORMATION TYPE 17
0 1 0 0 0 - - -   System information messages:
          0 0 0   - SYSTEM INFORMATION TYPE 18
          0 0 1   - SYSTEM INFORMATION TYPE 19
          0 1 0   - SYSTEM INFORMATION TYPE 20
0 0 0 1 0 - - -   Miscellaneous messages:
          0 0 0   - CHANNEL MODE MODIFY
          0 1 0   - RR STATUS
          1 1 1   - CHANNEL MODE MODIFY ACKNOWLEDGE
          1 0 0   - FREQUENCY REDEFINITION
          1 0 1   - MEASUREMENT REPORT
          1 1 0   - CLASSMARK CHANGE
          0 1 1   - CLASSMARK ENQUIRY
0 0 1 1 0 1 1 0   - EXTENDED MEASUREMENT REPORT
0 0 1 1 0 1 1 1   - EXTENDED MEASUREMENT ORDER
0 0 1 1 0 1 0 0   - GPRS SUSPENSION REQUEST
0 1 0 0 1 1 0 1   - DTM INFORMATION
VGCS uplink control messages:
0 0 0 0 1 0 0 1   - VGCS UPLINK GRANT
0 0 0 0 1 1 1 0   - UPLINK RELEASE
0 0 0 0 1 1 0 0   - Reserved (see NOTE)
0 0 1 0 1 0 1 0   - UPLINK BUSY
0 0 0 1 0 0 0 1   - TALKER INDICATION
Application messages:
0 0 1 1 1 0 0 0   - Application Information
```

Bit 8 is reserved for possible future use as an extension bit, see 3GPP TS 24.007.
NOTE: This value was allocated but never used in earlier phases of the protocol.

3GPP TSG-GERAN Meeting #9
Seattle, USA, 15.-19.April 2002

Tdoc GP-02xxxx

3GPP TSG-CN1 Meeting #23
Fort Lauderdale, Florida, USA 08. - 12. April 2002

Tdoc N1-020886
Revision of N1-020710

CR-Form-v5

CHANGE REQUEST

| ⌘ | **24.007** CR **047** | ⌘**rev** | **2** ~~**1**~~ | ⌘ | Current version: | **4.1.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘   (U)SIM ☐   ME/UE **X**   Radio Access Network **X**   Core Network **X**

Title: ⌘	RR protocol message type octet	
Source: ⌘	Nokia	
Work item code: ⌘	GSM-UMTS interworking	**Date:** ⌘ 9.4.2002
Category: ⌘ **A**		**Release:** ⌘ Rel-4

Use *one* of the following categories:
F (correction)
A (corresponds to a correction in an earlier release)
B (addition of feature),
C (functional modification of feature)
D (editorial modification)
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use *one* of the following releases:
2   (GSM Phase 2)
R96   (Release 1996)
R97   (Release 1997)
R98   (Release 1998)
R99   (Release 1999)
REL-4   (Release 4)
REL-5   (Release 5)

Reason for change: ⌘	24.007 assumes that only bits 1-6 are used for the message type indication in L3 protocols. However, RR protocol has already run out of 6-bit message type code points in and therefore 7 bits are already used for the RR message types. This makes the current 24.007 text not applicable to RR protocol.
Summary of change: ⌘	Align 24.007 subclause 11.2.3.2 with R99 RR message types which are defined in 04.18.
Consequences if not approved: ⌘	Contradiction between 04.18 and 24.007. RR message may be rejected by implementation following 24.007.

Clauses affected: ⌘	11.2.3.2	
Other specs affected: ⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications	
Other comments: ⌘	This CR aligns 24.007 with what has already been specified in 04.18 so no changes in GERAN specifications are needed. GERAN should be given a chance to review this CR if it is agreed by CN1.	

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

11.2.3.2   Message type octet

11.2.3.2.1   Message type octet (when accessing Release 98 and older networks only)

The message type octet is the second octet in a standard L3 message.

When a standard L3 message is expected, and a message is received that is less than 16 bit long, that message shall be ignored.

When the radio connection started with a core network node of a Release 98 or older network, the message type IE is coded as shown in figure 11.10a and 11.10x.

Bit 8 is encoded as "0"; value "1" is reserved for possible future use as an extension bit. A protocol entity expecting a standard L3 message, and receiving a message containing bit 8 of octet 2 encoded as "1" shall diagnose a " message not defined for the PD" error and treat the message accordingly.

In messages of MM, CC, SS, GCC, BCC and LCS protocol sent using the transmission functionality provided by the RR layer to upper layers, and sent from the mobile station or the LMU to the network, bit 7 of octet 2 is used for send sequence number, see section 11.2.3.2.3.

In all other standard layer 3 messages, except for RR messages, bit 7 is set to a default value. A protocol entity expecting a standard L3 message, and not using the transmission functionality provided by the RR layer, and receiving a message containing bit 7 of octet 2 encoded different to the default value shall diagnose a "message not defined for the PD" error and treat the message accordingly.

The default value for bit 7 is 0 except for the SM protocol where the default value is 1. No default value for bit 7 is specified for RR protocol. For RR message types see 3GPP TS 44.018.
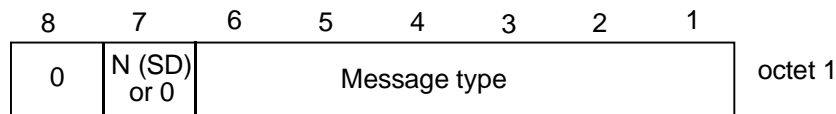
8	7	6	5	4	3	2	1	
0	N (SD) or 0		Message type					octet 1

Figure 11.10a: Message type IE (MM, CC, SS, GCC, BCC and LCS)

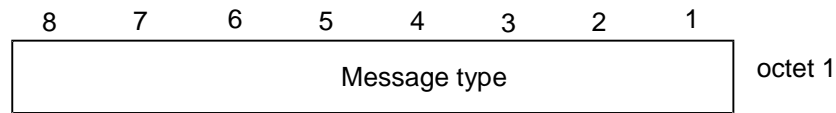| 8	7	6	5	4	3	2	1	
			Message type					octet 1

Figure 11.10x: Message type IE (protocol other than MM, CC, SS, GCC, BCC and LCS)

Bit For MM, CC, SS, GCC, BCC and LCS protocols bits 1 to 6 of octet 2 of standard L3 messages contain the message type. For all other L3 protocols bits 1 to 8 of octet 2 of standard L3 message contain the message type.

The message type determines the function of a message within a protocol in a given direction and for a given lower layer SAP. The meaning of the message type is therefore dependent on the protocol (the same value may have different meanings in different protocols), the direction (the same value may have different meanings in the same protocol, when sent from the Mobile Station to the network and when sent from the network to the Mobile Station) and the lower layer SAP (the same value may have different meanings, e.g., whether the message was sent on the SACCH or on the main DCCH).

Each protocol defines a list of allowed message types for each relevant SAP. A message received analysed as a standard L3 message, and with a message type not in the corresponding list leads to the diagnosis "message not defined for the PD". Some message types may correspond to a function not implemented by the receiver. They are then said to be non implemented by the receiver.

The reaction of a protocol entity expecting a standard L3 message and receiving a message with message type not defined for the PD or not implemented by the receiver and the reception conditions is defined in the relevant protocol specification. As a general rule, a protocol specification should not force the receiver to analyse the message further.

11.2.3.2.2   Message type octet (when accessing Release 99 and newer networks)

The message type octet is the second underline octet in a standard L3 message.

When a standard L3 message is expected, and a message is received that is less than 16 bit long, that message shall be ignored.

When the radio connection started with a core network node of a Release 99 or later network, the message type IE is coded dependent on the PD as shown in figures 11.10b, c and d.

In messages of MM, CC and SS protocol sent using the transmission functionality provided by the RR and/or access stratum layer to upper layers, and sent from the mobile station or the LMU to the network , bits 7 and 8 of octet 2 are used for send sequence number, see section 11.2.3.2.3.

In messages of GCC, BCC and LCS protocol sent using the transmission functionality provided by the RR layer to upper layers, and sent from the mobile station to the network or, for LCS, sent from the LMU to the network, only bit 7 of octet 2 is used for send sequence number. Bit 8 is set to the default value.

In all other standard layer 3 messages, except for RR messages, bits 7 and 8 are set to the default value. A protocol entity expecting a standard L3 message, and not using the transmission functionality provided by the RR and/or access stratum layer, and receiving a message containing bit 7 or bit 8 of octet 2 encoded different to the default value shall diagnose a "message not defined for the PD" error and treat the message accordingly.

==In messages of the RR protocol entity, bit 8 of octet 2 is set to the default value. The other value is reserved for possible future use as an extension bit== .If ==an== RR protocol entity expecting a standard L3 message receives message containing bit 8 of octet 2 encoded different from the default value it shall diagnose a "message not defined for the PD" error and treat the message accordingly.

The default value for bit 8 is 0. The default value for bit 7 is 0 except for the SM protocol which has a default value of 1. No default value for bit 7 is specified for RR protocol. For RR message types see ==3GPP TS== 044.018.
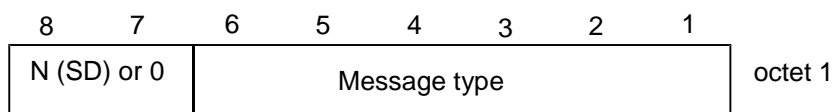
8	7	6	5	4	3	2	1	
N (SD) or 0		Message type						octet 1

Figure 11.10b: Message type IE (MM, CC and SS)

8	7	6	5	4	3	2	1	
0	N (SD) or 0	Message type						octet 1

Figure 11.10c: Message type IE (GCC, BCC and LCS)

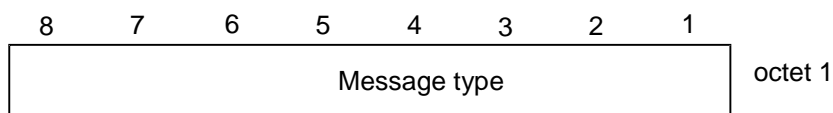| 8	7	6	5	4	3	2	1	
Message type								octet 1

Figure 11.10d: Message type IE (protocol other than MM, CC, SS, GCC, BCC and LCS)

~~Bit~~ For MM, CC, SS, GCC, BCC and LCS protocols bits 1 to 6 of octet 2 of standard L3 messages contain the message type. For all other L3 protocols bits 1 to 8 of octet 2 of standard L3 message contain the message type.

The message type determines the function of a message within a protocol in a given direction and for a given lower layer SAP. The meaning of the message type is therefore dependent on the protocol (the same value may have different meanings in different protocols), the direction (the same value may have different meanings in the same protocol, when sent from the Mobile Station to the network and when sent from the network to the Mobile Station) and the lower layer SAP (the same value may have different meanings, e.g., whether the message was sent on the SACCH or on the main DCCH).

Each protocol defines a list of allowed message types for each relevant SAP. A message received analysed as a standard L3 message, and with a message type not in the corresponding list leads to the diagnosis "message not defined for the PD". Some message types may correspond to a function not implemented by the receiver. They are then said to be non implemented by the receiver.

The reaction of a protocol entity expecting a standard L3 message and receiving a message with message type not defined for the PD or not implemented by the receiver and the reception conditions is defined in the relevant protocol specification. As a general rule, a protocol specification should not force the receiver to analyse the message further.