3GPP TSG-T#8
Düsseldorf, Germany, 21-23 June 2000

Tdoc TP-000074

Agenda Item: 6.2.3

Source: T2

Title: R00 Change Requests

Document for: Approval

Spec	CR	Rev	Phase	Subject	Cat	Vers-Curr	Vers-New	T2 Tdoc	Workitem
23.038	004		R00	Automatic removal of 'read' SMS	B	3.3.0	4.0.0	T2-000318	TEI
23.040	013		R00	Addition of numbering plan value for Service Centre Specific Addresses	B	3.4.0	4.0.0	T2-000310	TEI

3GPP/SMG Meeting T2 #9 / ETSI SMG4
Utrecht, The Netherlands, 15-19 May 2000

***Document* T2-000318**
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

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23.038	**CR**	**004**	Current Version:	3.3.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG-T#8 *list expected approval meeting # here ↑*

for approval [X]
for information [ ]

strategic [ ]
non-strategic [ ]
(for SMG use only)

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [ ] Core Network [X]

Source: T2 **Date:** 15.05.2000

Subject: Automatic removal of 'read' SMS

Work item: TEI

Category: *(only one category shall be marked with an X)*

F	Correction	[ ]	**Release:**	Phase 2 [ ]
A	Corresponds to a correction in an earlier release	[ ]		Release 96 [ ]
B	Addition of feature	[X]		Release 97 [ ]
C	Functional modification of feature	[ ]		Release 98 [ ]
D	Editorial modification	[ ]		Release 99 [ ]
				Release 00 [X]

Reason for change: The existing specification does not allow to automatically delete a SMS after reading if the SMS originator has set this option.
This feature facilitates memory storage management within the ME and prevents from frequent storage overflow, more particularly in case a terminal support Enhanced Short Message Service

Clauses affected: 4. SMS Data Coding Scheme

Other specs affected:

Other 3G core specifications	[ ]	→ List of CRs:	
Other GSM core specifications	[X]	→ List of CRs:	ETSI GSM 03.40
MS test specifications	[ ]	→ List of CRs:	
BSS test specifications	[ ]	→ List of CRs:	
O&M specifications	[ ]	→ List of CRs:	

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

4 SMS Data Coding Scheme

The TP-Data-Coding-Scheme field, defined in 3G TS 23.040 [4], indicates the data coding scheme of the TP-UD field, and may indicate a message class. Any reserved codings shall be assumed to be the GSM 7 bit default alphabet (the same as codepoint 00000000) by a receiving entity. The octet is used according to a coding group which is indicated in bits 7..4. The octet is then coded as follows:

Coding Group Bits 7..4	Use of bits 3..0
00xx	General Data Coding indication Bits 5..0 indicate the following:: Bit 5, if set to 0, indicates the text is uncompressed Bit 5, if set to 1, indicates the text is compressed using the compression algorithm defined in 3G TS 23.042 [13] Bit 4, if set to 0, indicates that bits 1 to 0 are reserved and have no message class meaning Bit 4, if set to 1, indicates that bits 1 to 0 have a message class meaning:: Bit 1 Bit 0 Message Class 0 0 Class 0 0 1 Class 1 Default meaning: ME-specific. 1 0 Class 2 (U)SIM specific message 1 1 Class 3 Default meaning: TE specific (see 3G TS 27.005 [8]) Bits 3 and 2 indicate the alphabet being used, as follows : Bit 3 Bit2 Alphabet: 0 0 GSM 7 bit default alphabet 0 1 8 bit data 1 0 UCS2 (16bit) [10] 1 1 Reserved NOTE: The special case of bits 7..0 being 0000 0000 indicates the GSM 7 bit default alphabet with no message class
01xx	Message Marked for Automatic Deletion Group This group can be used by the SM originator to mark the message (stored in the ME or (U)SIM) for deletion -after reading ~~in case it has been stored in the ME or (U)SIM and then whatever its~~ irrespective of the message class. The way the ME will process this deletion should be manufacturer specific but shall be done without the intervention of the End User or the targeted application.The mobile manfacturer may optionally provide a means for the user to prevent this automatic deletion. Bit 5..0 are coded exactly the same as Group 00xx
~~0100~~1000..1011	Reserved coding groups
1100	Message Waiting Indication Group: Discard Message Bits 3..0 are coded exactly the same as Group 1101, however with bits 7..4 set to 1100 the mobile may discard the contents of the message, and only present the indication to the user.

(continued)

Coding Group Bits 7..4	Use of bits 3..0
1101	Message Waiting Indication Group: Store Message This Group allows an indication to be provided to the user about the status of types of message waiting on systems connected to the GSM/UMTS PLMN. The mobile may present this indication as an icon on the screen, or other MMI indication. The mobile may take note of the Origination Address for messages in this group and group 1100. For each indication supported, the mobile may provide storage for the Origination Address which is to control the mobile indicator. Text included in the user data is coded in the GSM 7 bit default alphabet. Where a message is received with bits 7..4 set to 1101, the mobile shall store the text of the SMS message in addition to setting the indication. Bits 3 indicates Indication Sense: Bit 3 0 Set Indication Inactive 1 Set Indication Active Bit 2 is reserved, and set to 0 Bit 1 Bit 0 Indication Type: 0 0 Voicemail Message Waiting 0 1 Fax Message Waiting 1 0 Electronic Mail Message Waiting 1 1 Other Message Waiting* * Mobile manufacturers may implement the “Other Message Waiting” indication as an additional indication without specifying the meaning. The meaning of this indication is intended to be standardized in the future, so Operators should not make use of this indication until the standard for this indication is finalized.
1110	Message Waiting Indication Group: Store Message The coding of bits 3..0 and functionality of this feature are the same as for the Message Waiting Indication Group above, (bits 7..4 set to 1101) with the exception that the text included in the user data is coded in the uncompressed UCS2 alphabet.
1111	Data coding/message class Bit 3 is reserved, set to 0. Bit 2 Message coding: 0 GSM 7 bit default alphabet 1 8-bit data Bit 1 Bit 0 Message Class: 0 0 Class 0 0 1 Class 1 default meaning: ME-specific. 1 0 Class 2 (U)SIM-specific message. 1 1 Class 3 default meaning: TE specific (see 3G TS 27.005 [8])

GSM 7 bit default alphabet indicates that the TP-UD is coded from the GSM 7 bit default alphabet given in subclause 6.2.1. When this alphabet is used, the characters of the message are packed in octets as shown in subclause 6.1.2.1.1, and the message can consist of up to 160 characters. The GSM 7 bit default alphabet shall be supported by all MSs and SCs offering the service. If the GSM 7 bit default alphabet extension mechanism is used then the number of displayable characters will reduce by one for every instance where the GSM 7 bit default alphabet extension table is used 8-bit data indicates that the TP-UD has user-defined coding, and the message can consist of up to 140 octets.
UCS2 alphabet indicates that the TP-UD has a UCS2 [10] coded message, and the message can consist of up to 140 octets, i.e. up to 70 UCS2 characters. The General notes specified in subclause 6.1.1 override any contrary specification in UCS2, so for example even in UCS2 a <CR> character will cause the MS to return to the beginning of the current line and overwrite any existing text with the characters which follow the <CR>.
When a message is compressed, the TP-UD consists of the GSM 7 bit default alphabet or UCS2 alphabet compressed message, and the compressed message itself can consist of up to 140 octets in total.

When a mobile terminated message is class 0 and the MS has the capability of displaying short messages, the MS shall display the message immediately and send an acknowledgement to the SC when the message has successfully reached the MS irrespective of whether there is memory available in the (U)SIM or ME. The message shall not be automatically stored in the (U)SIM or ME. The ME may make provision through MMI for the user to selectively prevent the message from being displayed immediately. If the ME is incapable of displaying short messages or if the immediate display of the message has been disabled through MMI then the ME shall treat the short message as though there was no message class, i.e. it will ignore bits 0 and 1 in the TP-DCS and normal rules for memory capacity exceeded shall apply.

When a mobile terminated message is Class 1, the MS shall send an acknowledgement to the SC when the message has successfully reached the MS and can be stored. The MS shall normally store the message in the ME by default, if that is possible, but otherwise the message may be stored elsewhere, e.g. in the (U)SIM. The user may be able to override the default meaning and select their own routing.

When a mobile terminated message is Class 2 ((U)SIM-specific), an MS shall ensure that the message has been transferred to the SMS data field in the (U)SIM before sending an acknowledgement to the SC. The MS shall return a "protocol error, unspecified" error message (see 3G TS 24.011 [6]) if the short message cannot be stored in the (U)SIM and there is other short message storage available at the MS. If all the short message storage at the MS is already in use, the MS shall return "memory capacity exceeded". This behaviour applies in all cases except for an MS supporting (U)SIM Application Toolkit when the Protocol Identifier (TP-PID) of the mobile terminated message is set to "(U)SIM Data download" (see 3G TS 23.040 [4])

When a mobile terminated message is Class 3, the MS shall send an acknowledgement to the SC when the message has successfully reached the MS and can be stored, irrespectively of whether the MS supports an SMS interface to a TE, and without waiting for the message to be transferred to the TE. Thus the acknowledgement to the SC of a TE-specific message does not imply that the message has reached the TE. Class 3 messages shall normally be transferred to the TE when the TE requests "TE-specific" messages (see 3G TS 27.005 [8]). The user may be able to override the default meaning and select their own routing.

The message class codes may also be used for mobile originated messages, to provide an indication to the destination SME of how the message was handled at the MS.

The MS will not interpret reserved or unsupported values but shall store them as received. The SC may reject messages with a Data Coding Scheme containing a reserved value or one which is not supported.

3GPP/SMG Meeting T2 #9 / ETSI SMG4
Utrecht, The Netherlands, 15-19 May 2000

Document T2-000310
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

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23.040	**CR**	**013**	Current Version:	3.4.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to:	TSG-T#8	for approval	X	strategic		*(for SMG*
list expected approval meeting # here ↑		for information		non-strategic		*Use only)*

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)*	(U)SIM		ME	X	UTRAN / Radio		Core Network	

Source: T2 **Date:** 10.04.2000

Subject: Addition of numbering plan value for Service Centre Specific Addresses

Work item: TEI

Category: *(only one category shall be marked with an X)*

F	Correction		**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature	X		Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	
				Release 00	X

Reason for change: The current specification does not allow for the recognition of Service Centre specific addresses. It is proposed to add a Numbering Plan value to indicate a numbering plan for addresses to be interpreting by the service centre.

Clauses affected: 9.1.2.5 Address fields

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

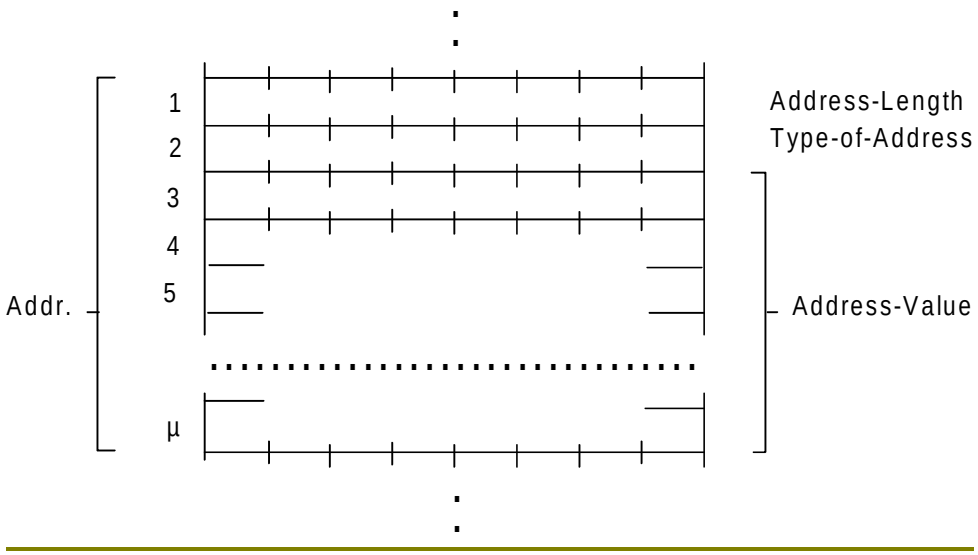
Other comments: This CR introduces a new code value into the NPI and although this new code value is solely for use in SMS it will not have been included into other documentation which uses the NPI code values.The controlling authority (assuming there is one) for the wider use of NPI code values is unknown to TSG T2. This CR will not in itself result in any undesirable operational incompatability between SMS and any other service but may appear as a misalignment with other documentation.

help.doc

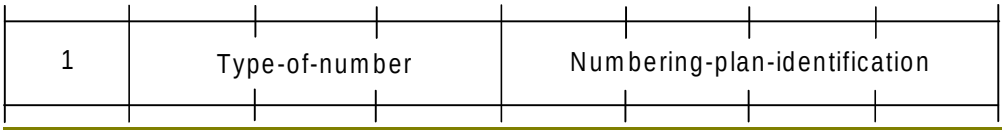
<--------- double-click here for help and instructions on how to create a CR.

9.1.2.5 Address fields

Address fields used by SM-RL are specified in 3G TS 24.011 [13] and 3G TS 29.002 [15].
Each address field of the SM-TL consists of the following sub-fields: An Address-Length field of one octet, a Type-of-Address field of one octet, and one Address-Value field of variable length; as shown below:



The Address-Length field is an integer representation of the number of useful semi-octets within the Address-Value field, i.e. excludes any semi octet containing only fill bits.
The Type-of-Address field format is as follows:



Type-of-number:

Bits 6 5 4

0 0 0	Unknown 1)
0 0 1	International number 2)
0 1 0	National number 3)
0 1 1	Network specific number 4)
1 0 0	Subscriber number 5)
1 0 1	Alphanumeric, (coded according to 3G TS 23.038 [9] GSM 7-bit default alphabet)
1 1 0	Abbreviated number
1 1 1	Reserved for extension

The MS shall interpret reserved values as "Unknown" but shall store them exactly as received.
The SC may reject messages with a type of number containing a reserved value or one which is not supported.

1) "Unknown" is used when the user or network has no a priori information about the numbering plan. In this case, the Address-Value field is organized according to the network dialling plan, e.g. prefix or escape digits might be present.

2) The international format shall be accepted also when the message is destined to a recipient in the same country as the MSC or as the SGSN.

3) Prefix or escape digits shall not be included.

4) "Network specific number" is used to indicate administration/service number specific to the serving network, e.g. used to access an operator.

5) "Subscriber number" is used when a specific short number representation is stored in one or more SCs as part of a higher layer application. (Note that "Subscriber number" shall only be used in connection with the proper PID referring to this application).

Numbering-plan-identification (applies for Type-of-number = 000,001,010)

Bits 3 2 1 0

0 0 0 0	Unknown
0 0 0 1	ISDN/telephone numbering plan (E.164 [17]/E.163[18])
0 0 1 1	Data numbering plan (X.121)
0 1 0 0	Telex numbering plan
0 1 0 1	Service Centre Specific plan 1)
1 0 0 0	National numbering plan
1 0 0 1	Private numbering plan
1 0 1 0	ERMES numbering plan (ETSI DE/PS 3 01-3)
1 1 1 1	Reserved for extension

All other values are reserved.

1) "Service Centre specific number" is used to indicate a numbering plan specific to External Short Message Entities attached to the SMSC.

For Type-of-number = 101 bits 3,2,1,0 are reserved and shall be transmitted as 0000. Note that for addressing any of the entities SC, MSC, SGSN or MS, Numbering-plan-identification = 0001 shall always be used. However, for addressing the SME, any specified Numbering-plan-identification value may be used.
The MS shall interpret reserved values as "Unknown" but shall store them exactly as received.
The SC may reject messages with a type of number containing a reserved value or one which is not supported.
Within the Address-Value field, either a semi-octet or an alphanumeric[1)] representation applies.
The maximum length of the full address field (Address-Length, Type-of-Address and Address-Value) is 12 octets.

1) Applies only to addressing at the SM-TL.