3GPP TSG-T (Terminals) Meeting #25
Palm Springs, CA, USA
8 - 10 September 2004

TP-040142

3GPP TSG-T2 #26
Montreal, Canada
23-27 August 2004

T2-040345

Title: LS concerning harmonization of MMS provisioning files between 3GPP & 3GPP2

Response to: LS from T3 to 3GPP2-TSG-C, 3GPP2-TSG-C-WG1-SWG1.4, 3GPP-TSG-T cc 3GPP-T2 concerning harmonization of MMS provisioning files between 3GPP & 3GPP2 (T2-040344 / T3-040517)

Source: T2

To: T3, 3GPP2-TSG-C, 3GPP2-TSG-C-WG1-SWG1.4, 3GPP-TSG-T

Cc: -

Contact Person:
Name: Josef Laumen
Tel. Number: +49-175-58-15067
E-mail Address: josef.laumen@infineon.com

Attachments: T2-040346 (T2 suggestion for revised CR 31102 REL-6 on Introduction of M-IMAP and SIP as MMS implementations in MMS provisioning)

---

1. Overall Description:

T2 thanks T3 for their LS concerning harmonization of MMS provisioning files between 3GPP & 3GPP2 (T2-040319 /T3-040517).

3. Discussion:

T2 reviewed the CR 31102 REL-6 on Introduction of M-IMAP and SIP as MMS implementations in MMS provisioning which came attached to the LS and has the following comments.

T2 understands that the CR introduces new header fields for MMS provisioning which apply solely to a 3GPP2 R-UIM and to terminals supporting one of 3GPP2's alternative (non-WAP based) MMS implementations. As mentioned in the reason for change the CR is neither intended to affect a 3GPP USIM nor to affect a 3GPP-only terminal. For reasons of alignment and consistency between R-UIM and USIM specifications this intention is shared and supported by T2.

When reviewing the CR, T2 though noted that, in its current form, it does not explicitly disallow the use of these new header fields on a 3GPP USIM. This would impact a 3GPP-only terminal such that – in order to cope with all eventualities - it would need to support these header fields even though it does not support any of 3GPP2's alternative MMS implementations.

T2 would like to point out that such a situation should be avoided and therefore suggests some modifications to the CR as in T2-040346 attached. T2 believes that the modified CR still fulfils 3GPP2's needs.

3. Actions:

To T3, 3GPP2-TSG-C and 3GPP2-TSG-C-WG1-SWG1.4 **groups.**

ACTION: **T2** would like to ask T3, 3GPP2-TSG-C and 3GPP2-TSG-C-WG1-SWG1.4 to verify T2's understanding above and to review the modified CR in T2-040346 attached at their earliest opportunity. Please note that any concerns to T2's suggestion should preferably be raised immediately to 3GPP-TSG-T **prior to their meeting on 8 - 10 Sep 2004** (Palm Springs).

To TSG-T group.

ACTION: **T2** would like TSG-T to note T2's concern regarding the original T3 CR and consider approving a modification to that CR which fulfils 3GPP2's needs without impacting a 3GPP terminal. Please find a suggestion for such a modification in T2-040346 attached.

3. Date of next T2 Meetings:

T2#27	8 – 12 Nov 2004	Cape Town, South Africa
T2#28	Feb 2005	Tbd

3GPP TSG-T2 #26
Montreal, Canada
23-27 August 2004

T2-040346

3GPP TSG-T3 Meeting #32
New York, USA, 10-13 August 2004

Tdoc ⌘T3-040593

CR-Form-v7

CHANGE REQUEST

⌘ **31.102** **CR** 236 ⌘ **rev** **-1** ⌘ Current version: **6.6.0** ⌘

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

Proposed change affects: UICC apps⌘ [X] ME [X] Radio Access Network [ ] Core Network [ ]

Title:	⌘	T2 suggestion for revised CR 31102 REL-6 on Introduction of M-IMAP and SIP as MMS implementations in MMS provisioning
Source:	⌘	~~T3~~T2
Work item code:	⌘	TEI
Date:	⌘	11/08/04
Category:	⌘	**B**
Release:	⌘	Rel-6

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)*
Rel-6	*(Release 6)*

Reason for change:	⌘	3GPP2 SWG 1.4 is looking forward to store MMS connectivity paramenters in the R-UIM (Removable User Identification Module). In order not to create inconstinacy between the R-UIM and the USIM, SWG 1.4is willing to re-use the files defined in the USIM. But in order to be able to re-use those files, some changes must be done to allow the support of MMS implementations parameters used in 3GPP2, i.e. M-IMAP and SIP. In addition, special care is being taken to ensure that a 3GPP-only terminal is not affected by this CR.
Summary of change:	⌘	Add SIP and M-IMAP in MMS implementaions field and adapt MMS Issuer / User Connectivity Parameters files to allow the storage of these new implementations.
Consequences if not approved:	⌘	A 3GPP-only terminal would be impacted such that – in order to cope with all eventualities - it would need to support these header fields even though it does not support any of 3GPP2's alternative MMS implementations

Clauses affected:	⌘	4.2.67,4.2.69
Other specs	⌘	Y [ ] N [ ] Other core specifications ⌘

affected:	☐ Test specifications ☐ O&M Specifications	
Other comments:	⌘	

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1] 3GPP TS 21.111: "USIM and IC Card Requirements".

[2] 3GPP TS 22.011: "Service accessibility".

[3] 3GPP TS 22.024: "Description of Charge Advice Information (CAI)".

[4] 3GPP TS 22.030: "Man-Machine Interface (MMI) of the User Equipment (UE)".

[5] 3GPP TS 23.038: "Alphabets and language".

[6] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".

[7] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".

[8] 3GPP TS 22.067: "enhanced Multi Level Precedence and Pre-emption service (eMLPP) - Stage 1".

[9] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".

[10] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".

[11] 3GPP TS 31.101: "UICC-Terminal Interface, Physical and Logical Characteristics".

[12] 3GPP TS 31.111: "USIM Application Toolkit (USAT)".

[13] 3GPP TS 33.102: "3GPP Security; Security Architecture".

[14] 3GPP TS 33.103: "3GPP Security; Integration Guidelines".

[15] 3GPP TS 22.086: "Advice of charge (AoC) Supplementary Services - Stage 1".

[16] 3GPP TS 23.041: "Technical realization of Cell Broadcast (CB)".

[17] 3GPP TS 02.07: "Mobile Stations (MS) features".

[18] 3GPP TS 51.011: "Specification of the Subscriber Identity Module – Mobile Equipment (SIM – ME) interface".

[19] ISO 639 (1988): "Code for the representation of names of languages".

[20] ISO/IEC 7816-4 (1995): "Identification cards - Integrated circuit(s) cards with contacts, Part 4: Interindustry commands for interchange".

[21] ISO/IEC 7816-5 (1994): "Identification cards - Integrated circuit(s) cards with contacts, Part 5: Numbering system and registration procedure for application identifiers".

[22] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".

[23] 3GPP TS 23.073: "Support of Localised Service Area (SoLSA); Stage 2".

[24] 3GPP TS 22.101: "Service aspects; service principles".

[25] 3GPP TS 23.003: "Numbering, Addressing and Identification".

[26] ISO/IEC 7816-9 (2000): "Identification cards - Integrated circuit(s) cards with contacts, Part 9: Additional Interindustry commands and security attributes".

[27] 3GPP TS 22.022: "Personalisation of Mobile Equipment (ME); Mobile functionality specification".

[28] 3GPP TS 44.018 "Mobile Interface Layer3 Specification, Radio Resource control protocol"

[29] 3GPP TS 23.022: "Functions related to Mobile Station (MS) in idle mode and group receive mode".

[30] 3GPP TS 23.057: "Mobile Execution Environment (MExE);Functional description; Stage 2".

[31] 3GPP TS 23.122: "NAS Functions related to Mobile Station (MS) in idle mode"

[32] ISO/IEC 7816-6 (1996): "Identification cards -- Integrated circuit(s) cards with contacts -- Part 6: Interindustry data elements".

[33] 3GPP TS 25.101: "UE Radio Transmission and Reception (FDD)"

[34] 3GPP TS 45.005: "Radio Transmission and Reception"

[35] ISO/IEC 8825 (1990): "Information technology; Open Systems Interconnection; Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)"

[36] 3GPP TS 23.097: "Multiple Subscriber Profile (MSP)"

[37] ETSI TS 102 221 "Smart cards; UICC-Terminal interface; Physical and logical characteristics (Release 4)"

[38] 3GPP TS 23.140: “Multimedia Messaging Service (MMS); Functional description; stage 2”.

[39] ETSI TS 102 222 "Administrative commands for telecommunications applications "

[40] 3GPP TS 24.234: “3GPP System to WLAN Interworking; UE to Network protocols;Stage 3”

[41] 3GPP TS 33.234: "3G Security; Wireless Local Area Network (WLAN) interworking security"

[xx] TIA/EIA-934: "Multimedia Messaging System Specification", May 2003

4.2.67 EF_{MMSN} (MMS Notification)

If service n°52 is "available", this file shall be present.

This EF contains information in accordance with 3GPP TS 23.140 [38] and TIA/EIA-934 [xx] comprising MMS notifications (and associated parameters) which have been received by the UE from the network. ~~A 3GPP terminal needs only to support the MMS implementation specified in 3GPP TS 23.140 [38].~~

Identifier: '6FCE'	Structure: Linear fixed	Optional
Record length: 4+X bytes	Update activity: low	
Access Conditions: READ PIN UPDATE PIN DEACTIVATE ADM ACTIVATE ADM		

Bytes	Description	M/O	Length
1 to 2	MMS Status	M	2 bytes
3	MMS Implementation	M	1 byte
4 to X+3	MMS Notification	M	X bytes
X+4	Extension file record number	M	1 byte

- MMS Status

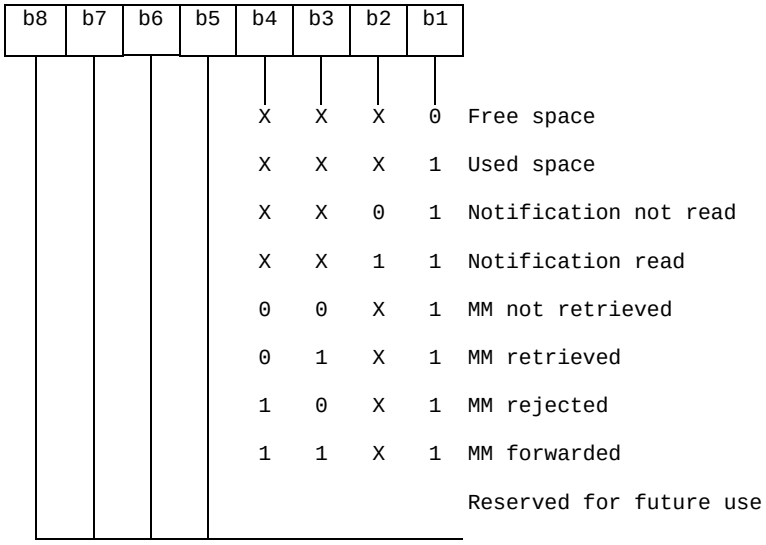
Content:

The status bytes contain the status information of the notification.

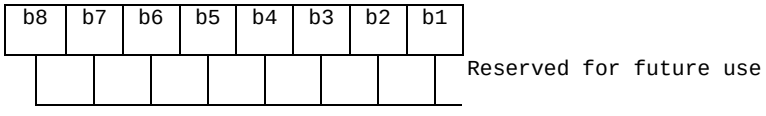
Coding:

b1 indicates whether there is valid data or if the location is free. b2 indicates whether the MMS notification has been read or not. Bits b3-b4 of the first byte indicate the MM retrieval, MM rejection, or MM forwarding status, Bits b5-b8 of the first byte and the entire second byte are reserved for future use.

First byte:



Second byte:



- MMS Implementation

Contents:

The MMS Implementation indicates the used implementation type, e.g. WAP.

Coding:

Allocation of bits:
Bit number Parameter indicated
1 WAP implementation of MMS as defined in 3GPP TS 23.140 [38]
2 M-IMAP implementation of MMS as defined in TIA/EIA-934 [xx]
3 SIP implementation of MMS as defined in TIA/EIA-934 [xx]
4~~2~~-8 Reserved for future use

Bit value Meaning
0 Implementation not supported.
1 Implementation supported.

A 3GPP USIM shall not support any other MMS implementation than those defined in 3GPP TS 23.140 [38].

NOTE: Parameter values which are marked above as "as defined in TIA/EIA-934 [xx]" have been introduced to support non-3GPP MMS implementations on non-3GPP applications on the UICC.

- MMS Notification
  Contents:
  The MMS Notification contains the MMS notification.
  Coding:
  The MMS Notification is coded according to the MMS Implementation as indicated in Byte 3.
  Any unused byte shall be set to 'FF'.

- Extension file record number
  Contents:
  - extension file record number. This byte identifies the number of a record in the EF_{EXT8} containing extension data for the notification information. The use of this byte is optional. If it is not used it shall be set to 'FF'.

  Coding:
  - binary.

4.2.69 EF_{MMSICP} (MMS Issuer Connectivity Parameters)

If service n°52 is "available", this file shall be present.

This EF contains values for Multimedia Messaging Connectivity Parameters as determined by the issuer, which can be used by the ME for MMS network connection. This file may contain one or more sets of Multimedia Messaging Issuer Connectivity Parameters. The first set of Multimedia Messaging Issuer Connectivity Parameters is used as the default set. Each set of Multimedia Messaging Issuer Connectivity Parameters may consist of one or more Interface to Core Network and Bearer information TLV objects, but shall contain only one MMS implementation TLV object, one MMS Relay/Server TLV object and one Gateway TLV object. The order of the Interface to Core Network and Bearer information TLV objects in the MMS Connectivity TLV object defines the priority of the Interface to Core Network and Bearer information, with the first TLV object having the highest priority.

Identifier: '6FD0'	Structure: Transparent	Optional
File Size: X_1+…+ X_n bytes	Update activity: low	

Access Conditions:

READ	PIN
UPDATE	ADM
DEACTIVATE	ADM
ACTIVATE	ADM

Bytes	Description	M/O	Length
1 to X_1	MMS Connectivity Parameters TLV object	M	X_1 bytes
X_1+1 to X_1 + X_2	MMS Connectivity Parameters TLV object	O	X_2 bytes
…	…		
X_1+…+ X_{n-1}+1 to X_1+…+ X_n	MMS Connectivity Parameters TLV object	O	X_n bytes

- MMS Connectivity Parameters tags

Description	Tag Value
MMS Connectivity Parameters Tag	'AB'
MMS Implementation Tag	‘80’
MMS Relay/Server Tag	‘81’
Interface to Core Network and Bearer Information Tag	'82'
GatewayTag	'83'
MMS Authentication Mechanism Tag	'84'
MMS Authentication User Name Tag	'85'

- MMS Connectivity Parameters contents

Description	Value	M/O	Length (bytes)

MMS Connectivity Parameters Tag	'AB'	M	1
Length	Note 1	M	Note 2
MMS Implementation Tag	'80'	M	1
Length	1	M	1
MMS Implementation Information	--	M	1
MMS Relay/Server Tag	'81'	M	1
Length	X1	M	Note 2
MMS Relay/Server Address	--	M	X1
MMS Authentication Mechanism Tag	'84'	C	1
Length	X2	C	Note 2
MMS Authentication Mechanism	--	C	1
MMS Authentication User Name Tag	'85'	C	1
Length	X3	C	Note 2
MMS Authentication User Name	--	C	X2
1st Interface to Core Network and Bearer Information Tag (highest priority)	'82'	~~M~~C	1
Length	Y1	~~M~~C	Note 2
1st Interface to Core Network and Bearer information	--	~~M~~C	Y1
2nd Interface to Core Network and Bearer Information Tag	'82'	~~M~~C	1
Length	Y2	~~M~~C	Note 2
2nd Interface to Core Network and Bearer information	--	~~M~~C	Y2
…			
Nth Interface to Core Network and Bearer Information Tag (lowest priority)	'82'	~~M~~C	1
Length	Y3	~~M~~C	Note 2
Nth Interface to Core Network and Bearer information	--	~~M~~C	Y3
GatewayTag	'83'	O	1
Length	Z	O	Note 2
Gateway Information	--	O	Z
Note 1: This is the total size of the constructed TLV object Note 2: The length is coded according to ISO/IEC 8825 [35]			

- MMS Implementation Tag '80'

  See section 4.2.67 for contents and coding.

- MMS Relay/server Tag '81'

  Contents:

  The MMS relay/server contains the address of the associated MMS relay/server.

  Coding:

  The MMS relay/server address is coded according to the guideline provided in 3GPP TS 23.140 [38].

- MMS Authentication Mechanism Tag '84'

  Contents:

  The MMS authentication mechanism contains the authentication mechanism used for M-IMAP and SIP.

  Coding:

  The MMS authentication mechanism is coded according to the guidelines provided in TIA-934 [xx].

MMS Authentication Mechanism Tag shall be present and shall only be present when either M-IMAP or SIP implementations are indicated in MMS Implementation Tag '80'.

- MMS Authentication User Name Tag '85'

  Contents:

  The MMS Authentication User Name contains the authentication user name used for M-IMAP and SIP.

  Coding:

  The MMS authentication User Name is coded according to the guidelines provided in TIA-934 [xx].

MMS Authentication User Name Tag shall be present and shall only be present when either M-IMAP or SIP implementations are indicated in MMS Implementation Tag '80'.

- Interface to Core Network and Bearer Information Tag '82'

  Contents:

  The Interface to Core Network and Bearer Information may contain the following information to set up the bearer: Bearer, Address, Type of address, Speed, Call type, Authentication type, Authentication id, Authentication password.

  Coding:

  The coding is according to the guideline provided in 3GPP TS 23.140 [38].

Interface to Core Network and Bearer Information Tag shall be present and shall only be present when WAP implementation is indicated in MMS Implementation Tag '80'.

- Gateway Tag '83'

  Contents:

  The Gateway may contain the following information; Address , Type of address, Port, Service, Authentication type , Authentication id and Authentication password.

  Coding:

  The coding is according to the guideline provided in 3GPP TS 23.140 [38].

Gateway Tag shall be present and shall be only be present when WAP implementation is indicated in MMS Implementation Tag '80'.

Unused bytes shall be set to 'FF'.

An Example for the coding of these parameters can be found in Annex J.2.