3GPP TSG-T (Terminals) Meeting #26
Athens, Greece
8 - 10 December 2004

TP-040298

Title:	LS on integration/correction of new features in TS 51.011 / SIM specifications
Response to:	LS concerning harmonization of MMS provisioning files between 3GPP & 3GPP2
Release:	
Work Item:	

Source:	3GPP TSG-T
To:	3GPP2 TSG-C
Cc:	T3

Contact Person:

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Attachments: T3-040827 ìIntroduction of M-IMAP and SIP as MMS implementations in MMS provisioningî

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1. Overall Description:

TSG-T noted that 3GPP2 R-UIM specifications are currently referencing GSM SIM. TSG-T understands that there are historical reasons and therefore in the past allowed to make some updates in TS 51.011.

However under 3GPP rules it is not possible to update (unless for essential corrections) pre Rel-6 specifications. The latest SIM specifications were frozen in Rel-4. A majority in 3GPP feels that those specifications cannot be upgraded.

TSG-T advises 3GPP2 TSG-C to point to USIM specifications (here, TS 31.102) rather than on SIM specifications. It will then be possible to include 3GPP2 related new parameters or features. Anyway TSG-T will object any future CR proposal for new feature or modification of a feature on Rel-4 documents.

TSG-T approved on the proposed T3 CR on TS 31.102 (attached to this LS) related to harmonization of MMS provisioning files between 3GPP & 3GPP2.

2. Actions:

None

3. Date of next TSG-T Meetings:

T #27	9 - 11 Mar 2005	Tokyo, Japan

CR-Form-v7

CHANGE REQUEST

⌘ **31.102** **CR** 236 ⌘ **rev** **2** ⌘ Current version: **6.7.0** ⌘

*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 [ ] Radio Access Network [ ] Core Network [ ]

Title:	⌘	Introduction of M-IMAP and SIP as MMS implementations in MMS provisioning
Source:	⌘	T3
Work item code:	⌘	TEI6
Date:	⌘	19/11/04
Category:	⌘	**C**
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 parameters in the R-UIM (Removable User Identification Module). In order not to create inconsistency between the R-UIM and the USIM, SWG 1.4 is 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 implementations field and adapt MMS Issuer / User Connectivity Parameters files to allow the storage of these new implementations.
Consequences if not approved:	⌘	3GPP2 requirements cannot be fullfilled.

Clauses affected:	⌘	2, 4.2.67, 4.2.69
Other specs affected:	⌘	Y N [ ] [ ] Other core specifications [ ] [ ] 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 ñ Mobile Equipment (SIM ñ 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: ì Multimedia Messaging Service (MMS); Functional description; stage 2î .

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

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

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

[42] 3GPP TS 33.220: "Generic Authentication Architecture (GAA); Generic bootstrapping architecture"

[43] 3GPP TS 33.246: "Security of Multimedia Broadcast/Multicast Service"

[44] 3GPP TS 43.020: "Technical Specification Group Services and system Aspects; Security related network functions"

[xx] X.S0016-000-A v1.0: "3GPP2 Multimedia Messaging System MMS Specification Overview, Revision A"

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 X.S0016-000-A v1.0 [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: í6FCEí	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:

b8	b7	B6	b5	b4	b3	b2	b1	
				X	X	X	0	Free space
				X	X	X	1	Used space
				X	X	0	1	Notification not read
				X	X	1	1	Notification read
				0	0	X	1	MM not retrieved
				0	1	X	1	MM retrieved
				1	0	X	1	MM rejected
				1	1	X	1	MM forwarded
								Reserved for future use

Second byte:

b8	b7	B6	b5	b4	b3	b2	b1	
								Reserved for future use

- 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 Reserved for 3GPP2: M-IMAP implementation of MMS as defined in X.S0016-000-A v1.0 [xx]

3 Reserved for 3GPP2: SIP implementation of MMS as defined in X.S0016-000-A v1.0 [xx]

4~~2~~-8 Reserved for future use

Bit value Meaning

0 Implementation not supported.

1 Implementation supported.

- 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+Ö + 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
Ö	Ö		
X_1+Ö + X_{n-1}+1 to X_1+Ö + 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	'B0'
MMS Relay/Server Tag	'B1'
Interface to Core Network and Bearer Information Tag	'82'
GatewayTag	'83'
Reserved for 3GPP2: MMS Authentication Mechanism Tag	'84'
Reserved for 3GPP2: 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'	C1	1
Length	X2	C1	Note 2
MMS Authentication Mechanism	--	C1	X2
MMS Authentication User Name Tag	'85'	C1	1
Length	X3	C1	Note 2
MMS Authentication User Name	--	C1	X3
1st Interface to Core Network and Bearer Information Tag (highest priority)	'82'	~~M~~C2	1
Length	Y1	~~M~~C2	Note 2
1st Interface to Core Network and Bearer information	--	~~M~~C2	Y1
2nd Interface to Core Network and Bearer Information Tag	'82'	~~M~~C2	1
Length	Y2	~~M~~C2	Note 2
2nd Interface to Core Network and Bearer information	--	~~M~~C2	Y2
Ö			
Nth Interface to Core Network and Bearer Information Tag (lowest priority)	'82'	~~M~~C2	1
Length	Y3	~~M~~C2	Note 2
Nth Interface to Core Network and Bearer information	--	~~M~~C2	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] C1: Reserved for 3GPP2: only present if M-IMAP or SIP indicated in tag 80 C2: only present if WAP is indicated in tag 80			

- 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 X.S0016-000-A v1.0 [xx].

- 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 X.S0016-000-A v1.0 [xx].

- 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].

- 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].

Unused bytes shall be set to 'FF'.

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