3GPP TSG-T2 #16
Sophia Antipolis, France
11-15 February 2002

T2-020264

Title:	Liaison Statement on reply to T3 on MMS related changes for Rel-4
Source:	T2
To:	T3
Cc:	T, SA1
Response to:	LS (T2-020247 / T3-020148) on MMS related changes for Rel-4 from T3.

Contact Person:
    Name: **Josef Laumen**
    Tel. Number: +49 5341 906 2830
    E-mail Address: Josef.laumen@siemens.com

Attachments: T2-020265 [CR 23.140 REL-5 Storage of MMS parameters on the USIM].

1. Overall Description:

MMS support in 3GPP TS 31.102:
T2 gratefully acknowledges the LS from T3 on MMS related changes for Rel-4 (T2-020247 / T3-020148) and would like to thank T3 for fulfilling T2's need for MMS support on the USIM. In particular the creation of the four new files EF_{MMSN} , EF_{EXT8}, EF_{MMSCP} and EF_{MMSUP} fulfils the T2 requirements for the storage of MMS-related information on the USIM expressed in earlier LSs and at the joint T2/T3 meeting hold on January 11th.

T2 would also like to express its support for T3's decision to support MMS on the USIM from REL-4 onwards. Specifically, T2 sees a benefit in the use case where a REL-4 USIM which supports MMS is plugged into a terminal with a REL-5 MMS User Agent which supports the USIM. However, T2 would like to point out that in 3GPP TS 23.140 the USIM support by an MMS User Agent is defined from REL-5 onwards. And T2 understands that the current reference in the REL-4 CR to 3GPP TS 31.102 is a *non-specific* reference, which as such "*refers to the latest version of that document in the same Release as the present document*". Hence, T2 suggests that the REL-4 versions of 3GPP TS 31.102 point with a *specific reference* to REL-5 of 3GPP TS 23.140.

USIM support in 3GPP TS 23.140:
In addition, T2 understood from the joint T2/T3 meeting that it was requested to define the MMS User Agent's service behaviour with respect to the storage of MMS information on the USIM. In particular this should include the setting of the status byte in EF_{MMSN} by the MMS User Agent. T2 has addressed this issue in the attached CR. T2 would like T3 to review the attached CR and indicate whether this CR reflects T3's request.

2. Actions:

ACTION#1:

T2 asks T3 to review T2's suggestion that the REL-4 versions of 3GPP TS 31.102 should point with a *specific reference* to REL-5 of 3GPP TS 23.140.

ACTION#2:

T2 asks T3 to review the attached CR and indicate whether this CR reflects T3's request for the definition of the MMS User Agent's service behaviour with respect to the storage of MMS information on the USIM, including the setting of the status byte in EF_{MMSN}.

3. Date of Next T2 Meetings:

T2#17	13-17 May 2002	North America
T2#18	12-16 Aug 2002	Germany

CR-Form-v5

CHANGE REQUEST

| ⌘ | **23.140** CR **CRNum** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.1.0** | ⌘ |

*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 **X** ME/UE **X** Radio Access Network ☐ Core Network ☐

Title:	⌘	MMS UA behaviour with respect to handling MMS parameters on the USIM
Source:	⌘	GEMPLUS Card International, Siemens AG
Work item code: ⌘	MESS5-MMS	*Date:* ⌘ February 13, 2002
Category:	⌘ **B**	*Release:* ⌘ REL-5

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: ⌘		The MMS-related information storage possibilities on the USIM have been identified as important. These MMS parameters include the MMS access parameters, the MMS user preferences and the MMS notifications.
Summary of change: ⌘		This CR reflects the support for MMS in the USIM specificatons, 3GPP TS 31.102, and clarifies the MMS User Agent behaviour with respect to the handling of MMS-related information on the USIM.
Consequences if not approved:	⌘	1) Consistency issues between the MMS specifications, 3GPP TS 23.140 and the USIM specifications, 3GPP TS 31.102 2) The MMS User Agent behaviour would not be defined 3) Interoperability issues when a user changes his/her terminal

Clauses affected:	⌘	2, 5.1.1, 7.1.X (new section)
Other specs Affected:	⌘ **X**	Other core specifications ⌘ 3GPP TS 31.102
	☐	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 22.140: "Multimedia Messaging Service; Stage 1".

[2]   3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[3]   WAP Forum: "Wireless Application Environment Specification, Version 1.2", WAP-WAESpec-19991104, . URL: http://www.wapforum.org/.

[4]   3GPP TS 23.057: "Mobile Execution Environment (MExE); Functional description; Stage 2".

[5]   IETF; STD 0011 (RFC 2822): "Internet Message Format", URL: http://www.ietf.org/rfc/rfc2822.txt.

[6]   IETF; RFC 2046: "Multipurpose Internet Mail extension (MIME) Part Two: Media Types", URL: http://www.ietf.org/rfc/rfc2046.txt.

[7]   The Unicode Consortium: "The Unicode Standard", Version 2.0, Addison-Wesley Developers Press, 1996.URL: http://www.unicode.org/.

[8]   ANSI X3.4, 1986: "Information Systems; Coded Character Set 7 Bit; American National Standard Code for Information Interchange".

[9]   ISO/IEC 8859-1:1998: "Information Processing; 8-bit Single-Byte Coded Graphic Character Sets; Part 1: Latin Alphabet No. 1".

[10]   IETF; RFC 2279: "UTF-8, A Transformation format of ISO 10646", URL: http://www.ietf.org/rfc/rfc2279.txt.

[11]   3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".

[12]   3GPP TS 26.090: "Mandatory Speech Codec speech processing functions; AMR Speech Codec Transcoding Functions".

[13]   3GPP TS 26.093 (V3.1.0): "Mandatory Speech Codec speech processing functions; AMR Speech Codec; Source Controlled Rate Operation".

[14]   ISO/IEC 11172-3:1993: "Information technology; Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s; Part 3: Audio" (MP3, MPEG1-Audio, MPEG2-Audio)

[15]   MIDI Manufacturers Association Incorporated, Los Angeles, California: "MIDI Sample Dump Standard (SDS)"; URL: http://www.midi.org.

[16]   ISO/IEC 14496-2:1999/FDAM4, ISO/IEC JTC1/SC 29/WG11 N3904, Pisa, January, 2001

[17]   ITU-T Recommendation T.81 | ISO/IEC 10918-1:1994: "Information technology; Digital compression and coding of continuous-tone still images: Requirements and guidelines".

[18]   Compuserve Incorporated, Columbus, Ohio (1990): "Graphics Interchange Format (Version 89a)".

[19]   ISO/IEC 14496-2:1999: "Information technology; Coding of audio-visual objects; Part 2: Visual".

[20]   ITU-T Recommendation H.263 (1998): "Video coding for low bit rate communication".

[21]   ITU-T Recommendation H.263 (1998): "Video coding for low bit rate communication - Annex X, Profiles and Levels Definition"

[22]   IETF; STD 0010 (RFC 2821): "Simple Mail Transfer Protocol", URL: http://www.ietf.org/rfc/rfc2821.txt.

[23]   WAP Forum (November 1999): "WAP Wireless Session Protocol", WAP-WSP-19991105- , URL: http://www.wapforum.org/.

[24]   WAP Forum (November 1999): "WAP Push Access Protocol", WAP-PAP-19991108, URL: http://www.wapforum.org/.

[25]   WAP Forum (November 1999): "WAP User Agent Profile Specification", WAP-UAProf-19991110, URL: http://www.wapforum.org/.

[26]   W3C Recommendation 22 February 1999 "Resource Description Framework (RDF) Model and Syntax Specification", URL: http://www.w3.org/TR/REC-rdf-syntax.

[27]   WAP Forum (November 1999): "WAP Wireless Markup Language Specification, Version 1.2 ", WAP-WML-19991104, URL: http://www.wapforum.org/.

[28]   W3C Recommendation 15-June-1998: "Synchronized Multimedia Integration Language (SMIL) 1.0 Specification" - http://www.w3.org/TR/REC-smil/.

[29]   WAP Forum (November 1999): "WAP Wireless Transport Layer Security Specification", WAP-WTLS-19991105, URL: http://www.wapforum.org/.

[30]   WAP Forum (November 1999): "WAP Identity Module Specification", WAP-WIM-19991105, URL: http://www.wapforum.org/.

[31]   ITU-T Recommendation T.37 (06/98): "Procedures for the transfer of facsimile data via store-and-forward on the Internet".

[32]   ITU-T Recommendation T.30 (1996): "Procedures for document facsimile transmission in the general switched telephone network".

[33]   IETF; RFC 2421 (Sept. 1998): "Voice Profile for Internet Mail – version 2, VPIM" , URL: http://www.ietf.org/rfc/rfc2421.txt.

[34]   IETF; STD 0053 (RFC 1939): "POP 3, Post Office Protocol - Version 3" , URL: http://www.ietf.org/rfc/rfc1939.txt.

[35]   IETF; RFC 1730 (December 1994): "IMAP4, Internet Message Access Protocol - Version 4" , URL: http://www.ietf.org/rfc/rfc1730.txt..

[36]   Adobe Systems: "Tag Image File Format (TIFF), Version 6", URL:, http://www.adobe.com.

[37]   3GPP TR 23.039: "Interface protocols for the connection of Short Message Service Centres (SMSCs) to Short Message Entities (SMEs)".

[38]   ISO/IEC TR 13818-5:1997/Amd 1:1999 "Advanced Audio Coding (AAC)"

[39]   IETF; Internet draft: "RTP payload format and file storage format for AMR and AMR-WB audio"; URL: http://search.ietf.org/internet-drafts/draft-ietf-avt-rtp-amr-10.txt..

NOTE: Reference [39] is work in progress in IETF/AVT working group and to be replaced by the appropriate RFC number once the Internet draft is approved within the IETF (IESG approval is scheduled to spring/summer 2001).

[40]   3GPP TS 26.233: "End-to-end transparent streaming Service (PSS); General Description".

[41]   3GPP TS 26.234: "End-to-end transparent streaming Service (PSS); Protocols and Codecs".

[42]   IETF; Internet Draft: "TCP over 2.5G and 3G Wireless Networks"; URL: http://search.ietf.org/internet-drafts/draft-ietf-pilc-2.5g3g-03.txt

NOTE: Reference [42] has to be replaced by the appropriate RFC number once the Internet draft is approved within the IETF.

[43]   WAP Forum: "Wireless profiled TCP", WAP-225-TCP-20010331-a, URL: http://www.wapforum.org

[44]   IETF; RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies", URL: http://www.ietf.org/rfc/rfc2045.txt

[45]   IETF; RFC 2047: "Multipurpose Internet Mail Extensions (MIME) Part Three: Message Header Extensions for Non-ASCII-Text", URL: http://www.ietf.org/rfc/rfc2047.txt.

[46]   IETF; RFC 2048: "Multipurpose Internet Mail Extensions (MIME) Part Four: Registration Procedures", URL: http://www.ietf.org/rfc/rfc2048.txt.

[47]   IETF; RFC 2049: "Multipurpose Internet Mail Extensions (MIME) Part Five: Conformance Criteria and Examples", URL: http://www.ietf.org/rfc/rfc2049.txt.

[48]   IETF; RFC 2616: "Hypertext Transfer Protocol, HTTP/1.1", URL: http://www.ietf.org/rfc/rfc2616.txt.

[49]   IETF; STD 13 (RFC 1034, 1035): "Domain Names -- concepts and facilities", "Domain names – implementation and specification", URL: http://www.ietf.org/rfc/rfc1034.txt, http://www.ietf.org/rfc/rfc1035.txt.

[50]   IETF; STD 14 (RFC 947): "Multi-network broadcasting within the Internet", URL: http://www.ietf.org/rfc/rfc947.txt.

[51]   IETF; RFC 2076: "Common Internet Message Headers", URL: http://www.ietf.org/rfc/rfc2076.txt.

[52]   IETF; RFC 1893: "Enhanced Mail System Status Codes", URL: http://www.ietf.org/rfc/rfc1893.txt.

[53]   IETF; RFC 1327: "Mapping between X.400(1988)/ISO 10021 and RFC 822", URL: http://www.ietf.org/rfc/rfc1327.txt.

[54]   3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based Services and Packet Data Networks (PDN)"

[55]   WAP-183-ProvCont, Provisioning Content, URL: http://www.wapforum.org

[56]   WAP-209-MMSEncapsulation, MMS Encapsulation Protocol, URL: http://www.wapforum.org

[57]   3GPP TS 31.102 "Characteristics of the USIM Application".

5.1   MMS User Agent

5.1.1   MMS User Agent operations

The MMS User Agent shall provide the following application layer functionalities:-

-     the retrieval of MMs (initiate MM delivery to the MMS User Agent).

The MMS User Agent may provide additional application layer functionalities such as:-

-     the MM composition

-     the MM submission

-     the MM presentation;

- the presentation of notifications to the user;

- the signing of an MM on an end-user to end-user basis;

- the decryption and encryption of an MM on an end-user to end-user basis;

- all aspects of storing MMs on the terminal;

- handling of MMS-related information on the USIM, if the USIM supports MMS;

- the handling of external devices;

- the user profile management.

This optional list of additional functionalities of the MMS User Agent is not exhaustive.

7   MMS Service Behaviour Description

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7.1.X   Handling of MMS-related information on the USIM

If the USIM according to [57] stores MMS related information , an MMS User Agent may be able to handle that MMS-related information on the USIM which comprises:

- MMS connectivity information, as defined in Annex F,

- MMS user preferences, as defined in Annex F, and

- MMS notifications.

MMS connectivity information, which is stored on the USIM, should be used by an MMS User Agent to connect to the network for the purpose of accessing the MMS Relay/Server. When conflicting MMS connectivity information is stored on both the USIM and outside the USIM, the MMS connectivity information stored on the USIM should be used by an MMS User Agent to connect to the network.

MMS user preferences information, which is stored on the USIM, may beused by an MMS User Agent for user assistance in preparation of terminal-originated MMs (e.g. default values for parameters that are often used).

MMS notifications, may be stored on the USIM together with an associated status by a recipient MMS User Agent.

- When an MMS User Agent has deleted a notification which was stored on the USIM, the associated status should be set to "Free space"

- When an MMS User Agent stores a notification on the USIM, the associated status should be set to "Used space"

- When a recipient MMS User Agent has not handled the notification which is stored on the USIM (e.g. the details of the notification were not shown to the user), the associated status should be set to "notification not read",

- When a recipient MMS User Agent has handled the notification which is stored on the USIM (e.g. the details of the notification have been shown to the user), the associated status should be set to "notification read",

- When a recipient MMS User Agent has not retrieved an MM based on the notification which is stored on the USIM, the associated status should be set to "MM not retrieved",

- When a recipient MMS User Agent has retrieved an MM based on the notification which is stored on the USIM, the notification should be deleted or the associated status may be set to "MM retrieved",

- When a recipient MMS User Agent has rejected an MM based on the notification which is stored on the USIM, the notification may be deleted or the associated status may be set to "MM rejected",

- When a recipient MMS User Agent has forwarded an MM based on the notification which is stored on the USIM, the notification may be deleted or the associated status should be set to "MM forwarded",

Upon an attempt to store a notification on a USIM, an MMS User Agent should ensure that the notification is not lost unless the USIM acknowledges the storage attempt to be successful.