3GPP TSG-T (Terminals) Meeting #26 ***TP-040221***
Athens, Greece
8 - 10 December 2004

3GPP TSG-T3 #33 ***T3-040851***
Sophia Antipolis, France
16-19 November 2004

Title: Reply LS on Enabling MMS transmission and reception to UICC
Response to: LS (T2-040365) on Enabling MMS transmission and reception to UICC from T2
Release: REL-6
Work Item:

Source: T3
To: T2, T
Cc:

Contact Person:
Name: Christophe DUBOIS (Axalto)
E-mail Address: cdubois@axalto.com

Attachments: T3-040850

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1. Overall Description:

T3 would like to thank T2 for their LS on enabling MMS transmission and reception to UICC.

T3 took into account the T2 suggested solution to use the Application Id mechanism.
Consequently, T3 defined in TS 31.111 an Application Id value in UICC and a toolkit mechanism to enable the MMS User Agent to transmit the MMS notification to the USIM.
However, the corresponding notification procedure for MM addressed to the USIM should be updated in TS 23.140.
T3 propose to find the attached CR to update 23.140.

T3 would also like T2 to confirm that T2 does not intend reference the UICC Application Id chosen by T3 in T2's specifications.

2. Actions:

To T2 group.

ACTION: **T3** asks T2 group

- To study the proposed CR and to consider its approval.
- To confirm whether or not T2 will incorporate the UICC Application Id in their specifications

3. Date of next T3 Meetings:

T3#34	8 - 11 Feb 2005	Barcelona, Spain
T3#35	26 - 29 Apr 2005	Cancun, Mexico

3GPP TSG-T3 #33 *T3-040850*

Sophia Antipolis, France, 16 ñ 19 November 2004

CR-Form-v7.1

CHANGE REQUEST

⌘ **23.140** **CR** ⌘ **rev** **-** ⌘ 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 [X] Radio Access Network [ ] Core Network [ ]

Title:	⌘	Definition of the notification procedure for MM adressed to the USIM
Source:	⌘	T3
Work item code:	⌘	TEI6
Date:	⌘	19/11/2004
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:

Ph2	*(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)*
Rel-7	*(Release 7)*

Reason for change:	⌘	3GPP-T3 has defined a mechanism to retrieve MMs on the USIM using Application Identification mechanism. MMS User Agent behaviour should be updated accordingly. Also according to TS 23.140, it is optional to include the Application Id field in the notification. In the case the Application Id is not present in the notification but only present in the MM itself (e.g. in order to reduce the size of the MMS Notification and make it fit into a single SMS), then upon reception of the MM, the MMS UA shall notify the USIM accordingly.
Summary of change:	⌘	Update of the procedure description whether the application Id is available in the MMS notification or only in the MM itself.
Consequences if not approved:	⌘	3GPP-T3 MMs retrieval mechanism still needs to be completed.

Clauses affected:	⌘	2, 7.1.14

Other specs affected:	⌘	Y	N		⌘
			X	Other core specifications	
			X	Test specifications	
			X	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] void

[13] void

[14] void

[15] void

[16] void

[17] void

[18] void

[19] void

[20] void

[21] void

[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 ñ 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] void

[39] void

[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; RFC 3481: "TCP over Second (2.5G) and Third (3G) Generation Wireless Networks"; URL: http://www.ietf.org/rfc/rfc3481.txt

[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: ì Hypertext Transfer Protocol, HTTP/1.1î , URL: http://www.ietf.org/rfc/rfc2616.txt.

[49] IETF; STD 13 (RFC 1034, 1035): "Domain Names -- concepts and facilities", "Domain names ñ 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] Open Mobile Alliance; OMA-WAP-ProvCont-v1_1-20021112-C, Provisioning Content Version 1.1, URL: http://www.openmobilealliance.org/

[56] Open Mobile Alliance; OMA-MMS-ENC-v1_2, Multimedia Messaging Service, Encapsulation Protocol, Version 1.2, URL: http://www.openmobilealliance.org

NOTE: Reference [56] is the REL-5 MM1 stage 3 specification. OMA is committed to develop a REL-6 version. Consequently, reference [56] is to be replaced by the appropriate document identifier once the REL-6 MM1 stage 3 specification is approved within OMA.

[57] IETF; RFC 1870: ì SMTP Service Extension for Message Size Declarationî , URL: http://www.ietf.org/rfc/rfc1870.txt

[58] IETF; RFC 1652: ì SMTP Service Extension for 8bit-MIME transportî , URL: http://www.ietf.org/rfc/rfc1652.txt

[59] void

[60] IETF, RFC 2915: ì The Naming Authority Pointer (NAPTR) DNS Resource Recordî , URL: http://www.ietf.org/rfc/rfc2915.txt

[61] IETF, RFC 2916: ì E.164 number and DNSî , URL: http://www.ietf.org/rfc/rfc2916.txt

[62] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[63] 3GPP TS 22.066: "Support of Mobile Number Portability (MNP); Service description. Stage 1".

[64] 3GPP TS 23.066: "Support of Mobile Number Portability (MNP); Technical realization. Stage 2".

[65] IETF; RFC 2617 "Access Authentication", URL:http://www.ietf.org/rfc/rfc2617.txt

[66] IETF; RFC 2246 "TLS protocol, version 1.0" , URL:http://www.ietf.org/rfc/rfc2246.txt

[67] 3GPP TS 31.102 "Characteristics of the USIM Application".

[68] W3C Note 08 May 2000 "Simple Object Access Protocol (SOAP) 1.1", URL: http://www.w3.org/TR/SOAP

[69] W3C Note 11 December 2000 "SOAP Messages with Attachments", URL: http://www.w3.org/TR/SOAP-attachments

[70] IETF; RFC 2376: "XML Media Type", URL: http://www.ietf.org/rfc/rfc2376.txt.

[71] IETF; RFC 2387: "The MIME Multipart/Related Content Type", URL: http://www.ietf.org/rfc/rfc2387.txt.

[72] IETF; RFC 2111: "Content-ID and Message-ID Uniform Resource Locators", URL: http://www.ietf.org/rfc/rfc2111.txt.

[73] IETF; RFC 2557: "MIME Encapsulation of Aggregate Documents, such as HTML (MHTML)", URL: http://www.ietf.org/rfc/rfc2557.txt.

[74] 3GPP TS 26.140: "Multimedia Messaging Service; Media formats and codecs".

[75] 3GPP TS 51.011 (Rel-4): "Specification of the Subscriber Identity Module ñ Mobile Equipment (SIM-ME) interface".

[76] ì Digital Rights Managementî , Open Mobile AllianceTM, OMA-Download-DRM-v1_0, http://www.openmobilealliance.org/

[77] ì DRM Rights Expression Languageî , Open Mobile AllianceTM, OMA-Download-DRMREL-v1_0, http://www.openmobilealliance.org/

[78] ì DRM Content Formatî , Open Mobile AllianceTM, OMA-Download-DRMCF-v1_0, http://www.openmobilealliance.org/

[79] ITU-T Recommendation E.212: "The international identification plan for mobile terminals and mobile users".

[80] 3GPP TS 32.240: "Charging Management; Charging Architecture and Principles ".

[81] 3GPP TS 32.270: "Charging Management; Multimedia Messaging Service (MMS) charging".

[82] Open Mobile Alliance; OMA-ERELD-MMS-v1_2-20030923-C, Enabler Release Definition for MMS Version 1.2, URL: http://www.openmobilealliance.org/

NOTE: Reference [82] is the REL-5 MM1 stage 3 specification. OMA is committed to develop a REL-6 version. Consequently, reference [82] is to be replaced by the appropriate document identifier once the REL-6 MM1 stage 3 specification is approved within OMA.

[83] 3GPP TS 23.078: "Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4 - Stage 2"

[84] IETF RFC 3588 "Diameter Base Protocol", URL: http://www.ietf.org/rfc/rfc3588.txt.

[85] Open Mobile Alliance; OMA-MMS-CONF-v1_2-20040219-C, MMS Conformance Document 1.2, URL: http://www.openmobilealliance.org/

NOTE: Reference [85] is the REL-5 MM1 stage 3 specification. OMA is committed to develop a REL-6 version. Consequently, reference [85] is to be replaced by the appropriate document identifier once the REL-6 MM1 stage 3 specification is approved within OMA.

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

7.1.14 Handling of MMS-related information on the (U)SIM

NOTE : This section does not apply when the MMS-UA is implemented within equipment which does not support a (U)SIM.

An MMS User Agent shall use the MMS related information stored in the (U)SIM [67] or SIM [75], if present, according to the definitions in this subclause 7.1.14 - unless otherwise specified by the user. This information comprises:

- MMS connectivity information, as defined in Annex F. This information is used to connect to the network for the purpose of accessing the MMS Relay/Server,
- MMS user preferences, as defined in Annex F, and
- MMS notifications.

MMS connectivity information, on the (U)SIM includes a number of sets of MMS connectivity parameters. Some of these sets of MMS connectivity parameters are preset by the issuer of the (U)SIM with the first set being the default. Such default preset MMS connectivity parameter set shall be selected unless otherwise specified by the user.

The MMS connectivity information on the (U)SIM includes preferences for the selection of Interface to Core Network and Bearer parameters (cf. Annex F) as defined in [67] or [75]. If these are stored on the (U)SIM the MMS-capable UE shall automatically select the Interface to Core Network and Bearer parameters based on their order of precedence defined on the (U)SIM unless otherwise specified by the user.

MMS user preferences information, which is stored on the (U)SIM, shall be used 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, should be stored on the (U)SIM 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 (U)SIM, the associated status shall be set to ì Free spaceî
- When an MMS User Agent stores a notification on the (U)SIM, the associated status shall be set to ì Used spaceî
- When a recipient MMS User Agent has not handled the notification which is stored on the (U)SIM (e.g. the details of the notification were not shown to the user), the associated status shall be set to ì notification not readî ,
- When a recipient MMS User Agent has handled the notification which is stored on the (U)SIM (e.g. the details of the notification have been shown to the user), the associated status shall be set to ì notification readî ,
- When a recipient MMS User Agent has not retrieved an MM based on the notification which is stored on the (U)SIM, the associated status shall be set to ì MM not retrievedî ñ unless the recipient MMS User Agent has rejected or forwarded the MM,
- When a recipient MMS User Agent has retrieved an MM based on the notification which is stored on the (U)SIM, the notification shall be either deleted or the associated status shall be set to ì MM retrievedî ,
- When a recipient MMS User Agent has rejected an MM based on the notification which is stored on the (U)SIM, the notification shall either be deleted or the associated status shall be set to ì MM rejectedî ,
- When a recipient MMS User Agent has forwarded an MM based on the notification which is stored on the (U)SIM, the notification shall either be deleted or the associated status shall be set to ì MM forwardedî ,

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

MMS notifications addressed to the USIM:

In case of an MM addressed to the USIM, the notification containing the Application Id field identifying the USIM (see value in 3GPP TS 31.111 [xx]) shall be transmitted to the USIM using the mechanism defined in 3GPP TS 31.111 [xx].

The Application Id field that identitfies an MM intended to a particular entity might not be present in the MMS Notification. Although the exact destination of the MM is not identified (e.g. user, UICC, ME application, Ö), the MMS User Agent can automatically or after user confirmation ask for the retrieval of the MM. Upon MM retrieval, it is

then up to the MMS User Agent to recognize the destination entity as indicated in the MM itself. In case the MM is addressed to the USIM, the MMS User Agent shall then transmit the notification including the Application Id field to the USIM using the mechanism defined in 3GPP TS 31.111 [xx].