Source: SA1

Title: **CRs to 22.140 and 22.038 on MM storage in the USIM (rel-6)**

Document for: **Approval**

Agenda Item: **7.1.3**

Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Current	Vers New	SA1 Doc
SP-21	SP-030461	22.038	014		Rel-6	B	MMS support by the USIM Application Toolkit	6.0.0	6.1.0	S1-030887
SP-21	SP-030461	22.140	036	-	Rel-6	B	MM storage in the USIM	6.2.0	6.3.0	S1-030950

CR-Form-v7

CHANGE REQUEST

| ⌘ | **22.038** CR **014** | ⌘**rev** | **-** | ⌘ | Current version: | **6.0.0** | ⌘ |

*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:	⌘	MMS support by the USIM Application Toolkit
Source:	⌘	SchlumbergerSema, TIM

Work item code:⌘	MMS-R6	*Date:* ⌘	08/07/2003

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:	⌘	Some operators are very aware they could benefit from using USIM storage capacity to store MM and/or elements of it, and that this storage could be used as a source to send MM to the network. Here are some uses cases where operators and end users a like could benefit from accessing the information stored on the USIM in order to compose MMs: - Build an MM using blocks stored on the card (images, text…) - "Ready to send" cards. These are preformatted messages easy and fast to send, from a user library or an operator library (written during card personalization or downloaded). The user just picks in a menu a pre-formatted MM, which is directly sent to the given destination. - Template messages to fill and send. Different templates could be provided for different occasions (e.g. Birthday cards), with only a text to add. Special advertising from stored operator's template could be added automatically and sent with each MM. Operators can have them installed during card personalization or use OTA download. There is already a directory Df$_{GRAPHICS}$ existing on the card, which could also be used to incorporate images in MMs.
Summary of change:⌘		The requirement that allows the card to send a MM on the network has been modified so the MM can be provided by the UE (i.e. the ME or the UICC)
Consequences if not approved:	⌘	
Clauses affected:	⌘	6.2

		Y	N			
Other specs	⌘	X		Other core specifications	⌘	TS 31.111, TS 31.102
Affected:			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

6.2   USAT proactive capability

The USAT proactive capability is a mechanism whereby the UICC can request specific actions to be taken by the ME by issuing "proactive commands" thus establishing and maintaining an interactive dialogue with the user and/or communicating with the network or an external device.

The ME shall inform the UICC of the success or otherwise of each command issued to it by the UICC, and also indicate the command details and if applicable add more specific information.

The proactive command set allows the USAT to instruct the ME to:

1   display text supplied by the USAT on the ME's display, with an indication of priority (normal or high), and a defined action (user activity or timeout) to terminate the text display.

2   display a text string and obtain the response in the form of a single user keystroke or a string of keys entered by the user and pass the response to the UICC. If the response is designated as private by the UICC the ME shall not display the users response on the screen.

3   set up a voice call to an address with a specific priority as indicated by the UICC with all parameters indicated by the UICC.

4   set up a data call to an address with specific bearer capability and priority, all parameters are indicated by the UICC.

5   set up and manage a data channel (using a CSD, GPRS, SMS or USSD bearer) between the SIM and an address using information provided by the UICC.

6   send data through a previously set up data channel. The UICC informs the ME if the data is to be sent immediately.

7   retrieve data from the ME that has previously been received via a data channel set up using (5) above. The UICCinforms the ME as to how much data it expects to retrieve.

8   send a short message to the network. The short message text is supplied by the UICC to the ME in either packed or unpacked SMS 7-bit alphabet, or UCS2 alphabet.

9   send a SS control, SS MMI string or USSD string, indicating which alphabet is used where applicable.

10 play a tone in the appropriate audio device.

11 negotiate, within reasonable tolerances, a periodic "polling" of the USIM Toolkit.

12 refresh the image (if applicable) of the USIM data contained in the ME memory, either entirely, or partially, or instruct the ME to re-initialize completely.

13 set up an event list in the ME such that the UICC is informed by the ME when a indicated event has occurred.

14 set up an additional menu in the ME, by issuing the ME with a menu list, and allow indication back to the UICC of the user selected menu item.

15 provide requested information from the ME to the UICC, for example the MCC, MNC and IMEI.

16 communicate bi-directionally with an auxiliary device, e.g. a second card reader.

17 set up, refresh and interrogate several timers, and inform the UICC when these expire, within reasonable tolerances.

18 display additional MMI information such as display information or tones with commands that employ network resources, with an indication to the ME as to the required level of ME generated MMI as a result of the interaction with the network.

19 allow the ME to display help information with the commands, by providing the associated text, related to the user action (e.g. menu selection).

20 Provide indication from the ME to the USAT when a key on the MMI has been pressed in a "menu" (response to prompt) or and event (independent action) methods, with key identification. This indication shall be done in a secure manner.

21 send a MM to the network, using a data channel as (5) above. The MM content is supplied by the ME or the UICC.

CR-Form-v7

CHANGE REQUEST

| ⌘ | **22.140** CR **036** | ⌘**rev** | **-** | ⌘ Current version: | **6.2.0** | ⌘ |

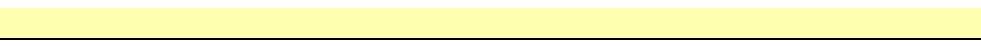*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ **X**   ME **X** Radio Access Network ☐   Core Network ☐

Title: ⌘	MM storage in the USIM	
Source: ⌘	SchlumbergerSema, TIM	
Work item code:⌘	MMS-R6	**Date:** ⌘ 08/07/2003
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: ⌘	Some operators are very aware they could benefit from using USIM storage capacity to store MM and/or elements of it. Here are some uses cases where operators and end users a like could benefit from accessing the information stored on the USIM in order to compose MMs: - Build an MM using elements stored on the card (images, text…) - "Ready to send" cards. These are preformatted messages easy and fast to send, from a user library or an operator library (written during card personalization or downloaded). The user just picks in a menu a pre-formatted MM, which is directly sent to the given destination. - Template messages to fill and send. Different templates could be provided for different occasions (e.g. Birthday cards), with only a text to add. Special advertising from stored operator's template could be added automatically and sent with each MM. Operators can have them installed during card personalization or use OTA download.
Summary of change:⌘	Introduce the possibility for the operator and the end user to store and use multimedia messages and/or elements of them on the USIM.
Consequences if ⌘ **not approved:**	

Clauses affected: ⌘	5.1 – 5.2

	Y	**N**		
Other specs ⌘	**X**		Other core specifications ⌘	TS 31.102, TS 31.111
Affected:		**X**	Test specifications	
		X	O&M Specifications	

Other comments: ⌘

5.1 Multimedia message management

[…]

- **Storage of Multi-Media Messages**

   The MMS shall be able to support a request for multimedia messages or message elements to be stored until delivered to the recipient's terminal, until they expire, or until they are deleted by the user (unless configured differently). The MMS shall be able to support a request to store and manage all MMs in a network based repository rather than on the mobile terminal.

   An ME using a USIM [7], when the USIM supports MMs storage, shall be able to store and retrieve MMs or elements of MMs in the USIM.

NOTE: There is no requirement for the MMS to be responsible for the processing/presentation of the MM message, after it has been delivered to the terminal.

5.2 Multimedia message delivery and submission

- **Submission mechanism**

   The MMS shall support multimedia messages or messages elements to be submitted from the sender's ~~terminal~~ME as well as from the sender's UICC.

- **Push Mechanism**

   The MMS shall be able to support a request for multimedia messages or messages elements to be automatically delivered to the recipient's ~~terminal~~ME as well as ~~from~~ to the recipient's UICC.

- **Pull Mechanism**

   The MMS shall be able to support a request for multimedia messages or messages elements to be delivered to the recipient's ~~terminal~~ ME, as well as ~~from~~to the recipient's UICC, on request by the recipient.

Note: Push and pull delivery mechanisms could be identical; the criteria which decide on the type of mechanism (push / pull) are either described in the User Services Profile or out of the scope of this specification.