Source: **SA1**

Title: **CRs to 22.038 on Interaction between ME and USAT applications and MMS as an additional data exchange capability for USAT (Rel-6)**

Document for: **Approval**

Agenda Item: **7.1.3**

Meet	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Vers	New Vers	Doc. SA1
SP-22	SP-030696	22.038	015	-	Rel-6	B	Interaction between ME and USAT applications	6.1.0	6.2.0	S1-031220

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Bangkok, Thailand, 27-31 October 2003

Tdoc ⌘S1-031220

CR-Form-v7

CHANGE REQUEST

⌘ **22.038** **CR** **015** ⌘**rev** **-** ⌘ Current version: **6.1.0** ⌘

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

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

Title:	⌘	Interaction between ME and USAT applications
Source:	⌘	SA1 (Schlumberger,)
Work item code:	⌘	USAT1
Date:	⌘	28/10/2003
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: ⌘

A USAT application currently has the possibility to launch a browser on the handset. Since a broad range of applications can now be available on the handset, it would be useful to be able to start other kinds of ME based applications.
This would enable the development of cooperative applications partly based on the ME interacting with a USIM based part, opening up a wide range of possibilities. Such a feature would be very valuable to network operators as it could be used in many different scenarios:

Some use cases are mentioned as an example of those scenarios:

A) network management optimization: USAT launches an application in the mobile that reports to the USIM channels and application metrics for network performance monitoring.

B) Proactive syncronization: USAT application, triggered by suitable events, may command the start of a data synchronization process (e.g. for subscriber related parameters or TE configuration data) that may involve data entities in the UE and in a synchronization server.

C) Streaming: USAT may launch a streaming client in the terminal to reproduce an adressed audio/video resource.

It is proposed that these requirements apply to Rel-6 since they enable operator valuable use cases that profits from the possible interaction of USAT applications and Rel-6 3GPP services.

Summary of change: ⌘ Broaden the USAT requirement to cover other kinds of mobile-based application

Consequences if not approved:	⌘	

Clauses affected:	⌘	6.2			
Other specs affected:	⌘	**Y** / **N**		⌘	
		X /	Other core specifications		3GPP TS 31.111
		/ **X**	Test specifications		
		/ **X**	O&M Specifications		
Other comments:	⌘				

6 SAT/USAT/ME interface requirements

[…]

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.

22 start an ME-based application that the USAT application knows about. For example USAT applications have the ability to launch a micro-browser if provided by the ME as already described in this document (see Interactions with MExE), or may ask the ME to initiate a data synchronisation process.

Note: addressing of ME applications and other relevant parameters if needed, shall be properly defined by the corresponding USAT specifications.

Unless otherwise stated the following shall apply:

- The format of text to be displayed is designated by the UICC and is either SMS default alphabet (packed or unpacked) or UCS2 alphabet.

- The format of the response from the ME is designated by the UICC and is either keypad digit (0-9, *, #, +), SMS default alphabet characters or UCS2 alphabet characters.