Technical Specification Group Services and System Aspects
Meeting #10, Bangkok, Thailand, 11-14 December 2000

TSGS#9(00) 0541

Source: **TSG SA1**

Title: **CRs to 22.038 on LS on USAT local link mechanism and impact on TS 22.038 (R4/R5)**

Document for: **Approval**

Agenda Item: **7.1.3**

Spec	CR	Rev	Phase	Cat	Subject	Vers	New Vers	SA1 Doc. No.
22.038	006		R4	B	LS on USAT local link mechanism and impact on TS 22.038	4.0.0	4.1.0	S1-000861
22.038	007		R5	B	LS on USAT local link mechanism and impact on TS 22.038	5.0.0	5.1.0	S1-000862

3GPP TSG-SA WG1 Meeting#10 **S1-000861**
Orlando, Fl, USA, 13-17 November 2000

CR-Form-v3

CHANGE REQUEST

22.038	CR	006	rev	-	Current version:	4.0.0

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

Proposed change affects: ✍ (U)SIM [X] ME/UE [X] Radio Access Network [ ] Core Network [ ]

Title: ✍	Introduction of USAT Local Link mechanism to USAT Stage 1 22.038	
Source: ✍	SA1	
Work item code: ✍	USAT Local Link (USAT1-LocLnk)	***Date:*** ✍ 17 November 2000
Category: ✍	**B**	***Release:*** ✍ REL-4

Use one of the following categories:
F *(essential 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: ✍	Introduction of USAT Local Link mechanism to USAT Stage 1 22.038
Summary of change: ✍	Additionof text proposed by T3 to introduce USAT Local Link communication mechanism.
Consequences if not approved: ✍	

Clauses affected: ✍	6.2			
Other specs affected: ✍	[X]	Other core specifications	✍	31.111
	[ ]	Test specifications		
	[ ]	O&M Specifications		
Other comments: ✍				

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at:
http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ✍ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 TSG meetings.

3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6 SAT/USAT/ME interface requirements

6.1 SAT/USAT APIs

The SAT/USAT-API is defined in GSM 02.19 [6].
The SAT/USAT API for the GSM USIM/SIM card shall allow application programmers easy access to the functions and data described in GSM 11.11 [4] and GSM 11.14 [5], such that USIM/SIM based services can be developed and loaded onto USIM/SIMs (independent of the USIM/SIM manufacturer), quickly and, if necessary, remotely, after the card has been issued. The SAT/USAT API shall support pro-active functions as described in GSM 11.14 [5] and transport functions as described in GSM 11.11 [4].

6.2 SAT/USAT proactive capability

The SAT/USAT proactive capability is a mechanism whereby the USIM/SIM 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 USIM/SIM of the success or otherwise of each command issued to it by the USIM/SIM, and also indicate the command details and if applicable add more specific information.
The proactive command set allows the SAT/USAT to instruct the ME to:

1 display text supplied by the USAT/SAT 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 USIM/SIM. If the response is designated as private by the USIM/SIM 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 USIM/SIM with all parameters indicated by the SIM.

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

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 SIM.

6 send data through a previously set up data channel. The SIM 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 SIM informs 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 USIM/SIM 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/SIM Toolkit.

12 refresh the image (if applicable) of the USIM/SIM 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 USIM/SIM is informed by the ME when a USIM/SIM 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 USIM/SIM of the user selected menu item.

15 provide requested information from the ME to the USIM/SIM, 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 USIM/SIM 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).

Unless otherwise stated the following shall apply:

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

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

6.3 ME Capability for support of bearer independent protocol

The ME supporting bearer independent protocol shall provide to the SIM a common interface for any type of data bearer. This interface is in addition to dedicated commands (eg SMS, SS and USSD) for SAT application to exchange data with the network.
The communication is initiated by the SIM. The ME negotiates with the SIM and the network to establish the optimum channel considering the SIM request, the network and ME capabilities.
The ME is responsible for maintaining and restoring the link should there be a link error.

CR-Form-v3

CHANGE REQUEST

✍	22.038	CR	007	✍	rev	-	✍	Current version:	5.0.0	✍

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Source: ✍	SA1	
Work item code: ✍	USAT Local Link (USAT1-LocLnk)	***Date:*** ✍ 17 November 2000
Category: ✍	**B**	***Release:*** ✍ REL-5

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