3GPP TSG-SA1 Meeting #15
Saalfelden, Austria, 11ᵗʰ-15ᵗʰ February

Tdoc S1-020613

CR-Form-v5

CHANGE REQUEST

| ⌘ | **22.101** CR **CRNum** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.4.0** | ⌘ |

*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 **X**

Title: ⌘	USIM support in GERAN only terminals	
Source: ⌘	Nokia	
Work item code: ⌘	UICC1	*Date:* ⌘ 14.2.2002
Category: ⌘	**C**	*Release:* ⌘ REL-5

Use <u>one</u> 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 <u>one</u> 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: ⌘	To clarify the functionality of GERAN only terminals with USIM in Release 5 and later.
Summary of change: ⌘	A requirement has been added: In Release 5 and later GERAN only terminals shall support USIM.
Consequences if not approved: ⌘	There will not be any new SIM specific service requirements and, accordingly, all new USIM specific modifications needs to be copied & maintained in the SIM specifications bringing additional burden of editorial changes.

Clauses affected: ⌘	Chapter 13.	
Other specs Affected: ⌘	☐ Other core specifications ⌘ ☐ 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://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 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.

13 UICC, USIM and Terminal

This clause defines the functional characteristics and requirements of the User Service Identity Module (USIM). The USIM is an application residing on a UICC.

13.1 The USIM and User Profiles

13.1.1 The ~~SIM/~~USIM

Every ~~SIM/~~USIM shall have a unique identity and shall be associated with one and only one home environment.

It shall be possible for a home environment to uniquely identify a user by the ~~SIM/~~USIM.

The ~~SIM/~~USIM shall be used to provide security features.

For access to services, provided by PS or CS CN domains, a valid ~~SIM/~~USIM shall be required.

The ~~SIM/~~USIM shall be able to support SIM Application Toolkit as specified in 3GPP TS 22.038 [3].

The ~~SIM/~~USIM shall reside on a UICC, 3GPP specifications shall adopt both of the GSM SIM card physical formats. Other formats may also be supported. ~~SIM/~~USIM specific information shall be protected against unauthorised access or alteration.

It shall be possible to update ~~SIM/~~USIM specific information via the air interface, in a secure manner.

13.1.2 User Profiles

It shall be possible for a user to be associated with one or a number of user profiles, which the user can select and activate on a per call basis. The user profile contains information which may be used to personalise services for the user.

It shall be possible for one or more user profiles associated with the same user to be active simultaneously so that the user may make or receive calls associated with different profiles simultaneously. Activation of profiles shall be done in a secure manner, for example with the use of a PIN.

For terminating calls the correct profile shall be indicated by the user address used (e.g. MSISDN), each profile will have at least one unique user address associated with it. For originating calls the user shall be able to choose from the available profiles, the appropriate one for the call. A profile identity will need to be associated with the call for accounting and billing purposes. User profile identities need not be standardised but a standardised means is required for indicating that a particular profile is being used.

Simultaneous use of the same user profile on multiple terminals for the same type of service shall not be allowed.

User profiles associated with different home environments shall not share the same user address.

13.1.3 UICC usage in GERAN only~~2G~~ Terminals

~~It shall be possible to use the UICC in 2G terminals to provide access to GSM networks. In order to achieve that option, it shall be possible to store a module containing 2G access functionalities on the UICC, which shall be accessed via the standard GSM SIM-terminal interface.~~

In Release 5 and later, terminals supporting only GERAN shall support USIM.

13.1.4 Multiple USIMs per UICC

The standard shall support more than one USIM per UICC even when those USIMs are associated with different home environments. Only one of the USIMs or the SIM shall be active at a given time. While the UE is in idle mode, it shall be possible for the user to select/reselect one USIM application amongst those available on the UICC. At switch on, the Last Active USIM shall be automatically selected. The Last Active USIM shall be stored on the UICC. By default if there is no Last Active USIM defined in the UICC, the user shall be able to select the active USIM amongst those available on the UICC.

The standard must not prevent the coexistence of USIM applications, each associated with different home environments on the same UICC, so long as the security problems which arise from such a coexistence are solved.

13.2 The UICC

Access to services via GSM and 3G networks with a single UICC shall be possible.

13.2.1 The UICC and Applications other than the USIM

It shall be possible for the UICC to host other applications in addition to the USIM, see figure 3. Service providers, subscribers or users may need to establish additional data or processes on the UICC. Each application on an UICC shall reside in its own domain (physical or logical). It shall be possible to manage each application on the card separately. The security and operation of an application in any domain shall not be compromised by an application running in a different domain. Applications may need to use their own security mechanisms which are separate to those specified by 3GPP e.g. electronic commerce applications.

Examples of other UICC applications are: USIM, Phase 2+ SIM, off-line user applications like UPT, electronic banking, credit service, etc.

Applications should be able to share some information such as a common address book.

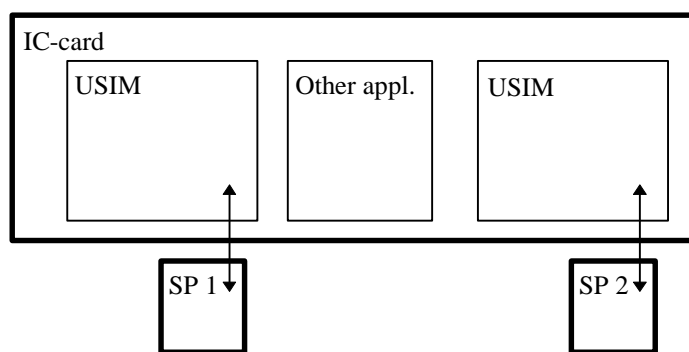It shall be possible to address applications, which reside on the UICC, via the air interface.

Figure 3 Example of a Multifunction UICC

13.3 Terminals and Multiple UICCs

A single terminal may support the use of multiple UICC (e.g with applications like USIM, SIM and/or banking, credit card,...). Only one UICC shall be active at a time to access a PLMN. In case the active UICC contains more than one USIM or SIM, the requirements of 11.1.4 shall apply.

If the UICC with the active USIM or SIM is removed from the mobile terminal during a call (except for emergency calls), the call shall be terminated immediately.