Source:	**SA1**
Title:	**CR to 22.101 on SIM access to IMS (Rel-5)**
Document for:	**Approval**
Agenda Item:	**7.1.3**

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-030017	22.101	118	-	Rel-5	F	CR to 22.101 on SIM access to IMS (Rel-5)	5.8.0	5.9.0	S1-030282

CR-Form-v7

CHANGE REQUEST

⌘ **22.101** CR **118** ⌘**rev** **-** ⌘ Current version: **5.8.0** ⌘

*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 **X**

Title: ⌘	SIM access to IMS
Source: ⌘	SA1 (T-Mobile)
Work item code: ⌘	IMS ***Date:*** ⌘ 22/01/2003

Category: ⌘ **F**	***Release:*** ⌘ REL-5

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: ⌘	Requirements on access to the IMS services via existing R99/R4 USIMs were agreed by SA1 to enable a smoother customer transition towards new IMS services. However it seems more and more realistic that at the launch of IMS services, a number of operators will still be supporting 2G SIMs. Moreover, operators should be given flexibility in planning SIMs replacements and not be forced by incoming SIM-uncompatible new IMS services. Requiring support of GSM SIM for IMS changes the way security for IMS is performed when accessing IMS via SIM but other methods based on GSM SIM algorithms (e.g. EAP SIM) could be applied to IMS authentication to enable access via legacy SIMs as well, although they don't guarantee mutual authentication like IMS AKA.
Summary of change: ⌘	A requirement is added to state that UE can access IMS services also with unmodified pre-Release 5 GSM SIMs. It is also stated that ISIM is preferred application for IMS authentication.
Consequences if not approved: ⌘	IMS Services could not be provided to terminals equipped with GSM SIMs.

Clauses affected: ⌘	2.1, 7.2.2; 13.1.1; 13.1.5

	Y	N		
Other specs affected: ⌘	X		Other core specifications ⌘	33.203, 23.228
		X	Test specifications	
		X	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/specs/CR.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.

************FIRST MODIFIED SECTION***************

2.1   Normative references

[1]   3GPP TS 22.105 "Services and Service Capabilities".

[2]   3GPP TS 22.121: "Virtual Home Environment (VHE), Stage 1".

[3]   3GPP TS 22.038: "SIM application toolkit, stage 1".

[4]   3GPP TS 22.001: " Principles of Circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".

[5]   3GPP TS 22.004: General on supplementary services".

[6]   3GPP TS 22.030: "Man-Machine Interface (MMI) of the User Equipment (UE)".

[7]   3GPP TS 22.066: "Support of Mobile Number Portability (MNP); Service description; Stage 1".

[8]   3GPP TS 22.079: " Support of Optimal Routing; Stage 1".

[9]   3GPP TS 22.129: "Handover Requirements between UTRAN and GERAN or other Radio Systems".

[10]   3GPP TS 33.102: "Security Architecture".

[11]   3GPP TS 22.011: "Service Accessibility".

[12]   3GPP TS 22.016: "International mobile Station Equipment Identities (IMEI)".

[13]   3GPP TS 24.008: " Mobile Radio Interface Layer 3 Specification".

[14]   3GPP TS 22.003: "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".

[15]   3GPP TS 21.133: "Security Threats and Requirements".

[16]   3GPP TS 33.120: "Security Principles".

[17]   3GPP TS 22.042: "Network Identity and Time Zone, Service Description, Stage 1".

[18]   3GPP TS 42.009: " Security Aspects".

[19]   3GPP TS 31.102: "USIM Application Characteristics".

[20]   3GPP TS 23.221 "Architectural Requirements".

[21]   3GPP TS 22.002: "Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)".

[22]   3GPP TS 22.060: "General Packet Radio Service (GPRS)".

[23]   3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[24]   3GPP TR 23.972: "Circuit Switched Multimedia Telephony".

[25]   3GPP TS 22.140: "Multimedia messaging service; Stage 1".

[26]   3GPP TS 22.226: "Global Text Telephony, Stage 1".

[27]   3GPP TS 22.228: "IP multimedia (IM) CN subsystem, stage 1".

[28]   RFC 3261: "SIP: Session Initiation Protocol".

[29]   3GPP TR 21.905: " Vocabulary for 3GPP Specifications".

[30]   3GPP TS 26.233: "Packet Switched Streaming Service (PSS) ; General Description".

[31]   3GPP TS 26.234: "Packet Switched Streaming Service (PSS) ; Protocols and Codecs".

[32]   3GPP TS 33.203: "Access security for IP-Based services"

*************Next MODIFIED SECTION***************

7.2.2   IP multimedia (IM) sessions

IP multimedia services are not the evolution of the circuit switched services but represent a new category of services, mobile terminals, services capabilities, and user expectations. Any new multimedia service, which may have a similar name or functionality to a comparable standardised service, does not necessarily have to have the same look and feel from the user's perspective of the standardised service. Voice communications (IP telephony) is one example of real-time service that would be provided as an IP multimedia application.

The following basic requirements are be supported for IP multimedia [27]:

- IP multimedia session control shall be based on SIP [28].

- MSISDN and SIP URL numbering and addressing schemes shall be supported.

- IP multimedia applications shall as a principle, not be standardised, allowing service provider specific variations.

- Access to the IMS services shall be possible using 3GPP release 99 and later releases UICCs (ISIM, USIM and SIM applications) and SIMs. See also TS 33.203 [32].

*************NEXT MODIFIED SECTION***************

13.1   The USIM/ISIM and User Profiles

13.1.1   The USIM

Every 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 USIM.

The USIM shall be used to provide security features.

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

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

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

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

~~Access to the IMS services shall be possible using 3GPP release 99 and release 4 UICCs.~~

Annex A describes a number of features that may optionally be supported by the UE and thus USIM.

*************LAST MODIFIED SECTION***************

13.1.5   The ISIM

Access to the IMS services shall be possible using an ISIM application. See also section 7.2.2

When the ISIM is available on the UICC the UE shall use the ISIM for IMS access.

The ISIM shall be sufficient for providing the necessecary security features for the IMS and IMS only.

The ISIM shall reside on a UICC. ISIM specific information shall be protected against unauthorised access or alteration.

It shall be possible to update ISIM specific information via the air interface, in a secure manner.

In Rel5 the ISIM application shall require the presence of a USIM application on the same UICC.

*************END OF MODIFICATIONS ****************