Source: **SA1**

Title: **Release 6 CRs to 22.101 on various subjects**

Document for: **Approval**

Agenda Item: **7.1.3**

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020557	22.101	097	1	Rel-6	B	Release 6 ISIM requirement	6.0.0	6.1.0	S1-021811
SP-020557	22.101	103		Rel-6	F	Clarification of SIM support in Rel-6	6.0.0	6.1.0	S1-021849
SP-020557	22.101	104		Rel-6	B	CR to 22.101 Removal of implementation details for directory number in SMS and other services	6.0.0	6.1.0	S1-021755
SP-020557	22.101	105		Rel-6	F	CR to 22.101 Rel-6 Clean up of IMS Rel 6 to re-instate requirements	6.0.0	6.1.0	S1-021775
SP-020557	22.101	106		Rel-6	B	Rel 6 22.101 CR on Independent and linked subscriptions	6.0.0	6.1.0	S1-021838

CR-Form-v5.1

CHANGE REQUEST

| ⌘ | **22.101 CR** | **097** | ⌘ **rev** | **1** | ⌘ | 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: ⌘ (U)SIM **X** ME/UE ☐ Radio Access Network ☐ Core Network ☐

Title:	⌘	Release 6 ISIM requirement
Source:	⌘	SA1
Work item code:	⌘ **IMS**	***Date:*** ⌘ 15/08/02
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)

Reason for change:	⌘	The Release 5 requirement states: "In Rel5 the ISIM application shall require the presence of a USIM application on the same UICC". For Release 6 it is proposed to remove the restriction of having an ISIM in a UICC that does not contain a USIM.
Summary of change:	⌘	Remove the restriction of having an ISIM in a UICC that does not contain a USIM.
Consequences if not approved:	⌘	

Clauses affected:	⌘	13.1.5

Other specs affected:	⌘	☐ Other core specifications	⌘
		☐ Test specifications	
		☐ O&M Specifications	

Other comments:	⌘	

13.1.5 The ISIM

Access to the IMS services shall be possible using an ISIM application.

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.~~

CR-Form-v7

CHANGE REQUEST

⌘	**22.101** CR	**103**	⌘**rev**	**-**	⌘	Current version:	**6.0.0**	⌘

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

Title: ⌘	Clarification of SIM support in Rel-6	
Source: ⌘	SA1 (Nokia)	
Work item code:⌘	TEI	***Date:*** ⌘ 15/08/2002
Category: ⌘	**F**	***Release:*** ⌘ Rel-6

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 <u>TR 21.900</u>.

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)
Rel-6 (Release 6)

Reason for change: ⌘	To clarify the support of SIMs from Release 4 and earlier within release 6.
Summary of change:⌘	Requirements clarified in 13.1.1
Consequences if ***not approved:*** ⌘	

Clauses affected: ⌘	13.1.1

	Y	N		
Other specs ***affected:*** ⌘		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	

13 UICC, USIM and Terminal

This clause defines the functional characteristics and requirements of the User Service Identity Module (USIM) and ISIM (IM Services Identity Module). The USIM/ISIM are applications residing on a UICC.

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. Optionally, SIM according to GSM phase 2, GSM phase 2+, 3GPP release 99, 3GPP release 4 specifications may be supported.

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.

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 Terminals

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

CR-Form-v7

CHANGE REQUEST

| | ⌘ | **22.101 CR** | **104** | ⌘**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⌘ ☐ ME **X** Radio Access Network ☐ Core Network ☐

Title:	⌘	Removal of implementation details for directory number in SMS and other services
Source:	⌘	SA1 (mmO2)
Work item code:⌘	TEI6	***Date:*** ⌘ 29/07/2002

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:	⌘	Version 6.0.0 of 22.101 contains implementation detail which should not be in a stage 1 specification. Therefore it is better to have the implementation detail in T2 specifications. Also the feature should apply to MMS
Summary of change:⌘		Delete implementation detail for directory number in SMS and add MMS as a possible transport mechanism for directory number.
Consequences if not approved:	⌘	Implementation detail left in stage 1 leading to possible misalignment with Stage 2/3. Lack of directory number feature in MMS.

Clauses affected:	⌘			
		Y	**N**	
Other specs	⌘	**X**		Other core specifications ⌘ Linked CR to 23.040 including implementation detail removed from 22.101
affected:				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/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.

A.22   Selection of directory number in messages

The Short Message Service (SMS)(Point to Point MT or MO, or Cell Broadcast Service (CBS)), Multimedia Message Service (MMS), Network Initiated USSD or Network Response to Mobile Originated USSD message strings may be used to convey a Directory Number whichNumber, which the user may wish to call. This can be indicated by enclosing the directory number in a pair of inverted commas (" ").

If the displayed message contains these characters enclosing a directory number, a call can be set up by user action. Normal (unspecified) or International format (using + symbol) may be used.

The message may contain more than one directory number, in which case it is for the user to select the one required.

CR-Form-v7

CHANGE REQUEST

⌘	**22.101** CR	**105**	⌘**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⌘ ☐ ME ☐ Radio Access Network ☐ Core Network **X**

Title: ⌘	Clean up of IMS Rel 6 to re-instate requirements	
Source: ⌘	SA1 (MCC)	
Work item code: ⌘	IMS	***Date:*** ⌘ 14/08/2002
Category: ⌘	**F**	***Release:*** ⌘ Rel-6

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 <u>TR 21.900</u>.

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)*
Rel-6 *(Release 6)*

Reason for change: ⌘	Some of SA1 requirements have not been fulfilled in Rel 5 time frame but still need to be maintained for Rel-6.
Summary of change: ⌘	Supportable requirements are put back into Rel-6
Consequences if not approved: ⌘	Requirements which were removed in Rel-5 will not be re-instated in Rel-6

Clauses affected: ⌘	7.2.2, 10.2, 10.3 and 10.4

		Y	N		
Other specs affected:	⌘			Other core specifications ⌘	
				Test specifications	
				O&M Specifications	

Other comments: ⌘	

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].

- All session scenarios shall be supported, i.e. Mobile Originating and Mobile Terminating sessions against Internet/Intranet, CS or IM Mobile, ISDN, PSTN call party.

- 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.

******** Next modified Sections ********

10.2 Emergency calls when attached to a CS CN Domain

PLMNs shall support an emergency call teleservice as defined in 3GPP TS 22.003 [14] (TS12).

10.3 Emergency calls when attached to a data only network

If an UE with voice capability attempts to make an emergency call while camping on a PLMN that does not support voice service to the UE, a new PLMN selection shall immediately take place, and the UE shall select the first available PLMN that supports emergency calls to the UE.

10.4 Emergency calls when attached to an IM CN subsystem

Emergency calls are notshall be supported when attached tovia an IM CN subsystem as specified in subclause 10.1.

If the UE does not recognise the emergency call MMI(s) (i.e. the dialled number is not stored in USIM/ME) but the serving network recognises the dialled number as an emergency call number used in the country then the IM CN subsystem shall inform the UE to use a CS CN domain for emergency services.

If UE is attached simultaneously to both CS domain and IM CN subsystem, the operator shall be able to specify, which domain is used by default for emergency calls.

For further information see 3GPP TS 22.228 [27].

It shall be possible to enable compliance with regional regulatory requirements related to emergency calls.

   Note: Other forms than speech for emergency services are for further study.

TSG-SA WG1 #17
Durango, USA, 12-16ᵗʰ August 2002

S1-021838
Agenda Item:

CR-Form-v7

CHANGE REQUEST

| ⌘ | **22.101** CR | **106** | ⌘**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 **X**

Title: ⌘	Independent and linked subscriptions	
Source: ⌘	SA1 (IMS SWG)	
Work item code: ⌘	IMS	***Date:*** ⌘ 15/08/2002
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)*
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be found in 3GPP TR 21.900.

Use one of the following releases:
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   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: ⌘	The current specification does not clearly specify operator requirements on subscriptions.
Summary of change: ⌘	The change makes it clear that subscriptions can be offered independently as well as linked to each other.
Consequences if not approved: ⌘	3GPP will not work according to clear requirements. This may throw operators in confusion about under what market conditions the 3GPP system will be adequately designed to operate. There is a risk that some requirements are not fulfilled. Further, the discussions on the ISIM issue will go on possibly forever in 3GPP, which will slow down the progress of work related to this issue.

Clauses affected: ⌘	Section 15.1	

	Y	N		
Other specs affected: ⌘			Other core specifications ⌘	
			Test specifications	
			O&M Specifications	

Other comments: ⌘	

How to create CRs using this form:
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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.

15 Relationship between subscription and service delivery

15.1 Subscription

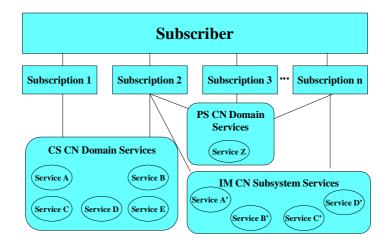A subscription describes the commercial relationship between the subscriber and the service provider.

Figure 4: Subscriber, subscription and services relationship

A subscription to an network operator may provide the user with access to one or more domains. A Subscription shall identify the set of services, within particular domains, to which the user has access (see figure 3); each subscription may specify a different set of services. These services may be provided by the CS CN Domain and/or a PS CN Domain and/or an IM CN subsystem and appropriate access technologies (E.g. UTRAN, GERAN or WLAN). Subscriptions relate to services such as Basic Services (e.g. Teleservices, Bearer services), GPRS services and IM-Services (IP-based multimedia services), which are typically provided by network operators, and to value added services which typically are provided by network operators and/or other entities that provide services to a subscriber.

The subscription identifies:

- the services and related services information that are made available to the subscriber by the service provider ;

In addition a subscription to a network operator may identify:

- the domains to which the user has been granted access by the network operator. In particular, the GPRS service profile and information on the allowed QoS parameter ranges shall be contained in the subscription.

- the identity of the subscriber within these domains.
  Note: The identity of a subscriber in the CS CN domain and PS CN domain (e.g. her IMSI) may potentially be different to her identity in the IM CN subsystem

The 3GPP system shall provide the functionality to maintain each subscription independent of each other;

Example: the subscription to the IMS domain shall be independent from the one to the 3GPP CN domains, to grant access to IMS by means of different access domain independently from the 3GPP CN core network subscription

The 3GPP system shall provide the functionality to provide dependencies between the different subscriptions based on operator decisions.

Examples: - an existing IMS subscription can be activated only if the associated 3GPP CN PS subscription exist

- an existing IMS subscription can be activated only if the associated 3GPP CN PS subscription is active.

- an existing 3GPP PS subscription can be activated only if the associated IMS subscription is active

Note: subscriptions belonging to different operators may be linked only with the agreement of all the pertinent operators.