
Source: SA1
Title: CRs to 22.228 Rel-5 on various IMS issues
Document for: Approval
Agenda Item: 7.1.3

SA Doc	Spec	CR	Rev	Phase	Cat	Subject	Old Vers	New Vers	SA1 Doc
SP-020058	22.228	010		Rel-5	B	CR 22.228 Rel. 5, IMS Addressing	5.4.0	5.5.0	S1-020507
SP-020058	22.228	011		Rel-5	B	CR to 22.228 on ISIM	5.4.0	5.5.0	S1-020657

CR-Form-v4	
CHANGE REQUEST	
⌘	22.228
⌘	CR 010
⌘ ev	-
⌘	Current version: 5.4.0
⌘	Spec Title: Service requirements for the IP Multimedia Core Network Subsystem (Stage 1)

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 ME/UE Radio Access Network Core Network

Title:	⌘ Introduction of IMS Public identities		
Source:	⌘ SA1		
Work item code:	⌘ IMS	Date:	⌘ 11/02/02
Category:	⌘ B	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:	⌘ Introduction of IMS public identities and other related requirements.
Summary of change:	⌘ There can be several public identities for one subscriber. Text on operator verification of public identities is added for clarity.
Consequences if not approved:	⌘ Missing requirements.

Clauses affected:	⌘ 7.5.1		
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications		⌘
	<input type="checkbox"/> Test specifications		
	<input type="checkbox"/> O&M Specifications		
Other comments:	⌘ It is believed that this CR is aligned with stage 2 (23.228).		

***** Next Modified Section *****

First Modified Section

2.1 Normative references

- [1] 3GPP TS 22.003: "CS Teleservices supported by a PLMN".
- [2] 3GPP TS 22.011: "Service Accessibility".
- [3] 3GPP TS 22.060: "General Packet Radio Service (GPRS) stage 1".
- [4] 3GPP TS 22.066: "Support of Mobile Number Portability (MNP)".
- [5] 3GPP TS 22.101: "Service principles".
- [6] 3GPP TS 22.105: "Services and Service Capabilities".
- [7] 3GPP TS 22.121: "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; The Virtual Home Environment"
- [8] 3GPP TS 22.129: "Handover requirements between UMTS and GSM and other Radio Systems".
- [9] RFC2543: "SIP: Session Initiation Protocol"
- [10] 3GPP TS 22.078: "Customised Applications for Mobile network Enhanced Logic (CAMEL); Service definition - Stage 1"
- [11] 3GPP TS 22.057: "Mobile Execution Environment (MExE); Service description, Stage 1"
- [12] 3GPP TS 22.038: "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; USIM/SIM Application Toolkit (USAT/SAT); Service description; Stage 1"
- [13] 3GPP TS 22.127: "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Stage 1 Service Requirement for the Open Service Access (OSA)"
- [14] 3GPP TR 21.905: "Vocabulary for 3GPP specifications"
- [15] RFC2806: "URLs for telephone calls"

Second Modified Section

7.5.1 Identification of entities

Both telecom and internet numbering and addressing schemes shall be supported as public identities. IP multimedia communication establishment (both mobile originating and terminating) depending on originator shall be able to be based on E.164/TEL URL (e.g. tel:+4412345678) [15](e.g. +1 23 456 789) or SIP URL (sip:my.name@company.org) [9]. It shall be possible to assign several public identities for one subscription.

Public identities shall be administered by the network operator and shall not be changeable by the user.

It shall be possible for the network operator to guarantee the authenticity of a public identity presented for an incoming call to a user where the call is wholly within that operator's network (i.e. originating and terminating parties are subscribers to, and resident in, a single PLMN). This is equivalent to the situation for CLIP with today's telephony networks.

It shall be possible for the network operator to use

- the same E.164 number for IP multimedia sessions and CS speech telephony (TS11) [1]
- a different E.164 number if desired for IP multimedia sessions

This allows customers who originally had only an E164 MSISDN to retain the same number for receiving communications in the IM domain and also in the CS domain when outside IM coverage.

CR-Form-v4			
CHANGE REQUEST			
⌘	22.228	CR 011	⌘ ev - ⌘ Current version: 5.4.0 ⌘
Spec Title:		Service requirements for the IP Multimedia Core Network Subsystem (Stage 1)	

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 ME/UE Radio Access Network Core Network

Title:	⌘ USIM/ISIM on single UICC		
Source:	⌘ SA1		
Work item code:	⌘ IMS	Date:	⌘ 15/02/02
Category:	⌘ B	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:	⌘ Introduction of USIM/ISIM on single UICC
Summary of change:	⌘ This CR modifies the current text within Section 5 to include the following requirement: In R5 the ISIM application shall require the presence of a USIM application on the same UICC.
Consequences if not approved:	⌘ Missing requirements.

Clauses affected:	⌘ 5
Other specs affected:	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> 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.

5 High level requirements

Support for IP multimedia sessions shall be provided in a flexible manner to allow operators to differentiate their services in the market place as well customise them to meet specific user needs. This shall be provided by the use of service capabilities in both networks and terminals, for the creation and support of IP multimedia applications.

The following high level requirements shall be supported for IP multimedia applications:

- Negotiable QoS for IP multimedia sessions both at the time of a session establishment as well as during the session by the operator and the user
- Negotiable QoS for individual media components in an IP multimedia session both at the time of establishing a media component as well as when the media component is active by the operator and the user
- End to end QoS for voice at least as good as that achieved by the circuit-switched (e.g. AMR codec based) wireless systems shall be enabled
- Support of roaming, negotiation between operators for QoS and for Service Capabilities is required. Such negotiation should be automated rather than manual, e.g., when another operator adds new service capabilities.
- Possibility for a network operator to implement IP Policy Control for IP multimedia applications.
- IP multimedia sessions shall be able to support a variety of different media types. A set of media types shall be identified to ensure interoperability (e.g. default codec selection and header compression).
- Within each IP multimedia session, one or more IP multimedia applications shall be supported
- The possibility for IP multimedia applications to be provided without a reduction in privacy, security, or authentication compared to corresponding GPRS and circuit switched services.
- Support for interworking between the packet and circuit switched services, and with PSTN and ISDN.
- Support for interworking with Internet.
- Support for basic voice calls between IMS users and users in CS domain/PSTN-style networks, In R5, the boundary interworking shall be able to convey the information associated with the services listed below:

CLIP/CLIR;

Call Forwarding.

Also due to regulatory reasons the subscriber identity may be required to be conveyed via the IMS-CS/PSTN boundary to enable calling line identification services on both sides.

Support of:

Call barring,

Call waiting/hold,

MPTY,

on the boundary interface is for further study. Please note that some of the listed services could turn out to have no impact on the boundary. Therefore, they could then be considered to be supported already with R5.

- Roaming shall be supported enabling users to access IP multimedia services provisioned by the:

- Home Environment
- Serving Network
- Access independence shall be supported. It is desirable that an operator should be able to offer services to their subscribers regardless of how they obtain an IP connection (e.g. GPRS, fixed lines, LAN).
- It shall be possible to support session-related internet applications that have been developed outside the 3GPP community.
- It shall be possible to limit the view of an operator's network topology to authorised entities.
- In R5 the ISIM application shall require the presence of a USIM application on the same UICC. This shall not preclude the possibility in later releases of having an ISIM in a UICC that does not contain a USIM.