TSGS#22(03)0778

Source: **TSG SA WG2**
Title: **CRs on 23.228 (IMS Stage 2)**
Agenda Item: **7.2.3**

The following Change Requests (CRs) have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #22.
Note: the source of all these CRs is now S2, even if the name of the originating company(ies) is still reflected on the cover page of all the attached CRs.

Title	Spec	CR #	cat	Version in	REL	WI	S2 meeting	Clauses affected
Restrictions on Sessions without IMS required capabilities	23.228	367r2	F	5.10.0	5	IMS-CCR	S2-36	5.4.2
PSI User	23.228	362r2	C	6.3.0	6	IMS2	S2-35	5.4.12.2, 5.4.12.4

3GPP TSG-SA Meeting #22
Hawaii, U.S.A., 15th-18th December 2003

Tdoc ⌘SP-030778

CR-Form-v7

CHANGE REQUEST

⌘ **23.228** **CR** **362** ⌘ **rev** **2** ⌘ Current version: **6.3.0** ⌘

*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 ☒

Title:	⌘	PSI User
Source:	⌘	Siemens
Work item code:	⌘	IMS-2
Date:	⌘	30/10/2003
Category:	⌘	**C**
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:	⌘	The term "PSI user" is used in TS 23.228, but a good definition or explanation is missing.
Summary of change:	⌘	Added explanation of term "PSI User".
Consequences if not approved:	⌘	TS 23.228 remains difficult to understand, which may delay stage 3 work.

Clauses affected:	⌘	5.4.12.2, 5.4.12.4			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
			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.

5.4.12.2 PSIs on the terminating side

The application server hosting the PSI may be invoked as a terminating application server with the AS and related PSIs configured in the home network, e.g. HSS. Such PSIs are globally routable and can be made available to users within and outside the operator domain, and can take the following form:

- Distinct PSIs (e.g. my_service@example.com).
- Wildcarded PSIs (chatlist_*@example.com): A range of PSIs with the same domain part in the SIP URI is defined using a wildcard indication in the userpart of the SIP-URI. Distinct PSIs can be created or deleted within the wildcarded range by the users using the Ut interface, or by the operator via O&M mechanisms.

For both the distinct PSIs and wildcarded PSIs, there are two ways to route towards the AS hosting the PSI:

a) The HSS maintains the assigned S-CSCF information and ISC Filter Criteria to route to the AS hosting the PSI according to IMS routing principles. In this case, the I-CSCF receives SIP requests at the terminating side, queries the HSS and directs the request to the S-CSCF assigned to the PSI. The S-CSCF forwards the session to the application server hosting the PSI according to the terminating ISC Filter Criteria.

b) The home database maintains the address information of the AS hosting the PSI. In this case, the AS address information for the PSI is returned to the I-CSCF in the location query response, in which case the I-CSCF will forward the request directly to the AS hosting the PSI.

In this case, the AS hosting the PSI in combination with its entry in the HSS is referred to as "PSI user".

Figure 5.4.12.a depicts a routing example for incoming session where the HSS has the PSI defined in the database and then the session request is routed directly to the AS hosting the PSI.

NEXT CHANGE

5.4.12.4 PSI configuration in the HSS

In order to support configuration of an AS hosting a PSI in the HSS, the PSI hosted in the AS needs to be configured in the HSS. This configuration is required when the PSI has S-CSCF assigned. The configuration shall include procedures to allow:

- PSI to be configured in the HSS via operation and maintanence procedures,
- Allow authorization and verification of access as “PSI user” with the Public Service Identity assigned to the AS, e.g. for AS-originating requests,
- Allow access to “PSI user” information (e.g. the S-CSCF assigned) over the Cx reference point from the CSCF nodes,
- Allow defining the “PSI user” similar to the principle of IMS user, without requiring any subscription/access information (e.g. CS/PS domain data) that are required for IMS user.

Further functional requirements such as how S-CSCF is provisioned with the PSI data need to be studied.

Note that the PSI configuration in the HSS does not affect the filter criteria based access to AS as defined in the user profiles.

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CHANGE REQUEST

⌘ **23.228** **CR** **367** ⌘ **rev** **2** ⌘ Current version: **5.10.0** ⌘

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

Title:	⌘	Restrictions on Sessions without IMS required capabilities
Source:	⌘	Siemens
Work item code:	⌘	IMS-CCR
Date:	⌘	25/11/2003
Category:	⌘	**F**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
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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:	⌘	Recently, the capability to optionally support re-establishment of sessions without the IMS required pre-conditions has been introduced to stage 2 specifications. The purpose has been to provide the Release-5 hooks to support interworking with external SIP networks in release 6. A particular motivation has been forward-compatibility like support of Rel-5 UEs in Rel-6 networks and vice versa. It has also been agreed that this should be under operator control. However even Rel-6 UEs will always initiate a session with pre-conditions, and it will use establishment without pre-conditions only as a fall back mechanism towards external SIP clients. Thus interworking with external networks is the source of sessions without IMS required extensions, nothing else. Therefor also the restriction an operator should and can enforce is on interworking with external networks (and clients) rather than on dedicated SIP headers.
Summary of change:	⌘	Impose operator restriction on interworking with external SIP networks rather than on SIP header level. This restriction is also in place. Thus it is proposed to remove the restiction on SIP header level.
Consequences if not approved:	⌘	Different interpretations of stage 2 specification will prevent stage 3 agreement.

Clauses affected:	⌘	5.4.2

Other specs affected: ⌘	Y	N		⌘	
	X		Other core specifications	⌘	24.229
		X	Test specifications		
		X	O&M Specifications		

Other comments: ⌘

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5.4.2 Interworking with Internet

Depending on operator policy, the S-CSCF may forward the SIP request or response to another SIP server located within an ISP domain outside of the IM CN subsystem.

It is possible that a remote SIP client does not support IMS required capabilities such as “Preconditions”, "Update” and “100rel” as described in 3GPP TS 24.229. If the remote SIP client does not support these capabilities, then the same session may be re-initiated by relaxing the requirements on the capabilities (by setting them to the status of desired) following the principle set by RFC 3261 [12]. However, general mechanisms for interworking between the IM CN subsystem and SIP servers/clients on the Internet are not specified in this Release.

~~The home network may impose restriction on session initiation without the IMS required capabilities.~~