Technical Specification Group Services and System Aspects ***TSGS#13(01)0553***

Meeting #13, Beijing, China, 24-27 September 2001

Source: **TSG SA WG2**
Title: **One more CR on 23.228**
Agenda Item: **7.2.3**

At the S2 drafting support in Dallas (25-28/06/01) -not supported by MCC- the following Change Request was approved. It was later approved by TSG SA WG2 by e-mail, but was not reflected as a CR in the S2 summary list. It was then forgotten in the first list provided in SP-010515.

It is asked to TSG SA plenary #13 to approve this CR in addition to the ones presented in SP-010515.

CR #	Rev	Rel	Title	cat	Ver in	Ver out	S2 Tdoc #	WI
019	1	R5	SIP Compression	B	5.1.0	5.2.0	S2-011675	IMS-CCR

Annex. Reminder on the CRs presented for approval in SP-010515.

CR #	Rev	Rel	Title	cat	Ver in	Ver out	S2 Tdoc #	WI
010		R5	CR on “23.228 Correction for the usage of CAMEL services on top of IMS”	F	5.1.0	5.2.0	S2-011673	IMS-CCR
011	2	R5	QoS-Assured Preconditions	F	5.1.0	5.2.0	S2-012332	IMS-CCR
022		R5	CR on “Incorrect text on interworking with ISUP”	F	5.1.0	5.2.0	S2-011264	IMS-CCR
025		R5	Corrections to 23.228 V5.0.0	F	5.1.0	5.2.0	S2-011267	IMS-CCR
032		R5	CR on “Correct information related to IPv4 handling”	F	5.1.0	5.2.0	S2-011322	IMS-CCR
045		R5	CR on “MRF functionality and architecture”	C	5.1.0	5.2.0	S2-011699	IMS-CCR
049	2	R5	Awareness of local SIP services in the IM Subsystem	C	5.1.0	5.2.0	S2-012440 rev 2	IMS-CCR
050		R5	Token generation at the PCF	F	5.1.0	5.2.0	S2-012105	QoS
051	2	R5	SIP protocol on the SIP+ (ISC) interface	B	5.1.0	5.2.0	S2-011684	IMS-CCR
052	2	R5	CR on “Emergency sessions”	B	5.1.0	5.2.0	S2-011704rev1	EMC1-PS
055	2	R5	CR on “Network Initiated De-registration procedure”	C	5.1.0	5.2.0	S2-011693rev3	IMS-CCR
058	1	R5	Terminology Change from SIP+ to ISC for Service Control interface	F	5.1.0	5.2.0	S2-011703	IMS-CCR
061	3	R5	Clarification of P-CSCF discovery	C	5.1.0	5.2.0	S2-012329 rev 2	
081		R5	P-CSCF and PCF Clarifications	F	5.1.0	5.2.0	S2-012259	IMS-CCR
083		R5	Service control during registration and de-registration	C	5.1.0	5.2.0	S2-012327	IMS

3GPP TSG-SA WG2 #18
14-18 May, 2001
Puerto Rico
(presented at Dallas S2 drafting)

Tdoc S2-~~011291~~011675

CR-Form-v3

CHANGE REQUEST

⌘ **23.228** **CR** **019** ⌘ rev **-1** ⌘ Current version: **5.0.0** ⌘

*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 ☐ ME/UE ☒ Radio Access Network ☐ Core Network ☒

Title:	⌘	SIP Compression
Source:	⌘	S2
Work item code:	⌘	~~1514~~IMS-CCR
Date:	⌘	2001-05-09
Category:	⌘	**B**
Release:	⌘	REL-5

Use one of the following categories:
F *(essential 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 compression of the SIP signaling message is needed in GERAN and it is possible that the SIP signalling between the UE and P-CSCF are confidentiality protected. This implies that SIP compression/decompression must be performed in the UE and P-CSCF. This is due to fact that compression must be done before encryption and decryption must be done before decompression.
Summary of change:	⌘	A new functionality is added to P-CSCF.
Consequences if not approved:	⌘	

Clauses affected:	⌘	4.6.1
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://www.3gpp.org/specs/ For the latest

version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

4.6.1 Proxy-CSCF

The Proxy-CSCF (P-CSCF) is the first contact point within the IM CN subsystem. Its address is discovered by UEs following PDP context activation, using the mechanism described in section "Procedures related to Local CSCF Discovery ". The P-CSCF behaves like a Proxy (as defined in RFC2543 or subsequent versions), i.e. it accepts requests and services them internally or forwards them on, possibly after translation. The P-CSCF may also behave as a User Agent (as defined in the RFC2543 or subsequent versions), i.e. in abnormal conditions it may terminate and independently generate SIP transactions.
The Policy Control Function (PCF) is a logical ent ity of the P-CSCF. If the PCF is implemented in a separate physical node, the interface between the PCF and the P-CSCF is not standardised.
The functions performed by the P-CSCF are:

- Forward the SIP register request received from the UE to an I-CSCF determined using the home domain name, as provided by the UE.
- Forward SIP messages received from the UE to the SIP server (e.g. S-CSCF) whose name the P-CSCF has received as a result of the registration procedure.
- As part of processing of the request and before forwarding, the P-CSCF may modify the Request URI of outgoing requests according to a set of provisioned rules defined by the network operator (e.g. Number analysis and potential modification such as translation from local to international format.)
- Forward the SIP request or response to the UE.
- Detect an emergency session and select a S-CSCF in the visited network to handle emergency sessions.
- The generation of CDRs.
- Maintain a Security Association between itself and each UE, as defined in Access Security for IP-based services Specification TS 33.2xx [19].
- Provide security towards Serving-CSCF by security methods defined in Network Domain Security specification TS 33.200 [20].
- ~~May~~Should perform SIP message compression/decompression.

Editor's Note: The following functions require further study:

- Authorisation of bearer resources and QoS management. Details of the P-CSCF role in QoS management and authorisation of bearer resources for the session are being investigated by the QoS ad-hoc group.