3GPP TSG CN Plenary Meeting #19 **NP-030045**
12th - 14th March 2003. Birmingham, U.K.

Source: **TSG CN WG 1**

Title: **CR to Rel-5 on Work Item IMS-CCR towards 23.218(040r2)**

Agenda item: **8.1**

Document for: **APPROVAL**

Introduction:

This document contains **1** CR, **Rel-5 to** Work Item **"IMS-CCR"**, that have been agreed by **TSG CN WG1**, and are forwarded to TSG CN Plenary meeting #19 for approval.

N1-030309 is linked to N4-030122 and N4-030128, and the related CR 269r1 for 24.229 is already implemented.

Spec	CR	Rev	Cat	Phase	Subject	Version-Current	Version-New	Meeting-2nd-Level	Doc-2nd-Level
23.218	040	2	F	Rel-5	Clarification on Sh interface for charging purposes	5.3.0	5.4.0	N1-28	N1-030309

3GPP TSG-CN1 Meeting #28
Dublin, Ireland, 10-14 February, 2003

Tdoc N1-030309

CR-Form-v7

CHANGE REQUEST

⌘ **23.218** **CR** **040** ⌘ **rev** **2** ⌘ Current version: **5.3.0** ⌘

*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 **X**

Title:	⌘	Clarification on Sh interface for charging purposes
Source:	⌘	NEC Corporation
Work item code:	⌘	IMS-CCR
Date:	⌘	05/02/2003
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:	⌘	Since several CN1 meetings ago, exchange of LS between SA5 and CN1 regarding this topic was communicated. However, discussion was left out SA2 decision. Then at the last SA2#28 meeting, the decision was made and the CR against 24.229 and 23.218 was agreed being aligned with the result of SA2 discussion at the last CN1#27 meeting. At the last CN#18 Plenary, the CR against 23.218 was postponed to this meeting because the corresponding CR against CN4 was not provided. This CR was resubmitted based on the latest 23.218 v5.3.0 and corresponding CR against 29.328 and 29.329 are also submitted at this meeting.
Summary of change:	⌘	In 6.8 and 9.4.5, it is added that there is a case that Sh interface is used for charging purposes.
Consequences if not approved:	⌘	For IMS charging mechanism, it may cause backward compatibility problem in Rel 6.

Clauses affected:	⌘	7.2.2, 9.4.5				
		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	CR:18-r2 against 29.328(N4-030267) and CR:9 against 29.329(N4- 030123) are affected each other.
			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.

Start of first change

7.2 Interfaces defined for HSS

7.2.1 HSS – CSCF (Cx) interface

This interface is used to send subscriber data to the S-CSCF, including Filter Criteria (and their priority); which indicates which SIP requests should be proxied to which Application Servers.

The protocol used between the HSS and CSCF (Cx Interface) is specified in 3GPP TS 29.228 [8] and 3GPP TS 29.229 [17].

7.2.2 HSS - Application Server (Sh) interface

The Sh interface is between the HSS and the SIP Application Servers and the OSA SCS and may be used for transferring User Profile such as user service related information or user location information or charging function addresses.. Requirements for the Sh interface are specified in 3GPP TS 23.228 [3].

The protocol used between the HSS and AS (Sh Interface) is specified in 3GPP TS 29.328 [18] and 3GPP TS 29.329 [19].

7.2.3 HSS – CSE interface

The protocol used on the interface between the HSS and the CAMEL Service Environment (CSE) is the MAP protocol [16].

7.2.4 HSS – IM-SSF Application Server (Si) interface

The Si interface is between the HSS and the IM-SSF Application Server and is used for transferring IMS CAMEL specific information.

The protocol used between the HSS and IM-SSF (Si Interface) is specified in 3GPP TS 23.278 [9] and 3GPP TS 29.002 [16].

End of first change

Start of second change

9.4.5 Application server handling of IP multimedia charging

If an application server receives a third party REGISTER from the S-CSCF carrying the ICID, IOI and charging function addresses, the application server may store these parameters for charging purposes.

In an originating case, when processing an incoming initial request carrying the ICID, IOI, GPRS charging information and charging function addresses for this session, the application server shall pass these parameters in the outgoing message and may store the parameters for charging purposes.

In a terminating case, when processing an incoming initial request carrying the ICID, IOI, GPRS charging information and charging function addresses for this session, the application server shall pass these parameters in the outgoing message and may store the parameters for charging purposes.

When the application server is acting as an originating user agent as described in clause 9.1.1.2 and initiates a session or a standalone transaction, it shall generate ICID itself. Charging function addresses may be allocated as locally preconfigured addresses. The application server may retrieve the charging addresses on Sh interface

When the conflict occurs between the charging function address(es) received over the ISC interface and those received over the Sh interface, the address(es) received over the ISC interface should take precedence.

NOTE: The use of the Sh interface to retrieve charging function addresses is not intended as a general-purpose alternative to receiving charging function addresses from the ISC interfaces. Rather, it is meant to address a special case where the AS needs to interact with the charging system before initiating a request to a user when the AS has not received the third party REGISTER for that user.

For detailed information on transporting charging parameters between IMS entities using SIP, see 3GPP TS 24.229 [5].

End of second change