Technical Specification Group Services and System Aspects Meeting #28, Quebec, Canada, 6-8 June 2005

Source:	MCC
Title:	CRs to 33.108 on Correction on IMS correlation for LI (ReI-7)
Document for:	Approval
Agenda Item:	7.3.3

This document contains the mirror CR to 33.108-072 (Rel-6) in document SP-050258.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre nt	Vers New	SA3 Doc
SP-28	SP-050383	33.108	073	1	Rel-7	A	Correction on IMS correlation	7.0.0	7.1.0	-

		С	HANG	E REQ	UE	ST	•	(CR-Form-v7.1
ж	33.108	CR	073	жrev	1	ж	Current version:	7.0.0	ж
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \Re symbols.									

 Proposed change affects:
 UICC apps%
 ME
 Radio Access Network
 Core Network
 X

Title:	Ħ	Correction on IMS correlation
Source:	ж	SA3-LI
Work item code	:¥	SEC1-LI Date: # 06/06/2005
Category:	ж	A Release: # Rel-7
0,		Use <u>one</u> of the following categories: Use <u>one</u> of the following releases:
		F (correction) Ph2 (GSM Phase 2)
		A (corresponds to a correction in an earlier release) R96 (Release 1996)
		B (addition of feature), R97 (Release 1997)
		C (functional modification of feature) R98 (Release 1998)
		D (editorial modification) R99 (Release 1999)
		Detailed explanations of the above categories can Rel-4 (Release 4)
		be found in 3GPP <u>TR 21.900</u> . <i>Rel-5 (Release 5)</i>
		Rel-6 (Release 6)
		Rel-7 (Release 7)

Reason for change: ३	In TS 33.108 there are some ambiguities between the correlation number which is used in the PS domain and the correlation number provided by the CSCF.
Summary of change: ३	The difference between the correlation number used in the PS domain (SGSN, GGSN) and the correlation number provided by the CSCF in IMS domain is clarified.
Consequences if भ not approved:	Different implementations, which would result in wrong interpretation of the decoded parameter at LEMF.
Clauses affected:	⁶ 7.1, 7.1.1, 7.1.3, 7.2
Other specs ३ affected:	Y N X Other core specifications X Test specifications X O&M Specifications
Other comments:	This document contains the mirror CR to 33.108-072 (Rel-6) in document SP- 050258.

*** FIRST MODIFICATION ***

7.1 Identifiers

Specific identifiers are necessary to identify a target for interception uniquely and to correlate between the data, which is conveyed over the different handover interfaces (HI2 and HI3). The identifiers are defined in the subsections below.

For the delivery of CC and IRI the SGSN, GGSN and CSCF's provide correlation numbers and target identities to the HI2 and HI3. The correlation number <u>provided in the PS domain (SGSN, GGSN)</u> is unique per PDP context and is used to correlate CC with IRI and the different IRI's of one PDP context.

Interception is performed on an IMS identifier(s) associated with the intercept subject including identifiers such as SIP-URL and Tel-URL [30].

*** NEXT MODIFICATION ***

7.1.1 Lawful interception identifier

For each target identity related to an interception measure, the authorized operator (NO/AN/SP) shall assign a special Lawful Interception Identifier (LIID), which has been agreed between the LEA and theoperator (NO/AN/SP).

Using an indirect identification, pointing to a target identity makes it easier to keep the knowledge about a specific interception target limited within the authorized operator (NO/AN/SP) and the handling agents at the LEA.

The LIID is a component of the CC delivery procedure and of the IRI records. It shall be used within any information exchanged at the handover interfaces HI2 and HI3 for identification and correlation purposes.

The LIID format shall consist of alphanumeric characters. It might for example, among other information, contain a lawful authorization reference number, and the date, when the lawful authorization was issued.

The authorized operator (NO/AN/SP) shall either enter, <u>based on an agreement with each LEA</u>, a unique LIID for each target identity of the interception subject or a single LIID for multiple target identities all pertaining to the same interception subject.

Note that, in order to simplify the use of the LIID at LEMF for the purpose of correlating IMS signalling with GSN CC, the use of a single LIID in association with potentially numerous IMS identities (SIP and TEL URIs) is recommended.

If more than one LEA intercepts the same target identity, there shall be unique LIIDs assigned relating to each LEA.

*** NEXT MODIFICATION ***

7.1.3 Correlation number

The GPRS Correlation Number is unique per PDP context and used for the following purposes:

- correlate CC with <u>GSN</u>IRI,
- correlate different <u>GSN</u>IRI records within one PDP context.

As an example, in the UMTS system, the Correlation Number may be the combination of GGSN address and charging ID.

 NOTE:
 It is an implementation matter how CSCF generates Correlation number value. However, in this release

 CSCF should use gPRSCorrelationNumber ASN.1 parameter as a container.

*** NEXT MODIFICATION ***

7.2 IRI for IMS

In addition, information on non-transmission related actions of a target constitute IRI and is sent via HI2, e.g. information on subscriber controlled input.

The IRI may be subdivided into the following categories:

- 1. Control information for HI2 (e.g. correlation information).
- 2. Basic data context information, for standard data transmission between two parties (e.g. SIP-message).

For each event, a Record is sent to the LEMF, if this is required. The following table gives the mapping between event type received at DF2 level and record type sent to the LEMF.

Table 7.1: Mapping between IMS Events and HI2 Records Type

Event	IRI Record Type		
SIP-Message	REPORT		

A set of information is used to generate the record. The records used transmit the information from mediation function to LEMF. This set of information can be extended in the CSCF or DF2 MF, if new IEs are available and if this is necessary in a specific country. The following table gives the mapping between information received per event and information sent in records.

Table 7.2: Mapping between IMS Events Information and IRI Information

Parameter	Description	HI2 ASN.1 parameter
Observed SIP URI	Observed SIP URI	partyInformation (sip-uri)
Observed TEL URL	Observed TEL URL	partyInformation (tel-url)
Event type	IMS Event	iMSevent
Event date	Date of the event generation in the CSCF	timeStamp
Event time	Time of the event generation in the CSCF	
Network identifier	Unique number of the intercepting CSCF	networkIdentifier
Correlation number	Unique number for each PDP context delivered to the LEMF, to help the LEA, to have a correlation between each PDP Context and the IRI.	gPRSCorrelationNumber
Lawful interception identifier	Unique number for each lawful authorization.	lawfulInterceptionIdentifier
SIP message	Either whole SIP message, or SIP message header. SIP message header is used if warrant requires only IRI. In such case, specific content in the SIPMessage (e.g. 'Message', etc.) must be deleted.	sIPMessage

NOTE 1: LIID parameter must be present in each record sent to the LEMF.

NOTE 2: Details for the parameter SIP message. If the warrant requires only signaling information, specific content in the parameter 'SIP message' like IMS (Immediate Messaging) has to be deleted/filtered.
 NOTE 3: In case of IMS event reporting, the gPRSCorrelationNumber HI2 ASN 1 parameter, which is also used in

NOTE 3: In case of IMS event reporting, the gPRSCorrelationNumber HI2 ASN.1 parameter, which is also used in the IRIs coming from PS nodes, is used as container.

*** END OF MODIFICATIONS ***