

CR-Form-v7
CHANGE REQUEST
⌘ 33.107 CR 030 ⌘ rev - ⌘ Current version: 5.4.0 ⌘

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

Title:	⌘ Incorrect implementation of the Serving System reporting
Source:	⌘ SA3 LI
Work item code:	⌘ SEC1-LI Date: ⌘ 12/11/2002
Category:	⌘ F Release: ⌘ Rel-5 Use <u>one</u> of the following categories: Use <u>one</u> of the following releases: F (correction) 2 (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 TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ This is a CR to remedy the incorrect implementation of a previously approved CR. HLR is a network element that may report the Serving System event. This feature was introduced at Orlando meeting (S3LI02_085r2 - 33107 SSM) as a national option . Under clause 4 figure 1c was missing. Under subclause 7.3 'S3LI02_085r2' reads: "Serving System event reporting is a national option." However, the feature being optional was never implemented in 33.107 (neither in v5.3.0, nor in v5.4.0), and therefore 33.107 needs to be corrected.
Summary of change:	⌘ Implement S3LI02_085r2 - 33107 SSM in 33.107v5.5.0.
Consequences if not approved:	⌘ Optional feature becomes mandatory. In addition, it will be inconsistent with TS 33.108.

Clauses affected:	⌘ 4; 7.3								
Other specs Affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;"></td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications ⌘ 33.108 Test specifications O&M Specifications	Y	N	X			X		X
Y	N								
X									
	X								
	X								
Other comments:	⌘								

4 Functional architecture

The following figures contain the reference configuration for the lawful interception. The circuit-switched configuration is shown in figure 1a. The packet-switched configuration is shown in figure 1b. The various entities and interfaces are described in more detail in the succeeding subclauses.

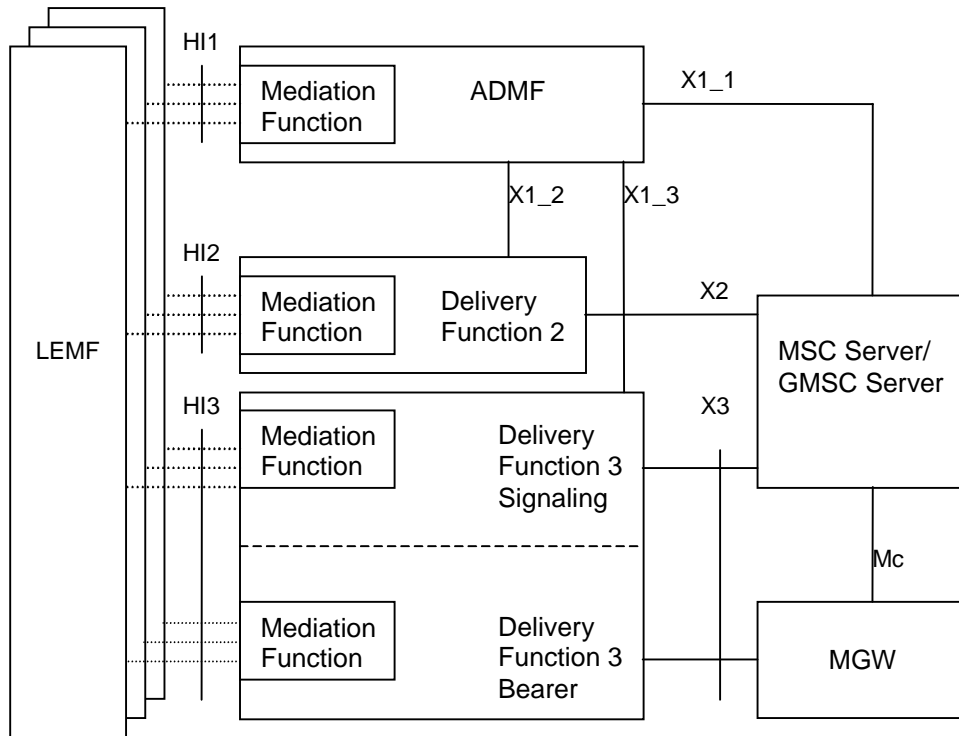


Figure 1a: Circuit switched intercept configuration

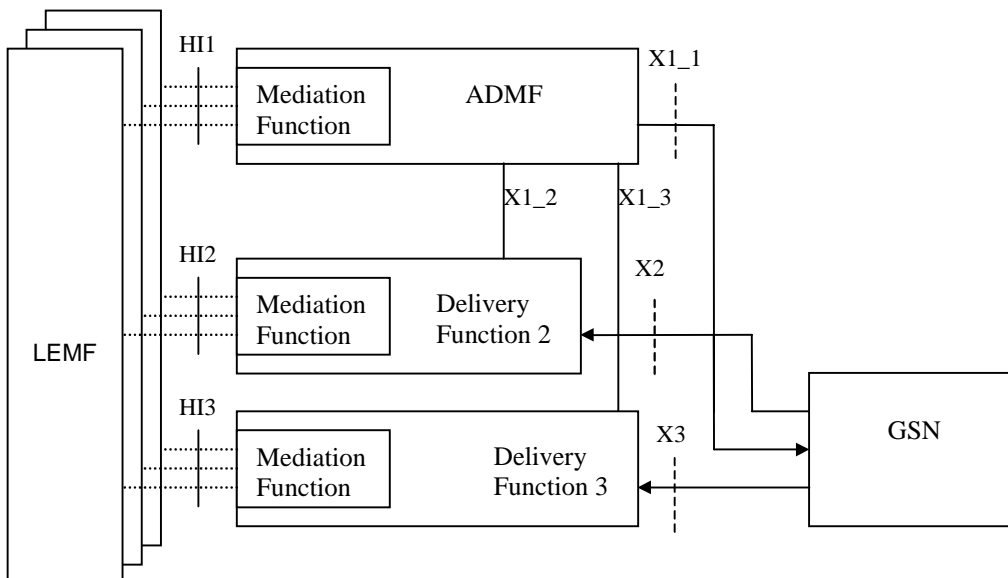


Figure 1b: Packet Switched Intercept configuration

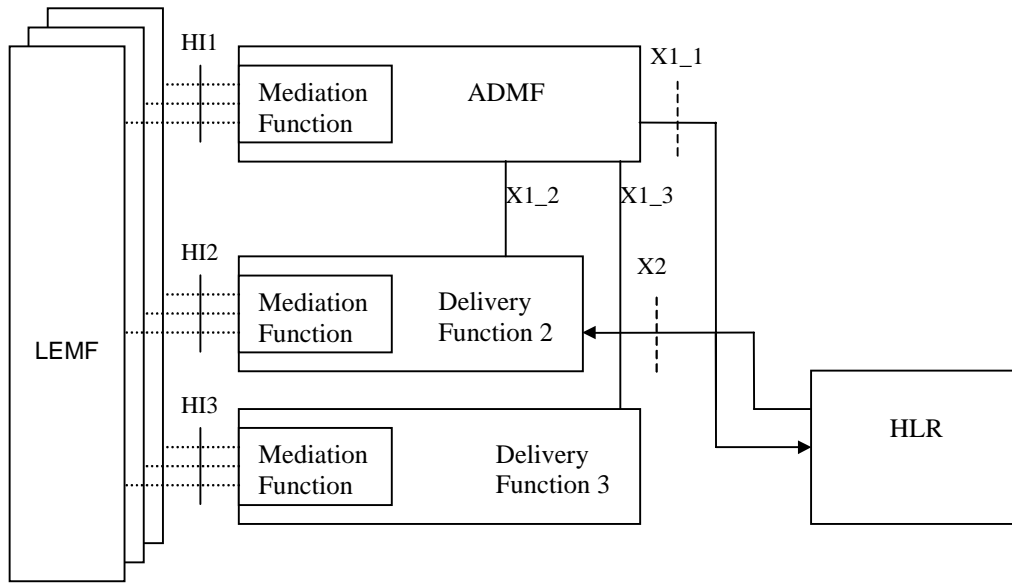


Figure 1c: HLR Intercept configuration

The reference configuration is only a logical representation of the entities involved in lawful interception and does not mandate separate physical entities. This allows for higher levels of integration.

Regional Mediation Functions, which may be transparent or part of the administration and delivery functions, are used to convert information on the HI1, HI2 and HI3 interfaces in the format described in various national or regional specifications. For example, if ES 201 671 or J-STD-25 is used, then the adaptation to HI1, HI2 and HI3 will be as defined in those specifications.

DF3 is responsible two primary functions:

- Call Control (Signaling) for the intercepted product; and
- Bearer Transport for the intercepted product.

HI3 is the interface towards the LEMF. It must be able to handle the signalling and the bearer transport for the intercepted product. LEMF can be located within the 3G network or can be in any other network.

There is one Administration Function (ADMF) in the network. Together with the delivery functions it is used to hide from the 3G ICEs that there might be multiple activations by different Law Enforcement Agencies (LEAs) on the same target. The administration function may be partitioned to ensure separation of the provisioning data from different agencies.

The HI2 and HI3-interfaces represent the interfaces between the LEA and two delivery functions. The delivery functions are used:

- to distribute the Intercept Related Information (IRI) to the relevant LEA(s) via HI2 (based on IAs, if defined);
- to distribute the Content of Communication (CC) to the relevant LEA(s) via HI3 (based on IAs, if defined).

See the remaining sections of this document for definitions of the X1_1, X1_2, X1_3, X2 and X3 interfaces.

Interception at the Gateways is a national option.

***** next modification *****

7.3 Provision of Intercept Related Information

Intercept Related Information (Events) are necessary at the Mobile Station Attach, Mobile Station Detach, PDP Context Activation, Start of intercept with PDP context active, PDP Context Deactivation, RA update, Serving System and SMS events.

Serving System event reporting is a national option.

Figure 21 shows the transfer of intercept related information to the DF2. If an event for / from a mobile subscriber occurs, the 3G GSN or the Home Location Register (HLR) sends the relevant data to the DF2.

See section 7A for multi-media Intercept Related Information produced at the CSCF.

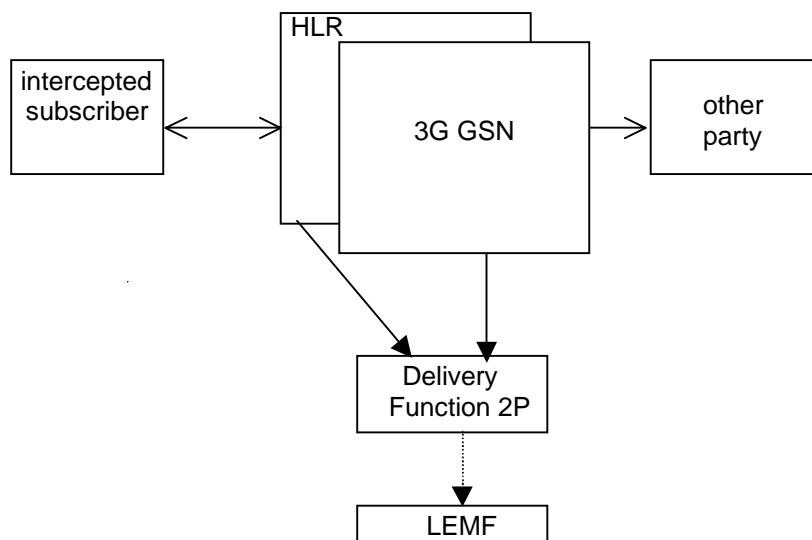


Figure 21: Provision of Intercept Related Information