



### 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.

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 3G Home Location Register (HLR) sends the relevant data to the DF2.

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

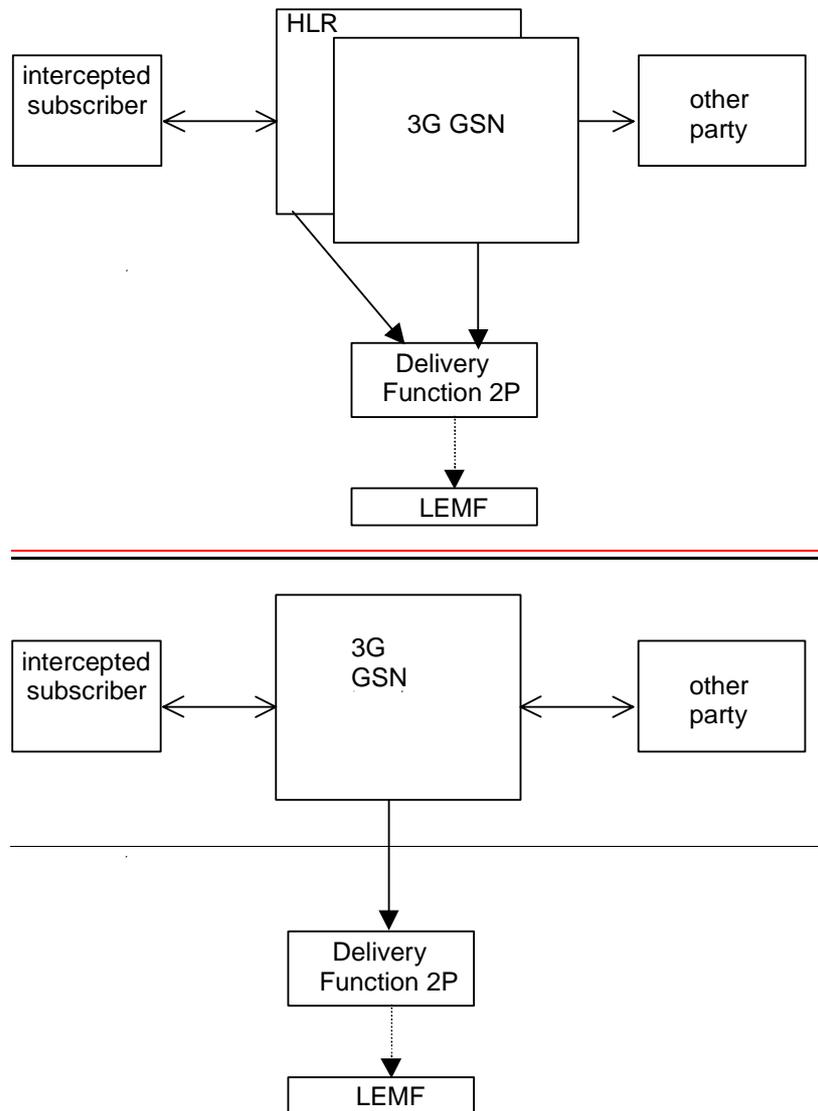


Figure 21: Provision of Intercept Related Information

### 7.3.1 X2-interface

The following information needs to be transferred from the 3G GSN or the 3G HLR to the DF2 in order to allow a DF2 to perform its functionality:

- target identity (MSISDN, IMSI, IMEI);
- events and associated parameters as defined in section 7.3.2 and 7.4 may be provided;
- the target location (if available) or the IAs in case of location dependent interception.
- Correlation number

The IRI should be sent to DF2 with a reliable transport mechanism.

### 7.3.2 Structure of the events

There are ~~seven~~eight different events in which the information is sent to the DF2 if this is required. Details are described in the following section. The events for interception are configurable (if they are sent to DF2) in the 3G GSN or the 3G HLR and can be suppressed in the DF2.

**The following events are applicable to 3G SGSN:**

- Mobile Station Attach;
- Mobile Station Detach;
- PDP context activation;
- Start of intercept with PDP context active;
- PDP context deactivation;
- RA update;
- SMS.

NOTE: 3G GGSN interception is a national option. Location information may not be available in this case.

The following events are applicable to the 3G GGSN:

- PDP context activation ;
- PDP context deactivation ;
- Start of interception with PDP context active.

The following events are applicable to the HLR:

- Roaming.

A set of fields as shown below is used to generate the events. The events transmit the information from 3G GSN or 3G HLR to DF2. This set of fields as shown below can be extended in the 3G GSN or 3G HLR, if this is necessary as a national option. DF2 can extend this information if this is necessary as a national option e.g. a unique number for each surveillance warrant.

**Table 2: Information Events for Packet Data Event Records**

Observed MSISDN MSISDN of the target subscriber (monitored subscriber)
Observed IMSI IMSI of the target subscriber (monitored subscriber)
Observed IMEI IMEI of the target subscriber (monitored subscriber), it shall be checked for each activation over the radio interface.
Event type Description which type of event is delivered: MS attach, MS detach, PDP context activation, Start of intercept with PDP context active, PDP context deactivation, SMS, <u>Serving System</u> , Cell and/or RA update,
Event date Date of the event generation in the 3G GSN or the 3G HLR.
Event time Time of the event generation in the 3G GSN or the 3G HLR.
PDP address The PDP address of the target subscriber. Note that this address might be dynamic.
Access Point Name The APN of the access point. (Typically the GGSN of the other party)
Location Information Location Information is the service area identity, RAI and/or location area identity that is present at the GSN at the time of event record production.
PDP Type The used PDP type.
Correlation Number The correlation number is used to correlate CC and IRI.
SMS The SMS content with header which is sent with the SMS-service. The header also includes the SMS-Centre address.
Network Element Identifier Unique identifier for the element reporting the ICE.
Failed attach reason Reason for failed attach of the target subscriber.
Failed context activation reason Reason for failed context activation of the target subscriber.
IAs The observed Interception Areas
Session Initiator The initiator of the PDP context activation, deactivation or modification request either the network or the 3G MS
Initiator SMS indicator whether the SMS is MO or MT
Deactivation / termination cause The termination cause of the PDP context
QoS This field indicates the Quality of Service associated with the PDP Context procedure
<u>Serving System Address</u> <u>Information about the serving system (e.g., serving SGSN number and or serving SGSN address)</u>

#### 7.4.10 Serving System

The Serving System report event is generated at the 3G HLR, when the 3G HLR has detected that the intercept subject has roamed. The fields will be delivered to the DF2 if available:

<u>Observed MSISDN</u>
<u>Observed IMSI</u>
<u>Observed IMEI</u>
<u>Event Type</u>
<u>Event Time</u>
<u>Event Date</u>
<u>Network Element Identifier</u>
<u>Serving System Address</u>