**3GPP TSG- Meeting #**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** |  |  |
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| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- |
|  |
| ***Title:***  | Correction to RCS trigger XID, and other XID clarifications |
|  |  |
| ***Source to WG:*** | SA3LI (, OTD\_US) |
| ***Source to TSG:*** | SA3LI |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | RCS triggering uses wrong XID – should be allocated by the appropriate TF.Clarify relationship between XID and ProductID, and other X2/X3 attributes such as Additional XID Related Information. |
|  |  |
| ***Summary of change:*** | Change XID for RCS tasks created by RCS triggering.Terminology improvements related to XID, ProductID, etc:- Use "ProductID" not "Product ID".- Clarify ProductID from LI\_T2 or LI\_T3 is used as the XID.- Describe Additional XID Related Information in the general LI\_X3 clause.- Use MDF2/MDF3 not MDF2/3.- Use LI\_T2/LI\_T3 not LI\_T2/3. |
|  |  |
| ***Consequences if not approved:*** | RCS triggering may not function correctly. |
|  |  |
| ***Clauses affected:*** | 4.3, 5.2.1, 5.2.5, 5.2.6, 5.3.1, 5.3.3, 7.10.3.2.3, 7.10.4.5.2, 7.10.4.5.3, 7.13.2.1.1, 7.13.2.2.1, Annex B. |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** | R18 mirror in CR 0575. |
|  |  |
| ***This CR's revision history:*** | s3i230521 |

 START OF CHANGE 1

## 4.3 Basic principles for external handover interfaces

This clause lists the external handover interfaces shown in clause 4.1, indicates the protocol used to realise each interface, and gives a reference to the relevant clauses of the present document that specify how the protocol is to be used for the given interface.

Table 4.3-1: External handover interfaces and related protocols

|  |  |  |  |
| --- | --- | --- | --- |
| Interface | Description | Protocol used to realise interface | Usage |
| LI\_HI1 | Used to send warrant and other interception request information from LEA to operator. | ETSI TS 103 120 [6] shall be supported.Other methods (e.g. manual exchange) may be used depending on national regulatory requirements.  | See clause 5.4 |
| LI\_HI2 | Used to send IRI from the MDF2 to the LEMF. | ETSI TS 102 232-1 [9] and ETSI TS 102 232-7 [10] shall be supported. | See clause 5.5 |
| LI\_HI3 | Used to send CC from the MDF3 to the LEMF. | ETSI TS 102 232-1 [9] and ETSI TS 102 232-7 [10] shall be supported. | See clause 5.5 |
| LI\_HI4 | Used to send LI notification information from MDF2/MDF3 to LEMF. | ETSI TS 102 232-1 [9] and ETSI TS 102 232-7 [10] shall be supported. | See clause 5.6 |
| LI\_HIQR | Used to send warrant and other identifier association query information from LEA to CSP and used by the CSP to send query responses to the LEA. | ETSI TS 103 120 [6] shall be supported. | See clause 5.7 |

 END OF CHANGE 1

 START OF CHANGE 2

### 5.2.1 General usage of ETSI TS 103 221-1

Functions having an LI\_X1, LI\_T2 or LI\_T3 interface shall support the use of ETSI TS 103 221-1 [7] to realise the interface.

In the event of a conflict between ETSI TS 103 221-1 [7] and the present document, the terms of the present document shall apply.

The LIPF and MDF2/MDF3 shall maintain a mapping between internal interception identifiers (XIDs) and external interception identifiers (LIIDs), as defined by ETSI TS 103 221-1 [7] clause 5.1.2. In case of multiple interceptions for a single target identifier, it is an implementation decision for the LIPF/TF whether multiple XIDs are used (i.e. a one-to-one mapping between XID and LIID is maintained) or whether the single XID is used and mapped to multiple LIIDs at the MDF2/MDF3. Clauses 6 and 7 give further details for specific networks or services (e.g. minimum supported target identifier formats).

In the event of a request issued over the interface fails, or an error is reported, the LIPF should raise an alert in the appropriate LI Operations and Management (O&M) system. Further procedures (e.g. retrying a failed request) are left to CSP policy to define.

A failure of LI shall not impact the target's or other users' services.

In general, and unless otherwise specified, the function playing the role of the NE (i.e. IRI-POI, IRI-TF, CC-TF, CC-POI, MDF2 or MDF3) shall:

- Accept CreateDestination and ModifyDestination messages regardless of the DeliveryType.

- Reject ActivateTask/ModifyTask messages that contain destination identifiers (DIDs) that reference Destinations that have not been created via a CreateDestination message; Destinations shall be created before they are used.

- Reject ActivateTask/ModifyTask messages that do not result in at least one valid DID for their DeliveryType (e.g. at least one valid DID for an X2 delivery destination for an "X2Only" Task). Additional DIDs for Destinations of other DeliveryTypes (e.g. a DID for an X3 Destination for an "X2Only" Task) shall be accepted, but a ReportTaskIssue message may be sent to indicate the mismatch.

 END OF CHANGE 2

 START OF CHANGE 3

### 5.2.5 Usage for realising LI\_T2

For the purposes of realising LI\_T2 between an IRI-TF and a triggered IRI-POI, the IRI-TF plays the role of the "ADMF" as defined in the ETSI TS 103 221-1 [7] reference model (clause 4.2), and the triggered IRI-POI plays the role of the "NE".

In case the IRI-TF receives from the triggered IRI-POI an error in the answer to a triggering message, the IRI-TF shall send a ReportTaskIssue message to the LIPF. In such case, the failure of LI shall not impact the target's or other users' services.

Unless otherwise specified, an IRI-TF shall set the ProductID field in any ActivateTask or ModifyTask message issued to a triggered IRI-POI (see ETSI TS 103 221-1 [7] clause 6.2.1.2). The IRI-TF shall set the ProductID to the XID of the Task object associated with the interception at the IRI-TF in order to allow correlation of LI product at the MDF2.

Unless otherwise specified, the TF shall include the MDF2 as the X2 delivery destination in the trigger sent using the ActivateTask/ModifyTask with "X2Only".

When the IRI-TF determines that it is required to remove a Task at a particular IRI-POI (e.g. having detected the end of a session) it shall send a DeactivateTask message for the relevant Task to that IRI-POI, unless the Task has already been removed by other means (e.g. by the use of the ImplicitDeactivationAllowed flag, see ETSI TS 103 221-1 [7] clause 6.2.12).

When the IRI-TF receives a DeactivateTask message or ModifyTask message from the LIPF, the IRI-TF shall send DeactivateTask or ModifyTask messages to all applicable triggered IRI-POIs for all tasks associated to the Task object in the message from the LIPF.

### 5.2.6 Usage for realising LI\_T3

For the purposes of realising LI\_T3 between a CC-TF and a triggered CC-POI, the CC-TF plays the role of the "ADMF" as defined in the ETSI TS 103 221-1 [7] reference model (clause 4.2), and the triggered CC-POI plays the role of the "NE".

In case the CC-TF receives from the triggered CC-POI an error in the answer to a triggering message, the CC-TF shall send a ReportTaskIssue message to the LIPF. In such case, the failure of LI shall not impact the target's or other users' services.

Unless otherwise specified, a CC-TF shall set the ProductID field in any ActivateTask or ModifyTask message issued to a triggered CC-POI (see ETSI TS 103 221-1 [7] clause 6.2.1.2). The CC-TF shall set the ProductID to the XID of the Task object associated with the interception at the CC-TF in order to allow correlation of LI product at the MDF3.

Unless otherwise specified, the TF shall include MDF3 as the X3 delivery destination in the trigger sent using the ActivateTask/ModifyTask with "X3Only".

When the CC-TF determines that it is required to remove a Task at a particular CC-POI (e.g. having detected the end of a session) it shall send a DeactivateTask message for the relevant Task to that CC-POI, unless the Task has already been removed by other means (e.g. by the use of the ImplicitDeactivationAllowed flag, see ETSI TS 103 221-1 [7] clause 6.2.12).

When the CC-TF receives a DeactivateTask message or ModifyTask message from the LIPF, the CC-TF shall send DeactivateTask or ModifyTask messages to all applicable triggered CC-POIs for all tasks associated to the Task object in the message from the LIPF.

 END OF CHANGE 3

 START OF CHANGE 4

## 5.3 Protocols for LI\_X2 and LI\_X3

### 5.3.1 General usage of ETSI TS 103 221-2

Functions having an LI\_X2 or LI\_X3 interface shall support the use of ETSI TS 103 221-2 [8] to realise the interface.

In the event of a conflict between ETSI TS 103 221-2 [8] and the present document, the terms of the present document shall apply.

The xIRI and the xCC sent using ETSI TS 103 221-2 [8] shall contain the appropriate XID as received in the relevant LI\_X1 provisioning message (or LI\_T2/LI\_T3 triggering message, as appropriate), noting that the appropriate XID may be given in the ProductID field.

### 5.3.2 Usage for realising LI\_X2

The POI sending xIRI over the LI\_X2 interface shall set the PDU type field within the xIRI to "X2 PDU". (see ETSI TS 103 221-2 [8] clause 5.1).

Where a single xIRI is sent as a result of a network procedure (i.e. as result of several signaling messages exchanged between the target UE and the network), the POI sending the xIRI shall set the Payload Direction field (see ETSI TS 103 221-2 [8] clause 5.2.6) based on the initiator of the network procedure.

Unless otherwise specified by the relevant clause, the payload shall consist of a BER-encoded TS33128Payloads.XIRIPayload structure. The payload format (see ETSI TS 103 221-2 [8] clause 5.4) shall be set according to the relevant clause of the present document (the value 2 is used for TS 33128Payloads.XIRIPayload).The TLS transport profile (see ETSI TS 103 221-2 [8] clause 6) shall be supported and used by default.

Unless otherwise specified, xIRI shall include the timestamp and sequence number conditional attribute fields, with the timestamp value set to the time at which the event occurred.

Unless otherwise specified, the "Matched Target Identifier" conditional attribute shall be set to indicate what target identity was matched to generate the xIRI (see ETSI TS 103 221-2 [8] clause 5.3.18).

Unless otherwise specified, the "Other Target Identifier" conditional attribute shall be set with all other target identities present at the NF that contains the POI (see ETSI TS 103 221-2 [8] clause 5.3.19).

Unless otherwise specified, the NFID conditional attribute (see ETSI TS 103 221-2 [8] clause 5.3.7) should be set to indicate the NF that contains the POI. The NFID is defined as a unique identifier assigned to the NF by the network (e.g. FQDN) per carrier implementation and referred to in the following clauses.

Unless otherwise specified, the IPID (see ETSI TS 103 221-2 [8] clause 5.3.8) should be set to indicate the POI (within the NF) that generated the xIRI for the conditional attribute field.

### 5.3.3 Usage for realising LI\_X3

The POI sending xCC over the LI\_X3 interface shall set the PDU type field in the xCC to "X3 PDU" (see ETSI TS 103 221-2 [8] clause 5.1).

The payload format shall be specified according to the relevant clause of the present document.

Unless otherwise specified, the NFID conditional attribute (see ETSI TS 103 221-2 [8] clause 5.3.7) should be set to indicate the NF that contains the POI. The NFID is defined as a unique identifier assigned to the NF by the network (e.g. FQDN) per carrier implementation and referred to in the following clauses.

Unless otherwise specified, the IPID (see ETSI TS 103 221-2 [8] clause 5.3.8) should be set to indicate the POI (within the NF) that generated the xCC for the conditional attribute field.

If defined by LI for a specific 3GPP-defined-network deployment (see clause 6) or a specific 3GPP-defined service (see clause 7), the POI may use the Additional XID Related Information attributes to facilitate efficient delivery of xCC, as specified in ETSI TS 103 221-2 [8] clause 5.3.22.

NOTE: ETSI TS 103 221-2 [8] specifies in clause 6 a default profile which is mandatory to support, but allows further profiles to be defined. In scenarios where it may not be possible to achieve the necessary LI data rates based on the default profile, alternative profiles may be considered (e.g. based on UDP, multi path TCP or other protocols). Any alternative profile needs to ensure that LI reliability, security and completeness requirements as specified in TS 33.126 [3] are met.

 END OF CHANGE 4

 START OF CHANGE 5

#### 7.10.3.2 Provisioning over LI\_X1

##### 7.10.3.2.1 General

For Phase-1 of HR LI, the following LI functions are provisioned over LI\_X1 by the LIPF using the X1 protocol defined in ETSI TS 103 221-1 [7] with the LIPF playing the role of ADMF and the following LI functions playing the role of NE as per the reference model depicted in ETSI TS 103 221-1 [7]:

- BBIFF-C present in the SMF.

- BBIFF-C present in the SGW-C.

- BBIFF present in the SGW.

- LMISF-IRI.

As described in clause 7.10.1, the Phase-1 of HR LI applies to all inbound roaming UEs that use the IMS-based services with home-routed roaming. The target identities "HR" and "IMSSignaling" are used for Phase-1 of HR LI.

##### 7.10.3.2.2 Provisioning of BBIFF-C and BBIFF

The minimum details of LI\_X1 ActivationTask message is shown in table 7.10.3.2-2.

Table 7.10.3.2-1: Void

Table 7.10.3.2-2: ActivateTask message for activating BBIFF-C and BBIFF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 field name | Description | M/C/O |
| XID | Shall be set to a value assigned by the LIPF. This shall be same as the XID used for ActivateTask as shown in table 7.10.3.2-4 when LMISF-IRI is configured using the ActivateTask.  | M |
| TargetIdentifiers | Shall contain Target Identifiers of type "HR" and "IMSSignaling" (see table 7.10.3.2-3). | M |
| DeliveryType | Set to "X2andX3". | M |
| ListOfDIDs | Shall give the DID of the LMISF-IRI to which the xIRI and xCC should be delivered. The delivery endpoint is configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |

Table 7.10.3.2-3: Target Identifier Type for enabling HR LI

|  |  |  |
| --- | --- | --- |
| Identifier type | ETSI TS 103 221-1 [7] TargetIdentifier type | Definition |
| HR | TargetIdentifierExtension /HR | Empty tag (see XSD schema) |
| IMSSignaling  | TargetIdentifierExtension/IMSSignaling | Empty tag (see XSD schema) |

##### 7.10.3.2.3 Provisioning of LMISF-IRI

The LMISF-IRI is listed as the delivery endpoint over LI\_X2\_LITE for xIRI generated by the BBIFF-C/BBIFF and for the xCC generated by the BBIFF-U/BBIFF.

The provisioning of LMISF-IRI is to enable it to receive the xIRIs and xCC sent from the BBIFF-C (SMF, SGW-C), BBIFF-U (UPF, SGW-U) and BBIFF (SGW). As an alternate deployment option, LMISF-IRI may be presumed to be enabled to receive such xIRI/xCC by default. This clause does not apply to such alternate deployment option.

Table 7.10.3.2-4 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the LMISF-IRI for Phase-1.

Table 7.10.3.2-4: ActivateTask message for activating the LMISF-IRI for Phase-1

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 field name | Description | M/C/O |
| XID | Shall be set to a value assigned by the LIPF. This shall be same as the XID used for ActivateTask as shown in table 7.10.3.2-2. | M |
| TargetIdentifiers | Shall contain two Target Identifiers of type "HR" and "IMSSignaling" (see table 7.10.3.2-3). | M |
| DeliveryType | Set to "X2andX3".LMISF-IRI shall use this only to enable the receiving of xIRI and xCC from the BBIFF-C/BBIFF. | M |
| ListOfDIDs | Shall be given as an empty list, since DIDs are not required in LMISF-IRI for Phase-1. | M |

 END OF CHANGE 5

 START OF CHANGE 6

#### 7.10.4.5 Triggering of BBIFF-U from BBIFF-C over LI\_T3

##### 7.10.4.5.1 General

When the trigger is received over the LI\_T1 for activating the media interception, the BBIFF-C present in the SGW-C shall send a trigger over LI\_T3 to the BBIFF-U present in the SGW-U when a dedicated bearer for the IMS media is established on the PDN connection.

When the trigger is received over the LI\_T1 for activating the media interception, the BBIFF-C present in the SMF shall send a trigger over LI\_T3 to the BBIFF-U present in the UPF when the PDU session is modified for adding IMS media related QoS flow.

If the trigger over LI\_T1 is received for activating the media interception after the IMS media related changes has happened (i.e. dedicated bearer is established for IMS media, PDU session is modified for adding the IMS media related QoS flow), then the BBIFF-C shall send the trigger to the BBIFF-U over LI\_T3 immediately.

The BBIFF-C shall trigger the BBIFF-U to stop the delivery of xCC to the LMISF-CC when it receives the trigger from the LMISF-IRI over LI\_T1 for stopping the media interception, independent of whether the IMS media related changes have happened or not.

##### 7.10.4.5.2 N9HR LI

The LI\_T3 trigger that the BBIFF-C in SMF sends to the BBIFF-U present in the UPF shall include at least the following information:

- XID assigned locally by the BBIFF-C in the SMF.

- The ProductID that includes the XID it receives from the LMISF-IRI over LI\_T1.

- Target identity: PFCP Session ID, PDR ID with the QFI associated with the IMS voice media (5Q = 1) related QoS flow.

- Delivery end point: LMISF-CC

The details of ActivateTask sent to the BBIFF-U in UPF over LI\_T3 are shown in table 7.10.4.5-1.

Table 7.10.4.5-1: ActivateTask message for triggering the BBIFF-U in the UPF over LI\_T3

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | Allocated by the BBIFF-C as per ETSI TS 103 221-1 [7]. | M |
| TargetIdentifiers | Packet detection criteria as determined by the BBIFF-C in the SMF, which enables the BBIFF-U to isolate user-plane packets of IMS voice media. The BBIFF-U in the UPF shall support the identifier types given in Table 6.2.3-7. The target identity type of PDR ID shall be mandatory. The BBIFF-C in SMF shall use the QFI associated with the IMS voice media (5QI = 1) related QoS flow to populate the QFI field within the PDI of PDR ID. | M |
| DeliveryType | Set to “X3Only”. | M |
| ListOfDIDs | Shall give the DID of the LMISF-CC to which the xCC should be delivered. The delivery endpoint is configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |
| CorrelationID | Correlation ID to assign to X3 PDUs generated by the BBIFF-U in the UPF. This field is populated with the same CorrelationID received over the LI\_T1 interface (see table 7.10.4.4.1). | M |
| ProductID | Shall be set to the XID of the Task Object associated with the interception as received in the ProductID field over LI\_T1 interface (see table 7.10.4.4.1). This value shall be used by the BBIFF-U in the UPF to fill the XID of X3 PDUs. | M |

The DeactivateTask sent to the BBIFF-U present in the UPF over LI\_T3 shall include the XID of the Task created by the ActivateTask message (see table 7.10.4.5-1).

##### 7.10.4.5.3 S8HR LI

The LI\_T3 trigger that the BBIFF-C in SGW-C sends to the BBIFF-U present in the SGW-U shall include at least the following information:

- XID assigned locally by the BBIFF-C in the SGW-C.

- The ProductID that includes the XID it receives from the LMISF-IRI over LI\_T1.

- Target identity: PFCP Session ID, PDR ID with the F-TEID associated with the IMS voice media (QCI = 1) related dedicated bearer.

- Delivery end point: LMISF-CC.

The details of ActivateTask sent to the BBIFF-U in SGW-U over LI\_T3 are shown in table 7.10.4.5-2.

Table 7.10.4.5-2: ActivateTask message for triggering the BBIFF-U in the SGW-U

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | Allocated by the BBIFF-C as per ETSI TS 103 221-1 [7]. | M |
| TargetIdentifiers | Packet detection criteria as determined by the BBIFF-C in the SGW-C, which enables the BBIFF-U in SGW-U to isolate user-plane packets. The BBIFF-U in the SGW-U shall support the identifier types given in Table 6.2.3-7. The target identity type of PDR ID shall be mandatory. The BBIFF-C in SGW-C shall use the F-TEIDs associated with the IMS voice media (QCI = 1) related dedicated bearer to populate the F-TEID field within the PDI of PDR ID. | M |
| DeliveryType | Set to “X3Only”. | M |
| ListOfDIDs | Shall give the DID of the LMISF-CC to which the xCC should be delivered. The delivery endpoint is configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |
| CorrelationID | Correlation ID to assign to X3 PDUs generated by the BBIFF-U in the SGW-U. This field is populated with the same CorrelationID received over the LI\_T1 interface (see table 7.10.4.4.3). | M |
| ProductID | Shall be set to the XID of the Task Object associated with the interception as received in the ProductID field over LI\_T1 interface (see table 7.10.4.4.3). This value shall be used by the BBIFF-U in the SGW-U to fill the XID of X3 PDUs. | M |

The DeactivateTask sent to the BBIFF-U present in the SGW-U over LI\_T3 shall include the XID of the Task created by the ActivateTask message (see table 7.10.4.5-2).

 END OF CHANGE 6

 START OF CHANGE 7

### 7.13.2 Triggering of the IRI-POI and CC-POI in the HTTP Content Server

#### 7.13.2.1 Triggering of the IRI-POI in the HTTP Content Server over LI\_T2

##### 7.13.2.1.1 LI\_T2 interface Specifics

In order to allow the IRI-POI in the HTTP content server to detect all events related to files uploaded or downloaded by a target, the IRI-TF in the RCS Server sends a trigger to the IRI-POI present in the HTTP Content Server with the necessary information over the LI\_T2 interface.

When the IRI-TF in the RCS Server detects that a file is being uploaded or downloaded by a target UE it shall send an activation message to the IRI-POI in the HTTP Content Server over the LI\_T2 interface. The activation message shall contain the correlation identifiers that the IRI-POI in the HTTP Content Server shall use with the xIRI. This can be achieved by sending an ActivateTask message as defined in ETSI TS 103 221-1 [7] clause 6.2.1 with the following details.

Table 7.13.2.1-1: ActivateTask message from the IRI-TF in the RCS Server for the IRI-POI in the HTTP Content Server

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | Allocated by the IRI-TF as per ETSI TS 103 221-1 [7]. | M |
| TargetIdentifiers | File detection criteria as determined by the IRI-TF in the RCS Server, which enables the IRI-POI in the HTTP Content Server to isolate target files. The IRI-POI in the HTTP Content Server shall support the identifier types given in table 7.13.2.1-2.NOTE: This value is the target identifier for the IRI-POI in the HTTP Content Server and may be different from the target identifier specified in the warrant. | M |
| DeliveryType | Set to "X2Only". | M |
| ListOfDIDs | Delivery endpoints for LI\_X2. These delivery endpoints shall be configured by the IRI-TF in the RCS Server using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to first use. | M |
| CorrelationID | Correlation ID to assign to xIRI generated by the IRI-POI in the HTTP Content Server. This field is populated with the same CorrelationID the IRI-POI in the RCS Server uses for the associated xIRI. | M |
| ProductID | Shall be set to the XID of the Task Object associated with the interception at the IRI-TF. This value shall be used by the IRI-POI in the HTTP Content Server to fill the XID of X2 messages. | M |
| ListOfServiceTypes | Shall be included when the task should only intercept specific CSP service types as described in clause 5.2.4. This parameter is defined in ETSI TS 103 221-1 [7], clause 6.2.1.2, table 4. | C |

Table 7.13.2.1-2: Target Identifier Types for LI\_T2

|  |  |  |  |
| --- | --- | --- | --- |
| Identifier type | Owner | ETSI TS 103 221-1 [7] TargetIdentifier type | Definition |
| RCS Content URI (See Note) | 3GPP | TargetIdentifierExtension / RCSContentURI | RCSContentURI (see XSD schema) |
| NOTE: If the TargetIdentifier used is an RCS Content URI, only one RCS Content URI shall be included per ActivateTask message. |

#### 7.13.2.2 Triggering of the CC-POI in the HTTP Content Server over LI\_T3

##### 7.13.2.2.1 LI\_T3 interface Specifics

To support the use-cases where the IRI-POI in the HTTP Content Server does not get the identity of the user involved in the file-transfer (and therefore, the CC-POI in the HTTP Content Server cannot perform the intereption based on the target identity provisioned by the LIPF), the CC-TF present in the RCS Server sends a trigger to the CC-POI present in the HTTP Content Server. When the CC-TF in the RCS Server detects that a file is being uploaded or downloaded by a target UE, it shall send an activation message to the CC-POI in the HTTP Content Server over the LI\_T3 interface. The activation message shall contain the correlation identifiers that the CC-POI in the HTTP Content Server shall use with the xCC. This can be achieved by sending an ActivateTask message as defined in ETSI TS 103 221-1 [7] clause 6.2.1 with the following details.

Table 7.13.2.2-1: ActivateTask message from the CC-TF in the RCS Server for the CC-POI in the HTTP Content Server

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | Allocated by the CC-TF as per ETSI TS 103 221-1 [7]. | M |
| TargetIdentifiers | File detection criteria as determined by the CC-TF in the RCS Server, which enables the CC-POI in the HTTP Content Server to isolate target files. The CC-POI in the HTTP Content Server shall support the identifier types given in table 7.13.2.1-2. | M |
| DeliveryType | Set to “X3Only”. | M |
| ListOfDIDs | Delivery endpoints for LI\_X3. These delivery endpoints shall be configured by the CC-TF in the RCS Server using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to first use. | M |
| CorrelationID | Correlation ID to assign to xCC generated by the CC-POI in the HTTP Content Server. This field is populated with the same CorrelationID the IRI-POI in the RCS Server uses for the associated xIRI. | M |
| ProductID | Shall be set to the XID of the Task Object associated with the interception at the CC-TF. This value shall be used by the CC-POI in the HTTP Content Server to fill the XID of X3 messages. | M |
| ListOfServiceTypes | Shall be included when the task should only intercept specific CSP service types as described in clause 5.2.4. This parameter is defined in ETSI TS 103 221-1 [7], clause 6.2.1.2, table 4. | C |

 END OF CHANGE 7

 START OF CHANGE 8

Annex B (normative):
LI Notification

Based on clause 5.6 of the present document, this annex defines a system of management notification of LI system with the LI\_HI4 interface.

The LI\_HI4 interface shall be used to transport specific LI service O&M information (referred to as LI Notification) from the CSP to the LEMF. The individual parameters of the LI Notification message shall be coded using ASN.1 and the basic encoding rules (BER). The delivery of LI Notification shall be performed directly using the same mechanism as used for delivery of IRI messages over LI\_HI2 and CC over LI\_HI3.

The LI Notification shall be used to send electronic notification to the LEMF in the following cases:

1) after the activation of lawful interception;

2) after the deactivation of lawful interception;

3) after the modification of an active lawful interception.

Table B.1-1: LINotification message

|  |  |  |
| --- | --- | --- |
| **Field name** | **Description** | **M/C/O** |
| notificationType | Information on the type of notification: activation, deactivation or modification | M |
| deliveryInformation | Delivery Information which has been decided by the LEA in terms of delivery numbers, IP addresses for LI\_HI2 and LI\_HI3 | O |
| appliedTargetID | Target Identifier applied in the ADMF for the warrant | O |
| appliedStartTime | Start time applied to the ADMF for the warrant | C |
| appliedEndTime | End time applied to the ADMF for the warrant | C |

Conditional parameters shall be set as follows:

|  |
| --- |
| **LI Activation Notification** |
| **Field name** | **Description** | **M/C/O** |
| notificationType | Activation | M |
| appliedStartTime | Always present and represents:The Start Date/Time in the warrant or,The Date/Time of the CSP activation in the ADMF or,The scheduled future Start Date/Time. | C |
| appliedEndTime | Absence means the interception has been activated with no predefined End Date/Time.Presence means the End time is scheduled to be applied at that (future) time.  | C |

|  |
| --- |
| **LI Modification Notification** |
| **Field name** | **Description** | **M/C/O** |
| notificationType | Modification | M |
| appliedStartTime | Present and provides the new Start Date/Time if modified by the LI Modification command | C |
| appliedEndTime | Present and provides the new End Date/Time if modified by the LI Modification command | C |

|  |
| --- |
| **LI Deactivation Notification** |
| **Field name** | **Description** | **M/C/O** |
| notificationType | Deactivation | M |
| appliedStartTime | Absent | C |
| appliedEndTime | Present and provides the actual End Date/Time, e.g. timed stop as per initial warrant or as per new warrant, or as pre-emptive audited stop from the LEA, or major LI failure. | C |

The individual notifications parameters shall be sent to the LEMF as soon as possible with the lowest latency at least once (if available).

The MDF2/MDF3 will deliver the LINotification message to LEMF.

 END OF CHANGE 8