**3GPP TSG-SA3 Meeting #84-LI-e-a *draft\_s3i220040-r1***

**Online, , 24th Jan 2022 - 28th Jan 2022**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **33.128** | **CR** | **0316** | **rev** | **1** | **Current version:** | **17.3.0** |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Addition of ListOfServiceTypes to ActivateTask messages |
|  |  |
| ***Source to WG:*** | SA3-LI(OTD) |
| ***Source to TSG:*** | SA3 |
|  |  |
| ***Work item code:*** | LI17 |  | ***Date:*** | 2022-01-27 |
|  |  |  |  |  |
| ***Category:*** | **C** |  | ***Release:*** | Rel-17 |
|  | *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:*** | The current specification has a requirement for service scoping at the POI, but there is no description of how this should be performed. The usage of the new ListOfServiceTypes parameter needs to be specified. |
|  |  |
| ***Summary of change:*** | Details the usage of the ListOfServiceTypes parameter. |
|  |  |
| ***Consequences if not approved:*** | Details for Service Scoping at the POI will not be specified. |
|  |  |
| ***Clauses affected:*** | 4.4.2, 5.2.4, 5.3.4, 5.5.4, 6.2.2.1, 6.2.3.1.2, 6.2.3.3.1, 6.2.3.4, 6.2.5.1, 6.3.2.1, 7.13.1.2, 7.13.2.2.1, 7.13.2.3.1 |
|  |  |
|  | **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:*** |  |
|  |  |
| ***This CR's revision history:*** | S3i220040 |

\*\*\* Start of First Change \*\*\*

### 4.4.2 CSP service type

The LIPF shall be able to provision the POIs, TFs and MDF2/MDF3 according to the requirements of the warrant with the following CSP service type(s):

- Voice.

- Data.

- Messaging (e.g. SMS/MMS).

- Push-to-Talk (including MCPTT).

- LALS (the Target Positioning service, per TS 33.127 [5], clause 7.3.3.2).

When multiple service types are applicable to a target due to multiple warrants, the MDF2/MDF3 shall be able to deliver interception product to each LEMF based on the CSP service type(s) of the respective warrant.

When no service type is provisioned, the POIs shall generate and deliver all applicable interception product specified for the NF where the POI is located.

When no service type is provisioned, the MDF2/MDF3 shall deliver all interception product it receives from the POIs.

\*\*\* Start of Change 2 of 13 \*\*\*

### 5.2.4 Service scoping

The LIPF shall be able to provision the POI, TFs and the MDF2/MDF3 according to the service scoping (see clause 4.4) applicable to a warrant as described in Clause 6.2.1.2 and Annex C of ETSI TS 103 221-1 [7].

If there is a need to explicitly identify specific CSP service types to be intercepted by the task, the LIPF shall include the ListOfServiceTypes parameter in the TaskDetails of the provisioning message sent to the POIs/TFs. If no service type is provisioned, the POIs shall generate and deliver all applicable interception product specified for the NF where the POI is located as described in clause 4.4.2.

If there is a need to explicitly identify specific CSP service types to be delivered by the task, the LIPF shall include the ServiceType parameter of the ServiceScoping parameter in the MediationDetails of the provisioning message sent to the MDF2/MDF3. If the LIPF includes the ListOfServiceTypes parameter in the TaskDetails of the provisioning message sent to the MDF2/MDF3, the MDF2/MDF3 shall ignore this parameter.

\*\*\* Start of Change 3 of 13 \*\*\*

### 5.3.4 Service scoping

When applicable, the POIs shall deliver the xIRIs/xCC to MDF2/MDF3 over LI\_X2/LI\_X3 according to the service scoping as provisioned by the LIPF to them (see clause 5.2.4).

\*\*\* Start of Change 4 of 13 \*\*\*

### 5.5.4 Service scoping

The MDF2 and MDF3 shall be able to deliver the IRI messages and the CC to the LEMF over LI\_HI2 and LI\_HI3 respectively, according to the provisioned service scoping (see clause 5.2.4).

\*\*\* Start of Change 5 of 13 \*\*\*

#### 6.2.2.1 Provisioning over LI\_X1

The IRI-POI present in the AMF is provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2.

The POI in the AMF shall support the following target identifier formats in the ETSI TS 103 221-1 [7] messages (or equivalent if ETSI TS 103 221-1 [7] is not used):

- SUPIIMSI.

- SUPINAI.

- PEIIMEI.

- PEIIMEISV.

- GPSIMSISDN.

- GPSINAI.

Table 6.2.2-0A shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POI in the AMF.

Table 6.2.2-0A: ActivateTask message for the IRI-POI in the AMF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. | M |
| TargetIdentifiers | One of the target identifiers listed in the paragraph above. | M |
| DeliveryType | Set to "X2Only". | M |
| ListOfDIDs | Delivery endpoints for LI\_X2 for the IRI-POI in the AMF. These delivery endpoints are configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |
| TaskDetailsExtensions/IdentifierAssociationExtensions | This field shall be included if the IRI POI is required to generate AMFIdentifierAssociation records (see clause 6.2.2.2.1). If the field is absent, AMFIdentifierAssociation records shall not be generated. | C |
| ListOfServiceTypes | Shall be included when the explicit identification of specific CSP service types to be intercepted by the task as described in clause 5.2.4 is required. This parameter is defined in ETSI TS 103 221-1 [7], clause 6.2.1.2, Table 4. | C |

Table 6.2.2-0B: IdentifierAssociationExtensions Parameters

|  |  |  |
| --- | --- | --- |
| Field Name | Description | M/C/O |
| EventsGenerated | One of the following values:- IdentifierAssociation- AllSee clause 6.2.2.2.1 for the interpretation of this field. | M |

\*\*\* Start of Change 6 of 13 \*\*\*

##### 6.2.3.1.2 Provisioning of the IRI-POI, IRI-TF and CC-TF in the SMF

The IRI-POI, IRI-TF and CC-TF present in the SMF are provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2.

The POI/TF in the SMF shall support the following target identifier formats in the ETSI TS 103 221-1 [7] messages (or equivalent if ETSI TS 103 221-1 [7] is not used):

- SUPIIMSI.

- SUPINAI.

- PEIIMEI.

- PEIIMEISV.

- GPSIMSISDN.

- GPSINAI.

Table 6.2.3-0A shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POI, in the SMF.

Table 6.2.3-0A: ActivateTask message for SMF IRI-POI, CC-TF and IRI-TF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. If the CC-TF or IRI-TF is also being tasked for the same interception, the same XID shall be used. | M |
| TargetIdentifiers | One or more of the target identifiers listed in the paragraph above. | M |
| DeliveryType | Set to “X2Only”, “X3Only” or “X2andX3” as needed to meet the requirements of the warrant. (NOTE: "X2Only" for IRI-POI, IRI-TF and "X3Only" for CC-TF can also be used). | M |
| TaskDetailsExtensions/HeaderReporting | Header reporting-specific tag to be carried in the *TaskDetailsExtensions* field of ETSI TS 103 221-1 [7]. See table 6.2.3.9.2-1. Unless there is a CSP/LEA agreement to not report packet header information, this field shall be present to enable packet header information reporting. | C |
| ListOfDIDs | Delivery endpoints of LI\_X2 or LI\_X3. These delivery endpoints shall be configured using the *CreateDestination* message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to first use. | 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 |

To enable packet header information reporting, parameters specified in table 6.2.3.9.2-1: PDHRReportingExtensions parametersshall be provided as the TaskDetailsExtensions/HeaderReporting field of the LI\_X1 provisioning message.

\*\*\* Start of Change 7 of 13 \*\*\*

##### 6.2.3.3.1 LI\_T3 interface specifics

When interception of communication contents is authorised or the delivery of packet header information is authorised and approach 2 described in clause 6.2.3.5 is used, the CC-TF present in the SMF sends a trigger to the CC-POI present in the UPF over the LI\_T3 interface.

When the CC-TF in the SMF detects that a PDU session is being established for a target UE (i.e. when the SMF sends the N4: Session Establishment Request), it shall send an activation message to the CC-POI in the UPF over the LI\_T3 interface. The activation message shall contain the correlation identifiers that the CC-POI in the UPF 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 6.2.3-6: ActivateTask message for triggering the CC-POI in the UPF

|  |  |  |
| --- | --- | --- |
| 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 | Packet detection criteria as determined by the CC-TF in the SMF, which enables the UPF to isolate target traffic. The CC-POI in the UPF shall support at least the identifier types given in Table 6.2.3-7.NOTE: This value is the target identifier for the CC-POI in the UPF and may be different from the target identifier specified in the warrant. | M |
| DeliveryType | Set to “X3Only”. | M |
| ListOfDIDs | Delivery endpoints for LI\_X3. These delivery endpoints shall be configured by the CC-TF in the SMF 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 X3 PDUs generated by the CC-POI in the UPF. This field is populated with the same CorrelationID the IRI-POI in the SMF 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 UPF to fill the XID of X3 PDUs. | M |

The CC-TF in the SMF shall not send the ListOfServiceTypes parameter of the ActivateTask message to the CC-POI in the SMF.

Table 6.2.3-7: Target Identifier Types for LI\_T3

|  |  |  |  |
| --- | --- | --- | --- |
| Identifier type | Owner | ETSI TS 103 221-1 [7] TargetIdentifier type | Definition |
| GTP Tunnel ID | 3GPP | gtpuTunnelId | F-TEID (see XSD schema) |
| UE IP Address | ETSI | ipAddress | See ETSI TS 103 221-1 [7] |
| UE IP Address and port | ETSI | ipAddressPort | See ETSI TS 103 221-1 [7] |
| PFCP Session ID | 3GPP | TargetIdentifierExtension / FSEID | F-SEID (see XSD schema) |
| PDR ID | 3GPP | TargetIdentifierExtension / PDRID | 32 bit unsigned integer (see XSD schema) |
| QER ID | 3GPP | TargetIdentifierExtension / QERID | 32 bit unsigned integer (see XSD schema) |
| Network Instance | 3GPP | TargetIdentifierExtension / NetworkInstance | Octet string (see XSD schema) |
| GTP Tunnel Direction | 3GPP | TargetIdentifierExtension / GTPTunnelDirection | Enumeration (see XSD schema) |

When the CC-TF in the SMF detects that a targeted PDU session is changing (i.e. when the SMF sends the N4 Session Modification Request to the UPF) in a way that requires changes to the interception already activated by the CC-POI in the UPF, the CC-TF shall modify the interception at the CC-POI in the UPF over the LI\_T3 interface. This is achieved by sending a ModifyTask message as defined in ETSI TS 103 221-1 [7] clause 6.2.2. The ModifyTask message contains the same details as the ActivateTask message with the following fields updated as appropriate.

Table 6.2.3-8: Parameters that may be changed in a ModifyTask message when updating interception at the CC-POI in the UPF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| TargetIdentifiers | Updated packet detection criteria as determined by the CC-TF in the SMF.NOTE: See notes on TargetIdentifiers in Table 6.2.3-6. | M |

When the CC-TF in the SMF detects that a targeted PDU session is changing (i.e. when the SMF sends the N4 Session Modification Request to the UPF) for which the interception had not been previously activated in the CC-POI in the UPF (e.g. in case of previous unsuccessful LI activation at the CC-POI in the UPF by the CC-TF in the SMF), the CC-TF shall send an activation message to the CC-POI in the UPF over the LI\_T3 interface. The activation message shall contain the correlation identifiers that the CC-POI in the UPF 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 details provided by Table 6.2.3-6.

When the CC-TF in the SMF detects that the PDU session has been released (i.e. when the SMF sends the N4: Session Release Request to the UPF) for a target UE, it shall send a deactivation message to the CC-POI in the UPF over the LI\_T3 interface. When using ETSI TS 103 221-1 [7] this is achieved by sending a DeactivateTask message with the XID field set to the XID associated with the interception, as described in ETSI TS 103 221-1 [7] clause 6.2.3.

By default, interception shall occur at the anchor UPF as described in 6.2.3.3.3.

When a warrant that includes the service scoping of CC is activated for a target UE with an established PDU session and when the IRI-POI present in the SMF generates the xIRI containing an SMFStartOfInterceptionWithEstablishedPDUSession record (see clause 6.2.3.2.5), the CC-TF present in the SMF shall send an activation message to the CC-POI present in the UPF to generate the xCC.

\*\*\* Start of Change 8 of 13 \*\*\*

#### 6.2.3.4 IRI-POI in UPF triggering over LI\_T2

When interception of packet header information is authorised, if approach 1 described in clause 6.2.3.9.1 is used for packet header information reporting, the IRI-TF in the SMF shall send a trigger to the IRI-POI in the UPF over the LI\_T2 interface when the IRI-TF in the SMF detects that a PDU session has been established for a target UE. The activation message shall contain the correlation ID that the IRI-POI in the UPF shall use when generating xIRI. This shall be achieved by sending an ActivateTask message as defined in TS 103 221-1 [7] clause 6.2.1 with the following details.

Table 6.2.3-9: ActivateTask message for triggering the UPF IRI-POI

|  |  |  |
| --- | --- | --- |
| 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 | Packet detection criteria as determined by the IRI-TF in the SMF, which enable the UPF IRI-POI to isolate target traffic. The IRI-POI in the UPF shall support at least the identifier types given in Table 6.2.3-7.NOTE: This value is the target identifier for the IRI-POI in the UPF and may be different from the target identifier specified in the warrant. | M |
| DeliveryType | Set to “X2Only”. | M |
| TaskDetailsExtensions/HeaderReporting | Header reporting-specific tag to be carried in the *TaskDetailsExtensions* field of ETSI TS 103 221-1 [7]. See table 6.2.3.9.2-1. | M |
| ListOfDIDs | Delivery endpoints of LI\_X2. These delivery endpoints shall be configured by the IRI-TF in the SMF 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 for xIRI generated by the IRI-POI in the UPF. This field is populated with the same CorrelationID the IRI-POI in the SMF 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 UPF to fill the XID of X2 PDUs. | M |

The IRI-TF in the SMF shall not send the ListOfServiceTypes parameter of the ActivateTask message to the IRI-POI in the SMF.

Table 6.2.3-10: Void

When the IRI-TF in the SMF detects that a targeted PDU session has changed in a way which requires changes to the interception by the IRI-POI in the UPF, the IRI-TF in the SMF shall modify the interception at the IRI-POI in the UPF over the LI\_T2 interface. This is achieved by sending a ModifyTask message as defined in ETSI TS 103 221-1 [7] clause 6.2.2. The ModifyTask message contains the same details as the ActivateTask message with the following fields updated as appropriate.

Table 6.2.3-11: Parameters that may be changed in a ModifyTask message when updating interception at the IRI-POI in the UPF

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| TargetIdentifiers | Updated packet detection criteria as determined by the IRI-TF in the SMF.NOTE: See notes on TargetIdentifiers in Table 6.2.3-6. | M |

When the IRI-TF in the SMF detects that the PDU session has been released for a target UE, it shall send a deactivation message to the IRI-POI in the UPF over the LI\_T2 interface. When using ETSI TS 103 221-1 [7] this is achieved by sending a DeactivateTask message with the XID field set to the XID associated with the interception, as described in ETSI TS 103 221-1 [7] clause 6.2.3.

When a PDU session involves multiple UPFs, the selection of UPF to provide the IRI-POI functions shall be done in the same way an UPF is selected to provide the CC-POI functions as described in clauses 6.2.3.3.2 and 6.2.3.3.3.

When interception of packet header information is authorised for a target UE, if approach 1 described in clause 6.2.3.9.1 is used for packet header information reporting, the IRI-TF present in the SMF shall send an activation message to the IRI-POI present in the UPF when the IRI-POI present in the SMF generates the xIRI containing an SMFStartOfInterceptionWithEstablishedPDUSession record to generate the packet header information reporting related xIRIs from the user plane packets of that PDU session.

\*\*\* Start of Change 9 of 13 \*\*\*

#### 6.2.5.1 Provisioning over LI\_X1

The IRI-POI present in the SMSF is provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2.

The IRI-POI in the SMSF shall support the following target identifier formats in the ETSI TS 103 221-1 [7] messages:

- SUPIIMSI.

- SUPINAI.

- PEIIMEI.

- PEIIMEISV.

- GPSIMSISDN.

- GPSINAI.

If service scoping is to be performed at the IRI-POI in the SMSF, the IRI-POI in the SMSF shall support the following CSP service types (see clause 4.4.2 and clause 5.2.4):

- Messaging

If the IRI-POI in the SMSF receives an ActivateTask message and the ListOfServiceTypes parameter contains a ServiceType that is not supported, the IRI-POI in the SMSF shall reject the task with an appropriate error as described in ETSI TS 103 221-1 [7] clause 6.2.1.2.

Table 6.2.5-1 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POI in the SMSF.

Table 6.2.5-1: ActivateTask message for the IRI-POI in the SMSF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. | M |
| TargetIdentifiers | One of the target identifiers listed in the paragraph above. | M |
| DeliveryType | Set to “X2Only”. | M |
| ListOfDIDs | Delivery endpoints for LI\_X2 for the IRI-POI in the SMSF. These delivery endpoints are configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |
| TaskDetailsExtensions/SMSFExtensions | This field shall be included if the delivery of the full TPDU is not authorised. See table 6.2.5-2. | C |
| 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 6.2.5-2: TruncateTPUserData Parameters

|  |  |  |
| --- | --- | --- |
| Field Name | Description | M/C/O |
| TruncateTPUserData | If included, the truncatedSMSTPDU field of the sMSTPDUData (as described in Table 6.2.5-7) structure shall be used when applicable (see text below table). If absent, the sMSTPDU field of the sMSTPDUData structure shall be used. | C |

If the TruncateTPUserData field of the LI\_X1 ActivateTask message is included, the IRI-POI in the SMSF shall use the truncatedSMSTPDU field in xIRI generated at the IRI-POI in the SMSF for SMS-SUBMIT and SMS-DELIVER TPDUs, otherwise, the sMSTPDU field shall be used.

The MDF2 listed as the delivery endpoint for the LI\_X2 generated by the IRI-POI in the SMSF shall be provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2. If SMS Content delivery is not authorized, the MDF2 shall be provisioned with the TruncateTPUserData included, otherwise it shall be be left absent.

Table 6.2.5-3 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the MDF2.

Table 6.2.5-3: ActivateTask message for MDF2

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. | M |
| TargetIdentifiers | One of the target identifiers listed in clause 6.2.5.1. | M |
| DeliveryType | Set to “X2Only”. (Ignored by the MDF2). | M |
| ListOfDIDs | Delivery endpoints for LI\_HI2. These delivery endpoints are configured using the CreateDestination message as described in ETSI TS 103 221-1 [7], clause 6.3.1 prior to the task activation. | M |
| ListOfMediationDetails | Sequence of Mediation Details, See table 6.2.5-4. | M |
| TaskDetailsExtensions/SMSFExtensions | This field shall be included if the delivery of the full TPDU is not authorised. See table 6.2.5-2. | C |

Table 6.2.5-4: Mediation Details for MDF2

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| LIID | Lawful Interception ID associated with the task. | M |
| DeliveryType | Set to "HI2Only". | M |
| ListOfDIDs | Details of where to send the IRI for this LIID. Shall be included if deviation from the ListofDIDs in the ActivateTask message is necessary. If included, the ListOfDIDs in the Mediation Details shall be used instead of any delivery destinations specified in the ListOfDIDs field in the ActivateTask Message. | C |
| ServiceScoping | Shall be included to Identify the service(s) and associated service-related delivery settings for this LIID. May include more than one instance of this parameter to allow for different combinations of sub-parameters associated with a single LIID. This parameter is defined in ETSI TS 103 221-1 [7], Annex C, Table C.2. | C |

\*\*\* Start of Change 10 of 13 \*\*\*

#### 6.3.2.1 Provisioning over LI\_X1

The IRI-POI present in the MME is provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2.

The POI in the MME shall support the following target identifier formats:

- IMSI (using the IMSI target identifier format from ETSI TS 103 221-1 [7]).

- MSISDN (using the E164Number target identifier format from ETSI TS 103 221-1 [7]).

- ME Identity (using the IMEI target identifier format from ETSI TS 103 221-1 [7]).

Table 6.3.2-0A shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POI in the MME.

Table 6.3.2-0A: ActivateTask message for the IRI-POI in the MME

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. | M |
| TargetIdentifiers | One of the target identifiers listed in the paragraph above. | M |
| DeliveryType | Set to "X2Only". | M |
| ListOfDIDs | Delivery endpoints for LI\_X2 for the IRI-POI in the MME. These delivery endpoints are configured using the CreateDestination message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to the task activation. | M |
| TaskDetailsExtensions/IdentifierAssociationExtensions | This field shall be included if the IRI-POI is required to generate MMEIdentifierAssociation records (see clause 6.3.2.2.1). If the field is absent, MMEIdentifierAssociation records shall not be generated. | C |
| 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 6.3.2-0B: IdentifierAssociationExtensions Parameters

|  |  |  |
| --- | --- | --- |
| Field Name | Description | M/C/O |
| EventsGenerated | One of the following values:- IdentifierAssociation- AllSee clause 6.3.2.2.1 for the interpretation of this field. | M |

\*\*\* Start of Change 11 of 13 \*\*\*

#### 7.13.1.2 Provisioning of the POIs and TFs in the RCS Server and the POIs in the HTTP Content Server and S-CSCF by the LIPF

The IRI-POI. CC-POI. IRI-TF and CC-TF present in the RCS Server and the IRI-POI and CC-POI in the HTTP Content Server and S-CSCF are provisioned over LI\_X1 by the LIPF using the X1 protocol as described in clause 5.2.2.

The POIs and TFs in the RCS Server and the IRI-POIs in the S-CSCF shall support the following target identifier formats in the ETSI TS 103 221-1 [7] messages (or equivalent if ETSI TS 103 221-1 [7] is not used).

- IMPU.

- IMPI.

- IMEI.

- PEIIMEI.

The POIs in the HTTP Content Server shall support the following additional target identifier formats in the ETSI TS 103 221-1 [7] messages (or equivalent if ETSI TS 103 221-1 [7] is not used).

- SIPURI.

- TELURI.

- GPSIMSISDN.

- GPSINAI.

- IMSI.

- SUPIIMSI.

- SUPINAI.

- Email Address.

Table 7.13.1.2-1 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POI, CC-POI, IRI-TF and CC-TF in the RCS Servers and the IRI-POI and CC-POI in the HTTP Content Server and S-CSCF.

Table 7.13.1.2-1: ActivateTask message for the IRI-POI, CC-POI, IRI-TF and CC-TF in the RCS Servers and the IRI-POI and CC-POI in the HTTP Content Server and S-CSCF

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. If the CC-TF or IRI-TF is also being tasked for the same interception, the same XID shall be used. The same XID shall be used at the RCS Servers, the S-CSCF and the HTTP Content Server for the same interception. | M |
| TargetIdentifiers | One or more of the target identifiers listed in the paragraphs above. | M |
| DeliveryType | Set to “X2Only”, “X3Only” or “X2andX3” as needed to meet the requirements of the warrant. (NOTE: "X2Only" for IRI-POI, IRI-TF and "X3Only" for CC-TF and CC-POI can also be also be used). | M |
| ListOfDIDs | Delivery endpoints of LI\_X2 or LI\_X3. These delivery endpoints shall be configured using the *CreateDestination* message as described in ETSI TS 103 221-1 [7] clause 6.3.1 prior to first use. | 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 |

\*\*\* Start of Change 12 of 13 \*\*\*

##### 7.13.2.2.1 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 7.13.2.2-1: 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 | XID assigned by LIPF. If the CC-TF or IRI-TF is also being tasked for the same interception, the same XID shall be used. The same XID shall be used at the RCS Servers, the S-CSCF and the HTTP Content Server for the same interception. | 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 7.13.2.2-2.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 7.13.2.2-2: 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. |

\*\*\* Start of Change 13 of 13 \*\*\*

##### 7.13.2.3.1 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 7.13.2.3-1: 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 | XID assigned by LIPF. If the CC-TF or IRI-TF is also being tasked for the same interception, the same XID shall be used. The same XID shall be used at the RCS Servers, the S-CSCF and the HTTP Content Server for the same interception. | 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 7.13.2.2-2. | 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 All Changes \*\*\*