**3GPP SA3LI#89 S3i230322**

**Washington DC; April 25-28, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.128** | **CR** | **541** | **rev** | **1** | **Current version:** | **18.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Update to TS 33.128 due to the transfer of Annex G to TR 33.928 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (Nokia, Nokia Shanghai Bell) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI18 | | | | |  | ***Date:*** | | | 2023-04-27 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | ***C*** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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 can be 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:*** | | As agreed at the SA#90 Plenary, the Annex G of TS 33.128 is being moved to the new TR 33.928. This requires all references made to Annex G are changes to TR 33.928. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | A reference is added to TR 33.928. All Annex G references are changed to TR 33.928. Annex G is removed. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | If the Annex G is not removed, the purpose of Plenary approval is not fullfilled. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 7.10.4.2.1, 7.12.2.1, 7.12.2.7, 7.12.3.2.1, 7.12.3.2.2, 7.12.3.3, 7.12.4.1.1, 7.12.4.1.4, 7.12.4.1.5.1, 7.12.5.1.1, 7.12.5.1.3, 7.12.5.1.4, Annex G | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 is dependent on the approval of S3i230208 and S3i230209 which create the new TR 33.928. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR’s revision history:*** | | S3i230287 | | | | | | | | |

### \*\* First Change \*\*

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: “Vocabulary for 3GPP Specifications”.

[2] 3GPP TS 23.501: “System Architecture for the 5G System”.

[3] 3GPP TS 33.126: “Lawful Interception Requirements”.

[4] 3GPP TS 23.502: “Procedures for the 5G System; Stage 2”.

[5] 3GPP TS 33.127: “Lawful Interception (LI) Architecture and Functions”.

[6] ETSI TS 103 120: “Lawful Interception (LI); Interface for warrant information”.

[7] ETSI TS 103 221-1: “Lawful Interception (LI); Internal Network Interfaces; Part 1: X1”.

[8] ETSI TS 103 221-2: “Lawful Interception (LI); Internal Network Interfaces; Part 2: X2/X3”.

[9] ETSI TS 102 232-1: “Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 1: Handover specification for IP delivery”.

[10] ETSI TS 102 232-7: “Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 7: Service-specific details for Mobile Services”.

[11] 3GPP TS 33.501: “Security Architecture and Procedures for the 5G System”.

[12] 3GPP TS 33.108: “3G security; Handover interface for Lawful Interception (LI)”.

[13] 3GPP TS 24.501: “Non-Access-Stratum (NAS) protocol for 5G System (5GS)”.

[14] 3GPP TS 24.007: “Mobile radio interface signalling layer 3; General Aspects”.

[15] 3GPP TS 29.244: “Interface between the Control Plane and the User Plane nodes”.

[16] 3GPP TS 29.502: “5G System; Session Management Services; Stage 3”.

[17] 3GPP TS 29.571: “5G System; Common Data Types for Service Based Interfaces; Stage 3”.

[18] 3GPP TS 23.040: “Technical realization of the Short Message Service (SMS)”.

[19] 3GPP TS 23.003: “Numbering, addressing and identification “.

[20] OMA-TS-MLP-V3\_5-20181211-C: “Open Mobile Alliance; Mobile Location Protocol, Candidate Version 3.5”, <https://www.openmobilealliance.org/release/MLS/V1_4-20181211-C/OMA-TS-MLP-V3_5-20181211-C.pdf>.

[21] 3GPP TS 29.540: “5G System; SMS Services; Stage 3”.

[22] 3GPP TS 29.518: “5G System; Access and Mobility Management Services; Stage 3”.

[23] 3GPP TS 38.413: “NG Application Protocol (NGAP)”.

[24] 3GPP TS 29.572: “Location Management Services; Stage 3”.

[25] 3GPP TS 29.503: “5G System; Unified Data Management Services”.

[26] IETF RFC 815: “IP datagram reassembly algorithms”.

[27] IETF RFC 2460: “Internet Protocol, Version 6 (IPv6) Specification”.

[28] IETF RFC 793: “Transmission Control Protocol”.

[29] IETF RFC 768: “User Datagram Protocol”.

[30] IETF RFC 4340: “Datagram Congestion Control Protocol (DCCP)”.

[31] IETF RFC 4960: “Stream Control Transmission Protocol”.

[32] IANA (www.iana.org): Assigned Internet Protocol Numbers, “Protocol Numbers”.

[33] IETF RFC 6437: “Ipv6 Flow Label Specification”.

[34] IETF RFC 791: “Internet Protocol”.

[35] Open Geospatial Consortium OGC 05-010: “URNs of definitions in ogc namespace”.

[36] 3GPP TS 33.107: “3G security; Lawful interception architecture and functions”.

[37] 3GPP TS 37.340: “Evolved Universal Radio Access (E-UTRA) and NR-Multi-connectivity; Stage 2”.

[38] 3GPP TS 36.413: “S1 Application Protocol (S1AP)”.

[39] OMA-TS-MMS\_ENC-V1\_3-20110913-A: “Multimedia Messaging Service Encapsulation Protocol”.

[40] 3GPP TS 23.140: “Multimedia Messaging Protocol. Functional Description. Stage 2”.

[41] 3GPP TS 38.415: “NG-RAN; PDU Session User Plane Protocol”.

[42] 3GPP TS 23.273: “5G System (5GS) Location Services (LCS); Stage 2”.

[43] IETF RFC 4566: “SDP: Session Description Protocol”.

[44] 3GPP TS 24.193: “Stage 3: Access Traffic Steering, Switching and Splitting (ATSSS)”.

[45] 3GPP TS 29.509: “5G System; Authentication Server Services; Stage 3”.

[46] 3GPP TS 24.011: “Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface”.

[47] 3GPP TS 29.002: “Mobile Application Part (MAP) specification”.

[48] 3GPP TS 29.504: “5G System; Unified Data Repository Services; Stage 3”.

[49] 3GPP TS 29.505: “5G System; Usage of the Unified Data Repository services for Subscription Data; Stage 3”.

[50] 3GPP TS 23.401 “General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access”.

[51] 3GPP TS 24.301 “Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS), Stage 3”.

[52] 3GPP TS 23.271 “Functional stage 2 description of Location Services (LCS)”.

[53] 3GPP TS 29.172 “Evolved Packet Core (EPC) LCS Protocol (ELP) between the Gateway Mobile Location Centre (GMLC) and the Mobile Management Entity (MME); SLg interface”.

[54] 3GPP TS 29.171 “LCS Application Protocol (LCS-AP) between the Mobile Management Entity (MME) and Evolved Serving Mobile Location Centre (E-SMLC); SLs interface”.

[55] 3GPP TS 24.379: “Mission Critical Push to Talk (MCPTT) call control; protocol specification”.

[56] OMA-TS-PoC-System\_Description-V2\_1-20110802-A: “OMA PoC System Description”.

[57] 3GPP TS 29.541: “5G System; Network Exposure (NE) function services for Non-IP Data Delivery (NIDD); Stage 3”.

[58] 3GPP TS 29.522: “5G System; Network Exposure Function Northbound APIs; Stage 3”.

[59] 3GPP TS 29.338: “Diameter based protocols to support Short Message Service (SMS) capable Mobile Management Entities (MMEs); Stage 3”.

[60] 3GPP TS 29.337: “Diameter-based T4 interface for communications with packet data networks and applications”.

[61] 3GPP TS 24.250: “Protocol for Reliable Data Service; Stage 3”.

[62] 3GPP TS 29.128: “Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) interfaces for interworking with packet data networks and applications”.

[63] 3GPP TS 29.122: “T8 reference point for Northbound APIs”.

[64] 3GPP TS 29.598: “5G System; Unstructured Data Storage Services; Stage3”.

[65] 3GPP TS 33.535: “Authentication and Key Management for Applications (AKMA) based on 3GPP credentials in the 5G System (5GS)”.

[66] IETF RFC 5246: “The Transport Layer Security (TLS) Protocol Version 1.2”.

[67] GSMA IR.88: “IR.88 LTE and EPC Roaming Guidelines”.

[68] GSMA NG.114 “IMS Profile for Voice, Video and Messaging over 5GS”.

[69] IETF RFC 8225: “PASSporT: Personal Assertion Token”.

[70] IETF RFC 8224: “Authenticated Identity Management in the Session Initiation Protocol (SIP)”.

[71] IETF RFC 8588: “Personal Assertion Token (PaSSporT) Extension for Signature-based Handling of Asserted information using token’s (SHAKEN)”.

[72] 3GPP TS 24.196: “Enhanced Calling Name (eCNAM)”.

[73] IETF draft-ietf-stir-passport-rcd-17: “PASSporT Extension for Rich Call Data”.

NOTE: The above document cannot be formally referenced until it is published as an RFC.

[74] 3GPP TS 24.229: “IP multimedia call control protocol based on Session Initiation Protocol (SIP)and Session Description Protocol (SDP); Stage 3”.

[75] IANA Session Initiation Protocol (SIP) Parameters: <https://www.iana.org/assignments/sip-parameters/sip-parameters.xhtml>

[76] IETF RFC 8946: “Personal Assertion Token (PASSporT) Extension for Diverted Calls”.

[77] 3GPP TS 23.204: “3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Support of Short Message Service (SMS) over generic 3GPP Internet Protocol (IP) access; Stage 2”.

[78] GSMA RCC.07: “Rich Communication Suite – Advanced Communications Services and Client Specification”.

[79] IETF RFC 4975: “The Message Session Relay Protocol (MSRP)”.

[80] IETF RFC 3862: “Common Presence and Instant Messaging (CPIM): Message Format”.

[81] IETF RFC 5438: “Instant Message Disposition Notification (IMDN)”.

[82] OMA-TS-CPM\_System\_Description-V2\_2-20170926-C: “OMA Converged IP Messaging System Description”.

[83] IETF RFC 4566 : « SDP : Session Description Protocol ».

[84] 3GPP TS 36.455: « Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol A (LPPa) « .

[85] 3GPP TS 37.355: « LTE Positioning Protocol (LPP) ».

[86] 3GPP TS 38.455: “NG-RAN; NR Positioning Protocol A (NRPPa)”.

[87] 3GPP TS 29.274: “3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunnelling Protocol for Control plane (GTPv2-C); Stage 3”.

[88] 3GPP TS 29.513: “5G System; Policy and Charging Control signalling flows and QoS parameter mapping”.

[89] 3GPP TS 29.512: “5G System; Session Management Policy Control Service; Stage 3”.

[90] 3GPP TS 29.508: “5G System; Session Management Event Exposure Service; Stage 3”.

[91] 3GPP TS 29.514: “5G System; Policy Authorization Service; Stage 3”.

[92] 3GPP TS 29.214: “Policy and Charging Control over Rx reference point”.

[93] 3GPP TS 24.558: “Enabling Edge Applications; Protocol specification”.

[94] 3GPP TS 29.558: “Enabling Edge Applications; Application Programming Interface (API) specification”.

[95] 3GPP TS 24.008: “Mobile radio interface Layer 3 specification; Core network protocols; Stage 3”.

[96] 3GPP TS 29.551: “5G System; Packet Flow Description Management Service; Stage 3”.

[97] ETSI TS 103 280: “Lawful Interception (LI); Dictionary for common parameters”.

[98] 3GPP TS 26.512: “5G Media Streaming (5GMS); Protocols”.

[99] 3GPP TS 26.247: “Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)”.

[100] 3GPP TS 29.563: “5G System; Home Subscriber Server (HSS) services for interworking with Unified Data Management (UDM); Stage 3”.

[101] 3GPP TS 29.562: “5G System; Home Subscriber Server (HSS) Services; Stage 3”.

[102] 3GPP TS 24.341 “Support of SMS over IP networks, Stage 3”.

[103] 3GPP TS 38.473 “NG-RAN;F1 application protocol (F1AP)”.

[104] 3GPP TS 23.032: “Universal Geographical Area Description (GAD)”.

[105] ITU-T Recommendation Q.763 (1999): “Specifications of Signalling System No.7; Formats and codes”.

[106] 3GPP TS 29.272: “Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) related interfaces based on Diameter protocol”.

[107] IETF RFC 6442 : « Location Conveyance for the Session Initiation Protocol ».

[108] 3GPP TS 29.272: “ Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) related interfaces based on Diameter protocol”.

[xxx] 3GPP TR 33.928: "ADMF Logic for Provisioning Lawful Interception (LI) ".

### \*\* Next Change \*\*

##### 7.10.4.2.1 General

For Phase-2 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].

- LMISF-IRI.

- MDF2.

- MDF3.

As described in clause 7.10.1, the Phase-2 of HR LI applies to inbound roaming target UEs that use IMS-based services with home-routed roaming or the inbound roaming UEs that use IMS-based services with home-routed roaming to communicate with the target non-local ID. The following target identities are used for Phase-2 of HR LI:

- IMPU.

- IMPI.

- PEIIMEI.

- IMEI.

The target identity in the IMPI format may contain a value derived from a SUPI or an IMSI. The target identity in the IMPU format containing a SIP URI or TEL URI may contain a value derived from a GPSI, MSISDN, an E.164 number, or IMSI. Only IMPU is used for target non-local ID. For triggered LALS, the LTF function associated with LMISF-IRI (see clause 7.3.1 and TR 33.928 [xxx]) is provisioned with the target identity of IMPU.

### \*\* Next Change \*\*

#### 7.12.2.1 General

This clause defines protocol and procedures to support the LI for IMS-based services. The scope of LI functions defined here are based on the IMS LI architecture defined in TS 33.127 [5] that includes:

- Target type – local ID, non-local ID.

- Roaming considerations – local break-out (LBO), home-routed (HR).

- Service specific aspects - normal sessions, redirected sessions, conferencing, STIR/SHAKEN, RCD/eCNAM.

- Location reporting.

The IMS LI shall apply to all IMS-based services unless restricted by the service scoping as defined in clause 4.4 of the present document. When restricted by the service scoping, the IMS LI applies only to service types listed in table C.2 of ETSI TS 103 221-1 [7]). Clause 7.12.2.5 provides further details of IMS LI with service scoping.

As defined in TS 33.127 [5], the NFs that provide the IRI-POI and CC-TF are in the IMS signaling functions that handle the SIP messages and the NFs that provide the CC-POI are in the IMS media functions. The media interception in the packet core network (EPC or 5GC) is outside the scope of the present document.

For some of the services listed above, an alternate deployment option in addition to the default option is also specified in TS 33.127 [5]. The NFs that provide the IRI-POI, CC-TF and CC-POI in the alternate deployment option can be different.

The LIPF provisioning scenarios for IMS LI is illustrated in TR 33.928 [xxx].

### \*\* Next Change \*\*

#### 7.12.2.7 Deployment considerations

As described in TS 33.127 [5], some of the service types may have two deployment options denoted as "default option" and "alternate option".

As illustrated in TR 33.928 [xxx], the LIPF provisions the LI functions in a NF based on the option the CSP has deployed within the network.

### \*\* Next Change \*\*

##### 7.12.3.2.1 Session-based IMS services

The table 7.12.3.2-1 below shows the applicability of NFs in which the IRI-POIs are provisioned with the target identifiers listed in clause 7.12.2.2 for session based IMS sessions (e.g. voice). See TS 33.127 [5] and TR 33.928 [xxx].

When the service scoping is applicable, the IRI-POIs in the NFs shown in table 7.12.3.2-1 are provisioned only when the type of service is voice/text or messaging (i.e. MSRP-based).

Table 7.12.3.2-1: IRI-POIs in the NFs that need to be provisioned for session-based IMS service

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NF  (IMS signaling function) | Not a target non-local ID | | Target non-local ID | | Reference |
| Default | Alternate option | Default | Alternate option |
| P-CSCF | YES | YES | YES | NO | In this clause |
| S-CSCF | YES | NO | NO | YES | In this clause |
| E-CSCF | YES | NO | NO | NO | In this clause |
| IBCF | NO | YES | YES | YES | In this clause |
| MGCF | NO | YES | YES | NO | In this clause |
| AS | YES | YES | YES | YES | In this clause |
| HSS | YES | YES | NO | NO | 7.2.3 |

Table 7.12.3.2-2 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POIs in the NFs listed in tables7.12.3.2-1 for session based IMS-based services.

Table 7.12.3.2-2: ActivateTask message for activating IRI-POI for session-based IMS service

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. The value used here shall be the same when IRI-POIs in multiple NFs are provisioned for a warrant. The value used here shall also be same as the value used for provisioning the CC-TFs (see table 7.12.3.3-1), MDF2 (see 7.12.3.4-1) and MDF3 (see table 7.12.3.5-1). | M |
| TargetIdentifiers | One or more of the target identifiers listed in the clause 7.12.2.2 with the embedded conditions implied. | M |
| DeliveryType | Set to “X2Only. | M |
| ListOfDIDs | Delivery endpoints of LI\_X2. 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 | Present if interception is to be done on one or more a specific service type. Using the format defined in ETS TS 103 221 [7] based on the service scoping listed below this table. When multiple intercepts are activated on a target identifier, the service scoping shall be the union of all of them. | C |

When service scoping is required, the IRI-POIs present in the NFs listed in table 7.12.3.2-1 shall support the following service types from the structure defined in ETSI TS 103 221-1 [7]:

- The enumerated value of "voice" or "messaging" in the service type field.

The ModifyTask and DeactivateTask messages that the LIPF may send to the IRI-POIs present in the NFs listed in table 7.12.3.2-1 shall include the XID of the Task created by the above ActivateTask message.

### \*\* Next Change \*\*

##### 7.12.3.2.2 Session-independent IMS services

Table 7.12.3.2-3 below shows the applicability of NFs in which the IRI-POIs are provisioned with the target identifiers listed in clause 7.12.2.2 for session independent services (e.g. SMS over IP). See TS 33.127 [5] and TR 33.928 [xxx].

When the service scoping is applicable, the IRI-POIs in the NFs shown in table 7.12.3.2-3 are provisioned only when the service type is messaging (i.e. SMS over IP).

Table 7.12.3.2-3: IRI-POIs in the NFs that need to be provisioned for session-independent IMS-based service

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NF  (IMS signaling function) | Not a target non-local ID | | Target non-local ID | | Reference |
| Default | Alternate option | Default | Alternate option |
| P-CSCF | YES | YES | YES | YES | In this clause |
| S-CSCF | YES | NO | YES | NO | In this clause |
| E-CSCF | YES | NO | NO | NO | In this clause |
| IBCF | NO | YES | NO | YES | In this clause |
| MGCF | NO | NO | NO | NO | In this clause |
| AS | NO | NO | NO | NO | In this clause |
| HSS | YES | YES | NO | NO | 7.2.3 |

Table 7.12.3.2-4 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the IRI-POIs in the NFs listed in table 7.12.3.2-3 for session independent IMS-based voice services.

Table 7.12.3.2-4: ActivateTask message for activating IRI-POI for session independent IMS-based service

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. The value used here shall be the same when IRI-POIs in multiple NFs are provisioned for a warrant. | M |
| TargetIdentifiers | One or more of the target identifiers listed in the clause 7.12.2.2 with the embedded conditions implied. | M |
| DeliveryType | Set to “X2Only. | M |
| ListOfDIDs | Delivery endpoints of LI\_X2. 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 | Present if interception of one or more listed service types is required. Using the format defined in ETS TS 103 221 [7] based on the service scoping listed below this table. When multiple intercepts are activated on a target identifier, the service scoping shall be the union of all of them. | C |

When service scoping is required, the IRI-POIs present in the NFs listed in table 7.12.3.2-3 shall support the following service types from the structure defined in ETSI TS 103 221-1 [7]:

- The enumerated value of "messaging" in the service type field.

The ModifyTask and DeactivateTask messages that the LIPF may send to the IRI-POIs present in the NFs listed in table 7.12.3.2-3 shall include the XID of the Task created by the above ActivateTask message.

### \*\* Next Change \*\*

#### 7.12.3.3 Provisioning of CC-TF

The table 7.12.3.3-1 below shows the applicability of NFs in which the CC-TFs are provisioned with the target identifiers listed in clause 7.12.2.2 for session-based IMS services (e.g. voice). See TS 33.127 [5] and TR 33.928 [xxx].

Table 7.12.3.3-1: CC-TFs in the NFs that need to be provisioned for session-based IMS service

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| NF  (IMS signaling function) | Not a target non-local ID | | Target non-local ID | |
| Default | Alternate option | Default | Alternate option |
| P-CSCF | YES | YES | YES | NO |
| IBCF | YES | YES | YES | YES |
| MGCF | YES | YES | YES | NO |
| AS/MRFC | YES | YES | YES | YES |
| Conferencing AS/MRFC | YES | YES | YES | YES |

Table 7.12.3.3-2 shows the minimum details of the LI\_X1 ActivateTask message used for provisioning the CC-TFs in the NFs listed in table 7.12.3.3-1 for session-based IMS services.

Table 7.12.3.3-2: ActivateTask message for activating CC-TF for session-based IMS services

|  |  |  |
| --- | --- | --- |
| ETSI TS 103 221-1 [7] field name | Description | M/C/O |
| XID | XID assigned by LIPF. The value used here shall be the same when IRI-POIs in multiple NFs are provisioned for a warrant. The value used here shall also be same as the value used for provisioning the IRI-POIs (see table 7.12.3.2-2), MDF2 (see 7.12.3.4-1) and MDF3 (see table 7.12.3.5-1). | M |
| TargetIdentifiers | One or more of the target identifiers listed in the clause 7.12.2.2 with the embedded conditions implied. | M |
| DeliveryType | Set to “X3Only. | M |
| ListOfDIDs | Delivery endpoints of 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 | Present if interception of one or more listed service types is required. The value provisioneUsing the format defined in ETS TS 103 221 [7] based on the service scoping listed below this table. When multiple intercepts are activated on a target identifier, the service scoping shall be the union of all of them. | C |

When service scoping is required, the CC-TF present in the NFs listed in table 7.12.3.3-1 shall support the following service scoping from the structure defined in ETSI TS 103 221-1 [7]:

- The enumerated value of "voice" or "messaging" in the service type field.

The ModifyTask and DeactivateTask messages that the LIPF may send to the CC-TFs present in the NFs listed in table 7.12.3.3-1 shall include the XID of the Task created by the above ActivateTask message.

### \*\* Next Change \*\*

##### 7.12.4.1.1 General

The IRI-POIs present in the NFs provisioned as shown in table 7.12.3.3-1 generate the xIRIs according to the conditions described in TS 33.127 [5] and illustrated in TR 33.928 [xxx].

As described in TS 33.127 [5], clause 7.12.3.2.2 and illustrated in TR 33.928 [xxx], the present document supports two deployment options:

- Default option.

- Alternate option.

The options used for LI involving a specific IMS service may be different from the option used for LI involving another IMS service. For example, a default option may be used for target non-local ID and an alternate option may be used for a local target ID.

NOTE: One of the obvious conditions not stated in the subsequent clauses is that an NF can provide an IRI-POI functions if and only if the SIP signaling messages pass through that NF.

When a condition (e.g. inbound roaming with LBO) under which an NF provides the IRI-POI functions is dependent on the handling of SIP REGISTER message, the IRI-POIs may have to scan the SIP REGISTER for all IMS users to address the case when that IMS user engages in a communication with a target non-local ID.

### \*\* Next Change \*\*

##### 7.12.4.1.4 IRI-POI in E-CSCF

In the default deployment option, the E-CSCF provides the IRI-POI functions except for the following condition (see TR 33.928 [xxx]):

- S-CSCF provides the IRI-POI for emergency services.

In the alternate deployment option, the E-CSCF does not provide the IRI-POI functions.

When the above conditions are met, the IRI-POI present in the E-CSCF identifies that an IMS-based communication is to be intercepted according to clause 7.12.2.8.

### \*\* Next Change \*\*

###### 7.12.4.1.5.1 Session-based IMS communications

In the default deployment option, the IBCF provides the IRI-POI functions when any of the following conditions are met (see TR 33.928 [xxx]):

- A non-roaming IMS user is in communication with a target non-local ID.

- An outbound roaming IMS user is in communication with a target non-local ID.

In the alternate deployment option, the IBCF shall provide the IRI-POI functions when any of the following conditions are met:

- The target involved is an outbound roaming (with LBO) IMS user.

- The IMS session to a target is redirected to a user in the IP domain.

- IMS session to a target is redirected to an outbound roaming (with LBO) IMS user.

- An inbound roaming (with LBO) IMS user is in communication with a target non-local ID on an IMS session that employs home-routed media.

When the above conditions are met, the IRI-POI present in the IBCF identifies that an IMS-based communication is to be intercepted according to clause 7.12.2.8.

### \*\* Next Change \*\*

##### 7.12.5.1.1 General

The CC\_TFs present in the NFs provisioned as shown in table 7.12.3.3-1 activate the CC-POIs according to the conditions described in TS 33.127 [5] and illustrated in TR 33.928 [xxx].

NOTE 1: One of the obvious conditions not stated in the subsequent clauses is that an NF can provide the CC-TF functions if and only if the SIP signaling messages pass through that NF.

NOTE 2: The CC-TF functions apply only for session-based IMS communications.

When a condition (e.g. inbound roaming with LBO) under which an NF provides the CC-TF functions is dependent on the handling of SIP REGISTER message, the CC-TFs may have to scan the SIP REGISTER for all IMS users to address the case when that IMS user engages in a communication with a target non-local ID.

### \*\* Next Change \*\*

##### 7.12.5.1.3 CC-TF in IBCF

The IBCF provides the CC-TF functions when the CC-POI functions are provided at the TrGW.

The IBCF provides the CC-TF functions when any of the following conditions are met (see TR 33.928 [xxx]):

- A non-roaming IMS user is in communication with a target non-local ID in the IP domain.

- An outbound roaming IMS user is in communication with a target non-local ID in the IP domain.

- IMS session is to an outbound roaming (with LBO) target.

- An IMS session to a target is redirected to a user in the IP domain.

- An IMS session to a target is redirected to an outbound roaming (with LBO) IMS user.

- An inbound roaming (with LBO) IMS user is in communication with a target non-local ID on an IMS session that employs home-routed media and alternate deployment option is used for media interception.

When the above conditions are met, the CC-TF present in the IBCF identifies that an IMS-based communication is to be intercepted according to clause 7.12.2.8.

### \*\* Next Change \*\*

##### 7.12.5.1.4 CC-TF in MGCF

The MGCF provides the CC-TF functions when the CC-POI functions are provided at the IM-MGW.

The MGCF provides the CC-TF functions when any of the following conditions are met (see TR 33.928 [xxx]):

- A non-roaming IMS user is in communication with a target non-local ID in the CS domain.

- An outbound roaming IMS user is in communication with a target non-local ID in the CS domain.

- An IMS session to a target is redirected to a user in the CS domain.

When the above conditions are met, the CC-TF present in the MGCF identifies that an IMS-based communication is to be intercepted according to clause 7.12.2.8.

### \*\* Next Change \*\*



































































### \*\* End of all Changes \*\*