**3GPP SA3LI#84-e-a *S3i220046***

**Online, 24-28, January 2022**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **33.128** | **CR** | **0320** | **rev** | **1** | **Current version:** | **16.9.0** |  |
|  |
| *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 NFID for xIRI and xCC |
|  |  |
| ***Source to WG:*** | SA3 LI (OTD) |
| ***Source to TSG:*** | SA3 |
|  |  |
| ***Work item code:*** | LI16 |  | ***Date:*** | 2022-01-25 |
|  |  |  |  |  |
| ***Category:*** | ***F*** |  | ***Release:*** | Rel-16 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Updating conditional requirements for inclusion of new common parameter NFID for reporting of xIRI and xCC. |
|  |  |
| ***Summary of change:*** | Addition of conditional parameter, NFID, for the reporting of xIRI and xCC in TS 33.128. |
|  |  |
| ***Consequences if not approved:*** | The potential inability to report the identity of the NF that contains the POI carrying out the LI operations. |
|  |  |
| ***Clauses affected:*** | 5.3.2, 5.3.3, 5.5.2, 5.5.3 |
|  |  |
|  | **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:*** | S3i220046 |

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

### 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 LI\_X2 "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 LI\_X2 "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 LI\_X2 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 LI\_X2 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 LI\_X3 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.

Unless otherwise specified, the LI\_X2 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.

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.

\*\*\* Second Change \*\*\*

### 5.5.2 Usage for realising LI\_HI2

The IRI messages sent over LI\_HI2 are structured as a header and a payload. The header contains general information like LIID, timestamp, correlation information (as for example defined in ETSI TS 102 232-1 [9]). The payload contains intercept related information based on information that the MDF2 has received from sources in the network, such as the IRI-POI as described in clauses 6 and 7 of the present document. Details of the IRI messages can be found in Annex A of the present document. Messages defined as passing over the LI\_HI2 interface shall be passed as the payload of the threeGPP33128DefinedIRI field (see TS ETSI 102 232 -7 [10] clause 15).

If the LI\_X2 contains the NFID conditional attribute (see ETSI TS 103 221-2 [8] clause 5.3.7), this shall be mapped into the PSHeader networkFunctionIdentifier (see ETSI TS 102 232-1 [9] clause 5.2.14 and ETSI TS 102 232-7 [10] clause 15.3).

If the LI\_X2 contains the IPID conditional attribute (see ETSI TS 103 221-2 [8]), the EIPID parameter (see ETSI TS 102 232-1 [9] clause 5.2.13) shall be populated by the MDF2 with the IPID value.

### 5.5.3 Usage for realising LI\_HI3

The CC sent over LI\_HI3 is structured as a header and a payload. The header contains general information like LIID, timestamp, correlation information (as for example defined in ETSI TS 102 232-1 [9]). The payload contains content of communication based on information that the MDF3 has received from sources in the network, such as the CC-POI as described in clauses 6 and 7 of the present document. Details of the CC can be found in Annex A of the present document. CC defined as passing over the LI\_HI3 interface shall be passed as the payload of the threeGPP33128DefinedCC field (see ETSI TS 102 232-7 [10] clause 15).

If the LI\_X3 contains the NFID conditional attribute (see ETSI TS 103 221-2 [8] clause 5.3.7), this shall be mapped into the PSHeader networkFunctionIdentifier (see ETSI Ts 102 232-1 [9] clause 5.2.14 and ETSI TS 102 232-7 [10] clause 15.3).

If the LI\_X3 contains the IPID conditional attribute (see ETSI TS 103 221-2 [8]), the EIPID parameter (see ETSI TS 102 232-1 [9] clause 5.2.13) shall be populated by the MDF3 with the IPID value.

NOTE: ETSI TS 102 232-1 [9] specifies in clause 6.4 a transport layer based on TCP. However, based on agreement between network operator and LEA, in scenarios where it may not be possible to achieve the necessary LI data rates based on the transport layer based on single TCP connection, 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 All Changes \*\*\*