**3GPP SA3LI#92 *s3i240073***

**30 January – 02 February 2024, Sevilla (Spain)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.128** | **CR** | **0614** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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:*** | LI\_HIQR: Adding option to support P2T identity association requests without ObservedTime parameter | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZITiS) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI18 | | | | |  | ***Date:*** | | | 2023-01-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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 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-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) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In most P2T ID association queries the LEA is interested in the most recent (latest) association between permanent and temporary identities and would like to retrieve this information without the need of specifying an observed time.  If requested by the LEA the corresponding location information (Cell ID) shall be included in the response.  Additionally the text describing the usage of the ObservedTime parameter may not be sufficiently clear to that effect that the ObservedTime is currently mandatory for non-ongoing P2T LI\_HIQR queries. This CR specifies what is expected and will avoid any ambiguity. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarification what is expected as a response in case no ObservedTime is provided within a P2T ID association query. The discription in Table 5.7.2-2 is adapted and a new LI\_XQR request message, called LatestAssociationRequest, is introduced. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | No possibility to issue a P2T ID association LI\_HIQR query without ObservedTime set, respectively it is not specified if no ObservedTime is provided. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.7.2.1, 5.8, urn\_3GPP\_ns\_li\_3GPPIdentityExtensions.xsd | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 associated with the following changes in the Forge:  Merge Request: [!244](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/244)  Commit hash: 777c81b0 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | S3i240040 | | | | | | | | |

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

#### 5.7.2.1 Request structure

LI\_HIQR requests are represented by issuing a CREATE request for an LDTaskObject (see ETSI TS 103 120 [6] clause 8.3), populated as follows:

Table 5.7.2-1: LDTaskObject representation of LI\_HIQR request

|  |  |  |
| --- | --- | --- |
| Field | Value | M/C/O |
| Reference | Reference to the authorization under which the request is made. The format of this field, and any procedures for allocating or validating it, are for national agreement. | M |
| DesiredStatus | Shall be set to "AwaitingDisclosure". | M |
| RequestDetails | Set according to table 5.7.2-2 below. | M |
| DeliveryDetails | Shall be set to indicate the delivery destination for the LI\_HIQR records (see clause 5.7.2.3 and ETSI TS 103 120 [6] clause 8.3.6.2) unless the delivery destination is known via other means. | C |

The use of any other LDTaskObject parameter is outside the scope of the present document.

Table 5.7.2-2: RequestDetails structure

|  |  |  |
| --- | --- | --- |
| Field | Value | M/C/O |
| Type | Shall be set to one of the RequestType values as defined in table 5.7.2-3. | M |
| ObservedTime | When the RequestValues provides a temporary identity, this field shall be set to the observation time of that temporary identity.  When the RequestValues provides a permanent identity, this field may be set to the time at which the LEA requires that the permanent to temporary association is applicable. If no ObservedTime is provided the IQF shall assume it is being asked for the most recent association, if any exists (see clause 5.8.X).  Shall not be present for requests of type "OngoingIdentityAssociation". | C |
| RequestValues | Set to the target identifier plus additional information required (see clause 5.7.2.2). | M |

NOTE: If the observed time is in the past, providing a successful query response is subject to associations still being available in the cache when the query is made to the ICF.

Table 5.7.2-3: RequestType Dictionary for LI\_HIQR

|  |  |
| --- | --- |
| Dictionary Owner | Dictionary Name |
| 3GPP | RequestType |
|  | |
| Defined DictionaryEntries | |
| Value | Meaning |
| IdentityAssociation | A request for a single IdentityResponseDetails response to the query provided. |
| OngoingIdentityAssociation | A request for an ongoing series of IdentityResponseDetails responses matching the query provided. May only be used when the RequestValues contains a permanent identifier. The request shall be terminated by updating the LDTaskObject DesiredStatus to "Disclosed". |

Table 5.7.2-3 is formatted in accordance with ETSI TS 103 120 [6] Annex F.

\*\*\* End of First Change \*\*\*

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

### 5.8.X Latest association requests

If the IQF receives a permanent to temporary association request with RequestType "IdentityAssociation" (see table 5.7.2-3) which does not include an ObservedTime, the IQF issues a LatestAssociationRequest message populated as follows:

Table 5.8-Y: LatestAssociationRequest message for LI\_XQR

|  |  |  |
| --- | --- | --- |
| Field name | Description | M/C/O |
| SUPI | Permanent identifier for which the most recent association shall be provided. | M |
| Flags | This parameter may contain the "IncludeNCGIInResponse" Task flag (see table 5.7.2-4A) indicating if the response shall contain the NR Cell Global Identity associated with the SUPI at the time of association (see table 5.7.2-5) | M |

The corresponding successful LI\_XQR responses are returned using the IdentityAssociationResponse message. The IdentityAssociationResponse message shall be populated with the most recent association present in the ICF, if available. Error conditions are reported using the normal error reporting mechanisms described in TS 103 221-1 [7].

LI\_XQR query responses are represented in XML following the IdentityAssociationResponse schema (see Annex E). The fields of the IdentityAssociationResponse record shall be populated as described in Table 5.7.2-5.

##### \*\*\* End of Second Change \*\*\*

##### \*\*\* Third Change \*\*\*

---a/33128/r18/urn\_3GPP\_ns\_li\_3GPPIdentityExtensions.xsd  
+++b/33128/r18/urn\_3GPP\_ns\_li\_3GPPIdentityExtensions.xsd

@@ -118,4 +118,15 @@

118 118 </xs:complexContent>

119 119 </xs:complexType>

120 120

121 + <xs:complexType name="LatestAssociationRequest">

122 + <xs:complexContent>

123 + <xs:extension base="x1:X1RequestMessage">

124 + <xs:sequence>

125 + <xs:element name="SUPI" type="liqr:SUPI"/>

126 + <xs:element name="Flags" type="liqr:TaskFlags"/>

127 + </xs:sequence>

128 + </xs:extension>

129 + </xs:complexContent>

130 + </xs:complexType>

131 +

121 132 </xs:schema>

##### \*\*\* End of Third Change \*\*\*

##### \*\*\* End of All Changes \*\*\*