**3GPP TSG-SA3 Meeting #92-LI *s3i240065***

**Sevilla, Spain, 30th Jan 2024 - 2nd Feb 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.127** | **CR** | **0227** | **rev** | **1** | **Current version:** | **18.6.0** |  |
|  | | | | | | | | |
| *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:*** | Addition of ProSe LI reporting at the UDM Stage 2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3-LI (OTD\_US) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | LI18 | | | | |  | ***Date:*** | | | 2024-01-30 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | Currently no solution for ProSe LI exists in TS 33.127. This CR add capability to report target ProSe activity at the UDM. | | | | | | | | |
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| ***Summary of change:*** | | Add two new IRIs to clause 7.2.2.4, claify behaviour of the serving system xIRI generation for ProSe UE authinticating using a relay in a VPLMN. | | | | | | | | |
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| ***Consequences if not approved:*** | | No solution for ProSe. CSPs will not be able to meet LI obligations. | | | | | | | | |
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| ***Clauses affected:*** | | 7.2.2.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Related Stage 3 found in CR0602 (s3i240005) | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | S3i240006 | | | | | | | | |

\*\*\*\*\*\*\* START OF CHANGES\*\*\*\*\*\*\*

\*\*\*\*\*\*\* START OF FIRST CHANGE\*\*\*\*\*\*\*

#### 7.2.2.4 IRI events

The IRI-POI present in the UDM shall generate xIRI, when the UDM detects the following specific events or information:

- Serving system.

- Subscriber record change.

- Cancel location.

- Location information request.

- Location information result.

- UE information response.

- UE authentication response.

- Start of interception with target already registered at the UDM.

- ProSe target identifier deconcealment.

- ProSe target authentication.

A serving system xIRI is generated when the IRI-POI present in the UDM detects the target UE registration or re-registration related notifications. The AMF Id or the MME Id, or the VPLMN Id (when the other two are not known) is used as the serving system identifier in a serving system xIRI. A serving system xIRI is also generated when the IRI-POI in the UDM detects that the target ProSe remote UE has utilized a ProSe relay with existing connection to a PLMN that is not the UEs HPLMN or an E-HPLMN to perform authentication.

NOTE: The serving system xIRI may carry the information of one or more serving systems based on the target UE's network connectivity.

A subscriber record change xIRI is generated when the IRI-POI present in the UDM detects that the GPSI, or SUPI, or PEI associated to the target has changed. In addition, a subscriber record change xIRI is generated when the associated GPSI or, SUPI, or PEI for the target is de-provisioned. A subscriber record change xIRI is also generated when the target’s user service identifiers are modified (e.g. subscribed S-NSSAIs, subscribed CAG).

A cancel location xIRI is generated when the IRI-POI present in the UDM detects that a de-registration notification is sent, or received, by the UDM for the target. A cancel location xIRI is also generated when the IRI-POI present in the UDM detects that the UDM has sent a cancel location indicator to the AMF due to target de-registration.

A location information request xIRI is generated when the IRI-POI present in the UDM detects that the UDM received a query for the location information of the target UE from a different PLMN (e.g. inbound SMS routing) with a known PLMN Id.

A location information result xIRI is generated when the IRI-POI in the UDM detects that the UDM received a LocationInfoRequest from an NF service consumer (i.e. HSS) for the target and responds with a LocationInfoResult to the NF service consumer.

A UE information response xIRI is generated when the IRI-POI present in the UDM detects that the UDM received a ProvideUeInfo request for the target UE and returns a UeInfo response.

A UE authentication response xIRI is generated when the IRI-POI present in the UDM detects that the UDM received an authentication info request for the target UE from the HSS or AUSF and an authentication info result is sent.

A start of interception with already registered target xIRI is generated with the IRI-POI in the UDM detects that interception is activated on a identifier that has existing registration context information at the UDM.

A ProSe target identifier deconcealment xIRI is generated when the IRI-POI in the UDM detects that the UDM has responded to a request from the NF consumer (i.e. the 5G PKMF) to perfrom SUCI to SUPI deconcealment for a ProSe remote UE.

A ProSe target authentication record is generated when the IRI-POI present in the UDM detects that the UDM has responded to an authentication request from the AUSF for a ProSe remote UE.

\*\*\*\*\*\*\* END OF FIRST CHANGE\*\*\*\*\*\*\*

\*\*\*\*\*\*\* END OF ALL CHANGES\*\*\*\*\*\*\*