**3GPP TSG- Meeting #**

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **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:*** | information | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | SA3LI (Ministère Economie et Finances, OTD\_US) | | | | | | | | | |
| ***Source to TSG:*** | SA3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***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-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | Information about the initial UE context is intercepted. Any update of the UE context information is not intercepted. Update of UE context information occurs when the AMF sends a UE Context Modification request or Downlink NAS transport message to the gNB.  - UE context modification is only exchanged if information related to initial UE context needs to be updated by AMF at the gNB, i.e., some UE’s subscription data have changed or the AMF serving the UE has changed.  - Downlink NAS transport message is exchanged only if the AMF needs to sends a NAS message to the UE. This message is mostly sent when SMS messages over NAS are exchanged, at registration/reregistration of The UE and when a PDU session is established/modified/released. | | | | | | | | |
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| ***Summary of change:*** | | UE context information update | | | | | | | | |
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| ***Consequences if not approved:*** | | The UE context information would not be updated. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.2.4; 6.2.2.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | s3i240657 | | | | | | | | |

START OF FIRST CHANGE

#### 6.2.2.4 IRI events

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

- Registration.

- Deregistration.

- Location update.

- Identifier association.

- Start of interception with already registered UE.

- Unsuccessful procedure.

- Positioning info transfer.

- Handover.

- Trace.

- UE policy transfer.

- Service accept.

- UE context update.

NOTE: AMF reporting of UE state changes other than registration, deregistration, or service accept is not supported in the present document.

The registration xIRI is generated when the IRI-POI present in an AMF detects that a target UE has successfully registered to the 5GS via 3GPP NG-RAN or non-3GPP access. The registration xIRI describes the type of registration performed (e.g. initial registration, periodic registration, registration mobility update) and the access type (e.g. 3GPP, non-3GPP). Unsuccessful registration shall be reported only if the target UE has been successfully authenticated.

The deregistration xIRI is generated when the IRI-POI present in an AMF detects that a target UE has deregistered from the 5GS. The deregistration xIRI shall indicate whether it was a UE-initiated or a network-initiated deregistration.

The location update xIRI is generated each time the IRI-POI present in an AMF detects that the target's UE location is updated due to target UE mobility (e.g. in case of Xn based inter NG-RAN handover) or when the AMF observes target UE location information during some service operation (e.g., LCS, Location Reporting, or emergency services). The generation of such xIRI may be omitted if the updated UE location information is already included in other xIRIs (e.g. mobility registration) provided by the IRI-POI present in the same AMF. If the information in the AMF received over N2 (TS 38.413 [14]) includes one or more cell IDs, then all cell IDs shall be reported to the LEMF whenever location reporting is triggered at the AMF.

The identifier association xIRI is generated each time the IRI-POI in the AMF detects a SUCI or 5G-GUTI allocation change for a SUPI associated with the target UE.

The start of interception with already registered UE xIRI is generated when the IRI-POI present in an AMF detects that interception is activated on the target UE that has already been registered in the 5GS.

When additional warrants are activated on a target UE, MDF2 shall be able to generate and deliver the start of interception with already registered UE related IRI messages to the LEMF associated with the warrants without receiving the corresponding start of interception with already registered UE xIRI.

The unsuccessful procedure xIRI is generated when the IRI-POI present in an AMF detects that a target initiated procedure (e.g. session establishment, SMS) is rejected, is not accepted by the AMF, or fails before the proper NF handling the communication attempt itself is involved. The unsuccessful procedure xIRI is also generated when the IRI-POI present in the AMF detects that a PDU session modification request to convert a single access PDU session to a Multi-Access PDU (MA PDU) session is not accepted by the AMF and therefore not forwarded to the SMF.

The IRI-POI in the AMF shall support per target selective activation or deactivation of reporting of identifier association xIRI independently of activation of LI for all other events. When identifier association xIRI only reporting is activated, the IRI-POI in the AMF shall also generate location update xIRI.

The positioning info transfer xIRI is generated when the IRI-POI present in the AMF detects one the following events:

- network-based or network-assisted positioning requests, responses or reports related to a target UE are being exchanged between LMF and NG-RAN via the AMF.

- UE-based or UE-assisted positioning requests, responses or reports related to a target UE are being exchanged between LMF and the target UE via the AMF.

NOTE: The activation and invocation of the positioning info transfer capability exclusively for LALS is not supported in the current version of the specification. Instead, the capability is invoked whenever any LCS operation (including LALS) is performed on the target.

The handover xIRI is generated when the IRI-POI in the AMF detects that a target UE is the subject of a handover between radio access nodes in 5GS to EPS, Intra 5GS, 5GS to UTRA, or EPS to 5GS scenarios.

The trace xIRI is generated when the IRI-POI in the AMF detects that a trace session has been initiated for a target.

The UE policy transfer xIRI is generated when the IRI-POI present in the AMF detects that UE policies related to a target UE are being sent by the PCF to the target UE via the AMF and confirmed by the target UE.

The service accept xIRI is generated when the IRI-POI in the AMF detects that the target UE service request has been accepted, changing the service state of the target.

The UE context update xIRI is generated when the IRI-POI in the AMF detects that the target UE context information has been updated.

END OF FIRST CHANGE

START OF SECOND CHANGE

#### 6.2.2.6 Specific IRI parameters

The list of parameters in each xIRI is defined in TS 33.128 [15]. The following give a summary.

The registration xIRI shall include the following:

- Registration type information.

- Access type information.

- Requested slice information.

The deregistration xIRI shall include the following:

- UE initiated de-registration.

- Access type information.

- Network initiated de-registration.

The location update xIRI shall include the following:

- Location of the target UE (see clause 7.3).

The identifier association xIRI shall include the following:

- Subscription permanent identifier.

- Temporary identifier association (i.e. SUCI or 5G-GUTI).

- Association change type indication.

The start of interception with already registered UE xIRI shall include the following:

- Access type information.

- Requested slice information.

The unsuccessful communication attempt xIRI shall include the following:

- Rejected type of communication attempt.

- Access type information.

- Failure reason.

The handover xIRI shall include the following:

- Handover type and reason.

- Radio related information.

- UE capability information.

When the access type is non-3GPP, the IP address used by the UE to reach the N3A Entity shall be reported. The port shall also be reported if available.

The trace xIRI shall include the following:

- Trace related information.

The UE policy transfer xIRI shall include the following:

- UE policies.

The service accept xIRI shall include the following:

- Service request related information.

- Service accept related information.

The UE context update xIRI shall include the following:

- UE context related information.

END OF SECOND CHANGE

END OF LAST CHANGE