**3GPP TSG- Meeting #**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** |  | **rev** |  | **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:*** |  | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | IRI Event reports did not have a way to report accepted service requests. This CR adds a Service accept event report to the AMF records. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Added an event report which enables service accept records to be reported from the AMF. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The lack of report record for service accept records may prevent CSPs from fulfilling their LI obligations. The specifcation will remain incomplete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | Added new clause 6.2.2.2.X, 6.2.2.3, Annex A. | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Merge Request: [!194](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/194)  Commit Hash: [b61e10f2585e932e374d07fa2ed599266f8e0ae7](https://forge.3gpp.org/rep/sa3/li/-/commit/b61e10f2585e932e374d07fa2ed599266f8e0ae7) | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | s3i230391 | | | | | | | | |

## \*\*\*\* START OF FIRST CHANGE (MAIN DOCUMENT) \*\*\*

##### 6.2.2.2.X Service Accept

The IRI-POI in the AMF shall generate an xIRI containing an or AMFUEServiceAccept record when the IRI-POI in present in the AMF detects that the AMF has sent a service accept in response to a service request from the target**,** changing target's 5GMM state to 5GMM-CONNECTED. Accordingly, the IRI-POI in the AMF generates the xIRI when the following event is detected:

- AMF sends a SERVICE ACCEPT message to the target in response to a SERVICE REQUEST message from the target.

Table 6.2.2.2.X-1: Payload for AMFUEServiceAccept record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Field name | Type | Cardinality | Description | M/C/O |
| userIdentifiers | UserIdentifiers | 1 | List of identifiers, including the target identifier, associated with the target UE registration stored in the AMF context. See TS 29.518 [22]clause 6.1.6.2.25. | M |
| serviceMessageIdentity | ServiceMessageIdentity | 1 | Indicates the type of message sent within the SERVICE ACCEPT from the AMF to the UE. Encoding per TS 24.501 [13] clause 9.7. | M |
| serviceType | OCTET STRING (SIZE (1)) | 0..1 | Indicates the purpose of the service request procedure. Encoded per TS 24.501 [13] clause 9.11.3.50. | C |
| fiveGTMSI | FiveGTMSI | 0..1 | TMSI value associated with the target within the AMF context. Include if known. Encoded per 24.501 [13] figure 9.11.3.4.5 | C |
| uplinkDataStatus | OCTET STRING (SIZE (2..32)) | 0..1 | Indicates if uplink data is pending for the PDU Session modified in the SERVICE REQUEST. See 24.501 [13] clause 9.11.3.57. | C |
| pDUSessionStatus | OCTET STRING (SIZE (2..32)) | 0..1 | Indicates the current status of the PDU Session (active, inactive) for the PDU Session the target has attempted to activate. This parameter is encoded using the format defined in TS 24.501 [13] clause 9.11.3.44. | C |
| uERequestType | FiveGSMRequestType | 0..1 | Indicates the type of request sent by the UE. Encoded per TS 24.501 [13] clause 9.11.3.47. | C |
| pagingRestriction | PagingRestrictionIndicator | 0..1 | Indicates the current paging restriction status for the target as known at the AMF. Encoded per TS 24.501 [13] clause 9.11.3.77.2, omitting the first two octets. | C |
| forbiddenTAIList | TAIList | 0..1 | Provides a list of tracking areas that the UE is forbidden to use either during roaming or configured via regional service provisioning. See TS 24.501 [13] clause 8.2.17.7 and 8.2.17.8. | C |

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*

#### 6.2.2.3 Generation of IRI over LI\_HI2

When an xIRI is received over LI\_X2 from the IRI-POI in AMF, the MDF2 shall generate the corresponding IRI message and deliver over LI\_HI2 without undue delay. The IRI message shall contain a copy of the relevant record received in the xIRI over LI\_X2. This record may be enriched with any additional information available at the MDF (e.g. additional location information).

The timestamp field of the PSHeader structure shall be set to the time at which the AMF event was observed (i.e. the timestamp field of the X2 PDU).

The IRI type parameter (see ETSI TS 102 232-1 [9] clause 5.2.10) shall be included and coded according to table 6.2.2-7.

Table 6.2.2-7: IRI type for IRI messages

|  |  |
| --- | --- |
| IRI message | IRI type |
| AMFRegistration | REPORT |
| AMFDeregistration | REPORT |
| AMFLocationUpdate | REPORT |
| AMFStartOfInterceptionWithRegisteredUE | REPORT |
| AMFUnsuccessfulProcedure | REPORT |
| AMFIdentifierAssociation | REPORT |
| AMFPositioningInfoTransfer | REPORT |
| AMFRANHandoverCommand | REPORT |
| AMFRANHandoverRequest | REPORT |
| AMFUEConfigurationUpdate | REPORT |
| AMFRANTraceReport | REPORT |
| AMFUEServiceAccept | REPORT |

These IRI messages shall omit the CIN (see ETSI TS 102 232-1 [9] clause 5.2.4).

The threeGPP33128DefinedIRI field in ETSI TS 102 232-7 [10] clause 15 shall be populated with the BER-encoded IRIPayload.

When an additional warrant is activated on a target UE and the LIPF uses the same XID for the additional warrant, the MDF2 shall be able to generate and deliver the IRI message containing the AMFStartOfInterceptionWithRegisteredUE record to the LEMF associated with the additional warrant without receiving a corresponding xIRI. The payload of the AMFStartOfInterceptionWithRegisteredUE record is specified in table 6.2.2-4.

If the MDF2 did not receive from the IRI-POI the value of timeOfRegistration parameter in a previous corresponding AMFStartOfInterceptionWithRegisteredUE for the same registration, the MDF2 shall include in that parameter the time provided in the timestamp previously received in the header of the related AMFRegistration xIRI.

## \*\*\*\* END OF MAIN DOCUMENTS CHANGES \*\*\*

## \*\*\*\* START OF ATTACHMENT CHANGE \*\*\*

---a/33128/r18/TS33128Payloads.asn  
+++b/33128/r18/TS33128Payloads.asn

@@ -238,7 +238,10 @@ XIRIEvent ::= CHOICE

238 238 -- RCS events, see clause 7.13.3

239 239 rCSRegistration [140] RCSRegistration,

240 240 rCSMessage [141] RCSMessage,

241 - rcsCapabilityDiscovery [142] RCSCapabilityDiscovery

- 241 rcsCapabilityDiscovery [142] RCSCapabilityDiscovery,

- 242

- 243 -- AMF events, see 6.2.2.2.X, continued from tag 139

- 244 aMFUEServiceAccept [143] AMFUEServiceAccept

242 245 }

243 246

244 247 -- ==============

@@ -469,7 +472,10 @@ IRIEvent ::= CHOICE

469 472 -- RCS events, see clause 7.13.3

470 473 rCSRegistration [140] RCSRegistration,

471 474 rCSMessage [141] RCSMessage,

472 - rcsCapabilityDiscovery [142] RCSCapabilityDiscovery

- 475 rcsCapabilityDiscovery [142] RCSCapabilityDiscovery,

- 476

- 477 -- AMF events, see 6.2.2.3, continued from tag 139

- 478 aMFUEServiceAccept [143] AMFUEServiceAccept

473 479 }

474 480

475 481 IRITargetIdentifier ::= SEQUENCE

@@ -1465,6 +1471,20 @@ AMFRANTraceReport ::= SEQUENCE

1465 1471 location [11] Location OPTIONAL

1466 1472 }

1467 1473

- 1474 -- See clause 6.2.2.2.12 for details of this structure

- 1475 AMFUEServiceAccept ::= SEQUENCE

- 1476 {

- 1477 userIdentifiers [1] UserIdentifiers,

- 1478 serviceMessageIdentity [2] ServiceMessageIdentity,

- 1479 serviceType [3] OCTET STRING (SIZE(1)) OPTIONAL,

- 1480 fiveGTMSI [4] FiveGTMSI OPTIONAL,

- 1481 uplinkDataStatus [5] OCTET STRING (SIZE(2..32)) OPTIONAL,

- 1482 pDUSessionStatus [6] OCTET STRING (SIZE(2..32)) OPTIONAL,

- 1483 uERequestType [7] FiveGSMRequestType OPTIONAL,

- 1484 pagingRestriction [8] PagingRestrictionIndicator OPTIONAL,

- 1485 forbiddenTAIList [9] TAIList OPTIONAL

- 1486 }

- 1487

1468 1488 -- =================

1469 1489 -- 5G AMF parameters

1470 1490 -- =================

@@ -1568,6 +1588,12 @@ MDTMode ::= CHOICE

1568 1588 -- TS 24.501 [13], clause 9.11.3.49

1569 1589 ServiceAreaList ::= OCTET STRING (SIZE(4..112))

1570 1590

- 1591 ServiceMessageIdentity ::= CHOICE

- 1592 {

- 1593 serviceRequest [1] OCTET STRING,

- 1594 serviceAccept [2] OCTET STRING

- 1595 }

- 1596

1571 1597 TraceActivationInfo ::= SEQUENCE

1572 1598 {

1573 1599 nGRANTraceID [1] OCTET STRING (SIZE(8)),

\*\*\*\* END OF ATTACHMENT CHANGES \*\*\*

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