**3GPP TSG-CT WG4 Meeting #101eC4-205523**

**E-Meeting, 3rd – 13th November 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.518** | **CR** | **0438** | **rev** | **-** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *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:*** | User Location | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SBIProtoc16 | | | | |  | ***Date:*** | | | 2020-11-10 |
|  |  | | | |  | |  | | |  |
| ***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 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-12 (Release 12) Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When the HSS/UDM receives a Sh request from the AS for 5G Location Information, the registered AMF (for 3GPP access) is contacted to provide 5G Location Information. The response from the AMF shall not contain both, eutraLocation and nrLocation as part of UserLocation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify that either eutaLocation or nrlocation is reported, but not both. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Inconsistency between protocols for end-to end user location conveyance from AMF via UDM/HSS to IMS-AS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.2.6.2.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | No impacts to OpenAPI | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

##### 6.2.6.2.5 Type: AmfEventReport

Table 6.2.6.2.5-1: Definition of type AmfEventReport

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description | Applicability |
| type | AmfEventType | M | 1 | Describes the type of the event which triggers the report |  |
| state | AmfEventState | M | 1 | Describes the state of the event which triggered the report. This IE shall be set to "TRUE" when subscriptionId IE is present. |  |
| timeStamp | DateTime | M | 1 | This IE shall contain the time at which the event is generated. |  |
| subscriptionId | Uri | C | 0..1 | This IE shall be included when the event notification is for informing the creation of a subscription Id at the AMF during mobility of a UE across AMFs.  When present, this IE shall contain the URI of the created subscription resource at the AMF; this shall contain an absolute URI set to the Resource URI specified in clause 6.2.3.3.2.  The type IE shall be set to:  - SUBSCRIPTION\_ID\_CHANGE, when the AMFcreates a subscription Id for a UE specific event subscription during mobility registration and handover procedures involving an AMF change.  - SUBSCRIPTION\_ID\_ADDITION, when the AMF creates a subscription Id for a group Id specific event subscription during mobility registration and handover procedures involving an AMF change. |  |
| anyUe | boolean | C | 0..1 | This IE shall be included and shall be set to "true", if the event subscription is a bulk subscription for number of UEs and the event reported is for one of those UEs. |  |
| supi | Supi | C | 0..1 | This IE shall be present if available.  When present, this IE identifies the SUPI of the UE associated with the report (NOTE). |  |
| areaList | array(AmfEventArea) | C | 1..N | This IE shall be present when the AMF event type is "PRESENCE\_IN\_AOI\_REPORT". When present, this IE represents the specified Area(s) of Interest the UE is currently IN / OUT / UNKNOWN.  If the AMF event is subscribed towards a PRA identifier referring to a Set of Core Network predefined Presence Reporting Areas, the AMF shall report both the subscribed PRA Identifier and the additional PRA identifier of the actually individual PRA(s) where the UE is currently IN / OUT, as specified in clause 5.6.11 of 3GPP TS 23.501 [2]. |  |
| refId | ReferenceId | C | 0..1 | This IE shall be present if a Reference Id has previously been associated with the event triggering the report.  When present, this IE shall indicate the Reference Id associated with the event which triggers the report. |  |
| gpsi | Gpsi | C | 0..1 | This IE shall be present if available.  When present, this IE identifies the GPSI of the UE associated with the report (NOTE). |  |
| pei | Pei | O | 0..1 | This IE may be included if the event reported is for a particular UE or any UE. This IE identifies the PEI of the UE associated with the report (NOTE). |  |
| location | UserLocation | O | 0..1 | Represents the location information of the UE  This IE shall convey exactly one of the following: - E-UTRA user location - NR user location  - Non-3GPP access user location. |  |
| timezone | TimeZone | O | 0..1 | Describes the time zone of the UE |  |
| accessTypeList | array(AccessType) | O | 1..N | Describes the access type(s) of the UE |  |
| rmInfoList | array(RmInfo) | O | 1..N | Describes the registration management state of the UE |  |
| cmInfoList | array(CmInfo) | O | 1..N | Describes the connection management state of the UE |  |
| reachability | UeReachability | O | 0..1 | Describes the reachability of the UE |  |
| commFailure | CommunicationFailure | O | 0..1 | Describes a communication failure for the UE. |  |
| numberOfUes | integer | O | 0..1 | Represents the number of UEs in the specified area |  |
| 5gsUserStateList | array(5GsUserStateInfo) | O | 1..N | Represents the 5GS User State of the UE per access type |  |
| typeCode | string | C | 0..1 | This IE shall be present when the AMF event type is "TYPE\_ALLOCATION\_CODE\_REPORT". When present, this IE represents the Type Allocation code (TAC), to indicate terminal model and vendor information of the UE.  Pattern: '^imeitac-[0-9]{8}$'. | ENA |
| registrationNumber | integer | C | 0..1 | This IE shall be present when the AMF event type is "FREQUENT\_MOBILITY\_REGISTRATION\_REPORT". When present, this IE represents the number of the mobility registration procedures during a period identified by the expiry time included in the event subscription request. | ENA |
| ueIdExtList | array(UEIdExt) | C | 1..N | This IE shall be present if multiple SUPIs and / or GPSIs need to be included, the AMF event type is "UES\_IN\_AREA\_REPORT" and the subscribing NF indicated support of the ENA feature.  This attribute provides additional SUPIs and / or GPSIs to the supi attribute or gpsi attribute. The ueIdExt attribute may be present even if both the supi and gpsi attributes are absent. | ENA |
| lossOfConnectReason | LossOfConnectivityReason | O | 0..1 | Describes the reason for loss of connectivity.  This IE should be present when the AMF event type is "LOSS\_OF\_CONNECTIVITY". |  |
| maxAvailabilityTime | DateTime | O | 0..1 | Indicates the time (in UTC) until which the UE is expected to be reachable.  This IE may be present in REACHABILITY\_REPORT event report for "UE Reachable\_for DL Traffic".  This information may be used by the SMS Service Center to prioritize the retransmission of pending Mobile Terminated Short Message to UEs using a power saving mechanism (eDRX, PSM etc.). |  |
| NOTE: If the event report corresponds to an event subscription of a single UE, then the same UE identifier (i.e. SUPI and/or GPSI and/or PEI) received during subscription creation shall be included in the report. If the event report corresponds to an event subscription for group of UEs or any UE, then the SUPI and if available the GPSI shall be included in the event report. SUPI, PEI and GPSI shall not be present in report for UES\_IN\_AREA\_REPORT event type. | | | | |  |

\* \* \* End Of Change \* \* \* \*