**3GPP TSG-CT WG4 Meeting #99eC4-204280**

**E-Meeting, 18th – 28th August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **29.518** | **CR** | **0400** | **rev** | **1** | **Current version:** | **16.4.0** |  |
|  | | | | | | | | |
| *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:*** | Managing RACS ID for mobility across ePLMNs | | | | | | | | | |
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| ***Source to WG:*** | Qualcomm Incorporated, Samsung | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | RACS | | | | |  | ***Date:*** | | | 2020-08-04 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | CR 2383 to 3GPP TS 23.501 in SA2 is addressing the scenario in which the AMF is shared across rPLMN and ePLMN and the UE connects to rPLMNA and gets assigned URCID-1 from the AMF of PLMNA.  In idle mode  - the UE moves from rPLMNA to ePLMNB for the first time  - the UE will not do mobility registration since it is not moving outside the TAIs list  When the UE transitions to connected mode and sends Service Request, the AMF checks from N2 signalling that the UE is in ePLMNB and returns the RACS ID for the PLMN if present  Following existing procedures, the AMF may interact with the UCMF of ePLMNB and assign URCID-2 to the UE. If assigned new URCID-2, the UE will use URCID-2 when in PLMNB. | | | | | | | | |
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| ***Summary of change:*** | | Added note on the RACS IDs in MM Context. | | | | | | | | |
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| ***Consequences if not approved:*** | | The corrected interpretation of the RACS ID will be missing. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.6.2.34 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 23.501 CR 2383 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
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| ***Other comments:*** | | This CR proposes backward compatible changes to the OpenAPI. | | | | | | | | |
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| ***This CR's revision history:*** | | * Added reference to stage-2 * The updated agreed stage-2 solution, if AMF decides to allocate TAIs of multiple PLMN IDs as part of Registration Area to the UE then AMF provides the UE Radio Capability ID of the new selected PLMN to the NG-RAN during UE mobility. Updated cover sheet to point to stage-2, and updated the corresponding note. | | | | | | | | |

# \*\*\* First change \*\*\*

6.1.6.2.34 Type: MmContext

**Table 6.1.6.2.34-1: Definition of type MmContext**

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| --- | --- | --- | --- | --- |
| **Attribute name** | **Data type** | **P** | **Cardinality** | **Description** |
| accessType | AccessType | M | 1 | This IE shall contain the access type of the MM context. |
| nasSecurityMode | NasSecurityMode | C | 0..1 | This IE shall be present if available in 3GPP access MM context. When present, this IE shall contain the used NAS security mode of the UE. |
| nasDownlinkCount | NasCount | C | 0..1 | This IE shall be present if available in 3GPP access MM context. When present, this IE shall contain the NAS downlink count of the UE. |
| nasUplinkCount | NasCount | C | 0..1 | This IE shall be present if available in 3GPP access MM context. When present, this IE shall contain the NAS uplink count of the UE. |
| ueSecurityCapability | UeSecurityCapability | C | 0..1 | This IE shall be present if available in 3GPP access MM context. When present, this IE shall contain the UE security capability |
| s1UeNetworkCapability | S1UeNetworkCapability | C | 0..1 | This IE shall be present if available in 3GPP access MM context. When present, this IE shall contain the S1 UE network capabilities. |
| allowedNssai | array(Snssai) | C | 1..N | This IE shall be present if available. When present, this IE shall contain the allowed NSSAI for the access type. |
| nssaiMappingList | array(NssaiMapping) | C | 1..N | This IE shall be present if available. When present, this IE shall contain the mapping of the allowed NSSAI for the UE. |
| nsInstanceList | array(NsiId) | C | 1..N | This IE shall be present if available. When present, it shall indicate the Network Slice Instances selected for the UE. |
| expectedUEbehavior | ExpectedUeBehavior | C | 0..1 | This IE shall be present if available. When present it shall indicate the expected UE moving trajectory and its validity period. See 3GPP TS 23.502 [3] clause 4.15.6.3. |
| plmnAssiUeRadioCapId | PlmnAssiUeRadioCapId | C | 0..1 | This IE shall be present if the source AMF supports RACS feature and if available. When present it shall be the PLMN-assigned UE Radio Capability ID.(NOTE X) |
| manAssiUeRadioCapId | ManAssiUeRadioCapId | C | 0..1 | This IE shall be present if the source AMF supports RACS feature and if available. When present it shall be the Manufacturer-assigned UE Radio Capability ID. |
| ucmfDicEntryId | string | C | 0..1 | This IE shall be present if the source AMF supports RACS feature and if available. When present it shall be the UCMF allocated dicEntryId received from the UCMF. |
| n3IwfId | GlobalRanNodeId | C | 0..1 | This IE shall be present during Registration procedure with AMF changes as specified in clause 4.2.2.2 of 3GPP TS 23.502 [3], if old AMF holds UE context established via N3IWF.  When present, this IE shall contain the Global RAN Node ID of N3IWF. |
| wagfId | GlobalRanNodeId | C | 0..1 | This IE shall be present during Registration procedure with AMF changes as specified in clause 4.2.2.2 of 3GPP TS 23.502 [3], if old AMF holds UE context established via W-AGF.  When present, this IE shall contain the Global RAN Node ID of W-AGF. |
| tngfId | GlobalRanNodeId | C | 0..1 | This IE shall be present during Registration procedure with AMF changes as specified in clause 4.2.2.2 of 3GPP TS 23.502 [3], if old AMF holds UE context established via TNGF.  When present, this IE shall contain the Global RAN Node ID of TNGF. |
| anN2ApId | integer | C | 0..1 | This IE shall be present during Registration procedure with AMF changes, as specified in clause 4.2.2.2 of 3GPP TS 23.502 [3], if old AMF holds UE context established via N3IWF/W-AGF/TNGF and the UE is in CM-CONNECTED state via N3IWF/W-AGF/TNGF.  When present, this IE shall contain the RAN UE NGAP ID over N2 interface. |
| nssaaStatusList | array(NssaaStatus) | C | 1..N | This IE shall be present if available. When present, it shall contain the subscribed S-NSSAIs subject to NSSAA procedure and for which a status information is available. See 3GPP TS 23.501 [2] clause 5.15.5.2.1 and 3GPP TS 23.502 [3] clause 5.2.2.2.2. |
| pendingNssaiMappingList | array(NssaiMapping) | C | 1..N | This IE shall be present if available. When present, this IE shall contain the mapping of the pending NSSAI for the UE. |
| NOTE X: If the AMF supports RACS, and the AMF detects that the selected PLMN in the Service Request is different from the currently registered PLMN for the UE, the AMF provides plmnAssiUeRadioCapId corresppnding to new PLMN, as specified in clause 4.2.3.2 of 3GPP TS 23.502 [3]. | | | | |

# \*\*\* End of changes \*\*\*