**3GPP TSG-WG2 Meeting #170**

**25 - 29 August, Gothenburg, Sweden**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **.501** | **CR** | **6376** | **rev** | **-** | **Current version:** | **19.4.0** |  |
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| *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 | **x** | Radio Access Network |  | Core Network | **x** |

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| ***Title:***  |  Revoking QoS differentiation for Non-3GPP Device Identifiers  |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | SA2 |
|  |  |
| ***Work item code:*** | UIA\_ARC |  | ***Date:*** | 2025-08-10 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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 canbe 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:*** | Currently it is unclear how the UE can revoke QoS differentiation for Non-3GPP Device Identifiers for which QoS differentiation has been requested previously. It is proposed that the UE indicates to the core network to remove QoS differntiation for a Non-3GPP Device Identifier by not including a user plane address in the Non-3GPP Device Connection Information.  |
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| ***Summary of change:*** | The following changes are proposed:* It is included in the PDU Session Modification request that the device can request removing a QoS differentiation for a Non-3GPP Device Identifier.
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| ***Consequences if not approved:*** | Unspecified procedure for revoking QoS differentiation for Non-3GPP Devices Identifiers. |
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| ***Clauses affected:*** | 5.52.3 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** | **x** |  |  Other core specifications  | TS 23.502 CR 5542, TS 23.503 CR 1570 |
| ***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's revision history:*** |  |

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

### 5.52.3 Session management enhancement

For the traffic of non-3GPP devices requiring differentiated QoS, the Non-3GPP Device Connection Information may be signalled by the UE as defined in TS 24.501 [47]. When a non-3GPP device is connected to the UE, the UE may include the Non-3GPP Device Connection Information in PDU Session Modification Request to SMF. The Non-3GPP Device Connection Information may include information of more than one non-3GPP device. The SMF forwards the Non-3GPP Device Connection Information to the PCF for policy control.

NOTE 1: To support QoS differentiation of traffic for Non-3GPP Device Identifier, how the UE determines which PDU Session to use for the non-3GPP device's traffic is not specified. It is up to UE implementation to determine when to initiate PDU Session Modification procedure for updating the Non-3GPP Device Connection Information.

For an Ethernet PDU Session, the Non-3GPP Device Connection Information includes the following information for each non-3GPP device:

- Non-3GPP Device Identifier;

- MAC address of the non-3GPP device used in PDU Session;

- Optionally, VLAN tag ID that is associated with the non-3GPP device used in PDU Session.

 If theVLAN tag ID is present in the Non-3GPP Device Connection Information and if the received VLAN Tag ID from UE is not within the allowed VLAN tags for the UE (described in clause 5.6.10.2) SMF rejects the PDU Session Modification Request.

For an IPv4 or IPv4v6 PDU Session, the Non-3GPP Device Connection Information includes the following information for each non-3GPP device:

- Non-3GPP Device Identifier;

- IPv4 Address associated with the non-3GPP device used in PDU Session;

- Optionally, port range(s) associated with the non-3GPP device used in PDU Session.

For an IPv6 or IPv4v6 PDU Session, the Non-3GPP Device Connection Information includes the following information for each non-3GPP device:

- Non-3GPP Device Identifier;

- IPv6 Address/prefix(sub) associated with the non-3GPP device used in PDU Session;

- Optionally, port range(s) associated with the non-3GPP device used in PDU Session.

NOTE 2: If IPv4v6 PDU Session is applied, it is up to UE implementation to determine to use IPv4 or IPv6 or both Address/prefix(sub) based on the associated traffic of the non-3GPP device and the IP allocation by the network to the PDU Session.

Note: The UE can revoke a previously-requested QoS differentication for a Non-3GPP Device Identifier via PDU Session Modification and including the packet filters associated with the Non-3GPP Device Identifier and setting “delete” in Packet Filter Operation (see clause 4.3.3.2 of TS 23.502 [3]).

If the PCF indicates to the SMF by rejecting the SM Policy Association Modification that any of the corresponding Non-3GPP Device Identifier(s) in the Non-3GPP Device Connection Information is not available in the UDR for the UE as specified in clause 6.1.3.31 of TS 23.503 [45], the SMF rejects the PDU Session Modification with a cause code to notify the UE that the Non-3GPP Device Identifier(s) is not available for the UE.

NOTE 3: Since the inclusion of Non-3GPP Device Identifier(s) not available in the UDR for the UE leads to rejection of PDU Session Modification Request, it is recommended that UE does not include parameters that are not related to Non-3GPP Device Connection Information in the PDU Session Modification Request requesting differentiated QoS.

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