**3GPP TSG- Meeting # *r03***

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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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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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
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| ***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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | The non-3GPP device identifiers were introduced for achieving differentiated QoS handling for traffic associated with non-3GPP device connecting to a UE. The UE sends the Non-3GPP Device Identifier and may also send the addressing information to the SMF in session management signalling. It was discussed in the previous meetings that there is no description of how the UE and/or AF triggers the UE to request for change of QoS Flows.  The expected behaviour is that user is provisioning non-3GPP device identifiers and associated QoS requirements to the 5GC and also provisions the same non-3GPP device identifiers in the UE through application layer mechanism. The AF has to provision those non-3GPP device identifiers to the UE which have been accepted by 5GC (and entered into the UDR). There is no further need for any triggering mechanism through 5GC. | | | | | | | | |
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| ***Summary of change:*** | | The NOTE1 in the clause 5.22.1 is updated to state that non-3GPP device identifiers are provisioned in the 5GC and in the UE in a co-ordinated manner through application layer mechanism. | | | | | | | | |
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| ***Consequences if not approved:*** | | It would not be clear how the mechanism for requesting differentiated QoS for non-3GPP device identifiers is triggered by the UE. | | | | | | | | |
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| ***Clauses affected:*** | | 5.52.2 | | | | | | | | |
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|  | | **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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | |  | | | | | | | | |

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| >>>>>> FIRST CHANGE <<<< |

## 5.52 QoS differentiation of traffic for Non-3GPP Device Identifier

### 5.52.1 General

This clause specifies the scenario of a non-3GPP device connecting through the UE. In this scenario QoS differentiation of traffic is applied to the traffic that originates from or is directed to the non-3GPP device. The non-3GPP device does not use NAS and is not authenticated by 5GC.

The support of identification of traffic for non-3GPP devices connecting behind a 5G-RG is specified in TS 23.316 [84].

The Non-3GPP Device Identifier is unique within the scope of the UE's SUPI.

### 5.52.2 Traffic identification

When a non-3GPP device is connecting to the UE, the UE may bind the Non-3GPP Device Identifier to a non-3GPP device, for the traffic of non-3GPP devices that require differentiated QoS. This binding enables the 5G System to distinguish between the traffic generated by different non-3GPP devices connected through the same UE.

NOTE 1: How the UE identifies the non-3GPP device and binds the Non-3GPP Device Identifier to a non-3GPP device is implementation specific. How the Non-3GPP Device Identifier(s) that are associated with the UE’s subscription information in UDR are known to the UE is implementation specific.

NOTE 2: At any point in time the Non-3GPP Device Identifier can be bound to only one non-3GPP device.

Non-3GPP Device Identifier Information is stored in the UDR and includes a Non-3GPP Device Identifier and QoS Information.

### 5.52.3 Session management enhancement

For the traffic of non-3GPP devices requiring differentiated QoS:

- For Ethernet PDU Session Type, the UE sends the Non-3GPP Device Identifier and may also send MAC address and/or the VLAN tag ID that is associated with the Non-3GPP Device Identifier to the SMF in PDU Session Modification procedure.

- For IPv4 PDU Session Type, the UE sends the Non-3GPP Device Identifier and may also send the IP Address and/port ranges associated with the Non-3GPP Device Identifier to the SMF in PDU Session Modification procedure.

- For IPv6 PDU Session Type, the UE sends the Non-3GPP Device Identifier and may also send the IPv6 Address/prefix(sub) that is associated with the Non-3GPP Device Identifier to the SMF in PDU Session Modification procedure.

Editor's note: Whether the UE sends the Non-3GPP Device Identifier and user plane information (e.g. IP Address) in PDU session establishment is FFS.

### 5.52.4 QoS differentiation

QoS differentiation and policy control is defined in clause 6.1.3.30 of TS 23.503 [45].

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| >>>>>> END OF CHANGE <<<< |