**3GPP TSG-CT WG1 Meeting #135-eC1-222640**

**E-Meeting, 6th – 12th April 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **554** | **CR** |  | **rev** | **-** | **Current version:** | **.0.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** |  | | | | | | | | | |
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| ***Source to WG:*** | CATT | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_ProSe | | | | |  | ***Date:*** | | | 2022-03-28 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | As specified in clause 5.6.2.2 of TS 23.304, "The 5G ProSe Layer-3 UE-to-Network Relay also provides the traffic filter provided by the 5G ProSe Layer-3 Remote UE to the SMF during the PDU Session Modification procedure, and the SMF updates the PSA UPF with DL Packet Detection Rules. " Stage 3 specification needs to be updated to align with this Stage 2 specification. | | | | | | | | |
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| ***Summary of change:*** | | Add description that the 5G ProSe layer-3 UE-to-network relay UE sends packet filter provided by the 5G ProSe layer-3 remote UE to the SMF during PDU session modification procedure. | | | | | | | | |
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| ***Consequences if not approved:*** | | Unclear description on QoS handling for 5G ProSe layer-3 relay with N3IWF. | | | | | | | | |
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| ***Clauses affected:*** | | 8.2.6.4.2 | | | | | | | | |
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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:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

##### 8.2.6.4.2 QoS handling with QoS signalling procedure

When the 5G ProSe layer-3 remote UE establishes or handovers a PDU session via the N3IWF as described in clause 4.12.5 of 3GPP TS 23.502 [5], the N3IWF initiates a child SA creation procedure by sending a CREATE\_CHILD\_SA request message to associate the QoS flow(s) of the PDU session with the child SA of the user plane as specified in clause 7.5 of 3GPP TS 24.502 [26]. In the CREATE\_CHILD\_SA request message, the 5G\_QOS\_INFO Notify payload includes the PDU session ID, one or more QFI(s), optionally a DSCP value, and optionally Additional QoS Information as defined in clause 9.3.1.1 of 3GPP TS 24.502 [26]. The N3IWF can also initiate the user plane IPsec child SA modification procedure by sending an INFORMATIONAL request message including the 5G\_QOS\_INFO Notify payload if the child SA associated with the QoS flows of the PDU session needs to be modified as specified in clause 7.6 of 3GPP TS 24.502 [26].

Based on information in the received 5G\_QoS\_INFO Notify payload, the 5G ProSe layer-3 remote UE determines whether to initiate the 5G ProSe direct link modification procedure to setup or modify the PC5 QoS flows. If the 5G ProSe direct link modification procedure needs to be initiated, the 5G ProSe layer-3 remote UE shall perform the procedure as specified in clause 8.2.6.3.3 with following additions:

a) if the Additional QoS Information is received in the 5G\_QoS\_INFO Notify payload, the 5G ProSe layer-3 remote UE shall set the PC5 QoS flow descriptions IE based on the Additional QoS Information; and

b) the 5G ProSe layer-3 remote UE shall include the PC5 QoS rules IE with the packet filter containing the N3IWF IP address, the security parameter index of the child SA, and the DSCP value if received in the 5G\_QoS\_INFO Notify payload.

The 5G ProSe layer-3 UE-to-network relay UE determines whether to initiate PDU session modification procedure to request establishment or modification of the QoS flow of the dedicated QoS rules which is associated with the IPsec traffic between the 5G ProSe layer-3 remote UE and the N3IWF. If the PDU session modification procedure needs to be initiated, the 5G ProSe layer-3 UE-to-network relay UE shall perform the procedure as specified in clause 6.4.2 of 3GPP TS 24.501 [11] with following additions:

a) the 5G ProSe layer-3 UE-to-network relay UE sends the packet filter provided in the PC5 QoS rules IE by the 5G ProSe layer-3 remote UE to the SMF.

\* \* \* End of Change \* \* \* \*