**3GPP TSG-CT WG1 Meeting #138-eC1-22xxx**

**E-Meeting, 10th – 14th October 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | **1** | **Current version:** | **1** |  |
|  | | | | | | | | |
| *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 |  |

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| ***Title:*** |  | | | | | | | | | |
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| ***Source to WG:*** | , Ericsson | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
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| ***Reason for change:*** | | SA2 agreed the CR S2-2207405, which reflects the opinion, that multiple PDU sessions of a L2 remote UE share the single PC5 unicast link established between the L2 remote UE and a L2 U2N Relay. Hence a note is added in clause 6.4.3.6 of TS 23.304 as stated below;  *“NOTE 4: A single PC5 unicast link is established between a 5G ProSe Layer-2 UE-to-Network Relay and a 5G ProSe Layer-2 Remote UE, as specified in TS 38.300 [12], for supporting PDU sessions of the 5G ProSe Layer-2 Remote UE.”*  This CR proposes to modify general sub-clause 7.2.2.1 to reflect SA2 agreement in stage-3 specifications. | | | | | | | | |
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| ***Summary of change:*** | | An informative note is added in sub-clause 7.2.1 to reflect that a single PC5 unicast link is established between a 5G ProSe Layer-2 UE-to-network relay and a 5G ProSe Layer-2 Remote UE for supporting PDU sessions of the 5G ProSe Layer-2 Remote UE.  Backward compatibility analysis:  This CR is backward compatible. It adds an informative note to avoid potential problems due to misalignment of UE behaviours in different layers. | | | | | | | | |
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| ***Consequences if not approved:*** | | Not aligned with the priciple agreement in TS 38.300. | | | | | | | | |
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| ***Clauses affected:*** | | 7.2.2.1 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
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| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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

#### 7.2.2.1 General

Depending on the type of the 5G ProSe direct link establishment procedure (i.e., UE oriented layer-2 link establishment or ProSe service oriented layer-2 link establishment in 3GPP TS 23.304 [2]), the 5G ProSe direct link establishment procedure is used to establish a 5G ProSe direct link between two UEs or to establish multiple 5G ProSe direct links. The UE sending the request message is called the "initiating UE" and the other UE is called the "target UE". If the request message does not indicate the specific target UE (i.e., target user info is not included in the request message), and multiple target UEs are interested in the ProSe application(s) indicated in the request message, then the initiating UE shall handle corresponding response messages received from those target UEs. The maximum number of 5G ProSe direct links established in a UE at a time shall not exceed an implementation-specific maximum number of established 5G ProSe direct links.

NOTE: The recommended maximum number of established 5G ProSe direct link is 8.

When the 5G ProSe direct link establishment procedure for a 5G ProSe layer-3 remote UE completes successfully, and if there is a PDU session established for relaying the traffic of the remote UE, the 5G ProSe layer-3 UE-to-network relay UE shall perform the remote UE report procedure as specified in 3GPP TS 24.501 [11].

After the 5G ProSe direct link establishment procedure for a 5G ProSe layer-2 remote UE completes successfully, and upon getting a request from the 5G ProSe layer-2 remote UE through lower layers, the 5G ProSe layer-2 UE-to-network relay UE, if in 5GMM-IDLE mode, shall inform lower layers to perform a service request procedure as specified in 3GPP TS 24.501 [11].

NOTE: A single PC5 unicast link is established between a 5G ProSe layer-2 UE-to-network relay UE and a 5G ProSe layer-2 remote UE for supporting PDU sessions of the 5G ProSe layer-2 remote UE, as specified in 3GPP TS 38.300 [21].

Editor's note: Any possible changes to the 5G ProSe direct link establishment procedure due to the security requirements of 5G ProSe layer-2 UE-to-network relay or 5G ProSe layer-3 UE-to-network relay (such as adding new IEs or changing existing IEs) are FFS.

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