**3GPP TSG- Meeting #**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** | 1 | **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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** |  | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | CT4 | | | | | | | | | |
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| ***Work item code:*** | TEI16, | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***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-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:*** | | There is an optional requirement for UP function in PFCP Association Setup Procedure to include F-TEID range in Association Setup Request( UP Initiated situation) or Association Setup Response(CP Initiated situation).  While the CR (2108), S2-2000860 proposed to remove the option that F-TEID allocation in SMF and it was agreed in SA2#136AH meeting.  Also in current description of F-TEID Allocation in 29.244, which indicate s that *For EPC and 5GC, F-TEID shall be only allocated by the UP function, see clause 5.8.2.3 of 3GPP TS 23.501[28].*  So it is not necessary for UP to provide F-TEID (range) to CP any more. | | | | | | | | |
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| ***Summary of change:*** | | Delete optional requirement in UP to provid F-TEID range. | | | | | | | | |
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| ***Consequences if not approved:*** | | Useless information in Association Setup Procedure.Misalignment with SA2. | | | | | | | | |
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| ***Clauses affected:*** | | 6.2.6.2;6.2.6.3 | | | | | | | | |
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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 \* \* \* \*

#### 6.2.6.2 PFCP Association Setup Initiated by the CP Function

##### 6.2.6.2.1 CP Function Behaviour

The CP function shall initiate the PFCP Association Setup procedure to request to setup a PFCP association towards a UP function prior to establishing a first PFCP session on this UP function.

The CP function shall retrieve an IP address of the UP function to send the PFCP Association Setup Request, as specified in clause 5.8.1, and shall send a PFCP Association Setup Request to the UP function with:

- the Node ID of the CP function;

- the list of optional features the CP function supports which may affect the UP function behaviour, if any;

- optionally, the PFCP Session Retention Information IE (see figure 7.4.4.1-2) to request the UP function to retain all or part of the existing PFCP sessions if a PFCP association already exists in the UP function for the same Node ID.

The CP function shall only initiate PFCP Session related signalling procedures toward a UP function after it receives the PFCP Association Setup Response with a successful cause from this UP function.

The CP function shall determine whether the UP function supports Sxa, Sxb, Sxc and/or combined Sxa/Sxb by local configuration or optionally via DNS if deployed.

##### 6.2.6.2.2 UP Function behaviour

When receiving a PFCP Association Setup Request, the UP function:

- if the request is accepted:

- shall store the Node ID of the CP function as the identifier of the PFCP association;

- shall send a PFCP Association Setup Response including:

- a successful cause;

- its Node ID;

- information of all supported optional features in the UP function;

- optionally the available user plane resources, e.g. IP address(es);

- optionally one or more UE IP address Pool Information IE which contains a list of UE IP Address Pool Identities per Network Instance;

- optionally the NF Instance ID of the UPF if available.

- shall send a PFCP Version Not Supported Response if the PFCP header of the request indicates a PFCP protocol version that is not supported by the UP function;

- otherwise, shall send a PFCP Association Setup Response with an appropriate error cause if the request is rejected.

If the PFCP Association Setup Request contains a Node ID for which a PFCP association was already established, the UP function shall:

- proceed with establishing the new PFCP association (regardless of the Recovery Timestamp received in the request), overwriting the existing association;

- retain the PFCP sessions that were established with the existing PFCP association and that are requested to be retained, if the PFCP Session Retention Information IE was received in the request; otherwise, delete the PFCP sessions that were established with the existing PFCP association;

- set the PSREI (PFCP Session Retained Indication) flag set to "1" in the PFCP Association Setup Response, if the PFCP Session Retention Information IE was received in the Request and the requested PFCP sessions have been retained.

\* \* \* Next Change \* \* \* \*

#### 6.2.6.3 PFCP Association Setup Initiated by the UP Function

##### 6.2.6.3.1 UP Function Behaviour

The UP function initiates the PFCP Association Setup procedure to request to setup a PFCP association towards a CP function. The UP function is configured with a set of CP functions to which it shall establish a PFCP association.

The UP function:

- shall retrieve an IP address of the CP function, e.g. based on local configuration in the UP function;

- shall send the PFCP Association Setup Request including:

- the Node ID of the UP function;

- information of all supported optional features in the UP function;

- optionally the available user plane resources, e.g. IP address(es);

- optionally one or more UE IP address Pool Information IE which contains a list of UE IP Address Pool Identities per a given Network Instance;

- optionally the NF Instance ID of the UPF if available.

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