**3GPP TSG-CT WG3 Meeting #108-eC3-201092**

[**E-Meeting**](https://www.3gpp.org/ftp/tsg_ct/WG3_interworking_ex-CN3/TSGC3_108_Sophia_Antipolis/)**, 19th -28th February 2020 (Revision of C3-201xyz)**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **29.513** | **CR** | **0108** | **rev** | **-** | **Current version:** | **16.2.0** |  |
|  |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:***  | PCF selection performed by the SMF |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | CT3 |
|  |  |
| ***Work item code:*** | 5G\_eSBA |  | ***Date:*** | 2020-02-28 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***Release:*** | Rel-16 |
|  | *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-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:*** | Stage 2 agreed the the factors included in the request in the case of delegated discovery and selection in SCP. |
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| ***Summary of change:*** | Aligned with stage 2. Remove the editor’s note. |
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| ***Consequences if not approved:*** | FFS is not resolved. |
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| ***Clauses affected:*** | 8.3 |
|  |  |
|  | **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:*** | This CR does not impact the OpenAPI file. |

\*\*\* 1st Change \*\*\*

## 8.3 PCF discovery and selection by the SMF

The SMF selects the PCF for a PDU session. The selected PCF instance may be the same or a different one than the PCF instance selected by the AMF.

The SMF may utilize the Nnrf\_NFDiscovery service of the Network Repository Function to discover the candidate PCF instance(s). In addition, PCF information may also be locally configured on SMF. The SMF selects a PCF instance based on the available PCF instances (obtained from the NRF or locally configured in the SMF). The following factors may be considered during the PCF selection.

- Local operator policies.

- Selected Data Network Name (DNN).

- S-NSSAI of the PDU session.

- the feature supported by the PCF (e.g. a PCF supporting the "ATSSS" feature is selected for an MA PDU session).

- SUPI; the SMF selects a PCF instance based on the SUPI range the UE's SUPI belongs to or based on the results of a discovery procedure with NRF using the UE's SUPI as input for PCF discovery.

- PCF selected by the AMF for the UE if available.

- The PCF Group ID provided by the AMF to the SMF.

- PCF Set ID.

In the case of delegated discovery and selection in SCP, the SMF shall include the above factors except the local operator policies if available in the first request.

The AMF may, based on operator policies, forward the selected PCF instance to the SMF during the PDU Session Establishment procedure to enable the usage of the same PCF instance for the AMF and the SMF. The SMF may decide based on operator policy either to use the same PCF instance or select a new PCF instance. If the same PCF instance is selected by the SMF, the PCF discovery and selection procedure described above is not performed.

In the case of delegated discovery and selection in the SCP, the AMF may, based on operator policies, forward the selected PCF instance Id and if available the PCF Group ID to the SMF during the PDU Session Establishment procedure to enable the usage of the same PCF instance for the AMF and the SMF. The SMF may include the received PCF instance Id and PCF Group ID in the request to the PCF via the SCP. The SCP may decide based on operator policy either to use the indicated PCF instance or select another PCF instance.

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