**SA WG2 Meeting #S2-143E S2-2100232r01**

**24 February-9 March, 2021, Electronic meeting (revision of S2-20xxxxx)**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **23.502** | **CR** | **2478** | **rev** | **1** | **Current version:** | **16.7.1** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Update NF services provided by PCF to support DCAMP in the 5GC | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | China Telecom | | | | | | | | | |
| ***Source to TSG:*** | SA2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17\_DCAMP | | | | |  | ***Date:*** | | | 2021-01-15 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)*  *Rel-17 (Release 17)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | According to discussions of the agreed TEI17\_DCAMP WID, the following scenario exists:  If the PCF used for AM policy decisions is not the same PCF instance as what is used for SM decision of the UE, when application starts/stops, PCF-SM needs to inform PCF-AM this event. Then, PCF-AM dynamically changes AM policy and notifies AMF new AM policy.  In order to support this, it is required to update procedures for handling dynamically changing AM policies. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Adding PCF into consumers of Npcf\_PolicyAuthorizationSubscribe/Unsubscribe/Notify services. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Dynamically changing AM policies are not supported by the 5GC. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.5.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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| **First change** |

5.2.5.1 General

The following table illustrates the PCF Services.

**Table 5.2.5.1-1: NF services provided by PCF**

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| --- | --- | --- | --- |
| **Service Name** | **Service Operations** | **Operation**  **Semantics** | **Example Consumer (s)** |
| Npcf\_AMPolicyControl | Create | Request/Response | AMF |
|  | Update | Request/Response | AMF |
|  | UpdateNotify | Subscribe/Notify | AMF |
|  | Delete | Request/Response | AMF |
| Npcf\_Policy Authorization | Create | Request/Response | AF, NEF |
|  | Update | Request/Response | AF, NEF |
|  | Delete | Request/Response | AF, NEF |
|  | Notify | Subscribe/Notify | AF, NEF, NWDAF, PCF |
|  | Subscribe |  | AF, NEF, NWDAF, PCF |
|  | Unsubscribe |  | AF, NEF, NWDAF, PCF |
| Npcf\_SMPolicyControl | Create | Request/Response | SMF |
|  | UpdateNotify | Subscribe/Notify | SMF |
|  | Update | Request/Response | SMF |
|  | Delete | Request/Response | SMF |
| Npcf\_BDTPolicyControl | Create | Request/Response | NEF |
|  | Update | Request/Response | NEF |
|  | Notify |  | NEF |
| Npcf\_UEPolicyControl | Create | Request/Response | AMF, V-PCF |
|  | Update | Request/Response | AMF, V-PCF |
|  | UpdateNotify | Subscribe/Notify | AMF, V-PCF |
|  | Delete | Request/Response | AMF, V-PCF |
| Npcf\_EventExposure | Subscribe | Subscribe/Notify | NEF, NWDAF |
|  | Unsubscribe |  |  |
|  | Notify |  |  |

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| **End of change** |

NOTE: In the Npcf\_PolicyAuthorization operations, PCF is a consumer when the PCF for the UE and the PCF for the PDU session are different.