**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 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)**Rel-17 (Release 17)* |
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| ***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. |
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| ***Summary of change:*** | 1. Adding PCF into consumers of Npcf\_PolicyAuthorizationSubscribe/Unsubscribe/Notify services.
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| ***Consequences if not approved:*** | Dynamically changing AM policies are not supported by the 5GC. |
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| ***Clauses affected:*** | 5.2.5.1 |
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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 ...  |
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| ***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.