**3GPP TSG-SA5 Meeting #155 *S5-242808rev1***

**Jeju, South Korea, 27 - 31 May 2024**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.255** | **CR** | **0541** | **rev** | **1** | **Current version:** | 18.3.0 |  |
|  | | | | | | | | |
| *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:*** | Add charging procedure for PDU Session Modification initiated by network | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-05-30 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In SA2, network requested PDU Session Modification is supported in TS 23.502 clause 4.3.3. PCC rules and charging policies are modified through PDU Session Modification procedure initiated by network, which is triggered by PCF initiated SM Policy Association Modification. It can support the use case for providing dynamic personalized charging package to the charged party. The use cases can be provided in the discussion paper (S5-242754).  Currently in TS 32.255, the charging procedure for PDU Session Modification is initiated by UE. But there is no charging procedure for PDU Session Modification initiated by network to support charging scenarios of dynamic personalized charging package. This tdoc is to add the charging procedure for PDU Session Modification initiated by network. | | | | | | | | |
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| ***Summary of change:*** | | Add charging procedure for PDU session modification initiated by network.  PCC rule and charging policies are modified and charging information is updated accordingly. | | | | | | | | |
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| ***Consequences if not approved:*** | | Charging procedure for PDU Session Modification initiated by network is missing. | | | | | | | | |
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| ***Clauses affected:*** | | 5.2.2.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

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| **1st Change** |

##### 5.2.2.2.3 PDU Session Modification

The following figure 5.2.2.2.3-1 describes the PDU session modification charging, based on figure 4.3.3.2-1 TS 23.502 [202] description:



Figure 5.2.2.2.3-1: PDU Session Modification

1. Network requested PDU Session Modification procedure is triggered by UE initiated modification, PCF initiated SM Policy Association Modification, SMF requested modification, AN initiated modification or AMF initiated modification in clause 6.3.2.2 of TS 23.503 [202].

2ch-a. The SMF sends Charging Data Request [Update] to the CHF for reporting the charging information when the corresponding trigger is armed (e.g., start of the service data flow, QoS change).

2ch-b. The CHF update the CDR for the PDU session.

2ch-c. The CHF acknowledges by sending Charging Data Response [Update] to the SMF.

3 to 13 PDU Session Modification Request Contination.

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| **End of Changes** |