**3GPP TSG-SA5 Meeting #129-e *S5-201331***

**Online, , 24th Feb 2020 - 4th Mar 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **32.255** | **CR** | **0203** | **rev** | **-** | **Current version:** | **16.3.0** |  |
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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:***  | Remove Editor's note of PDU Session establishment with I-SMF insertion |
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| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | ETSUN |  | ***Date:*** | 2020-02-14 |
|  |  |  |  |  |
| ***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:*** | Adding clarification that I-SMF controlling both I-UPF and PSA2 UPF upon local traffic offload scenario, it may enforce quota management and/or usage report with PSA2 UPF information and may report usage  with I-UPF information. |
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| ***Summary of change:*** | Adding note covering I-UPF and PSA-2 UPF usage scenario, and removal of editor’s notes. |
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| ***Consequences if not approved:*** | The handling of I-UPF and PSA-2 UPF would be unspecified. |
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| ***Clauses affected:*** | 5.2.2.14.2 |
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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** |

##### 5.2.2.14.2 PDU session establishment with I-SMF insertion

The following figure 5.2.2.14.2.1 describes a PDU session establishment charging, for the case where the service area of the selected SMF does not include the location where the UE camps, based on TS 23.502 [201] figure 4.3.2.2.2, where the V-SMF and V-UPF are replaced by I-SMF and I-UPF, and H-SMF and H-UPF are replaced by SMF and UPF (PSA) respectively:



Figure 5.2.2.14.2.1: UE-requested PDU Session Establishment with I-SMF insertion

2. The AMF selects SMF and I-SMF upon SMF serving area cannot cover UE location.

5a. I-SMF selects one or more UPFs.

11. The SMF may perform a Session Management Policy Modification procedure to report some event to the PCF that has previously subscribed.

11ch-a. The SMF creates a Charging Id for the PDU session, and sends Charging Data Request [initial] including I-SMF information to CHF for authorization for the subscriber to start the PDU session which is triggered by start of PDU session charging event.

11ch-b. The CHF opens CDR for this PDU session.

11ch-c. The CHF acknowledges by sending Charging Data Response [Initial] to the SMF.

14. AMF to SMF: SM Request (N2 SM information).

[19a-b]. N4 session Modification.

19c, I-SMF notify SMF on N4 information with Traffic usage reporting.

19ch-a. This step may occur in case "start of service data flow" needs quota from CHF, for the SMF to request quota for both own and I-SMF usage.

19ch-b. The CHF updates CDR for this PDU session.

19ch-c. The CHF acknowledges by sending Charging Data Response [Update] to the SMF.

NOTE 1: The steps from 19ch-a to 19ch-c for quota request from CHF are not applicable for offline only charging.

20. SM Request with PDU session Update Response to AMF.

21. SMF sends SM Context Status Notify to AMF.

22. In case of PDU Type IPv6, IPv6 Address Configuration.

NOTE 2: I-SMF controlling both I-UPF and PSA2 UPF upon local traffic offload scenarios, may enforce usage report and/or quota management for PSA2 UPF.

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| **End of change** |