**3GPP TSG-SA5 Meeting #134e *S5-206104***

**electronic meeting, online, 16th - 25th November 2020** Revision of S5-20xxxx

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| *CR-Form-v11.4* | | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | | |
|  | | | | | | | | | |
|  | **32.255** | **CR** | **0263** | **rev** | **1** | **Current version:** | **16.6.1** |  |
|  | | | | | | | | | |
| *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:*** | Add Charging Principle for Usage Reporting | | | | | | | | | |
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| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5G\_URLLC | | | | |  | ***Date:*** | | | 2020-11-19 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
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| ***Reason for change:*** | | As per TS 23.501 and TS 23.502, the 5GS to support Ultra Reliable Low Latency Communication (URLLC) is specified. The charging principle about how to report the usage for the redundant transmission should be added. | | | | | | | | |
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| ***Summary of change:*** | | Add charging principle for usage reporting if redundant transmission on N3/N9 interfaces and transport layer. | | | | | | | | |
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| ***Consequences if not approved:*** | | The highly reliable URLLC services charging is not supported. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.X.4 (New) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Implement after 5.1.X Ultra Reliable Low Latency Communication | | | | | | | | |

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| **First change** |

5.1.X.4 Usage Reporting

For dual connectivity based end to end Redundant User Plane Paths, SMF shall collect and report the usage which is the amount of traffic delivered to and forwarded from core network and the usage which is the amount of traffic sent to and received from external data networks for each redundant PDU session.

For redundant transmission at transport layer and N3/N9 interface, the SMF shall collect and report the usage to CHF:

- If the SMF collects the usage which is the amount of redundant transmission traffic delivered to and forwarded from core network. SMF reports the usage with a redundant transmission indication or;

- If the SMF collects the usage which is the amount of traffic resulting from packet elimination process sent to and received from external data networks. SMF reports the usage.

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| **End of change** |