**3GPP TSG-SA5 Meeting #134e *S5-206102***

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

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| *CR-Form-v11.4* | | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | | |
|  | | | | | | | | | |
|  | **32.255** | **CR** | **0261** | **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 Message Flow for URLLC services | | | | | | | | | |
|  |  | | | | | | | | | |
| ***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 message flow for URLLC charging should be added. | | | | | | | | |
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| ***Summary of change:*** | | Add message flow for URLLC services charging. | | | | | | | | |
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| ***Consequences if not approved:*** | | The highly reliable URLLC services charging is absent. | | | | | | | | |
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| ***Clauses affected:*** | | 5.2.2.X(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:*** | |  | | | | | | | | |

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| **First change** |

#### 5.2.2.X Ultra Reliable Low Latency Communication

##### 5.2.2.X.1 General

Support highly reliable URLLC services is specified in TS 23.501 [200] clause 5.33 procedures and TS 23.502 [201] message flows for different scenarios:

- Dual Connectivity based end to end Redundant User Plane Paths- Support of redundant transmission on N3/N9 interfaces

- Support for redundant transmission at transport layer

##### 5.2.2.X.2 Dual Connectivity based end to end Redundant User Plane Paths

###### 5.2.2.X.2.1 PDU Session establishment

The charging message flow of PDU session establishment for supporting Dual Connectivity based end to end Redundant User Plane Paths, is based on Figure 5.2.2.2.2.1 description with the differences identified in clause 4.3.2.2.1.1 TS 23.502 [202].

In the Step 9ch-a.

If SMF decided on redundant handling of the establishment of two redundant PDU Sessions, SMF sends the Charging Data Request [Initial] with the redundant transmission information.

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| **Next change** |