**3GPP TSG-SA5 Meeting #138-e *S5-214325***

**e-meeting, 23 - 31 August 2021** Revision of S5-20xxxx

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **32.255** | **CR** | **0321** | **rev** | **-** | **Current version:** | **17.2.0** |  |
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| *For* [***HELP***](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:***  | Correction on usage reporting for URLLC charging |
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| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
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| ***Work item code:*** | 5G\_URLLC |  | ***Date:*** | 2021-08-08 |
|  |  |  |  |  |
| ***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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
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| ***Reason for change:*** | As per the clause 5.2.2.3.3 of TS 29.244 traffic Usage Reporting with Redundant Transmission on N3/N9 interfaces, the UPF shall not count redundant packets in Usage Reports (e.g. Volume Measurement), i.e. it shall count the traffic only once in Usage Reports.As per the clause 5.24.3 of TS 29.244 Redundant Transmission at transport layer, a note specify that how the UPF perform the redundant transmission at transport layer is left up to UPF implementation. That means how to report from UPF for redundant transmission at transport layer is undefined in CT. UPF may count the redundant packerts or may not count. About the charging for the redundant transmission at transport layer, SMF shall include the Redundant Transmission Indicator to specify clearly the reported usage. |
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| ***Summary of change:*** | Clarify the usage reporting of the redundant transmission at transport layer and N3/N9 interface.Remove the editor’s note.  |
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| ***Consequences if not approved:*** | Can not support the URLCC charging. |
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| ***Clauses affected:*** | 5.2.1.12 |
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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 ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **First change** |

#### 5.2.1.12 URLLC Charging

The CHF can be aware of redundant transmission type (i.e.dual connectivity, redundant transmission on N3/N9 and redundant transmission at transport layer) and provide the quota allocation based on the redundant transmission type:

- For dual connectivity based end to end redundant user plane paths, the granted quotas is allocated for each PDU session.

- For the redundant transmission on N3/N9 interfaces, the CHF grants the quota regardless if packets were duplicated or not.

- For the redundant transmission at transport layer, the CHF grants the quota regardless if packets were duplicated or not.

For dual connectivity based end to end Redundant User Plane Paths, SMF shall collect and report the usage for each redundant PDU session.

For redundant transmission at N3/N9 interface, the SMF shall collect and report the usage not counting redundant packets. During the PDU session life, the SMF may decide to active or deactive the redundant transmission and reports the usage based on the redundant transmission change trigger.

For redundant Transmission at transport layer, the SMF shall collect and report the usage not counting redundant packets.

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| **End of change** |