**3GPP TSG-SA5 Meeting #138-e *S5-214173***

**e-meeting, 23 - 31 August 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.552** | **CR** | **0315** | **rev** | **-** | **Current version:** | **17.3.1** |  |
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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 | **x** | Core Network |  |

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| ***Title:*** | Rel-17 CR 28.552 Add PLMN granularity to PDCP SDU data volume measurement per interface for split gNB deployment scenario | | | | | | | | | |
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| ***Source to WG:*** | China Telecom | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** | ePM\_KPI\_5G | | | | |  | ***Date:*** | | | 2021-08-13 |
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| ***Category:*** | F |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | In TS 28.552, the PDCP SDU data volume measurement per interface for split gNB deployment scenario is lack of the PLMN granularity, however, in the non-split gNB deployment scenario, the PDCP SDU data volume measurement have the PLMN granularity, both of the scenario need to be consistent. | | | | | | | | |
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| ***Summary of change:*** | | Add PLMN granularity to PDCP SDU data volume measurement per interface for split gNB deployment scenario | | | | | | | | |
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| ***Consequences if not approved:*** | | Incomplete granularity affects the data volume measurement per interface for split gNB deployment scenario | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.3.6.2.3 | | | | | | | | |
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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** |

##### 5.1.3.6.2 PDCP SDU data volume Measurement

5.1.3.6.2.3 DL PDCP SDU Data Volume per interface

1. This measurement provides the Data Volume (amount of PDCP SDU bits) in the downlink delivered from GNB-CU-UP to GNB-DU (F1-U interface), to external gNB-CU-UP (Xn-U interface) and to external eNB (X2-U interface). The measurement is calculated per QoS level (mapped 5QI or QCI in NR option 3) and per S-NSSAI and per PLMN ID, and reported per Interface (F1-U, Xn-U, X2-U).

b) CC

c) This measurement is obtained by counting the number of DL PDCP SDU bits sent to GNB-DU (F1-U interface), sent to external gNB-CU-UP (Xn-U interface) and sent to external eNB (X2-U interface). The measurement is performed in GNB-CU-UP per QoS level (mapped 5QI or QCI in NR option 3) and per S-NSSAI and per PLMN ID, and reported per interface (F1-U, Xn-U, X2-U).

d) Each measurement is an integer value representing the number of bits measured in Mbits (1MBits=1000\*1000 bits). The number of measurements is equal to the number of QoS levels per interface plus the number of S-NSSAIs per interface plus the number of PLMN ID.

e) The measurement names have the form DRB.F1uPdcpSduVolumeDL\_Filter.

Where filter is a combination of PLMN ID and QoS level and S-NSSAI. (F1-U interface measurements) (Xn-U interface measurements)

Where filter is a combination of PLMN ID and QoS level. (X2-U interface measurements)

Where *PLMN ID* represents the PLMN ID, *QoS* representes the mapped 5QI or the QCI level, and *SNSSAI* represents S-NSSAI.

f) EP\_F1U (F1-U interface), EP\_XnU (Xn-U interface), EP\_X2U (X2-U interface).

g) Valid for packet switched traffic.

h) 5GS.

i) One usage of this measurement is for performance assurance within integrity area (user plane connection quality) and in the energy efficency (EE) area.

#### 5.1.3.6.2.4 UL PDCP SDU Data Volume per interface

a) This measurement provides the Data Volume (amount of PDCP SDU bits) in the uplink delivered to GNB-CU-UP from GNB-DU (F1-U interface), from external gNB-CU-UP (Xn-U interface) and from external eNB (X2-U interface). The measurement is calculated per QoS level (mapped 5QI or QCI in NR option 3) and per S-NSSAI and per PLMN ID, and reported per Interface (F1-U, Xn-U, X2-U).

b) CC.

c) This measurement is obtained by counting the number of UL PDCP SDU bits entering the GNB-CU-UP from GNB-DU (F1-U interface), from external gNB-CU-UP (Xn-U interface) and from external eNB (X2-U interface). The measurement is performed in GNB-CU-UP per QoS level (mapped 5QI or QCI in NR option 3) and per S-NSSAI and per PLMN ID, and reported per Interface (F1-U, Xn-U, X2-U).

d) Each measurement is an integer value representing the number of bits measured in Mbits (1MBits=1000\*1000 bits). The number of measurements is equal to the number of QoS levels per interface plus the number of S-NSSAIs per interface plus the number of PLMN ID.

e) The measurement names have the form DRB.F1uPdcpSduVolumeUL\_Filter.

Where filter is a combination of PLMN ID and QoS level and S-NSSAI. (F1-U interface measurements) (Xn-U interface measurements)

Where filter is a combination of PLMN ID and QoS level. (X2-U interface measurements)

Where *PLMN ID* represents the PLMN ID, *QoS* representes the mapped 5QI or the QCI level, and *SNSSAI* represents S-NSSAI.

f) EP\_F1U (F1-U interface), EP\_XnU (Xn-U interface), EP\_X2U (X2-U interface).

g) Valid for packet switched traffic.

h) 5GS.

i) One usage of this measurement is for performance assurance within integrity area (user plane connection quality) and in the energy efficency (EE) area.

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| **End of changes** |