**3GPP TSG-SA5 Meeting #154 *S5-242070d1***

Changsha, China, 15 - 19 April 2024

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
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|  | **28.552** | **CR** | **0550** | **rev** | **1** | **Current version:** | **18.6.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <http://www.3gpp.org/Change-Requests>.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:***  | Rel-18 CR 28.552 Update QoS Sustainability Analytics related measurements data in UPF performance measurements  |
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| ***Source to WG:*** | China Mobile |
| ***Source to TSG:*** | S5 |
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| ***Work item code:*** | PM\_KPI\_5G\_Ph3 |  | ***Date:*** | 2024-04-07 |
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| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *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:*** | Base on the request from SA2(S5-241324), the input data for the NWDAF to produce QoS sustainability analytics are missing, which are “UL and DL capacity GTP” . These measurement data are transmitted between UPF and gNB, and between UPF and UE.Therefore, this proposal is to add the missing the performance measurement of “UL/DL capacity GTP” for UPF in clause 5.4, to support NWDAF for QoS sustainability analytics. |
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| ***Summary of change:*** | Adding the missing the performance measurement on “UL and DL capacity GTP” to support NWDAF to produce QoS sustainability analytics. |
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| ***Consequences if not approved:*** | The results produced by NWDAF for QoS sustainability analytics are inaccurate, if GTP capacity performance measurements are missing.  |
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| ***Clauses affected:*** | 5.4.7.1.x, 5.4.9.1.x, 5.4.9.2.x |
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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 28.554 ... CR 0180...  |
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| ***Other comments:*** |  |
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| ***This CR's revision history:*** |  |

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| **1st Modified Section** |

### 5.4.7 One way packet delay between NG-RAN and PSA UPF

#### 5.4.7.1 UL packet delay between NG-RAN and PSA UPF

##### 5.4.7.1.x UL GTP capacity between PSA UPF and NG-RAN

a) This measurement provides the UL GTP capacity between PSA UPF and NG-RAN. This measurement is split into subcounters per 5QI and subcounters per S-NSSAI.

b) DER (n=1).

c) The measurement is obtained by the following method:

The UPF measures the maximum achievable GTP transmission rate between PSA UPF and NG-RAN for each 5QI or S-NSSAI, by counting the maximum achievable data volume for the measured 5QI or S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithemetic peak value and then dividing it by Δt.

d) Each measurement is an integer value representing the number of bits measured in Mbits (1MBits=1000\*1000 bits).

e) GTP.CapMaxUlPsaUpfNgran.*5QI, where 5QI* identifies the 5QI;
GTP.CapMaxUlPsaUpfNgran.*SNSSAI, where SNSSAI* identifies the S-NSSAI.

f) EP\_N3 (contained by UPFFunction);

g) Valid for packet switched traffic.

h) 5GS.

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| **2nd Modified Section** |

### 5.4.9 One way packet delay between PSA UPF and UE

#### 5.4.9.1 DL packet delay between PSA UPF and UE

##### 5.4.9.1.x DL GTP capacity between PSA UPF and UE

a) This measurement provides the capacity DL GTP capacity between PSA UPF and UE. This measurement is split into subcounters per S-NSSAI.

b) DER (n=1).

c) The measurement is obtained by the following method:

The UPF measures the maximum achievable DL GTP transmission rate between PSA UPF and UE for each S-NSSAI, by counting the maximum achievable data volume for the measured S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithemetic peak value and then dividing it by Δt.

d) Each measurement is an integer value representing the number of bits measured in Mbits (1MBits=1000\*1000 bits).

e) GTP.CapMaxDlPsaUpfUe.*SNSSAI,* where *SNSSAI* identifies the S-NSSAI.

f) EP\_N3 (contained by UPFFunction);

g) Valid for packet switched traffic.

h) 5GS.

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| **3rd Modified Section** |

#### 5.4.9.2 UL packet delay between PSA UPF and UE

##### 5.4.9.2.x UL GTP capacity between PSA UPF and UE

a) This measurement provides the UL GTP capacity between PSA UPF and UE. This measurement is split into subcounters per S-NSSAI.

b) DER (n=1).

c) The measurement is obtained by the following method:

The UPF measures the maximum achievable UL GTP transmission rate between PSA UPF and UE for each S-NSSAI, by counting the maximum achievable data volume for the measured S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithemetic peak value and then dividing it by Δt.

d) Each measurement is an integer value representing the number of bits measured in Mbits (1MBits=1000\*1000 bits).

e) GTP.CapMaxUlPsaUpfUe.*SNSSAI,* where *SNSSAI* identifies the S-NSSAI.

f) EP\_N3 (contained by UPFFunction);

g) Valid for packet switched traffic.

h) 5GS.

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| **End of modification** |