**3GPP TSG-SA5 Meeting #154 *S5-242072d1***

Changsha, China, 15 - 19 April 2024

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.554** | **CR** | **0180** | **rev** | **1** | **Current version:** | **18.5.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_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 28.554 Update KPIs on “UL/DL capacity GTP” and “UL/DL available capacity GTP” | | | | | | | | | |
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| ***Source to WG:*** | China Mobile | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | PM\_KPI\_5G\_Ph3 | | | | |  | ***Date:*** | | | 2024-04-07 |
|  |  | | | |  | |  | | |  |
| ***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 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:*** | | 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 KPIs need to be added in TS 28.554.  Therefore, this proposal is to add the missing KPIs of “UL and DL capacity GTP” in clause 6.3, to support NWDAF for QoS sustainability analytics. | | | | | | | | |
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| ***Summary of change:*** | | Add the missing KPIs 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 measurement is missing. And people may misunderstand the definitions on “UL and DL capacity GTP”. | | | | | | | | |
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| ***Clauses affected:*** | | 6.3.x | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 28.552 CR 0549, 0550 | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **1st Modified Section** |

## 6.3 Integrity KPI

### 6.3.x Capacity GTP

#### 6.3.x.1 UL GTP capacity between PSA UPF and NG-RAN

a) GTP.CapMaxUlPsaUpfNgran.

b) This KPI describes the maximum achievable UL GTP transmission rate between PSA UPF and NG-RAN.

c) It is obtained by counting the UL available data volume between PSA UPF and NG-RAN for the measured 5QI or S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithmetic peak value and then dividing it by Δt.

d) NetworkSlice, SubNetwork, UPFunction

#### 6.3.x.2 DL GTP capacity PSA UPF and NG-RAN

a) GTP.CapMaxDlPsaUpfNgran

b) This KPI describes the maximum achievable DL GTP transmission rate between PSA UPF and NG-RAN.

c) It is obtained by counting the DL available data volume between PSA UPF and NG-RAN for the measured 5QI or S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithmetic peak value and then dividing it by Δt.

d) NetworkSlice, SubNetwork, GNBCUUPFunction

#### 6.3.x.3 UL GTP capacity between PSA UPF and UE

a) GTP.CapMaxUlPsaUpfUe

b) This KPI describes the maximum achievable UL GTP transmission rate between PSA UPF and UE.

c) It is obtained by counting the UL available data volume between PSA UPF and UE for the measured S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithmetic peak value and then dividing it by Δt..

d) NetworkSlice, SubNetwork, UPFunction

#### 6.3.x.4 DL GTP capacity PSA UPF and UE

a) GTP.CapMaxDlPsaUpfUe

b) This KPI describes the maximum achievable DL GTP transmission rate between PSA UPF and UE.

c) It is obtained by counting the DL available data volume between PSA UPF and UE for the measured S-NSSAI for each time interval ([t, t + Δt]) during the collection period, taking the arithmetic peak value and then dividing it by Δt.

d) NetworkSlice, SubNetwork, UPFunction

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| **End of modification** |