**3GPP TSG-SA5 Meeting #155 *S5-243272d1***

**Jeju, South Korea, 27 - 31 May 2024**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0573** | **rev** | **1**  | **Current version:** |  |  |
|  |
| *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 | **X** |

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| ***Title:***  | Rel-19 CR TS 28.552 Add new measurements for Mean virtual GPU usage |
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| ***Source to WG:*** | China Unicom |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | PM\_KPI\_5G\_Ph4 |  | ***Date:*** | 2024-05-15 |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** | Rel-19 |
|  | *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:*** | CPU and GPU have differences in processing speed, role and technology, which leads to the need to choose a more appropriate processing unit according to different application scenarios and needs. At present, Gpu is widely used in large-scale computing tasks, and the measurement requirements of Mean virtual GPU usage should also be met, but now only Mean virtual CPU usage is measured in TS 28.552. |
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| ***Summary of change:*** | Add new measurements for Mean virtual GPU usage. |
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| ***Consequences if not approved:*** | The measurement requirements of Mean virtual GPU usage cannot be met. |
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| ***Clauses affected:*** | 5.7.1 |
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|  | **Y** | **N** |  |  |
| ***Other specs*** |  |  |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  |  |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  |  |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st Change** |

#### 5.7.1.X Virtual GPU usage

##### 5.7.1.X.1 Mean virtual GPU usage

a) This measurement provides the mean usage of the underlying virtualized GPUs for a virtualized 3GPP NF. This measurement is not applicable to the scenario that one VNFC instance supports more than 1 NFs.

b) OM.

c) The measurement method is similar to Mean virtual CPU usage, refer to Mean virtual CPU usage (see TS 28.552 clause 5.7.1.1.1).

d) A single integer value (Unit: %).

e) VR.VGpuUsageMean

f) GNBCUCPFunction (for 3 split scenario)
GNBCUUPFunction (for 3 split scenario)
GNBCUFunction (for 2 split scenario)
NWDAFFunction

g) Valid for packet switched traffic.

h) 5GS

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| **End of Change** |