**3GPP TSG-SA5 Meeting #139-e *S5-215079rev1***

**e-meeting, 11 - 20 October 2021**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **28.554** | **CR** | **0087** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  |
| *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 | **X** | Core Network |  |

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|  |
| ***Title:***  | Add Energy Consumption KPI for NG-RAN |
|  |  |
| ***Source to WG:*** | Huawei |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | EE5GPLUS |  | ***Date:*** | 2021-10-01 |
|  |  |  |  |  |
| ***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:*** | The Energy Consumption (EC) KPI has been defined for 5G NFs and 5GC. The EC KPI for NG-RAN is missing. |
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| ***Summary of change:*** | Add EC KPI definition for NG-RAN. |
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| ***Consequences if not approved:*** |  |
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| ***Clauses affected:*** | New clause 6.7.3.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 ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st modified section** |

#### 6.7.3.X NG-RAN Energy Consumption (EC)

##### 6.7.3.X.1 Definition

a) ECNG-RAN

b) This KPI describes the Energy Consumption (EC) of the NG-RAN. It is obtained by summing up the Energy Consumption of ECgNB for all the gNBs that compose the NG-RAN network, and ECgNB is defined as the sum of ECPNF for all PNFs that constitute the gNB. For the Energy Consumption (EC) of Network Functions, see clause 6.7.3.1. The unit of this KPI is J.

c)

d) Subnetwork

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| **End of modified section** |