**3GPP TSG-SA5 Meeting #155 *S5-243270***

Jeju, Korea, 27 May - 31 May 2024

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0192**  | **rev** | **1** | **Current version:** | **18.5.0** |  |
|  |
| *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 |  | Core Network | **X** |

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| ***Title:***  | New KPIs for PDU Establishment Accessibility |
|  |  |
| ***Source to WG:*** | Apple, Intel |
| ***Source to TSG:*** | SA5 |
|  |  |
| ***Work item code:*** | PM\_KPI\_5G\_Ph4 |  | ***Date:*** | 2024-27-05 |
|  |  |  |  |  |
| ***Category:*** | **B** |  | ***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:*** | Currently there is KPI defined in TS 28.554 quantifying the PDU Session Establishement Request Rejection rate broken down by both Request Type and whether or not the PDU Session is moved from EPC or non 3GPP Access at the time of initiating its 5G session etablishement. In this CR, it is proposed to define PDU Session Establishment Per Request Type Rate, as well as PDU Session Establishment Reject Rate, Per Request. One usage of these new KPIs is for performance assurance to support RRM resources optimization (see TS 28.313) as well as to characterize PDU session establishment success rate for scenarios where a handover happens between a 3GPP access and non 3GPP access links with a pre-established PDU Session. |
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| ***Summary of change:*** | Adding a new KPIs showing the PDU Session Establishment Per Request Type Rate, as well as PDU Session Establishment Reject Rate, Per Request. |
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| ***Consequences if not approved:*** | Without these KPIs, percentage of rejected PDU Sessions, established on 5GC or handed over from EPC or non 3GPP access networks to 5GC, cannot be derived. |
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| ***Clauses affected:*** |  2 (new reference), 6.2.X (new), 6.2.Y (new) |
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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:*** | Revision of S5-242634 |

>>>>BEGINNING OF CHANGES<<<<

### 2 References

[x] 3GPP TS 28.313: " Management and orchestration; Self-Organizing Networks (SON) for 5G networks".

>>>>NEXT CHANGE<<<<

### 6.2.X PDU Session Per Establishment Request Rate.

a) PDUSessionEstablishRatePerReqType

b) This metric shows the percentage of PDU establishment requests, per PDU Request Type, w.r.t all PDU establishment requests that a AMF receives from all UEs it serves.

c) To measure the percentage of PDU establishment requests, per PDU Request Type:

Measurement names: ,

d) AMFFunction

>>>>NEXT CHANGE<<<<

### 6.2.Y PDU Session Per Establishment Request Reject Rate,.

a) PDUSessionRejectRate

b) This metric shows the percentage of PDU establishment requests that get rejected by the AMF, w.r.t all PDU establishment requests that the same AMF receives from all UEs it serves, broken down by PDU Request Type.

c) To measure the PDU establishment request Reject rate, per PDU Request Type :

Measurement names: ,

d) AMFFunction

>>>>NEXT CHANGE<<<<

A.X Use case for the PDU Session Establishment Requests and Rejects related KPIs.

The PDU Session Establishment Requests and Rejects KPIs are useful for performance assurance to characterize PDU session establishment success rate for scenarios where a handover happens from non 3GPP access to 3GPP access links with a pre-established PDU Session.

>>>>END OF CHANGES<<<<