**3GPP TSG-SA5 Meeting #138-e *S5-214234***

**e-meeting, 23 - 31 August 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.535** | **CR** | **0054** | **rev** | **-** | **Current version:** | **17.2.1** |  |
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| *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-17 CR 28.535 Update the communication service quality assurance and optimization use case | | | | | | | | | |
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| ***Source to WG:*** | China Telecom, Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eCOSLA | | | | |  | ***Date:*** | | | 2021-08-13 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***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 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:*** | | For the communication service quality assurance, there may be many problems including the performance degradation and/or fault alarms. The 3GPP management service should have the ability to find a solution. When the performance degradation are deteted, both of the root cause analysis and solution analysis also should be done, because the root couse analysis may not come to the optimization strategy(e.g., the update configuration parameters) but only the the location of the problem, Howerer, in the description of the use case, there is lack of the root cause and solution analysis based on the MDAF. | | | | | | | | |
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| ***Summary of change:*** | | Update the use case of communication service quality assurance and optimization | | | | | | | | |
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| ***Consequences if not approved:*** | | The description of the use case is not complete. | | | | | | | | |
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| ***Clauses affected:*** | | 6.1.1 | | | | | | | | |
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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:*** | |  | | | | | | | | |

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| **First change** |

## 6.1 Use cases

### 6.1.1 Communication service quality assurance and optimization

The goal of the use case is to enable communication service quality assurance and optimization for the set of services provided by the network to certain group (category) of UEs. For example, the set can include the communication services provided via certain NSI(s)/NSSI(s) or to IoT devices in certain area.

The group of NG-RAN and 5GC nodes (deployed and active), which are essential for the set of E2E services, provide provisioning and PM management services. It is also assumed that the providers of the related NSI / NSSI provisioning and PM management services are deployed and active.

The management system is consuming the aforementioned management services either directly or through proxy nodes that re-expose the management services; the management system is aware of the performance requirements imposed on the set of communication services.

The management system is collecting the service experience information and monitoring the key performance indicators, KPIs, related to the targeted services. Analytics hosted by the MDAF may be utilized for processing of the network data to derive and analyse the KPIs, which could include the performance degradation analysis, root cause analysis and solution analysis. If the service quality assurance and optimization function detects performance degradation, the MDAF analyse the problem to locate the root cause and analyse the solution (e.g., the update configuration parameters). The MDAF may analyse the network data iteratively based on the feedback result of the network configuration, and the 3GPP management system may continuously modify the configuration parameters in the corresponding NG-RAN and 5GC nodes and NSI(s)/NSSI(s), to satisfy the SLA requirement. In case that changes of communication service SLS are needed, those changes may result as input to the 3GPP management system.

If the network performance does not recover or improve, the management system may further adjust the network configuration, or roll back to the previous configuration. At all times the management system continues to collect the network data and to monitor the performance indicators.

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| **End of change** |