**3GPP TSG-SA5 Meeting #138e *S5-214477rev1***

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

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **28.535** | **CR** | **0055** | **rev** | **1** | **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:***  | Add use case of advance testing and monitoring assisted SLS assurance |
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| ***Source to WG:*** | AsiaInfo |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | eCOSLA |  | ***Date:*** | 2021-08-13 |
|  |  |  |  |  |
| ***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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | The goal of this use case is to ensure SLS through advance testing and monitoring using test terminals. Through real-time monitoring the key performance data related to SLS goals, the MnS producer can analyse network fault and performance degradation in time. |
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| ***Summary of change:*** | Added the use case of advance testing and monitoring assisted SLS assurance to ensure SLS. |
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| ***Consequences if not approved:*** | An important scenario is missing for eCOSLA. |
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| ***Clauses affected:*** | 6.1.x (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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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| **1st of changes** |

### 6.1.X Advance testing and monitoring assisted SLS assurance

The goal of this use case is to ensure SLS through advance testing and monitoring using test terminals. Through real-time monitoring the key performance data related to SLS goals, the MnS producer can analyse network fault and performance degradation in time.

Test terminals can be deployed at each test point in the network system to perform test tasks and collect performance data. The MnS producer can configure the test terminals according to the SLS requirements. The MnS producer is aware of the requirements of SLA to be tested, translates E2E SLS goal and configures the threshold(s) of SLA requirements for the test terminals (such as the latency threshold, the throughput threshold, and the jitter threshold). The test terminals continuously monitor the network according to the configured threshold(s) of SLA requirements. When a certain threshold is crossed, an SLS performance alarm is reported. The threshold can be set, modified, deleted, and inquired according to different service status to achieve the effectiveness of monitoring.

MnS producer collects reports from test terminals to perform root cause analysis and find the cause for SLS breach, and propose activities, mitigation or suggestions to solve the problem. The new task can be verified in the network through the simulation test before MnS producer executes the new task to avoid the potential risks in advance.

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| In conclusion, the management control loop consists of the steps Monitoring, Analysis, Decision and Execution. When the MnS producer receives SLS goals, "Execution"configures the threshold(s) of SLA requirements for the test terminals. "Monitoring" collects performance alarm reports provided from test terminals. "Analysis" performs root cause analysis and finds the cause for SLS breach. "Decision"decides the potential solutions which are executed through provisioned services by "Execution". "Execution" may also perform reconfiguration of the test terminal threshold to monitor the network. **end of changes** |