**3GPP TSG-SA5 Meeting #135-eS5-212300**

**Online, , 25th Jan 2021 - 3rd Feb 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.535** | **CR** |  | **rev** |  | **Current version:** | **17.0.0** |  |
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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:*** | Input to eCOSLA draft CR S5-211358 | | | | | | | | | |
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| ***Source to WG:*** | Ericsson, Deutsche Telekom AG. | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** | eCOSLA | | | | |  | ***Date:*** | | | 2021-02-19 |
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| ***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 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:*** | | The draft CR contains two use cases that have been discussed 1) co-ordination between loop 2) pause point. The stage 2 solutions have not been discussed yet and is work in progress. The text in 1) has some ambiguities and updates are proposed to both use case and requirements. The use case case in 2) is not needed for the following reasons:  - In practice many closed control loops are closed and with only some basic observability.  - All actions are logged, an operator can monitor the log for detailed information about the internal operation of an assurance closed loop.  - Operation of the loop can be controlled through insertion of policies.  - Having specific breakout point that expose an interface to the ouside of the loop, is taking away from the benefits of a closed control loop, in which case an open control loop may be more applicable. | | | | | | | | |
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| ***Summary of change:*** | | Improve text in 4.2.x  Remove 6.1.x  Remove associated requirement from 6.2 | | | | | | | | |
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| ***Consequences if not approved:*** | |  | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.x (new), 6.1.X(new), 6.2 | | | | | | | | |
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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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | | This CR is input to draft CR S5-211358 | | | | | | | | |

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| **1st Change** |

## 4.2.x Coordination between closed control loops

Different closed control loops reside in the management domains or in the network functions to support automation and the autonomous networks. Different domains may involve overlapping or nonoverlapping coverage areas. The results of a closed control loop may have impact on other closed control loops. Coordination between closed control loops is needed for example in and between, the 5GC management domain and the NG-RAN management domain, to improve the performance in order to achieve the goal(s) of the closed control loops. Furthermore coordination may also be needed when conflicts happen between closed control loops related to their activities.

A closed control loop may coordinate with other closed control loops in the same domain or in a different domain. Closed control loops in domain management for 5GC and NG-RAN are responsible for local optimization. Closed control loops in the cross management domain may need to coordinate with closed control loops in multiple other management domains for the end to end optimization.

The relationships between closed control loops can be hierarchical and/or peer-to-peer. Coordination in the management domains include the following categories:

* Coordination between Cross Management Domain and the 5GC Management Domain
* Coordination between Cross Management Domain and the NG-RAN Management Domain
* Coordination between Cross Management Domain, 5GC Management Domain and NG-RAN Management Domain
* Coordination within:

- Cross Management Domain,

- 5GC Management Domain and

- NG-RAN Management Domain

Coordination in management domains provides the SLS assurance from the overall management perspective. It also provides governance and goals for the 5GC NFs and gNBs.

Editor’s NOTE: This will be revisited.

Editor’s NOTE: Cross management domain interactions are FFS

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| **2nd Change** |

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| **3rd Change** |

## 6.2 Requirements

**REQ-CSA-CON-01** The 3GPP management system shall have the capability to take actions for a set of communication services serving certain group of UEs based on the target SLS.

**REQ-CSA-CON-02** The 3GPP management system shall have the capability to collect service experience information.

**REQ-CSA-CON-03** The 3GPP management system shall have the capability to analyse the performance information related to the set of communication services serving certain group of UEs.

**REQ-CSA-CON-04** The 3GPP management system shall have the capability to modify the configuration parameters related to the set of communication services serving certain group of UEs.

**REQ-CSA-CON-05** The 3GPP management system shall have the capability to collect NSI related data from one or more 5GC NF(s).

NOTE 1: An example for NSI related data may be QoE data.

**REQ-CSA-CON-06** The 3GPP management system shall have the capability to derive which communication service is associated to the QoE data from the collected NSI related QoE data.

**REQ-CSA-CON-07** The 3GPP management system shall have the capability to ascertain SLS breach.

**REQ-CSA-CON-08** The 3GPP management system shall have the capability to perform the root cause analysis (e.g., identifying the underlying reason) for an SLS breach.

**REQ-CSA-CON-09** The 3GPP management system shall have the capability to take corrective actions against the root cause identified.

**REQ-CSA-CON-10** The 3GPP management system shall have the capability to translate communicate service requirements to cross domain SLS goal and single domain SLS goal.

**REQ-CSA-CON-11** The 3GPP management system shall have the capability to collect single domain SLS analysis as input to cross domain SLS analysis.

**REQ-CSA-CON-12** The 3GPP management system shall have the capability to allow its authorized consumer to control the SLS assurance (e.g. specify the SLS to be assured, enable/disable, specify the assurance time and update the SLS assurance requirements).

**REQ-CSA-CON-13** The 3GPP management system shall have the capability to allow its authorized consumer to obtain the SLS assurance progress information and fulfil information.

NOTE 2: The management system refers to the producer of management service for SLS assurance.

**REQ-CSA-CON-xx1** The 3GPP management system shall have the capability to configure SLS assurance goals for the 5GC management domain and the NG-RAN management domain.

**REQ-CSA-CON-xx2** The 3GPP management system shall have the capability to allow closed control loops in cross management domain to collect SLS assurance goal status of closed control loops in 5GC management domain and NG-RAN management domain.

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| **End of Change** |