**3GPP TSG-SA5 Meeting #139-eS5-215114**

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

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.535** | **CR** | **-** | **rev** | **-** | **Current version:** | **17.3.0** |  |
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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 draftCR S5-212397 Update coordination between closed control loops | | | | | | | | | |
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| ***Source to WG:*** | Huawei. | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** | eCOSLA | | | | |  | ***Date:*** | | | 2021-09-26 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | It is described in the draftCR S5-212397 the relationships and coordination categories between closed control loops in the management domains. However it is not clear what are coordinated between ACCLs. | | | | | | | | |
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| ***Summary of change:*** | | To provide more information of ACCL coodinations, added reference to ZSM009-1 in 4.2.x the ACCL coordination types of hierarchical and peer to peer. . | | | | | | | | |
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| ***Consequences if not approved:*** | | It is not clear on more detail information that are coordinated between ACCLs in management domains. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.x | | | | | | | | |
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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 is input to draftCR S5-212397 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **1st Change** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.261: "Service requirements for the 5G system".

[3] 3GPP TS 28.550: "Management and orchestration; Performance assurance".

[4] 3GPP TS 28.531: "Management and orchestration; Provisioning".

[5] ETSI GS ZSM 002 (V1.1.1) (2019-08): "Zero-touch network and Service Management (ZSM); Reference Architecture".

[6] 3GPP TS 28.545: "Management and orchestration; Fault Supervision (FS)".

[7] 3GPP TS 28.552: "Management and orchestration; 5G performance measurements".

[8] 3GPP TS 28.554: "Management and orchestration; 5G end to end Key Performance Indicators (KPI)".

[9] 3GPP TS 28.532: "Management and orchestration; Generic management services".

[x] ETSI GS ZSM 009-1 (V1.1.1) (2021-06): "Zero-touch network and Service Management (ZSM); Closed-Loop Automation; Part 1: Enablers".

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| **2nd 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 non overlapping 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 Cross Management Domain and 5GC management domain or 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.

Closed Loop Coordination (CLC) of Hierarchical and peer-to-peer interactions are described in ETSI GS ZSM 009-1 [x].

Editor’s NOTE: This will be revisited.

Editor’s NOTE: Cross management domain interactions are FFS

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| **End of Change** |