**3GPP TSG-SA5 Meeting #143-e *S5-223234rev3***

**e-meeting, 9 – 17 May** **2022**

**Source: Huawei**

**Title: Key Issue on SLA monitoring and evaluation**

**Document for: Approval**

**Agenda Item: 6.5.17.3**

# 1 Decision/action requested

***Discuss and approve on the proposal.***

# 2 References

[1] TR 28.907 Study on enhancement of management of non-public networks v0.1.0.

# 3 Rationale

It is proposed to add a Key Issue in draft TR 28.907 [1].

# 4 Detailed proposal

This document proposes the following changes in TR 28.907 [1].

|  |
| --- |
| **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 28.557: "Management and orchestration; Management of Non-Public Networks (NPN); Stage 1 and stage 2".

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

[4] 3GPP TS 22.867 "Study on 5G Smart Energy and Infrastructure".

[5] 5G-ACIA: Exposure of 5G Capabilities for Connected Industries and Automation Applications, https://5g-acia.org/whitepapers/exposure-of-5g-capabilities-for-connected-industries-and-automation-applications-2/

[x] 3GPP TS 22.104: "Service requirements for cyber-physical control applications in vertical domains".

|  |
| --- |
| **2nd Change** |

## 5.X Key Issue #X: SLA monitoring and evaluation

### 5.X.1 Description

A service-level agreement (SLA) consists of a technical part and a non-technical part (i.e., pricing and billing conditions, penalties, etc). The technical part, referred to as SLS, capture service requirements which are input to 3GPP management system.. For example, 3GPP TS 22.104 [x] presents service requirements of cyber-physical control applications (e.g. motion control, process automation, etc.) in vertical domains, which require very high levels of communication service availability and/or very low end-to-end latencies. The end-to-end latency is also very important for the applications of smart Grid, e.g. differential protection in power distribution grid.

From network management perspective, the network management service provider allocates network resource to provide communication service based on related service requirements, monitoring the network performance to evaluate and assurance the SLA fulfilment. Therefore, the NPN management system may need to study how to assure whether the service and network requirements are achieved. Some related KPIs/KQIs like communication service availability, communication service reliability, end-to-end latency, UE speed, are clarified to continually monitoring the network performance to evaluate the assurance of the SLA. If the SLA is not fulfilled, the network optimization contributing to SLS assurance, e.g. reconfigure the resources should be adopted to resolve the performance degradation.

Editor Note 1: Some KPIs/KQIs may be specific to NPN scenarios, not be applicable to public network scenarios, is FFS.

Editor Note 2: Some of the COSLA work might be reused here, particularly those applicable to the capabilities regarding assurance. How this reusability can be applied, under what circumstances, and to which extent, is FFS.

|  |
| --- |
| **End of change** |