**3GPP TSG-SA5 Meeting #143-e *S5-223398***

**e-meeting, 9- 17May 2022**

**Source: Huawei, CMCC**

**Title: pCR 28.830 Add framework of FSEV**

**Document for: Approval**

**Agenda Item: 6.5.7**

# 1 Decision/action requested

***The group is asked to discuss and approve the proposal.***

# 2 References

[1]  [SP-220153](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3693): "New SID on Fault Supervision Evolution"

[2] S5-222733: "draft TR 28.830 Fault supervision evolution"; v0.1.0

# 3 Rationale

This document describes the deployment position of incident management in the 3GPP management domains and the functional framework of the incident MnS Producer to achieve fault supervision evoluation.

# 4 Detailed proposal

This document proposes the following changes in TR 28.830.

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| **1st Change** |

# 4 Background and concepts

## 4.1 Background

## 4.2 Concepts

### 4.2.x Fault supervision evolution framework

To achieve the goal for fault supervision evolution, based on the Service based management architecture, incident management service could reside on 3GPP cross domain, RAN domain or CN domain as shown in the following figure. Incident management in 3GPP cross domain coordinates with incident management in RAN domain and CN domain. Incident management in RAN domain and CN domain provide domain specific incidents to incident management in 3GPP cross domain for further processing.



**Figure 1: Deployment of incident management for fault supervision evolution**

The following figure shows the functional framework of incident MnS producer.

**Figure 2: Incident MnS Producer**

The closed loop of incident management contains the following steps:

**Awareness**: collects data from multiple data sources and supports standard data types such as alarm, performance, configuration or incident information from other incident MnS producer.

**Analytics**: provides correlation analysis and optionally recommendation capabilities. Multiple alarms or performance data or incident information from other incident MnS producer that meet incident characteristics can be correlated and analyzed for incident identification, risk prediction, service impact analysis, and demarcation.

**Decision**: provides incident evaluation, and resolution for incident handling.

**Execution**: provides the execution of automatic incident handling and incident verification functions. The incident status is updated according to the execution results.

The incident MnS producer provides following capabilities:

incident monitoring such as the name, status, service impacts and correlation information of the incident

incident subscription and query.

Editor Notes: This clause describes the working assumption for the architecture and work flow of fault supervision evolution. The generic workflow in clause 7.3 ”Generic autonomous network level for fault management” in TS 28.100 could be considered as reference. This working assumption may be revisited.

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| **End of change** |