**3GPP TSG-SA5 Meeting #155 *S5-243090d1***

Jeju, South Korea, 27 - 31 May 2024

**Source: Huawei**

**Title: Rel-19 pCR 28.866 Add use case for** **fault analytics time duration measurement**

**Document for: Approval**

**Agenda Item: 6.19.2**

# 1 Decision/action requested

***The group is asked to discuss and approval.***

# 2 References

[1] 3GPP TR 28.866: "Study on Management Data Analytics (MDA) – Phase 3".

# 3 Rationale

This contribution proposes the new use case on the topic of fault management related analytics for TR 28.866 [1]. This is related to WT-7 in the SID.

MDA has the capability for failure prediction and service failure recovery as defined in TS 28.104. It may be useful to evaluate the capability for MDA to perform fault analytics by measuring how long MDAF takes to execute the analytics. Currently there is no attributes to measure the time duration of fault analytics execution. It can be achieved by adding new attributes or update existing attributes.

# 4 Detailed proposal

It is proposed to make the following changes to TR 28.866 [1].

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| **1st change** |

## 5.X Use case X: Fault analytics time duration measurement

### 5.X.1 Description

In MDA assisted fault management, consumers can obtain analytics output which includes predictions of potential service failures and possible recommendation actions to prevent failures or service recovery. It is beneficial to evaluate the capability for MDA to perform fault analytics by measuring the time duration taken to execute the analytics. It is assumed that MDAF performs the analytics when receives a request from MnS consumer and the analytics will end by sending the MDA output. This time duration of performing analytics needs to be measured. The start time is the time when MnS consumer requests the MDA output. The end time is the time when the MDA output is delivered to the MDA consumer. It may help consumer decide when to request the analytics or evaluate the timeliness of obtaining fault analytics results. For example, it is useful for consumer to obtain the measurement of the time duration of performing analytics on failure prediction assisted by MDA in order to evaluate the speed of failure prediction and timeliness of subsequent failure prevention actions.

### 5.X.2 Potential Requirements

**REQ-MDA-01:** The MDA capability for fault management related analytics may be able to enable MnS producer to provide information to measure the time duration of fault analytics execution.

### 5.X.3 Potential Solutions

In order to define the time duration of analytics execution, it is possible to add a new optional TimeWindow datatype attribute in MDAOutputs IOC to represent the start time and end time of the analytics execution. Alternatively, it can reuse existing attributes and update it to measure the analytics execution time duration.

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| **End of changes** |