**3GPP TSG-WG SA2 Meeting #161 S2-2403057**    
**26th February – 1st March 2024, Athenswas 2271**

**Source: Ericsson**

**Title:** **(KI#4) Use case for NWDAF enhancements to support network abnormal behaviours (i.e. Signalling storm) mitigation and prevention**

**Document for:** **Approval**

**Agenda Item:** **19.15**

**Work Item / Release: FS\_AIML\_CN / Rel-19**

*Abstract: This paper proposes a new Use Case#X related to KI#4 for the scenarios where NFs can be source of signalling storm and OAM in the center for prevention and mitigation.*

# 1 Rationale

This paper proposes a new use case in relevance with KI #4, described in [1]. The use case describes a scenario that may arise when network abnormal behaviour i.e., signalling storm happens where NFs in 5GC are not behaving as they should.

# 2 Detailed proposal

\* \* \* \* First change (All new text) \* \* \* \*

### 5.1.x Use Case #x: Analytics-assisted prevention of abnormal NF behaviour causing signalling storm and mitigation of its impact in the network

The presented use case is to elaborate on how analytics can assist entities in 5GC e.g., NFs, OAM, etc., to prevent and mitigate the impact of abnormal behaviour i.e., signalling storm in the network.

Signalling storm can happen because of different reasons in the network e.g., error or unsuccessful update in the software running on an NF, incompatible interfaces between network entities, invalid configuration, etc.

The network or the operation of the network, may based on the analytics discover abnormal NF behavior, i.e., signalling strorms, and begin an enforcement action towards the network that can contribute to prevention of signaling storm or mitigation the impact of it. The result of the action would either prevent the abnormally behaving NF to affect other entities in the network or mitigate the impact.

\* \* \* \* End of changes \* \* \* \*