**3GPP TSG-SA5 Meeting #162 *S5-254024***

Goteborg, Sweden, 25 - 29 August 2025

**Source: Huawei**

**Title: Rel-19 pCR TS 28.561 Update the use case in 5.3.2.2**

**Document for: Approval**

**Agenda item: 6.19.5.1**

**Spec: 3GPP TS 28.561**

**Version: 1.0.0**

**Work Item: NDT**

**Comments**

This contribution is proposed to update the use cases.

In clause 5.3.2.2, the main purpose is to use NDT to evaluate how the network responds of events. NDT can model network behaviors and provide information on potential impact of network events. However, the statement given in signaling storm is not aligned with this use case. Examples are given to describe how the signaling storm event can be modelled in NDT considering different scenarios.

**Proposed Changes**

\* \* \* First Change \* \* \* \*

#### 5.3.2.2 Verification of network response to events – NDTVER\_02

The network can experience different kinds of events, including failure and non-failure events. A failure event refers to the situation where the network does not behave as expected, e.g., where users in the network are completely unable to get service from the network. A non-failure event refers to the situation where the network experiences an unusual occurrence, but users are still able to get service. The NDT can be used to evaluate how the network responds to any of these events. The NDT can model network behaviors and provide information on potential impact of network events. The NDT can be used to evaluate if a particular event will cause a network failure or whether the network can withstand the event.

The following is an example of events that can be supported:

- Signaling storms: A signaling storm is a failure events where a large number of signaling messages suddenly surge in the mobile communication network, resulting in the network processing capacity overload, thus affecting the network performance and stability. During this period, users will repeatedly try to establish the connection until reconnected, thus generating a large number of signaling messages surge suddenly, causing signaling storm. In this scenario, NDT is used to simulate/emulate the network behaviour of surges in signaling requests on the network. For example, NDT can simulate/emulate a sudden surge in the number of UE requests in the scenario of major holidays or network interruption recovery. Operators can also select the multiplication factor for the surge in signaling requests to be injected in NDT to evaluate the network resilience capability in response to different severity levels of events.

\* \* \* End of Changes \* \* \* \*