**3GPP TSG-SA5 Meeting #157 *S5-245326rev1***

**Hyderabad, India, 14-18 October 2024**

**Source: Huawei**

**Title: pCR TR 28.915 Update the relations between NDT and network automation functions**

**Document for: Approval**

**Agenda Item: 6.19.5**

# 1 Decision/action requested

***The group is asked to discuss and agree on the proposal.***

# 2 References

[1] 3GPP TR 28.915: Study on management aspects of Network Digital Twin

# 3 Rationale

This contribution proposes to correct the description of relations between NDT and network automation functions. For option 2, the NDT is separate from Network Automation Functions, but it doesn’t mean that NDT is external to a MnF. The NDT can still be inside a MnF that is different with the existing Network Automation Functions.

# 4 Detailed proposal

This document proposes the following changes in TR 28.915 [1].

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| **1st Change** |

### 4.2.2 Relations between digital twins and network automation functions

The NDT can be requested by the consumer to model a mobile network or part of one, support evaluating the corresponding impact, and return the report of the simulated impact generated by the NDT. The NDT may be used as a replica of a mobile network, which may synchronize data from the managed network for modeling. The digital twins provide modelling capabilities that are used by the network automation functions (e.g. MDA, SON, etc.) to accomplish their automation functionality. The related automation capabilities are provided by the network automation functions regardless of whether the digital twin models are integrated within or external to the network automation functions - see figure 4.2.2-1.



Option 1 NDT internal/integrated into existing Network Automation Functions.

Option 2 NDT separate from existing Network Automation Functions

Figure 4.2.2-1: Relation of NDTs with network automation functions

NOTE: The double headed arrows indicate candidate flow of data and controls from the network to the NDT and to the management function and related flow of control from the MnFs to the network of NDT while one headed arrows indicate only flow of control.

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| **End of changes** |