**3GPP TSG-SA5 Meeting #162S5-253341**

**25 - 29 August 2025, Goteborg, Sweden**

**Source: Nokia, Nokia Shanghai Bell**

**Title:** **pCR 28.881 Invariant Guidance in Intent Contexts**

**Document for: Approval**

**Agenda Item: 6.20.1**

# 1 Decision/action requested

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

# 2 References

[1] 3GPP TR 28.881 “Study on intent driven management services for mobile network phase 4”.

# 3 Rationale

TS 28.312 discussed the idea of intent decomposition, where an intent is decomposed into multiple derivative intents. However, the MnS consumer might possess some knowledge, which is necessary to fulfil the main intent and subsequent derivative intents. This knowledge needs to be conveyed to all subsequent intent handlers, who are going to handle all the subsequent derivative intents. There should be a support/enablement for the MnS consumer to do so.

WT-2 New intent driven management scenarios:

WT-2.2 Investigate what intent handling functionality is needed to better support deployment scenario#2 defined in TS 28.312. (e.g. intent decomposition).

# 4 Detailed proposal

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| **Start of modification** |

## 5.X Use case #X: Invariant Guidance in Intent Contexts

### 5.X.1 Description

TS 28.312 describes a scenrio where for an instantiated intent, the intent handler may need to decompose the intent into multiple derivative intents, each to be fulfilled by a separate other intent handler. There may be contexts in the intent which the MnS consumer desires that the other intent handlers understand them exactly as they were provided, i.e., without any modification by the first intent handler in the decomposition process.

As an example, the MNO may want to only use certain certified hardware (e.g., with certain security, privacy, energy consumption, other types of quality guarantees) to be used in the fulfillment of RAN or CN operations. This additional guidance to use this specified hardware or the quality constraints on the resources may be provided as part of the intent *context*.

The MnS consumer should be enabled to indicate the context which should be transmitted to other intent handlers without modification.

Note: the context may not be applicable to all decomposition use-cases

### 5.X.2 Potential requirements

**REQ-Intent\_InvarGui-1:** The intent driven MnS shall include a capability enabling the MnS consumer to indicate the intent, expectation and target contexts which should be transmitted to other intent handlers without modification by the first MnS producer.

### 4.X.3 Potential solutions

TBA

### 4.X.4 Evaluation of potential solutions

TBA

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| **End of modifications** |