**3GPP TSG-SA5 Meeting #162 *S5-254040***

Goteborg, Sweden, 25 - 29 August 2025

**Source: ZTE Corporation**

**Title: Pseudo-CR on TR 28.881 Add Key Issue on Intent feasibility check enhancement to support resource reservation**

**Document for: Approval**

**Agenda item: 6.20.1**

**Spec: 3GPP TR 28.881**

**Version: V0.0.0**

**Work Item: FS\_IDMS\_MN\_Ph4**

**Comments**

This contribution proposes to add structure for TR 28.881 based on SP-250861.

**Proposed Changes**

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

# 4 Issue investigations and potential solutions for new areas

Editor's note: this clause will contain issues and potential solutions related to the new scenarios, requirements and generic capability for intent driven management.

## 4.X Issue#Num: Support to express guarantee requirements in an intent

### 4.X.1 Description

In today’s highly dynamic and heterogeneous network environment, Intent-Driven Management Service (IDMS) is emerging as the foundational paradigm for advanced network operations and automation. Nevertheless, practical deployments reveal a critical capability gap: the absence of robust support for dynamic resource reservation and release.

Intent expression, translation, negotiation, and fulfilment are intrinsically coupled to resource allocation—e.g., bandwidth, capacity and spectrum. When the IDMS is used for communication service assurance in a specific time window, the MnS consumer should be allowed to express the guarantee requirements in the intent. Then, the MnS Producer can perform some actions (e.g., resource reservation) to guarantee the intent fulfilment in the future. Because these resources are highly time-variant, the current IDMS lacks the ability for the MnS Consumer to proactively reserve or release them on demand. This shortcoming results in inefficient resource utilisation and reduced flexibility in intent fulfilment. Additionally, after an MnS Producer has classified an intent as “FEASIBLE” following the initial feasibility check, subsequent changes in network resource can render the intent “INFEASIBLE” before intent fulfilment is requested without actions taken for guarantee. This temporal inconsistency, caused by the absence of continuous feasibility validation, will lead to fulfilment failures, undermining the reliability of intent-based operations and degrading overall network performance.

### 4.X.2 Potential requirements

**REQ-IDMS\_Resource-1:** The intent driven MnS should have the capability to allow MnS consumer to express the guarantee requirement in an intent.

### 4.X.3 Potential solutions

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

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