**3GPP TSG-SA5 Meeting #140-e *S5-216273***

**e-meeting, 15 - 24 November 2021**

**Source: China Mobile**

**Title: Add judge requirements and intent database query requirements for intent driven management**

**Document for: Approvals**

**Agenda Item: 6.4.10**

1 Decision/action requested

***The group is asked to discuss and approval.***

2 References

[1] 3GPP draft TS 28.312: “Management and orchestration; Intent driven management services for mobile networks v0.1.0”.

[2] 3GPP TR 28.812: “Study on scenarios for Intent driven management services for mobile networks v17.1.0”.

3 Rationale

When the MnS Consumer sends a request to create an intent instance to the MnS Producer, it is necessary for the MnS Producer to assess the intent preliminarily. If the MnS producer judge that the intent is malicious or infeasible, MnS producer will not activate it and will notify MnS consumer about the assessment result directly. Therefore, by introducing the preliminary assessment of intent in the intent creation process, the malicious intent or infeasible intent can be filtered out. For example, the judge procedure may help reduce the risk of malicious intent fulfilment, and reduce unnecessary policy generation computing.

When there are multiple intents, an intent may have some relationship with other intents, e.g. an intent may be equal to anther intent, an intent may be conflict with another intent. Considering that the multiple intents can be requested by different MnS Consumers and responded by different MnS Producers, the intent database or some other function that manages the multiple intents is necessary to store the intent MOI and determine the intent relationship.

Therefore, when MnS producer analyses the goal of received intent and corresponding solutions, it will query the intent database. The information in the intent database helps generate the solutions, for example, if there exists a conflict intent in the intent database, the new solution may be a trade-off between the two intents, or if there exists a same or similar intent in the intent database, the new solution may learn from the old one.

4 Detailed proposal

Add judge requirements and intent database query requirements for intent driven management.

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| **1st modified section** |

5.2 Requirements

**REQ-Intent-CON-x** The intent driven MnS shall have capability enabling MnS producer to judge that the intent is malicious or infeasible.

**REQ-Intent-CON-x** The intent driven MnS shall have capability enabling MnS producer to query the intent database or some other function that manages the multiple intents.

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| **End of modified section** |