**3GPP TSG-SA5 Meeting #154 *S5-241981***

Changsha, China, 15 April - 19 April 2024

**Source: ZTE Corporation, China Mobile, Ericsson**

**Title: pCR TR 28.914 add use case, requirements and solution for customized intent report**

**Document for: Approval**

**Agenda Item: 6.19.3**

# 1 Decision/action requested

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

# 2 References

[1] Study on intent driven management service for mobile network phase 3 v0.0.0

[2] SP-231737 "Study on intent driven management services for mobile network phase 3"

# 3 Rationale

When MnS Consumer expresses the intent expectation to MnS Producer, the MnS Consumer may have some requirements on Intent report (e.g., receive periodical and automated intent reports on a specific expectation target). It proposes to add key issue for introducing the MnS capability to enable MnS consumer to customize the content of intent report.

This contribution is related to WT-3 of the FS\_IDMS\_MN\_Ph3 SID [2], which is to investigate new requirements for additional intent driven management functionalities.

# 4 Detailed proposal

***Start of First change***

# 5 Use cases

## 5.X Use case#<X>: Intent Report Customization

### 5.X.1 Description

In R18, IntentReport IOC including IntentFulfilmentReport, IntentConflictReport, and IntentFeasibilityCheckReport are defined, which represents intent report information from MnS producer to MnS consumer. Basic intent report management is already defined. The IntentReport MOI is created by the MnS producer automatically when creating an Intent MOI. The MnS Consumer can receive an intent report by 1) triggering the intent report subscription and notification procedure and 2) triggering the procedure for querying the IntentReport MOI.

For the intent report subscription and notification procedure, the MnS Consumer needs to request the MnS Producer to create a NtfSubscriptionControl instance. Then, the MnS Producer will configure the IntentReport MOI and send a notification to the subscribed MnS Consumer using notifyMOIAttributeValueChanges notification when one or several attributes of IntentReport MOI change. However, the subscribed MnS Consumer may be only interested in one or more specific targets, which means that there is no need to send an intent report (e.g., fulfillment report) when any attribute changes. For the procedure to query an intent report, the MnS Consumer should send a request to query an intent report instance using the getMOIAttributes operation. Query procedures cannot support automatic and periodic intent reports and add a burden to consumers. In a word, current basic intent report management cannot support the MnS Consumer’s requirements of the intent report.

Based on the above analysis, it is important to add ability to allow an intent consumer to customize the intent report output. Customizations include ability to specify the type of intent report, and ability to specify which content to report and under which considerations it should be reported. This allows an intent consumer to customize intent report(s) to suite different needs.

### 5.X.2 Potential requirements

### 5.X.3 Potential solutions

#### 5.X.3.i Potential solution #<i>: <Potential Solution i Customized Intent Report>

The existing Intent IOC can be extended to support customized intent report.

 **Enhancement Aspect**: Add a new IntentReportControl <<datatype>> to the Intent IOC and one Intent instance can have multiple IntentReportControl. IntentReportControl <<datatype>> includes following attributes:

* “reportingType”, represents the type of IntentReports, which can be one/any/all of “IntentFulfilmentReport”, “IntentConflictReport”, and “IntentFeasibilityCheckReport”.
* “reportingTime”, represents the specified time condition for intent reporting. For example, it can be an interval, a specific time, or a time window.
* “reportingTargets”, represents the specified targets needed to be reported and corresponding conditions. This attribute can be a <<dataType>>, including targetName, targetCondition, and targetValueRange that are already defined in TS 28.312.
* “intentReportReference”, indicates the associated intent report instance(s).

#### 5.X.3.j Potential solution #<j>: <Potential Solution j Customized Intent Report>

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

***End of First change***