3GPP TSG SA WG5 Meeting 139-e S5-215274

electronic meeting, online, 11- 20 October 2021

**Source: Nokia**

**Title: Add MDA Reporting Control**

**Document for: Approval**

**Agenda Item: 6.4.18**

# 1 Decision/action requested

This contribution is for approval.

# 2 References

[1] TR 28.809 Management and orchestration; Study on enhancement of Management Data Analytics (MDA)

# 3 Rationale

This contribution introduces an MDA reporting control description, use case and requirements that enables the MDA MnS consumer to request analytics indicating certain reporting control attributes to the MDA MnS producer.

This MDA reporting control can be applicable to all analytics use cases described in [1], which request an MDA report.

# 4 Detailed proposal

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| **1st Modified Section** |

## X.Y MDA Reporting Control

### X.Y.1 Description

The MDA reporting control allows any authorized MDA MnS consumer to request MDA.

### X.Y.2 Use Case

The MDA MnS conusmer can request the MDA MnS producer to provide MDA output for a specified type of analytics, i.e., MDA type, which corresponds to a MDA use case. The MDA MnS conusmer may introduce reporting control attributes related to the MDA output with respect to the geographic location and/or the target objects, e.g., managed elements, time schedule for obtaining a MDA output, time conditions related to the preparation of MDA output, and potential filter conditions to be met before a MDA output is made available, e.g. load or delay threshold crossing related to a target object. The geographical location indicates an area of interest for obtaining MDA output and target objects include affected objects or objects of interest for obtaining MDA output.

The MDA MnS conusmer may control the MDA output attributes and has the capability to modify them. The MDA MnS conusmer can request a MDA output that contains numeric output results, e.g. average, Cumulative Distribution Function (CDF), nomal distribution, etc., recommendation options, e.g. potential handover cells, or root case analysis, e.g. alarm prediciton.

The MDA MnS consumer can be informed with an acknowledgment if the request was successful. If the request was not successful the consumer is informed about potential errors indicating the reasons. The MDA MnS consumer can also deactivate the MDA reporting control request once it is no longer needed.

### X.Y.3 Requirements for Requesting MDA

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| **Requirement label** | **Description** | **Related use case(s)** |
| **REQ-MDA\_CONT- -1** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to request MDA output, while indicating its preferences on the MDA type. | **All use cases** |
| **REQ-MDA\_CONT-2** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to request MDA output, while indicating its preferences on the reporting time schedule. | **All use cases** |
| **REQ-MDA\_CONT-3** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to request MDA output, while indicating its preferences on geographic location and/or the target objects. | **All use cases** |
| **REQ-MDA\_CONT-4** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to request MDA output, while indicating its preferences on the time schedule related to MDA results. | **All use cases** |
| **REQ-MDA\_CONT-5** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to modify the attributes related to the requested MDA output. | **All use cases** |
| **REQ-MDA\_CONT-6** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to specify filter conditions on target obejcts based on threshold crossing for MDA output when this is applicable. | **All use cases** |
| **REQ-MDA\_CONT-7** | The MDA MnS producer shall support the capability allowing any authorized MDA MnS consumer to express that the requested MDA output is no longer needed.  | **All use cases** |
| **REQ-MDA\_CONT-8** | The MDA MnS producer shall inform any authorized MDA MnS consumer whether the MDA output request was successfully processed and any errors that may have occurred. | **All use cases** |

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| **End of Modified Sections** |