**3GPP TSG-SA5 Meeting #142-e *S5-222357***

**e-meeting, 4 - 12 April 2022**

**Source: Nokia**

**Title: Multiplicity change for “Affected Objects” IE in “E2E latency analysis” Usecase**

**Document for: Approval**

**Agenda Item: 6.6.5**

# 1 Decision/action requested

This contribution is for approval.

# 2 Rationale

The current multiplicity of the IE “Affected Objects” in the output of “E2E latency analysis” usecase indicates “1”. This IE is optional and likely will be reported only when is atleast one affected object.

But the affected objects need not be just one but atleast one, indicating it could be one or more. This is not reflected in the multiplicity of the IE “Affected Objects”.

The multiplicity shall be changed from “1” to “1..\*”.

# 3 Detailed proposal

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| **1st Modified Section** |

8.4.2.4 E2E latency analysis

8.4.2.4.1 MDA type

The MDA type for Capability-E2E latency analysis is: SLSAnalysis.E2ElatencyAnalysis.

8.4.2.4.2 Enabling data

The enabling data for E2E latency analysis are provided in table 8.4.2.4.2-1.

**Table 8.4.2.4.2-1: Enabling data for E2E latency analysis**

|  |  |  |
| --- | --- | --- |
| **Data category** | **Description** | **References** |
| Performance measurements | Average e2e UL/DL delay for a network slice | Average e2e uplink delay for a network (6.3.1.8.1 in TS 28.554 [5]); Average e2e downlink delay for a network slice (6.3.1.8.2 in TS 28.554 [5]). |
| Integrated uplink/downlink delay in RAN | Integrated downlink delay in RAN (6.3.1.2 in TS 28.554 [5]); Integrated uplink delay in RAN (6.3.1.7 in TS 28.554 [5]); |
| Round-trip Packet Delay | Round-trip packet delay between PSA UPF and NG-RAN (5.4.8 TS 28.552 [4]) |

8.4.2.4.3 Analytics output

The specific information elements of the analytics output for E2E latency analysis, in addition to the common information elements of the analytics outputs (see clause 8.3), are provided in table 8.4.2.4.3-1.

**Table 8.4.2.4.3-1: Analytics output for E2E latency analysis**

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| --- | --- | --- | --- |
| **Information element** | **Definition** | **Support qualifier** | **Properties** |
| E2ELatencyIssueId | The identifier indicates the output is for E2E latency issue analysis | M | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| E2ELatencyIssueType | Indication the type of the E2E latency issue.  The allowed value is one of the enumerated values: RAN latency issue, CN latency issue | M | type: ENUM  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| AffectedObjects | The managed object instances of subnetwork, managed elements or network slices where the latency issue happens | O | type: DN  multiplicity: 1..\*  isOrdered: False  isUnique: True  defaultValue: None  isNullable: False |

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| **End of Modified Sections** |