**3GPP TSG-SA5 Meeting #144-e *S5-224293***

**e-meeting, 27 June - 1 July 2022**

**Source: Nokia, Nokia Shanghai Bell**

**Title: pCR 28.831 Add analysis of JSONPath as potential solution**

**Document for: Approval**

**Agenda Item: 6.8.2.3 - FS\_eSBMAe\_WoP#4**

# 1 Decision/action requested

***The group is requested to discuss and approve the pCR below***

# 2 References

[1] 3GPP TS 28.831: " Management and orchestration; Study on basic Service-Based Management Architecture (SBMA) enabler enhancements"

# 3 Rationale

None.

# 4 Detailed proposal

The following changes are proposed for TR 28.831[1].

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| **Begin of modifications** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[6] IETF Internet-Draft: "JSONPath: Query expressions for JSON"; draft-ietf-jsonpath-base-05; April 2022 (https://datatracker.ietf.org/doc/html/draft-ietf-jsonpath-base-05).

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| **Next modification** |

#### 4.2.5.4 JSONPath

JSONPath [6] is still a draft RFC. Its intention is to be a powerful JSON Pointer.

**Example JSONPath expressions**

Select a subtree starting from the base object

$

Select all objects with a specific class

$..\*[?(@.objectClass=="ManagedElement")]

Select all objects based on their DN

$..\*[?(@.objectInstance=="DN1" || @.objectInstance== "DN2")]

Select specified attributes and attribute fields:

$.SubNetwork[?(@.id=="SN1")].attributes.userLabel

$.SubNetwork[?(@.id=="SN1")].attributes.plmnId.mcc

$.SubNetwork[?(@.id=="SN1")].attributes[userLabel,userDefinedNetworkType]

$.SubNetwork[?(@.id=="SN1")].attributes[userLabel,plmnId.mcc], does not work

Select an array element

$.SubNetwork[?(@.id=="SN1")].ThresholdMonitor[?(@.id=="TM1")].attributes.thresholdLevels[?(@.level==1)]

Conditional read: return attributes container only when a condition is met,

in this case "userLabel" is equal to "Berlin NW"

$.SubNetwork[?(@.id=="SN1")][?(@.userLabel=="Berlin NW")]

in this case we walk down one level for a test

$.SubNetwork[?(@.id=="SN1")][?(@.plmnId.mcc==456)], does not work

in this case an absolute path is used, that is outside of the current object

$.SubNetwork[?(@.id=="SN1")].attributes[?($.SubNetwork[?(@.id=="SN1")].ThresholdMonitor[?(@.id=="TM1")].attributes.metric=="Metric1")], does not work

Test on the presence of an attribute

$.SubNetwork[?(@.id=="SN1")][?(@.userLabel)]

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| **End of modifications** |