**3GPP TSG-SA5 Meeting #144-e *S5-*** ***224163rev1***

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

**Source: China Unicom**

**Title: Add potential solution for management requirement between MOP-NM and MOP-SR-DM**

**Document for: Approval**

**Agenda Item: 6.8.6**

# 1 Decision/action requested

***In this box give a very clear / short /concise statement of what is wanted.***

# 2 References

[1] 3GPP TR 28.835 v0.2.0: “Management Aspects of 5G MOCN Network Sharing Phase2”

# 3 Rationale

For supporting the POP’s network operation, MOP-NM needs to sent different data (e.g. mobility management measurements focused by POP A, packet delay measurements focused by POP B) to each POP. This key issue was approved in TR 28.835[1].

It was approved to add potential solution for management requirement between MOP-NM and MOP-SR-DM [1]. This contribution proposes to add operator granularity for some operations.

# 4 Detailed proposal

This contribution proposes to make the following changes in [1].

***1st Change***

# 2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

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

[2] 3GPP TS 28.541: "5G Network Resource Model (NRM); Stage 2 and stage 3".

[3] 3GPP TS 28.552: "5G performance measurements".

[4] 3GPP TS 32.130: "Network sharing; Concepts and requirements".

[5] 3GPP TS 28.533: " Architecture framework".

[6] 3GPP TS 28.532: " Management and orchestration; Generic management services" .

[7] 3GPP TS 28.622: " Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS) ".

[8] 3GPP TS 28.658: "Telecommunications management; Evolved Universal Terrestrial Radio Access Network (E-UTRAN) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)".

***2nd Change***

## 5.2 Issue #2: Management requirement between MOP-NM and MOP-SR-DM

### 5.2.2 Potential solution

1. Individual PerfMetricJob instance can be created and configured for each POP.
2. The following attribute pLMNId of PerfMetricJob IOC defined in TS 28.622[7] can be added for POPs’ network operation.

The optional attribute pLMNId can be used to establish operator-instance of PerfMetricJob IOC. The attribute performanceMetrics and optional attribute pLMNId together define the performance metrics to be produced according to individual POP’s requirements.

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| --- | --- | --- | --- | --- | --- |
| Attribute name | S | isReadable | isWritable | isInvariant | isNotifyable |
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|  |  |  |  |  |  |
| pLMNId | O | T | T | F | T |

The definition of pLMNId can see in the following table.

| Attribute Name | Documentation and Allowed Values | Properties |
| --- | --- | --- |
| pLMNId | This parameter defines the information of a PLMN identification and is used to distinguish operator granularity. It is defined in TS 28.658.allowedValues: N/A | type: PLMNIdmultiplicity: 1isOrdered: N/AisUnique: N/AdefaultValue: NoneisNullable: False |

1. The getMOIAttributes operation defined in TS 28.532[6] of generic provisioning management service shall be able to distinguish operator granularity.

The attribute pLMNId shall be added as the followings in the input parameters and output parameters. The MOI attribute requirements of each POP are different and this attribute is used to distinguish operator granularity in the operation.

* Input Parameters

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| --- | --- | --- | --- |
| Name | S | Information Type | Comment |
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| pLMNId  | O | pLMNId | The parameter represents the information of a PLMNr identification and defines the operator granularity of the getMOIAttributes operation.  If the parmeter is absent or empty, all operators (POP A, POP B, etc.)shall get the attributes to be returned by this operation. |

* Output Parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Name | S | Matching Information | Comment |
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| pLMNId  | O | pLMNId | Return the pLMNId of the input parameters |

1. The subscribe operation defined in TS 28.532[6] of generic fault supervision management service shall be able to distinguish operator granularity.

The attribute pLMNId shall be added as the followings in the input parameters. This parameter defines the operation can distinguish operator granularity. A MnS consumer can invoke this operation to establish different POP’s subscription to receive network events via notifications, under the filter constraint specified in this operation.

* Input Parameters

| Parameter Name | S | Information Type / Legal Values | Comment |
| --- | --- | --- | --- |
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|  |  |  |  |
|  |  |  |  |
| pLMNId  | O | This parameter defines the information of a PLMN identification and is used to distinguish operator granularity.. | The parameter represents the information of a PLMN identification and defines the operator granularity of the subscribe operation. If this parameter is absent or empty, then no operator granularity shall be applied.  |

* Output Parameters

| Parameter Name | S | Matching Information / Information Type / Legal Values | Comment |
| --- | --- | --- | --- |
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|  |  |  |  |
| pLMNId  | O | pLMNId | Return the pLMNId of the input parameters |

1. The getAlarmList operation defined in TS 28.532[6] of generic fault supervision management service shall be able to distinguish operator granularity.

The attribute pLMNId shall be added as the followings in input parameters and output parameters. This parameter defines the operation can distinguish operator granularity. A MnS consumer can invoke this operation to request the MnS producer to provide either the complete list of AlarmInformation instances in the AlarmList or only a part of this list (partial alarm alignment) for each POP.

* Input Parameters

| Parameter Name | S | Information Type / Legal Values | Comment |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| pLMNId  | O | This parameter defines the information of a PLMN identification and is used to distinguish operator granularity. | The parameter represents the information of a PLMN identification and defines the operator granularity of the getAlarmList operation. If this parameter is absent or empty, then no operator granularity shall be applied.  |
|  |  |  |  |
|  |

* Output Parameters

| Parameter Name | S | Matching Information / Information Type / Legal Values | Comment |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
| pLMNId  | O | pLMNId | Return the pLMNId of the input parameters |

***End of Changes***