**3GPP TSG-SA3 Meeting #102-e *S3-210309***

**e-meeting, 18 -29 January 2021** Revision of S3-21309

**Source: China Mobile**

**Title: Modifying the security requirement and the related test case in clause 5.2.5.5.7.2**

**Document for: Approval**

**Agenda Item: 5.2**

# 1 Decision/action requested

***This contribution modifies the security requirement and the related test case in clause 5.2.5.5.7.2.***

# 2 Rationale

Since VNF does not know its resource state, the requirements descrined in clause 5.2.5.5.7.2 cannont be implemented. This contribution proposes to change the security requirements and related test case.

# 3 Detailed proposal

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of the first change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

###### 5.2.5.5.7.2 Potential security functional requirements on executive environment provision

*Requirement Name*: secure executive environment provision

*Requirement Description*:

The VNF shall support setting the threshold for traffic limit (e.g. throughput) and reporting the operation status to OAM. When a VNF traffic does not reach the threshold, but operation status (e.g. traffic congestion) is reported to the OAM by the VNF, the OAM will find that VNF is abnormal. Then the abnormal detection of the VNF will be initiated.

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Note: The virtualisation layer provides the execution environment for the VNF. The security of the virtualisation layer is a base of the VNF security. Whether VNFs are run on the trusted virtualisation layer or not is based on operator's decision.

*Threat Reference*: Threats on interface between 3GPP VNF and virtualisation layer, in clause 5.2.4.2.2.3.

*Test case*:

**Test Name:** TC\_SECURE EXECUTIVE ENVIRONMENT PROVISION

**Purpose:**

1. To test whether the VNF supports threshold for the traffic limit.

2. To test whether the VNF send the operation status (e.g. traffic congestion) to the OAM.

**Procedure and execution steps:**

**Pre-Condition:**

There are a VNF, a virtualisation layer (or simulated virtualisation layer), an OAM, a VNFM, a VIM (or simulated OAM, VNFM, VIM) on the test environment.

**Execution Steps**

**Execute the following steps:**

1. The tester checkes the configuration of the VNF whether a threshould of the VNF set and the traffic is limited according to the threshould.

2. The tester utilizes the virtualisation layer to change the resource state of VNF (e.g. change vCPU size of the VNF through implementing scale-down of the VNF in the virtualisation layer).

3. The tester sends a lot of data package to the VNF and checkes whether the VNF sends the operation status to the OAM.

**Expected Results:**

1. The VNF supports the configuration of the threshould and implements the traffic limit according to the threshould.

2. The VNF supports to send the operation status to the OAM.

**Expected format of evidence:**

1. Screenshot contains the configuration of the threshould and implementation of the traffic limit.

2. Screenshot contains the operation status on the OAM.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of the third change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*