**3GPP TSG-SA3 Meeting #107-e *S3-220691***

**e-meeting, 16 - 20 May 2022**

**Source: Keysight Technologies**

**Title: New test case for confidentiality, integrity and replay protection between AAnF and AF/NEF**

**Document for: Approval**

**Agenda Item: 4.5**

# 1 Decision/action requested

***We ask SA3 to accept a new test specification about traffic protection in TS 33.537.***

# 2 References

# 3 Rationale

Clause 4.4.0 in TS 33.535 includes this security requirement:

* The SBA interface between the AAnF and the AF/NEF shall be confidentiality, integrity and replay protected.

It is proposed to include a new test case to cover this security requirement of the confidentiality, integrity and replay protection of the communication between AAnF and AF/NEF.

As TS 33.501 – clause 13.1 defines the communications between NFs in the SBI must be protected by TLS/mTLS, the test case makes reference to that procedure in TS 33.117 – 4.2.2.2.2.

# 4 Detailed proposal

*\*\*\*\*\* BEGIN OF CHANGE \*\*\*\*\**

##### 4.2.3.2.4 Protecting data and information in transfer

##### 4.2.3.2.4.2 Confidentiality, integrity and replay protections over SBA interface

*Requirement Name*: Confidentiality, integrity and replay protections over SBA interface

*Requirement Reference*: TS 33.535 [X], clause 4.4.0

*Requirement Description*: "The SBA interface between AAnF and AF/NEF shall be confidentiality, integrity and replay protected." as specified in TS 33.535 [X], clause 4.4.0

*Threat References*: TR 33.926 [X], clause X.1.Y, Control plane data protection with AF/NEF

*Test Case*:

**Test Name**: TC\_PROTECT\_AAnF\_AF\_NEF

**Purpose**:

Verify that the transported data between AAnF and AF/NEF are confidentiality, integrity and replay protected over SBA interface.

**Pre-Conditions**:

- AAnF and AF/NEF network products are connected in simulated/real network environment.

- Network product documentation containing information about supported TLS protocol and certificates is provided by the vendor.

- Tester shall have access to the SBA interface between AAnF and AF/NEF.

**Execution Steps**:

The requirement mentioned in this clause is tested in accordance with the procedure mentioned in clause 4.2.2.2.2 of TS 33.117 [X].

**Expected Results**:

The user data transported between AAnF and AF/NEF is confidentiality, integrity and replay protected.

**Expected format of evidence**:

Evidence suitable for the interface, e.g., evidence can be presented in the form of screenshot/screen-capture or pcap traces.

*\*\*\*\*\* END OF THE CHANGE \*\*\*\**