**3GPP TSG-SA3 Meeting #104-e ad-hoc *S3-213583***

e-meeting, 27 - 30 September 2021

**Source: CableLabs**

**Title: Update NSSAAF to support EAP-TTLS phase 2 authentication**

**Document for: Approval**

**Agenda Item: 4.5**

# 1 Decision/action requested

***It is proposed to approve the changes to be included in the draft-CR for eNPN***

# 2 References

# 3 Rationale

This contribution updates NSSAAF to support EAP-TTLS phase 2 authentication.

# 4 Detailed proposal

\*\*\*\*\*FIRST CHANGE\*\*\*\*\*

5.13 Requirements on NSSAAF

The Network slice specific and SNPN authentication and authorization function (NSSAAF) shall handle the Network Slice Specific Authentication requests from the serving AMF as specified in clause 16.The NSSAAF shall also support functionality for access to SNPN using credentials from Credentials Holder using AAA Server as specified in clause I.2.2.z and Annex X.

The NSSAAF is responsible to send the NSSAA requests to the appropriate AAA-S.

The NSSAAF shall support AAA-S triggered Network Slice-Specific Re-authentication and Re-authorization and Slice-Specific Authorization Revocation and translate any AAA protocol into a Service Based format.

NSSAAF shall translate the Service based messages from the serving AMF or AUSF to AAA protocols towards AAA-P/AAA-S.

\*\*\*\*\*NEXT CHANGE\*\*\*\*\*

14.4.X Nnssaaf\_AIW services

14.4.X.1 General

The following table illustrates the security related services provided by the NSSAAF for primary authentication or EAP-TTLS phase 2 authentication in SNPN with Credentials holder using AAA server (see section I.2.2.z).

**Table 14.4.X.1-1: NF services for CH using AAA for primary authentication provided by NSSAAF**

|  |  |  |  |
| --- | --- | --- | --- |
| **Service Name** | **Service Operations** | **Operation Semantics** | **Example Consumer(s)** |
| Nnssaaf\_AIW | Authenticate | Request/Response | AUSF |

14.4.X.2 Nnssaaf\_AIW\_Authenticate service operation

**Service operation name:** Nnssaaf\_AIW\_Authenticate

**Description:** The NSSAAF provides Authentication and Authorization service to the consumer NF by relaying EAP messages or AVPs towards a AAA Server and performing related protocol conversion as needed. **Input, Required:**

1) In EAP authentication

a) In the initial authentication request: SUPI.

 b) In subsequent authentication requests: EAP message.

2) In case non-EAP mechanisms are implemented: AVP container

**Input, Optional:** None

**Output, Required:** EAP message, authentication result and if success MSK.

1) In EAP authentication: EAP message, authentication result and if success MSK.

2) In case non-EAP mechanisms are implemented: AVP container

**Output, Optional:** None

\*\*\*\* END OF CHANGES\*\*\*\*\*