**3GPP TSG-SA3 Meeting #104-e *S3-212585r3***

**e-meeting, 16 - 27 August 2021** Revision of S3-20xxxx

**Source: Huawei, HiSilicon**

**Title: UAA re-authentication procedure (5G)**

**Document for: Approval**

**Agenda Item: 4.20 ID\_UAS**

# 1 Decision/action requested

***Approve the proposed pCR as normative text***

# 2 References

[1]

# 3 Rationale

This contribution proposes the UAA re-authentication procedure based on the agreed principle in the study. It is in-line with SA2’s procedure as well.

# 4 Detailed proposal

pCR

\*\*\* BEGINNING OF CHANGES (all text are new) \*\*\*

### X.1.1.4 UAA re-authentication procedure (5G)

As described in X.1.1.4, the USS or the AMF (if support UUAA during registration) may initiate the Re-authentication procedure for the UAV at any time.

Editor's note: It is ffs whether AMF can initiate Re-authentication.

This clause describes the USS initiated Re-authentication procedure (the AMF initiated Re-authentication procedure is described in the clause X.x.x.2). The below description considers only the security related parameters (for full details of the flows see TS 23.256 [aa]).



Figure X.1.1.4-1: UUAA re-authentication in 5GS

1. The USS sends a re-authentication request for the UAV to UAS-NF that includes GPSI, CAA-Level UAV ID, and the USS identifier. It may contain the PDU Session IP address if available.

Editor's note: For USS initiated re-authentication, how the USS/UTM contacts the right UAS NF which stores the UUAA context corresponding to an UAV is FFS

Editor's note: Inclusion of CAA-Level UAV ID and PDU Session IP address is FFS

Editor's note: Whether the identifier of the USS is sent to the UAS NF or an identifier local to the UAS NF is FFS

2. The UAS NF retrieves the UAV UE's context. The UE’s context contains identity mapping between the GPSI and the USS identifier that performed UAA. The UAV-NF verifies the USS re-authentication request by checking whether the GPSI and the USS identifier match the stored mapping of GPSI and USS identifier. The UAV-NF shall only continue the re-authentication procedures if match.

The UAS NF determines whether the target NF is an AMF or an SMF.

* If the target NF is an AMF, the UAS NF further determines the target AMF for re-authentication and continues step 3a.
* If the target NF is an SMF, the UAS NF further determines the target SMF for re-authentication and continues step 3b.

3a or 3b. The UAS NF sends to either the target AMF or the target SMF the UAA re-authentication request for the UE identified by the GPSI and the CAA-Level UAV ID, and PDU Session IP address if available.

Editor's note: Inclusion of CAA-Level UAV ID is FFS

4. The UAS NF responses the USS that the UAA Re-authentication has been initiated.

5a. If the target NF is an AMF, the AMF initiates re-authentication of the UAV as described in the clause x.1.1.2 (step 2 to step 9).

5b. If the target NF is an SMF, the SMF initiates re-authentication of the UAV as described in the clause x.1.1.3 (step 2 to step 7).

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