**3GPP TSG-SA3 Meeting #116 *S3-242519-r2***

Jeju, South Korea, 20th - 24th May 2024 (revision of S3-241956)

**Source: Huawei, HiSilicon**

**Title: Pairing authorization supporting multiple USS**

**Document for: Approval**

**Agenda Item: 5.11**

# 1 Decision/action requested

***Approve the pCR to TR 33.759***

# 2 References

None

# 3 Rationale

The current pairing authorization procedure works only for single USS. This contribution proposes amendments to paring authorization to support multiple USS.

# 4 Detailed proposal

pCR

\*\*\* 1st CHANGE \*\*\*

## 6.Y Solution # Y: Pairing authorization supporting multiple USS

### 6.Y.1 Introduction

This solution addresses the key issue #1. The solution adapts the pairing authorization procedure in TS 33.256 [4] to support multiple USS.

Pairing authorization can occur during the UUAA-SM procedure or after a successful UUAA. For the former, it is assumed that UUAA has been amended to support multiple USS and no further change is needed. This solution is to address the latter scenario.

### 6.Y.2 Solution details

With reference to the clause 5.4.2 in TS 33.256 [4], the amended UUAA procedure at PDU session establishment/modification is shown below to support multiple USS:

1.The UAV includes the USS address(es) of the UAV-C to pair in the PDU session establishment/modification request, in addition to other information as specified in TS 33.256 [4].

NOTE: Although the pairing information may contain USS information, it is transparent to the UAS NF. The UAS NF may send to a different USS for pairing authorization.

2. The SMF invokes the pairing authorization procedure and the UAS NF exchanges authorization messages with and receives results with the USS identifier from the USS identified by the USS address(es) in step 1. The rest are the same as in the step 2 in the clause 5.4.2 of TS 33.256 [4].

3. The SMF informes the UE the paring authorization result which may include USS identifier in addition to information specified in the step 3 in the clause 5.4.2 of TS 33.256 [4].

### 6.Y.3 Evaluation

Editor’s Note: How to handle conflicting parallel pairing authorization (e.g., paired UAV-C, conflicting pairing authorization result) is FFS.

Editor’s Note: Alignment with SA2 conclusions for the support of multiple USS is FFS.

\*\*\* END OF 1st CHANGE\*\*\*