**3GPP TSG-SA3 Meeting #108e *S3-221800r5***

**e-meeting, 22 - 26 August 2022**

**Source: Huawei, HiSilicon, Xiaomi, Lenovo, ZTE**

**Title: update to KI#1**

**Document for: Approval**

**Agenda Item: 5.12**

# 1 Decision/action requested

***Approve the new KI proposal to eNS3 TR33.886***

# 2 References

[1]

# 3 Rationale

The contribution proposes to update KI#1 with security threats and requirments.

# 4 Detailed proposal

pCR

\*\*\* BEGINNING OF 1st CHANGES \*\*\*

## 4.1 Key Issue #1: providing VPLMN slice information to roaming UE

### 4.1.1 Key issue details

The following requirement for a 5G network is specified in TS 22.261[2] in order to support a roaming UE activating network slice services

*For a roaming UE activating a service/application requiring a network slice not offered by the serving network but available in the area from other network(s), the* *HPLMN shall be able to provide the UE with prioritization information of the VPLMNs with which the UE may register for the network slice*

A related key issue is also being studied in TR 23.700-41 [3] for possible procedure changes to automatic PLMN selection for a roaming UE requiring a network slice not offered by the serving network but available in the area from other network(s). It is expected that the corresponding security procedure will be affected (e.g. Steering of Roaming in TS33.501 [4]) in order to support the HPLMN to provide a roaming UE the VPLMN slice information.

In this key issue, the following aspects will be studied:

- Would security procedures be impacted? If so which security procedures are impacted in support of HPLMN proving a roaming UE with information about prioritization information of the VPLMNs with which the UE may register for the network slice?

- How to secure the procedures impacted.

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### 4.1.2 Security threats

Network-specific Steering of Roaming information sent to a UE has been integrity protected to prevent tampering from VPLMN as specified in TS33.501 [4]. If slice-specific information is not integrity protected, it may be tampered by the VPLMN ~~subject to forged information sent to the UE~~.

### 4.1.3 Potential security requirements

5G system shall protect in integrity the information about slice availability and prioritization sent by the HPLMN to a roaming UE.

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\*\*\* END OF 1st CHANGES \*\*\*