**3GPP TSG-SA3 Meeting #101-e *S3-210315r1***

**e-meeting, 9 -20 Novenber 2021** Revision of S3-210315

**Source: China Mobile**

**Title: proposal for way forward**

**Document for: Approval**

**Agenda Item: 5.2**

# 1 Decision/action requested

***This contribution adds conclusion into clause 8.***

# 2 Rationale

At present, some operators have built a commercial 5G core network based on virtualized network equipment (like vAMF, vUDM etc.). In order to ensure the security of virtualized network products, SECAM and SCAS for GVNP of 5GC shall be needed. Although there is no significant gap between GNP and GVNP in terms of SECAM/SCAS as identified in clause 4, there are still some security threats and requirements specific to generic virtualized network products identified in the present document, the SECAM and SCAS of GVNP in this document only apply to the virtualized netwok products.

This contribution adds way forward.

# 3 Detailed proposal

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of the change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# 8 Conclusion

## 8.2 Way forward of SECAM/SCAS for 3GPP virtualized network products

In order to ensure the security of virtualized network products, SECAM and SCAS for such GVNP of 5GC (e.g. vAMF, vUDM, vSMF) should be needed.

Although there is no significant gap between GNP and GVNP in terms of SECAM/SCAS as identified in clause 4, there are still some security threats and requirements specific to generic virtualized network products identified in the present document, which can serve as the basis for the SECAM and SCAS of specific virtualized network products. In conclusion, the following way forward is proposed:

- for methodology part, it is proposed to capture the methodology specific to GVNP in a new TR (to pair with TR33.916[2]).

- for critical assets and threats: it is proposed to capture the threats and critical assets as described in clause 5.2.3.2/5.2.4.2 for type1, clause 5.2.3.3/5.2.4.3 for type2, clause 5.2.3.4/5.2.4.4 for type3 specific to virtualized network product class in a new TR (to pair with TR33.926 [3]).

- for security requirements and test cases, it is proposed to capture the requirements and corresponding test cases for GVNP as described in clause 5.2.5.5 for type1, clause 5.2.5.6 for type2, clause 5.2.5.7 for type3 and clause 5.4 for general BVT test in a new TS (to pair with TS 33.117 [4]).

NOTE: Regarding GVNP Type2 and GVNP Type3, only the security requirements and test cases on the interface between virtualization layer and hardware layer, the interface between 3GPP defined functionalities and virtualization layers are considered in this present document. 3GPP assumes the security assurance of virtualization layer and hardware layer themselves, though are not covered in this present document, can demostrating secure enough to meet the security requirement specified or will be specified in other related SDO, e.g. ETSI NFV, as well as the security requirements identified in the present document.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of the change \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*