**3GPP TSG-SA3 Meeting #104-e ad-hoc *draft\_S3-213346***

**e-meeting, 27 – 30 September 2021** Revision of S3-21wxyz

**Source: Ericsson**

**Title: Conclusion for key issue#1**

**Document for: Approval**

**Agenda Item: 5.10**

# 1 Decision/action requested

***SA3 is kindly requested to approve the proposed conclusion for key issue #1 of TR 33.881.***

# 2 References

[1] TR 33.881

# 3 Rationale

This revision includes Ericsson comments on the contribution.

This contribution proposes to add conclusion for Key Issue #1. Few advantages of solution#1 are listed below.

* Maintains the function of the AUSF as the primary EAP Authentication Server (inline with existing TS 33.501 clause 6.1.1.2).
* Introduces a new 5GC Network Function and interface that will be forward compatible with the 5GC.
* 5G NSWO can be deployed without any dependency with 4GC.
* A general section is included in the conclusions chapter is added to note the fact that the architecture in figure 6.3.2.1-1 (refer to figure 6.Y.2.1-1 in the TR which needs to be corrected) is already supported in Rel-16 specifications.

# 4 Detailed proposal

\*\*\*\*\*\*\*\*\*\*\*\*\* START OF CHANGES\*\*\*\*\*\*\*\*\*\*\*\*\*\*

# 7 Conclusions

# 7.1 General

Aspects related to co-existence with 4G NSWO deployments, support of EPS interworking and support of pre-Rel17 UEs have not been considered for the conclusions output of this TR.

As a result of this study it can also be noted that the architecture in figure 6.3.2.1-1 and corresponding procedures are already supported in Rel-16 specifications. This architecture is applicable to enable NSWO authentication for 4G subscriptions and 5G subscriptions supporting EPS interworking. This solution works also with pre-Rel-17 UEs. This architecture does not enable SUPI privacy over the legacy WLAN access.

# 7.1.1 Conclusion for key issue #1

Solution#1 is selected as the basis for the normative work of key issue#1 “Support of EAP-AKA’ authentication for NSWO” with the main charactetistics as follows

- The WLAN access is connected to a new NSWO NF who acts as a proxy of NSWO authentication requests towards the 5GS.

- The NSWO authentication is executed within the 5GS via the AUSF and UDM making use of new services independent from the primary authentication services.

- The UE makes use of a SUCI which is deconcealed by the 5GS in the UDM/SIDF.

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