**3GPP TSG-SA3 Meeting #109 AdHoc-e draft\_S3-230220-r2**

**e-meeting, 16th – 20th** **January, 2023**

**Source: OPPO**

**Title: New solution on authorization for 5GC assistance information exposure to internal AF**

**Document for: Approval**

**Agenda Item: 5.20**

# 1 Decision/action requested

***It is proposed a solution to address the KI #1 of TR 3.898.***

# 2 References

[x] 3GPP TS 33.501

# 3 Rationale

It is proposed a solution to address the Key issue #1 “Privacy and authorization for 5GC assistance information exposure to AF”.

# 4 Detailed proposal

\*\*\*\*\*\*\*\*\* Begin 1st change\*\*\*\*\*\*\*\*\*

5.Y Solution #Y: Authorization for 5GC assistance information exposure to internal AF

5.Y.1 Introduction

This solution addresses the Key issue #1 “Privacy and authorization for 5GC assistance information exposure to AF”. It is proposed to reuse the existing OAuth 2.0 based authorization of NF service access for the AF that is internal to the operator’s network. User consent may be needed for the personal data exposure to AF, and the existing user consent mechanism can be reused.

5.Y.2 Solution details



**Figure 5.Y.2-1:** **Authorization for 5GC assistance information exposure to internal AF**

Step 1. A PDU Session between the UE and the AF may have been established.

Step 2. The AF requests the AI/ML service by sending Nnrf\_AccessToken\_Get Request to the NRF with the access required parameters, expected NF Service name(s), NF type, AF ID.

Step 3. The NRF authorizes the internal AF service access using OAuth 2.0 based authorization mechanism as specified in clause 13.4 of TS 33.501[x].

Step 4. The AF sends Nnwdaf\_<Service-X> or Nnef\_<Service-Y> Request to the requested NWDAF or NEF with the access token.

Step 5. If there is need to check user consent, the NWDAF/NEF is deemed as an enforcement point. Otherwise, steps 6-8 can be skipped.

Step 6. If there is no user consent parameter in the UE context stored in NWDAF/NEF, the NWDAF/NEF sends the Nudm\_SDM\_Get Request message to the UDM, including the UE ID, and may include purpose of data processing, data processor ID.

Step 7. The UDM returns requested user consent parameters.

Step 8. The NWDAF/NEF checks the user consent reusing the user consent framework defined in Annex V in TS 33.501 [x].

Step 9. The NWDAF/NEF replies to AF with the service response, based on the outcome of the AI/ML service procedures.

5.Y.3 Evaluation

TBD.

The user consent checking for internal AIML AF is FFS.

\*\*\*\*\*\*\*\*\* End 1st change\*\*\*\*\*\*\*\*\*