**3GPP TSG-SA WG6 Meeting #49-e S6-221368**

**e-meeting, 16th – 25th May 2022 (revision of S6-221114)**

**Title: LS on CAPIF authorization roles related to FS\_SNAAPP**

**Response to:**

**Release: Release 18**

**Work Item: Study on application enablement aspects for subscriber-aware northbound API access (FS\_SNAAPP)**

**Source:** **3GPP TSG SA WG6#49-e**

**To: 3GPP TSG SA WG3**

**Cc:**

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**Attachments:** **Draft TR 23.700-95 v1.3.0**

# 1 Overall description

SA6 has been studying in TR 23.700-95 the enhancements to the existing CAPIF functional model so that the CAPIF can support the subscriber-aware northbound API access (SNA), a scenario in which the northbound API invocation requires the API invoker obtaining the user’s (i.e. resource owner’s) consent before being allowed to access the resource.

In the SA6 study, we assume that, in CAPIF, the API invoker may be different from the resource owner, and that the AEF exposes the protected resources related to the resource owner. This is a major change in assumption, as the existing CAPIF specification in TS 33.122 assumes that the API invoker performs the functions of the resource owner (as highlighted in green below).

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| As per OAuth 2.0 [4], the CAPIF core function shall perform the functionalities of the Authorization and token protocol endpoints, the API invoker shall perform the functions of the resource owner, client and redirection endpoints functionalities, while the API exposing function shall perform the resource server functions. The API invoker client (Client endpoint) shall be registered as a confidential client type with an authorization grant type of ‘client credentials'. The access token shall follow the profile described in annex C. |

To support SNA use cases, SA6 has proposed enhancements to CAPIF functional model to include an authorization function responsible for resource owner related authorizations.

SA6 would like to get the following feedbacks from SA3:

1. SA6 would like to receive feedback on the solutions in the TR that are identified with SA3 dependency.

2. Clause 6.2 of TR 23.700-95 contains potential functional models for SNAAPP. SA6 would like SA3 to assess the functional models and provide feedback on their viability. Especially, SA6 would like SA3 to provide feedback on the following points:

i. For cases where the API provider is within the PLMN trust domain, whether the authorization function in Figure 6.2.1.2.1-1 should be located inside the CAPIF core function, outside the CAPIF core function (i.e., within the API provider domain), or both options are acceptable.

ii. For cases where the 3rd party API provider is outside the PLMN trust domain, whether the authorization function can be located in CAPIF core function of PLMN trust domain or in the 3rd party trust domain to address the authorization related to resource owners belonging to 3rd party API provider.

3. Currently, in TS 33.501 Annex V, the user consent data are stored in the UDM/UDR as subscription data (an in-advance consent). SA6 would like to get SA3’s view for the option to retrieve authorization from subscriber upon the API invocation, as described in Solution #3.

4. Currently the assumption is that the API provider decides which APIs require authorization from subscribers. SA6 would like clarifications on whether SA3 considers in scope of their study options for the resource owner to also provide such configuration (e.g. request authorization triggering even if not required by API provider).

# 2 Actions

**To SA3**

**ACTION:** SA6 asks SA3 to provide feedback on the above questions.

# 3 Dates of next TSG SA WG 6 meetings

SA6#49-bis-e 22nd June – 1st July 2022 e-meeting

SA6#50 22nd August – 26th August 2022 meeting