3GPP TSG SA WG 4 Meeting 116-e TDoc S4-211585

Electronic, 10-19 November 2021 revision of S4-211428

**Title: Reply LS to CT3 Questions and Feedback on EVEX**

**Response to: S4-211453 (C3-215316)**

**Release: Rel-17**

**Work Item: EVEX**

**Source:** **3GPP SA4**

**To:** **3GPP CT3**

**Cc: 3GPP SA2, SA3, SA6, RAN2**

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**Attachments:**

# 1 Overall description

SA4 thanks CT3 for reviewing and responding to SA4 LS in S4-210961 and the associated EVEX WID. We wish to provide the following responses to the CT3 observations, related questions, and feedback on the EVEX Work Item. Please note that in the following, for clearer distinction, inputs from CT3 are copied as is from CT3 LS where the SA4 replies are shown in green font.

*CT3 observation 1:*

*EVEX WI adds new stage 3 TS with description of Data Collection and Reporting; Protocols and Formats, corresponding to TS 26.532 with current v0.1.0 draft version, which contains a clause below, which specifies the event exposure service API:*

4.2.8 Event subscription, management and publication

This clause specifies the event exposure service API used by the NWDAF or an Application Server Provider AF to subscribe to and receive UE data related event information from a Data Collection AF.

*TS* *29.517 already defines Naf\_EventExposure API used by NWDAF to subscribe to and receive data collection from AF. (NWDAF directly subscribe to trust domain AF or via NEF subscribe to untrust domain AF for application data collection). Also, UE data collection via AF has been specified in TS* *23.288 e.g.in clause* *6.10 Dispersion Analytics, hence CT3 has implemented this in TS* *29.517 accordingly, and also has specified the corresponding procedure signalling flow clause in TS* *29.552.*

*Q1: Since the existing TS 29.517 and TS 29.552 already provide Naf\_EventExposure API, is such a clause indeed needed in TS 26.532 to specify this API which is under CT3 remit?*

*F1: CT3 regards it as better to extend the Naf\_EventExposure API for UE data collection on media streaming via AF in the existing TS 29.517. TS 29.517 can reuse the media streaming data format defined in SA4 stage 3 specifications. The stage 2 requirements of these extensions firstly need to be either defined or referenced in TS 23.502, which contains the service definition of Naf\_EventExposure. TS 26.532 can refer to related clauses in TS 29.517,* *hence no need to specify the event exposure service API in clause 4.2.8 in TS 26.532.*

**[SA4 response to Q1 and F1]:** SA4 would be pleased to defer to CT3 the specification of the Naf\_EventExposure API extensions that will be used by NWDAF to subscribe to and receive data collection reports from the AF (referred to as the *Data Collection AF* in the EVEX specifications). SA4 will capture the stage 2 requirements of the aforementioned Naf\_EventExposure API extensions in TS 26.531, whereas for the respective stage 3 aspects, clause 4.2.8 should be interpreted to mean that SA4 would reference a suitable specification for such propose, such as TS 29.517. Accordingly, SA4 has amended TS 26.532 clause 4.2.8 with the appropriate language. As CT3 points to the necessity, SA4 has ongoing discussion with SA2 on additional candidate event types for subscription by NWDAF from the Data Collection AF, such as those defined in 5G Media Streaming (in TS 26.501 and TS 26.512). As mentioned in the LS to SA4 in S2-2107013 (cc’d to CT3), SA2 indicates its willingness to further evaluate the merit of those events for exposure to NWDAF for specific data analytic features, in response to related work progress in SA4. However, SA2 states that inclusion of new event types will not be possible in the associated Rel-17 SA2 specifications (TS 23.288 and TS 23.502). SA2 also mentions that it should be possible in Rel-17 specifications for 5G Media Streaming specific events to be exposed to the Application Service Provider by a Data Collection AF instantiation of a 5GMS AF. However, doing so will require SA4 coordination with (and support by) CT3 in defining the stage 3 API of such AF Event Exposure service, which may include an NEF-equivalent Nnef\_EventExposure service API, should the AF reside within and the ASP reside outside the trusted domain. Given that the SA2 LS implies SA2 agreement with extending the stage 3 specifications of Naf\_EventExposure and Nnef\_EventExposure based on SA4 specifications (without respective contents in TS 29.502 and TS 23.288), SA4 intends to ask CT3 to realize such functionality. SA4 will also encourage SA2 to add, in the stage 2 service definitions of Naf\_EventExposure and Nnef\_EventExposure in TS 23.502, references to the SA4 specifications that extend them.

CT3 observation 2:

*Nnef\_NFManagement service and Nnef\_DataReporting service are mentioned in TS 26.531, while no such NEF services exist in TS 23.502 or TS 23.288.*

Q2: Should the Nnef\_NFManagement service and Nnef\_DataReporting service aligned between SA2 and SA4?

[SA4 response to Q2]: Yes, SA4 believes that although these services are neither defined in TS 23.502 or TS 23.288, such definition will be necessary when the Data Collection AF and its logical endpoint for the related NF management or data reporting interaction reside in a different trust domains, and require alignment between SA2 and SA4. In addition, SA4 wishes to point out, as part of the EVEX Work Item, that another service will need to be supported by the NEF: Nnef\_DataReportingProvisioning. As functional equivalent to Ndcaf\_EventReportingProvisioning, this service is required should the Application Service Provider (ASP) and the Data Collection AF to be provisioned by the ASP with a data collection and reporting configuration, reside in separate trust domains. Note that in the ongoing LS exchanges between SA2 and SA4, SA2 is aware of network services, to be exposed or accessed by the Data Collection AF to or from external system actors, that may require mediation by the NEF. SA2 has informed SA4 that corresponding updating of SA2 specifications (e,g, TS 23.502 and TS 23.288) will depend on further assessment of SA4’s EVEX work progress.

F2: CT3 would also like to be early informed (by keeping in LS Cc list) by SA4 and / or SA2 on related AF Event Exposure topics, so that further UE/AF data collection implementation in TS 29.517 could be well aligned.

**[SA4 response to F2]:** SA4 certainly wishes to and will keep CT3 fully informed regarding LS exchange between SA2 and SA4 on AF Event Exposure topics, and related developments not only on the EVEX Work item, but also Rel-17 extensions to 5G Media Streaming specifications TS 26.501 and TS 26.512. It may also be useful in the near future for a trilateral conference call to be held between CT3, SA2 and SA4 on these matters. Since all three WGs will hold their e-meetings in mid-November 2021, with subsequent e-meetings in January/February 2022, early-to-mid December timeframe would seem opportune for such discussion.

# 2 Actions

**To CT3**

**ACTION 1:** SA4 asks CT3 to take the above SA4 responses into account and kindly inform SA4 whether CT3 has further questions or related comments.

**ACTION 2:** SA4 asks CT3 to respond on your interest and availability to hold a 3-way teleconference among SA2, SA4 and CT3 on event exposure and UE data collection and reporting services and APIs on Thursday, December 9th, with a meeting start time of 6:00 am PST/3 pm CET/10 pm CST and duration of one hour.

# 3 Dates of next TSG SA WG 4 meetings

SA4#117-e 14th – 23rd February 2022 E-Meeting

SA4#118-e 6th – 14th April 2022 E-Meeting