**3GPP TSG-SA4 Meeting #113 S4-210715**

**Electronic Meeting, 6th – 14th April 2021**

**Source: Qualcomm Inc.**

**Title: New WID on 5GMS AF Event Exposure (EVEX)**

**Document for: Approval**

**Agenda Item: 9.10**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>   
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

# Title: Draft New WID on 5GMS AF Event Exposure

## Acronym: EVEX

## Unique identifier:

Potential target Release: Rel-17

## 1 Impacts

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Affects:** | UICC apps | ME | AN | CN | Others (specify) |
| **Yes** |  | X |  | X |  |
| **No** | X |  | X |  |  |
| **Don't know** |  |  |  |  | X |

## 2 Classification of the Work Item and linked work items

### 2.1 Primary classification

This work item is a …

|  |  |
| --- | --- |
| X | Feature |
|  | Building Block |
|  | *Work Task* |
|  | Study Item |

### 2.2 Parent Work Item

|  |  |  |  |
| --- | --- | --- | --- |
| Parent Work / Study Items | | | |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
|  |  |  |  |

### 2.3 Other related Work Items and dependencies

|  |  |  |
| --- | --- | --- |
| Other related Work Items (if any) | | |
| Unique ID | Title | Nature of relationship |
| 820002 | 5GMSA 5G Media streaming architecture | Developed the initial architecture for 5G Media Streaming and documented in TS 26.501. |
| 840001 | 5GMS3 5G Media Streaming stage 3 | Addressed stage-3 in 5G Media Streaming by updating TS 26.247 as well as new specs in TS 26.511, TS 26.512, and TS 26.117. |
| 900029 | Study on 5G media streaming extensions | Studying exposure of 5GMS-related events to NWDAF and/or to the 5GMS Application Provider. |

## 3 Justification

As result of the FS\_5GMS\_EXT study item regarding the key topic “Network Event usage”, the following summary and motivation for stage 3 specification development are provided below.

* The 5G System currently defines a set of event exposure services that are offered by the 5G Network Functions to different consumers. For instance, the NWDAF collects and exposes a wide range of data for analytics purposes. The NWDAF collects its data from different data sources. It uses that information to build statistical and/or predictive analytics information that are exposed to analytics data consumers.
* The 5GMS AF supports media streaming sessions by providing functionality such as content hosting, QoS and charging policy modifications, network assistance, and tracking of service consumption and QoE. In addition, the 5GMS AF can host, on behalf of Application Provider, other types of media streaming session related UE data for exposure to analytics data consumers. Consequently, the 5GMS AF collects valuable information about the media streaming sessions in the network.
* The 5GMS AF may act as data source to the NWDAF by providing collected information about media sessions. Other consumers of this data may be the Application Provider, external 3rd party analytics and application servers, OAM, and any network function.
* The 5GMS AF will leverage the AF Event Exposure APIs to share data with interested event consumers, such as the NWDAF. The event and data formats are to be defined and the access to the data is to be controlled.

In addition, there are ongoing discussions between SA2 and SA4 on UE data collection and notification by the 5GMS AF of such data to the NWDAF via event exposure services. SA2 has expressed specific interest in extending the scope of the 5GMS AF to accommodate general-purpose UE data collection for subsequent offering as event exposure services. SA4 has devised a generic reference architecture comprising the entities, interfaces and procedures for UE-related data collection, reporting and event exposure by a “Data Collection AF” to NF consumers. Such network architecture is being discussed between SA4 and SA2. A potential outcome is that SA2 will define the overall reference architecture, whereas SA4 will assume responsibility to specify the Data Collection AF and associated interfaces for data collection, reporting and event exposure. Another possible outcome is that SA4 will undertake the specification of the generic solution (in coordination with SA2 and CT3). In either situation, the 5GMS AF can be regarded as an instantiation of the Data Collection AF for the collection, reporting and exposure of UE data specific to streaming media services.

## 4 Objective

The work item will have the following objectives:

1. Define the media related data and formats for the media session data to be exposed by the 5GMS AF. The carriage in existing AF events or the definition of new AF Events will be subject to agreements with SA2.
2. Enhance the 5GMS AF data collection to support direct and indirect collection of UE data pertaining to media sessions.
3. Devise mechanisms to control the access to the collected media session data.
4. Depending on the outcome of the dialog between SA2 and SA4 on a generic network architecture for UE data collection, reporting and event exposure functionalities, other related extensions to, or generalization of, the 5GMS architecture and procedures may be specified.

The work will be coordinated with SA2 and CT3 as the owners of the AF Event Exposure service, stage 2 and 3. In particular, the definition of any new events or the integration of the media related data and formats into existing AF events will be coordinated with SA2 for the stage 2 part and CT3 for the stage 3 implementation.

The mechanisms to limit and control access to the collected media session data will be developed in coordination with SA3.

## 5 Expected Output and Time scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **New specifications** *{One line per specification. Create/delete lines as needed}* | | | | | |
| Type | TS/TR number | Title | For info  at TSG# | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Impacted existing TS/TR** *{One line per specification. Create/delete lines as needed}* | | | |
| TS/TR No. | Description of change | Target completion plenary# | Remarks |
| *26.512* | *enhancing data collection and adding event exposure mechanisms* | *93* |  |
| *26.501* | *extensions to the architecture to reflect the event exposure interfaces* | *93* |  |

## 6 Work item Rapporteur(s)

*Lo, Charles, Qualcomm Inc., clo@qti.qualcomm.com.*

## 7 Work item leadership

*SA4*

## 8 Aspects that involve other WGs

*SA2 and CT3 for the definition of additional AF events or integration of the media related data and formats into existing AF events.*

*SA3 will be consulted on the mechanisms to limit access to the collected media related data.*

## 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| Qualcomm Inc. |
| AT&T |
| Ericsson LM |
| Enensys |
| BBC |
| Huawei Technologies Co., Ltd. |
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