TSG SA4#113e meeting ***Tdoc S4-210441***

April 6-14, 2021

**Title:** Draft Reply LS to SA2 on UE Data Collection

**Response to:** S4-210405 (S2-2101342)

**Source:** 3GPP SA4

**To:** 3GPP SA2

**Contact Person:**

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**Attachments: S4-210xxx (EVEX Work Item Description)**

**1. Overall Description:**

SA4 thanks SA2 for the LS Reply to the SA4 questions on method for collection of data from the UE (in S2-2101342) and for which SA2 poses two follow-up questions to SA4 on UE data collection:

Question nº 1: Whether UE application can also provide a GPSI.

SA4 answer: In the context of 5G Media Streaming, a GPSI in the form of MSISDN may but is not guaranteed to be available to the 5GMS Client (“UE application”) due to uncertainty that this information is provisioned in the USIM depending on national/regional regulations, as well as based on OS-level permissions.

Question nº 2: Whether as already suggested by SA4 (for direct reporting), UE IP address could also be read from the IP header for the case of indirect reporting. Otherwise, how SA4 suggests to identify the UE application at the AF.

SA4 answer: Even in direct reporting, the availability or usefulness of the UE IP address cannot be ensured. For example:

1. The actual UE IP address will not be visible to the 5GMS AF in the case of NAT usage (e.g., N6-NAT between the UE and the 5GMS AF).
2. It would be infeasible for the 5GMS AF to offer to an NF consumer via event exposure service, access log information (reports on UE access to media streaming content hosted by an MNO application server, a.k.a. 5GMS AS) in the event that the 5GMS AF and 5GMS AS reside in different Data Networks.

SA4 wishes to point out that NAT usage could similarly hamper acquisition of the UE IP address in the use of the indirect reporting method (i.e., assuming that the ASP server, receiving data from the ASP client via user-plane communication, resides in an untrusted DN).

SA4 also has the following question for SA2 with regards to CR-209 (S2-2101345) attached to the SA2 LS. It is our understanding that individual or collective data regarding UE mobility characteristics/behaviors (destination, route, average speed and time of arrival) should be made available by the AF to NF consumers such as the NWDAF. Since neither 5GMS nor any other SA4-defined service architecture and protocol specification contains such UE mobility parameters, SA4 assumes the implicit “ask” from SA2 to be that SA4 would support the specification of an “opaque container” data structure in the control plane interface between the 5GMS Application Provider and the 5GMS AF. Using such container, any type of UE-related information, presumed to be available at the ASP, can be transparently delivered to the AF for subsequent event exposure to NF consumer subscribers (e.g., NWDAF). Please confirm whether the SA4 assumption is correct. If so, SA2 should provide an explicit request to SA4, including a clear description of the sought functional support, and take into consideration the potential unavailability of UE IP address due to NAT usage as described above.

Lastly, during SA4#113-e, SA4 has agreed on a new Work Item “EVEX” on 5GMS AF Event Exposure. Although it still requires SA Plenary approval, due to impending deadline of Rel-17 Stage 2 completion, the associated WID is attached. In particular we wish to point out the five types of UE-specific, media streaming service related event information tracked by the AF: i) content hosting, ii) QoS and charging policy modifications, iii) network assistance invocations, iv) service consumption, and v) QoE metrics, that can in turn be provided as event exposure services by the AF. SA4 asks SA2 to consider the potential usefulness of these “UE data” types for data analytics by the NWDAF, in the context of SA2’s eNA\_Ph2 work item.

**2. Actions:**

**ACTION 1:** SA4 kindly asks SA2 to check SA4’s responses to the two questions from SA2, and provide any related feedback.

**ACTION 2:** SA4 kindly asks SA2 to respond to our interpretation of the information provided in CR-209. In particular, if provision of an opaque container data structure in the control plane interface between the 5GMS Application Provider and 5GMS AF is sought, please send us an explicit request for such functionality.

**ACTION 3:** SA4 kindly asks SA2 to inform us of any request for additional information, related questions or comments, on the envisioned value of the five types of UE data available at the 5GMS AF, as described in the attached EVEX WID, as inputs for data analytics purposes with regards to SA2’s eNA\_Ph2 work item.

**3. Date of Next SA4 Meetings:**

SA4#114-e 19 – 28 May 2021 E-meeting

SA4#115-e 18 – 27 August 2021 E-Meeting

SA4#116 15 – 19 November 2021 Marbella, ES