**3GPP TSG-SA4 Meeting #115-e *S4-211133***

**Online, 18th – 27th Aug 2021**

**Title: [Draft]** LS Reply on QoE report handling at QoE pause

**Response to:** S4-211058 (R2-2106775)

**Release:** Rel-17

**Work Item:** NR\_QoE-Core

**Source:** SA4

**To:** TSG RAN2, TSG SA5, TSG SA3

**Cc:**

**Contact Person:**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** [**mailto:3GPPLiaison@etsi.org**](mailto:3GPPLiaison@etsi.org)

**1. Overall Description:**

SA4 thanks RAN2 for their LS in R2-2106775/S4-211058.

First of all, SA4 wishes to inform RAN2 that application layer buffering of QoE data during temporary stop/QoE pause should be feasible, given the accessibility to high capacity of application level memory in the Rich OS environment. However, SA4 wishes to point out that fully-reliable resumption of QoE reporting by the application layer, upon receiving a restart directive, may not always be possible in the current Rel-17 QoE architecture. For example, the application layer entity responsible for the reporting may no longer be running at the time of the indicated restart, since the RAN overload event which triggered the temporary stop may be accompanied by poor service quality causing the user to terminate the service and its associated application.Possibly, SA4 is able to address this in the future release.

In light of the above issue, and before SA4 is able to decide on our preference among the three options described in your LS, SA4 kindly asks RAN2 to respond to the following questions:

1. What is the expected typical duration of a temporary stop – e.g., in the order of minutes or perhaps much longer, say hours? As per-session QoE reports are typically sent relatively seldom (at the end of each session or say every few minutes for longer sessions), we would expect that a temporary stop lasting about half an hour should not require additional AS layer storage beyond the supported buffer size limitation, e.g., 64 kB as indicated for Option 2.
2. In case a temporary stop can last for a very long time (e.g., hours), are there any mechanisms already defined or being considered at the RAN side to ensure that subsequent resumption of delivery of potentially a large volume of buffered QoE reports, upon recovery from RAN overload, will not trigger RAN overload recurrence?
3. Will pausing of QoE reporting during RAN overload effectively help the RAN, given that the average QoE load per application is <100 bits/sec?

SA4 also wishes to address the first question to SA5, in case they have an understanding or opinion..

**2. Actions:**

**To RAN2 group.**

**ACTION:** SA4 kindly asks RAN2 to take the above information into account and provide your response to our three inquiries along with any additional comments or questions.

**To SA5 group.**

**ACTION:** SA4 kindly asks SA5 to provide your response to the first and third questions in the above.

**3. Date of Next TSG-SA WG4 Meetings:**

SA4#116-e 15 – 19 November 2021 E-Meeting

SA4#117 14 – 18 February 2022 Sophia Antipolis, FR