**3GPP TSG RAN2 Meeting #116bis-eR2-22xxxxx**

**Online, 17 – 25 January, 2022**

**Title:** **[DRAFT]** Reply LS on RAN visible QoE

**Response to:** R2-2200110/R3-216227

**Release:** Rel-17

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

**Source:** Qualcomm (to be RAN2)

**To:** SA4, RAN3

**Cc:**

**Contact Person:**

**Name:** Jianhua Liu

**E-mail:** [jianhua@qti.qualcomm.com](mailto:jianhua@qti.qualcomm.com)

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

**1. Overall Description:**

RAN2 thanks RAN3 for their LS R3-216227 on agreements on RAN visible QoE. RAN2 discussed the RAN2 impacts of RAN visible QoE (RVQoE temporarily used) according to the LS, and achieved the following conclusions. The wording “legacy QoE” refers to non RAN visible QoE (in this release).

Issue 1: RVQoE configuration and reporting

The following agreements were achieved for RVQoE configuration and reporting.

* RVQoE configuration can share the same measConfigAppLayerId and service type RRC IEs with legacy QoE configuration.
* Modification of RVQoE configuration can be supported from RRC layer point of view, it can be revisited if any problem occurs according to further stage 3 specification.
* RAN2 confirm it is feasible that NG-RAN can release a list of RAN visible QoE configurations while not releasing the corresponding legacy QoE configuration and if the corresponding legacy QoE configuration is released, the RAN visible QoE configuration is released as well.
* RVQoE measurements can be included into MeasurementReportAppLayer message.
* MeasConfigAppLayerId can be used to identify both of associated legacy QoE report and RVQoE report, and it is irrespective whether RVQoE measurements should be reported independently or together with legacy QoE measurements.
* Multiple RVQoE reports can be included in one MeasurementReportAppLayer message, and can be revisited according to legacy QoE reporting progress.

Issue 2: RVQoE metric reporting

RAN2 discussed how to report the RVQoE metrics of buffer level and playout delay for media startup, considering the potential signalling overhead, and arrived at the following possible assumptions as starting points. However, RAN2 understands RAN2 is not the main responsible group for definition of RV QoE metrics, so the decision whether to use these assumptions is in the hands of SA4 and RAN3.

* Assumption 1a: RAN2 specifies the maximum number of buffer level entries (ASN.1 value) for each buffer level metric report in one reporting message.
* Assumption 1c: It is UE implementation on which buffer level entries should be reported for each buffer level metric report when the received number of buffer level entries exceeds the maximum number.
* Assumption 2a: The time parameter “t” is not reported for each buffer level entry.
* Assumption 2b: It is expected that application layer does not send parameter “t” to AS layer.
* Assumption 3: Taking the granularity 10ms for level value as baseline, i.e. integer value 1 corresponds to 10ms, value 2 corresponds to 20ms, and so on.
* Assumption 4a: Taking the maximum value of 5min as baseline for level value range.
* Assumption 4b: UE sets the value to 5min if the received level value is more than 5min.
* Assumption 5: Taking the maximum value 30 seconds as baseline for playout delay for media startup value range.
* Assumption 6: Taking the granularity 1ms as baseline for playout delay, i.e. integer value 1 corresponds to 1ms, value 2 corresponds to 2ms, and so on.

**2. Actions:**

**To SA4, RAN3 groups:**

**ACTION:** RAN2 respectfully asks SA4 and RAN3 to take the above information into account and provide feedback on issue 2.

**3. Dates of next TSG-RAN WG2 meetings:**

RAN2#117-e 21 February – 3 March 2022 Online

RAN2#118-e 16 May – 27 May 2022 Online