**3GPP TSG-RAN WG3 Meeting #117-bis-e *R3-22xxxx***

***E-meeting, 10-18 Oct 2022***

**Title: Reply LS on questions on RAN visible QoE**

**Response to:** **LS R2-2206833 and S4-221129**

**Release: Release 17**

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

**Source: RAN3**

**To: RAN2, SA4**

**Cc: -**

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

**Attachments:** **None**

1 Overall description

RAN3 thanks to RAN2 for the LS which raises the questions on RAN visible QoE. RAN3 has discussed the questions, and would like to provide the answers as shown below:

Question 1: Is a periodicity specific for buffer level measurement necessary for RVQoE? If yes, what is the motivation and what should be the configurable values? If not, what are the assumptions on how often the application layer performs the measurements of buffer level and how the buffer level list is filled?

*Answer to Question 1:* *For RAN Visible QoE measurements, RAN3 agrees that periodicity of measurement can be calculated based on the reporting interval as suggested by SA4 in S4-221129.*

There are several possible options for how to handle this, and the application layer needs to know what to do. For instance, the buffer level measurement interval could relate to the reporting interval. In such a case the application layer could do eight equally-divided buffer level measurements to fill the eight entries in one RVQoE report. So if the RVQoE reporting interval is configured as 640 ms, there will be 80 ms between each buffer level measurement.

*The application layer fills the RAN Visible QoE buffer level list in the same manner as specified for the RAN Visible QoE buffer list on the AS layer, i.e., as specified in clause 5.7.16.2 of TS 38.331.*

set the appLayerBufferLevel values in the appLayerBufferLevelList to the buffer level values received from the upper layer in the order with the first appLayerBufferLevel value set to the newest received buffer level value, the second appLayerBufferLevel value set to the second newest received buffer level value, and so on until all the buffer level values received from the upper layer have been assigned or the maximum number of values have been set according to appLayerBufferLevel, if configured;

Question 2: Should the PDU session ID(s) be provided for each RAN visible QoE report and should it be mandatory or optional in the signaling?

*Answer to Question 2:* *PDU session ID(s) should be provided for each RAN visible QoE report and should be mandatory in the signalling.*

Question 3: What is the motivation for specifying that RAN visible QoE reports should be sent together with the legacy QoE reports? Is the requirement that RAN visible QoE reports should be sent together with the legacy QoE reports intended for the application layer or AS layer? If for AS layer, could the reporting periodicity for RAN visible QoE reports be considered mandatory because AS layer is not aware of when the legacy QoE reports will be triggered?

*Answer to Question 3:* *The motivation for specifying that RAN visible QoE reports should be sent together with the legacy QoE reports is to achieve a simple and straightforward QoE report mechanism. The requirement that RAN visible QoE reports should be sent together with the legacy QoE reports is intended for the application layer when the RAN visible QoE reporting periodicity is not explicitly configured. RAN3 agreements imply that the indication of separate periodicity for RAN Visible QoE should be optional in RRC signalling.*

RAN3 will continue work on this topic based on other WG’s feedback.

2 Actions

**To RAN2 and SA4:**

**ACTION: RAN3 kindly asks RAN2 and SA4 to take the feedback above into account.**

3 Dates of next RAN3 meetings

RAN3#118 2022-11-14 - 2022-11-18 Toulouse, FR

RAN3#119 2023-2-27 - 2023-3-3 Athens, GR