**3GPP TSG-RAN2 Meeting #118-e *R2-22xxxxx***

Electronical meeting, 9th- 20th May 2022

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

**Release:** Rel-17

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

**Source:** RAN2

**To:** RAN3, SA4

**Cc:** -

**Contact Person:**

**Name:** Cecilia Eklöf

**Tel. Number:** +46763353243

**E-mail Address:** cecilia.eklof@ericsson.com

**Attachments:**

**1. Overall description:**

RAN2 has discussed RAN visible QoE and made the following agreement with regards to buffer level reporting:

* *Application layer shall report the latest values of the buffer level to the AS layer.*

However, on other aspects RAN2 could not reach consensus and thus seek guidance from RAN3.

1. **Buffer level measurements**

RAN2 has discussed the request from SA4 in the feedback received in the reply LS S4-220239.

* *Assumption 1a: RAN2 specifies the maximum number of buffer level entries (ASN.1 value) for each buffer level metric report in one reporting message.*

[Feedback]: SA4 agrees with the above expectation on Application layer reporting behavior and AS layer can limit the maximum number in one reporting message. However, SA4 notes that RAN2 also need to specify how often buffer level measurements shall be done.

SA4 asks RAN2 to specify how often buffer level measurements shall be done. RAN2 has specified a list of buffer level entries and reporting periodicity for RAN visible QoE, but not a periodicity specific for buffer level measurements.

1. **Reporting of PDU session ID(s)**

RAN2 specified that PDU session ID(s) corresponding to the service that is subject to QoE measurements can be reported by the UE along with the RAN visible QoE measurement results. According to current signaling the PDU session ID(s) are optional, but RAN2 was not certain whether from RAN3 point of view, PDU session ID(s) should be mandatory or optional in the RAN visible QoE report.

1. **Reporting of RAN visible QoE measurements**

Furthermore, based on the RAN3 stage 2 input to QoE the below highlighted requirement is specified in TS 38.300, subclause 21.4:

*RAN visible QoE measurements can be reported with a reporting periodicity different from the one of regular QoE measurements. If there is no reporting periodicity defined in the RAN visible QoE configuration, RAN visible QoE reports should be sent together with the legacy QoE reports.*

RAN2 noted that the RAN3 agreement was captured as:

*If the reporting periodicity of RVQoE is not explicitly indicated in the RVQoE configuration, RVQoE reports can be sent together with the legacy QoE reports.*

Based on the discussions above, RAN2 has the following questions to RAN3 and SA4:

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?

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?

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?

**2. Actions:**

**To 3GPP RAN3**

**ACTION:**

RAN2 respectfully asks RAN3 to provide feedback to the questions 1-3 above.

**To 3GPP SA4**

**ACTION:**

RAN2 respectfully asks SA4 to take the agreement on buffer level reporting into account in their specifications and provide feedback to question 1 if they have any.

**3. Date of next TSG RAN WG2 meetings:**

RAN2#119 15th August - 26th August 2022 Online

RAN2#119bis 10th October - 19th October 2022 Online