3GPP TSG SA WG4#115-e meeting TDoc S4-211227

E-meeting, 18th – 27th Aug 2021

**Title: Reply LS on QoE configuration and reporting related issues**

**Response to: S4-211059/R2-2106776**

**Release: R17**

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

**Source: TSG SA WG4**

**To: TSG RAN WG2,**

**Cc: TSG RAN WG3, TSG SA WG5**

**Contact person: Qi Pan**

**panqi8@huawei.com**

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

**Attachments:** none

# 1 Overall description

3GPP TSG SA WG4 (SA4) would like to thank 3GPP TSG RAN WG2 (RAN2) on the LS on QoE configuration and reporting related issues.

On your questions about the maximum container size for one QoE measurement configuration or report, SA4 would like to give the answers together.

*Issue 3: The maximum container size for one QoE measurement configuration*

*RAN2 assumes to re-use the maximum container size of 1000 bytes for QoE measurements configuration which is the same as in LTE. RAN2 would like SA4 to confirm the assumption.*

*Issue 4: The maximum container size for one QoE report*

*RAN2 discussed how to report QoE measurements in RRC layer, e.g. whether multiple QoE reports could be included in one RRC message. RAN2 discussed whether to re-use from LTE the maximum container size of 8000 bytes for one QoE report and would like to check with SA4 whether the maximum container size for one QoE report could go beyond 8000 bytes in NR?*

The current limits were defined based on the then-existing QoE metrics from the MTSI and 3GP-DASH streaming services. While there could be no hard guarantees, it was seen as unlikely that these limits would be exceeded, except for rare cases. Currently, any QoE container exceeding the size limit is simply discarded, under the assumption that such discards are very rare.

However, more advanced networks, such as NR, makes it even more relevant to use more advanced immersive services, such as Virtual Reality (VR). These services have much more complex metrics (defined in TS 26.118, clause 9), and there is a higher risk that both the configuration and the reporting size limits might be exceeded.

SA4 has evaluated one possible VR metric collection test, and with reporting every ten minutes the resulting zipped report container is then about 18 kB in size. Although that metrics can be configured in different ways, it illustrates that newer services can in some cases produce larger reports exceeding the existing size limits.

Unfortunately, it is difficult to specify a certain (higher) limit which would always be enough for these services, as (especially) the QoE report size is dependent on user head movements and other factors, and thus the only safe way forward is to remove the size limits.

SA4 understands that RRC segmentation is already available in NR, which can be used in the (still rare) cases where a QoE configuration or report exceeds the PDCP size limit.

Note that removing the size limits does not imply that QoE data in general will be more bulky, as the QoE data collection is still done in exactly the same way without adding any further complexity to the QoE architecture.

As summary, in principle SA4 would welcome the relaxation of QoE report container size limits in NR.

# 2 Actions

**ACTION:**

**To** **RAN2**

SA4 kindly asks RAN2 to take the above information into account and provide feedback if any.

# 3 Dates of next TSG SA WG 4 meetings

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

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