3GPP TSG SA WG4 Meeting #122 TDoc S4-230164

Athens, Greece, February 20-24, 2023

**Title: Draft Reply LS on QoE measurements in RRC IDLE/INACTIVE states**

**Response to: R2-2213054 | S4-230007**

**Release: Rel-18**

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

**Source:** **3GPP SA4**

**To:** **3GPP RAN2**

**Cc: 3GPP RAN3, 3GPP SA5**

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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

SA4 thanks RAN2 for its liaison on the QoE measurements in RRC IDLE/INACTIVE states.

Regarding the questions 1-4, SA4 would like to provide following replies below:

***Question 1:*** *Can information about the applicable area scope of a QoE configuration be provided to the application layer in the UE as part of the QoE configuration container? If it can, how is this information defined at the application layer, e.g. does it indicate applicable tracking area, applicable cells etc.?*

**SA4 reply**: For QMC of 3GP-DASH Streaming, VR Streaming and MTSI, the area scope of a QoE configuration can be provided within the QoE configuration container and it can be indicated via the *Location Filter*, which can be a list of cell IDs and/or a geographic area expressed with one or more instances of *polygonList* and/or *circularAreaList*. Tracking area is not supported.

***Question 2:*** *Can the application layer know the UE location on the proper level (e.g. tracking area, cell) and use this information to decide whether to start QoE measurements when triggering conditions are met?*

**SA4 reply**: The application layer can know the UE’s location on a proper level (e.g. cell ID, geographical coordinates). The QoE configuration is then evaluated by the client at the start of a QoE measurement and reporting session (“QoE session”) associated with a streaming session. This includes evaluation of any filtering criteria such as by geographical area or cell ID. When the trigger conditions are met, e.g. the UE is in the target area at the start of the session, the QoE session is started for QoE measurement and reporting.

As a reminder, SA4 specifications assume that *LocationFilter* can only be included in the QoE configuration container, if geographical filtering is not handled on the network side, i.e. there should be no two-consecutive filtering, as mentioned in TS 26.247 and TS 26.114. And for the AS layer filtering, SA4 assumes that the area scope filtering will not be based on GNSS locations and polyon/circular shapes, but rather on radio network parameters like Cell Id or Tracking Area.

Further questions from RAN2 were related to any buffering of QoE reports generated in RRC IDLE/INACTIVE state, based on the assumption that the UE should not trigger an RCC connection setup only to send QoE reports.

***Question 3:*** *Is there a time after which the QoE reports collected by the UE are no longer useful for the OAM?*

**SA4 reply**: SA4 defers this answer to SA5 since the OAM related issue is under the scope of SA5.

***Question 4:*** *In case of limited storage space for QoE reports at the UE, is there any preference from the OAM side on which QoE reports should be reported and which should be discarded, e.g. is there a principle that newer or older reports are more useful for the network?*

**SA4 reply**: SA4 defers this answer to SA5 since the OAM related issue is fully under the scope of SA5.

# 2 Actions

**To RAN2**

**ACTION:** 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#123-e 17th–21st April 2023 Electronic

SA4#124 22nd-26th May 2023 Berlin, Germany