**3GPP TSG-RAN3 Meeting #122 R3-237935**

**Chicago, US, 13th – 17th November, 2023**

**Title:** (TP to BL CR of 38.300) on QoE measurement enhancements in DC

**Source:** Huawei

**Agenda item:** 11.3

**Document Type:** for approval

# 1. Introduction

In this contribution, we provide the TP to 38.300 based on the discussion in [1] [2] [3] [4].

# 2. TP to 38.300

-------------------------------------------Start change-------------------------------------------

21.3 QoE Measurement Continuity for Mobility

QoE measurement collection continuity for intra-system intra-RAT handover is supported, with the Area Scope parameters configured by the OAM, where the network is responsible for keeping track of whether the UE is inside or outside the area scope. A UE continues an ongoing QoE measurement even if it leaves the area scope, unless the network indicates to the UE to release the application layer measurement configuration.

For handover, the source gNB may transmit the information related to one or more application layer measurement configurations of the UE to the target gNB via XnAP or NGAP. For signalling-based QoE, the service type indication, QoE reference, and, optionally, the MCE IP address, measurement configuration application layer ID, MDT alignment information, area scope, slice support list for QMC, available RAN visible QoE metrics and measurement status are passed to the target gNB. For management-based QoE, the service type indication, measurement configuration application layer ID, the MCE IP address and QoE measurement status are passed to the target gNB. For RRC\_INACTIVE state mobility, QoE measurement configuration(s) of a specific UE can be retrieved from the gNB hosting the UE context when it resumes to the RRC\_CONNECTED state.

For signalling-based QoE, at handover to a target gNB that supports QoE measurement collection, the target gNB decides which of the application layer measurement configurations should be kept or released, e.g., based on application layer measurement configuration information received from the source gNB in Xn/NG signalling.

During mobility process for UEs configured with NR-DC, all the QoE/RVQoE measurement configurations at source gNB(s) are provided to target gNB(s).

Under NR-DC deployment scenario, the SN should inform the MN if the SN has released a QoE configuration, via the QMC coordination procedure.

For QoE sessions pertaining to data flows received via MBS broadcast, QoE measurement collection may continue during the RRC\_INACTIVE and RRC\_IDLE states, and the measurement results, if collected, may be provided to the network when the UE returns to the RRC\_CONNECTED state.

Upon UE’s transition from the RRC\_IDLE to the RRC\_CONNECTED state, the gNB serving the UE should ensure that it does not release an already configured signaling based QoE measurement configuration for the sake of configuring a new management-based QoE measurement configuration.

When the UE resumes the connection with a gNB that does not support QoE, the UE releases all application layer measurement configurations.

-------------------------------------------End of change-------------------------------------------

# 3. Reference

[1] R3-237720, Further discussions on the support for QoE in NR-DC, Huawei

[2] R3-237180, (TP for QoE BL CR for TS 38.423, TS 37.340, and TS 38.300) QoE and RVQoE Measurements and Reporting in NR-DC Scenarios (Ericsson)

[3] R3-237656, Stage 2 TPs to BL CR of 37.340 and 38.300 on QoE in NR-DC (ZTE, China Telecom)

[4] R3-237716, (TP to BL CR of 38.300 38.423 37.340) QoE in NR-DC (China Unicom)