**3GPP TSG-RAN WG3 Meeting #110-e *R3-207186 was R3-207118***

**2 – 12 Nov 2020**

**Title:** TP on the radio related measurements and information as assistance to the NR QoE management functionality

**Source:** Huawei, China Unicom, China Mobile

**Agenda item:** 15.2

**Document Type:** Discussion

# 1. Introduction

This TP to 38.890 tries to reflect the following agreements:

**For RAN triggered measurement as assistance to QoE measurement:**

* RAN is allowed to trigger Radio related measurements based on the received QoE measurement configuration with existing mechanism, e.g. MDT procedure. FFS on Radio related measurements only from UE or RAN node or both;
* This RAN assisted RAN level measurement could be for all service type;
* RAN is allowed to provide radio related information when providing QoE report to OAM, even the Radio related measurement is not triggered over radio; FFS on Radio related information only from UE or RAN node or both
* Radio related measurement and QoE report should be aligned and correlated at OAM using Trace ID, FFS using other info, e.g. time stamp.

# 2 Reference

1. RP-193256, New SID: Study on NR QoE management and optimizations for diverse services
2. R3-206733, Discussions on the radio related measurements and information as assistance to the NR QoE management functionality Huawei, China Unicom, China Mobile
3. R3-206897, Summary of Offline Discussion on QoE Configuration and reporting, Huawei

# 3 Annex- TPs to be captured in TR 38.890

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

//////////////////////////////////Texts Omitted////////////////////////////////////////////////////////

[x] 3GPP TS 26.247: 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH) (Release 16)

[y] 3GPP TS 26.114: 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; IP Multimedia Subsystem (IMS); Multimedia Telephony; Media handling and interaction (Release 16)

[z] 3GPP TS 26.118: 3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Virtual Reality (VR) profiles for streaming applications (Release 16)

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## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**QoE measurement:** Ameasurement triggered and configured by OAM, see details in [x] [y] [x] for different service type.

**QoE report:** The measurement result of a QoE measurement

**Radio-related measurements:** A measurement triggered and configured by RAN, whose intention is to help network to further evaluate and improve the QoE.

**Radio-related information:** Information include the measurement results from “radio-related measurements” and some information collected at network side which are not dependent on “radio-related measurements”, e.g. feature info, mobility history info or dual connectivity status.

*Editor’s note: The above three definitions may subject to further refinements once further consensus are reached.*

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## 6.X Radio-related measurements and information for QoE

In order for the network to further evaluate and improve the QoE, RAN could also trigger radio-related measurements towards a certain UE, based on the QoE measurement configuration received from the OAM. For triggering the measurements an existing mechanism, e.g. MDT procedure can be used.

The radio-related QoE measurements are reported for all types of supported services, and they include MDT-like measurements and, potentially, additional measurements related to the radio interface. If new radio-related measurements, with respect to what is currently specified in MDT, are required for NR QoE management, these additional radio-related QoE measurements will be specified as a part of MDT measurements. Since the application-related QoE measurements are only collected when the application session is ongoing, the same requirement holds for radio-related QoE measurements, as well.

Besides radio-related measurements, radio-related information may also be reported. The radio-related information may include e.g. the information about features or configuration used to carry the data for an application session, DC or CA configuration and the mobility history information. Radio-related information may be reported even when radio-related measurements are not triggered over the radio.

The radio-related measurement results should be aligned and correlated with the QoE measurement results, using e.g. trace ID.

*Editor’s note: Whether other information, e.g. time stamp could be used for correlation is FFS.*