

Further enhancement for QoE in Rel-19

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R19 Further Enhancement on QoE

□ Motivation:

- 5G is designed for providing various types of new services, 5G QoE management is aiming to specify the unified mechanism to collect and optimize the experience parameters for the eMBB service, and the new service, such as AR/VR/XR, MBS and the new emerging 5G services. **In Rel-18, the new service types (AR/XR, MBS) have been discussed in RAN3, but QoE/RVQoE collection mechanism may rely on the progress of other WGs, such as SA4. It need to be further specified in Rel-19.**
- QoE optimization can be one of the potential use case of AI/ML application when the MCE and NG-RAN node store a large amount of QoE reports. AI/ML can be used for QoE data analysis, model training for resource optimization and user experience prediction, etc. **As RAN visible QoE metrics and corresponding mechanism are already in the scope of R17/R18 QoE WI, further work on the new metrics and enhancement on mechanism can be continue discuss in Rel-19 NR QoE.**
- **QoE enhancement can be extended to support new scenarios**, such as sidelink relay, etc. The details of the enhancements on how to support new scenarios needs further discussion. 5G+WLAN is an important scenario for the indoor deployment, the mechanism for this scenario can be discussed in Rel-19.

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□ Considering on the ongoing work item of R18 QoE, further enhancements can include the following objective.

- Specify RAN visible QoE metrics for XR, MBS service, IIOT, etc (depend on the QoE metrics defination in SA4).
- Support QoE collection for MBS multicast service in INACTIVE/IDLE state.
- Support QoE continuity during Inter-RAT HO
 - Multiple QoE configurations for one UE during inter-RAT HO;
 - QoE continuity for intra-system(5GC)/inter-system scenarios (e.g. HO btw 5G and 4G).

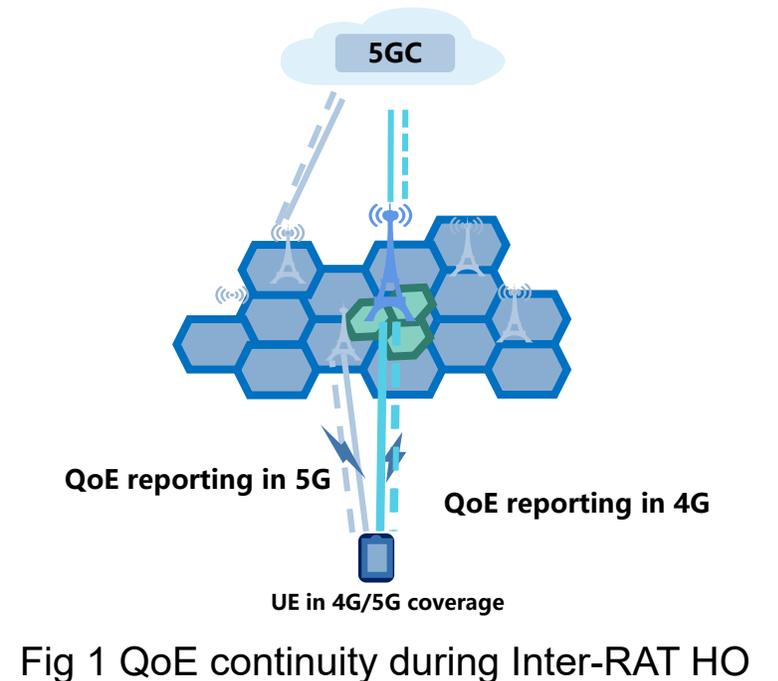


Fig 1 QoE continuity during Inter-RAT HO

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□ Support QoE enhancement in new scenarios.

- New metrics and enhancement on mechanism for supporting AI/ML new use case of QoE analysis
 - The metrics related with QoE prediction, QoE assisted access control and mobility;
 - Correlation for RVQoE and radio related measurements in gNB;
- QoE configuration and reporting for new scenarios, e.g. sidelink relay and 5G+WLAN.

Thanks