**3GPP TSG-RAN WG3 #117bis-e R3-22xxxx**

**10-18 Oct 2022**

**Online**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.300** | **CR** | - | **rev** | **-** | **Current version:** | **17.2.0** |  |
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| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <http://www.3gpp.org/Change-Requests>.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Draft CR to 38.300 on RAN visible QoE | | | | | | | | | |
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| ***Source to WG:*** | ZTE | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_QoE-Core | | | | |  | ***Date:*** | | | 2022-9-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-17 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)*  *Rel-19 (Release 19)* | |
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| ***Reason for change:*** | | The description on the support of RAN visible QoE measurement is unclear. For example, the RAN visible application layer measurement would bring confusion with application layer measurement, which is supposed to be just mentioned as RAN visible QoE measurement. Some other details are also proposed to be modified.  Besides, there is never any non-RAN visible QoE measurements defined, so such expression should be avoided. QoE measurement/report can simply represent the legacy QoE measurements/reports which is not visible to RAN.  The agreement on the application layer measurement of RVQoE metrics is also needed to be reflected in stage-2 description. | | | | | | | | |
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| ***Summary of change:*** | | - Cleaning the wording on RAN visible QoE measurements, to prevent confusion on RAN visible QoE and application layer measurement.  - capture the latest agreement on the application layer measurement of RAN visible QoE metrics.  Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has limited impact with the previous version of the specification. | | | | | | | | |
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| ***Consequences if not approved:*** | | The description on RAN visible QoE is not clear enough. | | | | | | | | |
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| ***Clauses affected:*** | | 21.4 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | | Rev 1: updated based on more comments. | | | | | | | | |
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*Changes Start*

## 21.4 RAN Visible QoE Measurements

RAN visible QoE measurements are configured to the UE by the gNB, where a subset of configured QoE metrics is reported from the UE to the gNB as an explicit IE readable by the gNB. The RAN visible QoE measurements can be utilized by the gNB for network optimization. The RAN visible QoE measurements are supported for the DASH streaming and VR services. The gNB configures the RAN visible QoE measurement to collect all or some of the available RAN visible QoE metrics, where the indication of metric availability is received from the OAM or the 5GC. The set of available RAN visible QoE metrics is a subset of the metrics which are already configured as part of QoE measurement configuration encapsulated in the application layer container. The PDU session ID(s) and the QoS Flow IDs corresponding to the service that is subject to QoE measurements can also be reported by the UE along with the RAN visible QoE measurement results.

The RAN visible QoE measurements can be reported with a reporting periodicity different from the one of the corresponding encapsulated QoE measurements, where the reporting periodicity is configured by the gNB. The UE Application layer can measure the RAN visible metrics based on this reporting periodicity. If there is no reporting periodicity defined in the RAN visible QoE configuration, RAN visible QoE measurement reports are sent together with the encapsulated QoE measurement reports (which are not visible to the gNB).

Multiple simultaneous RAN visible QoE measurement configurations and reports can be supported for RAN visible QoE measurement, and each RAN visible QoE measurement configuration and report is identified by the same RRC identifier as the QoE measurement configuration and measurement report. After receiving the RAN visible QoE measurement configuration, the UE RRC layer forwards the configuration to the application layer, indicating the service type, the RRC identifier and the periodicity. RAN visible QoE configuration can only be configured if there is a corresponding QoE measurement configuration for the same service type configured at the UE. The application layer sends the RAN visible QoE measurement report associated with the RRC identifier to the UE's AS layer. The UE can send both RAN visible QoE measurement reports and the QoE measurement reports to the gNB in the same *MeasurementReportAppLayer* message. The gNB can release one or multiple RAN visible QoE measurement configurations from the UE in one *RRCReconfiguration* message at any time.

During RAN overload, the UE continues to report the configured RAN visible QoE measurements, even if the corresponding QoE measurement reporting is paused.

*End of Change*