**3GPP TSG-RAN WG2 Meeting #118 electronic R2-220XXXX**

**Electronic Meeting, 9th – 20th May, 2022**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.306** | **CR** | **Draft** | **rev** | **-** | **Current version:** | **17.0.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Minor Changes to NR QoE UE capabilities | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CMCC | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_QoE-Core | | | | |  | ***Date:*** | | | 2022-05-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | RAN3 agreed that RAN-visible QoE metrics is a subset of legacy QoE metrics data collected from UE, which means the support of RAN visible QoE implies the support of application layer QoE for relevant services.  Moreover, the following agreement related to pause functionality in NR QoE are added at RAN2#116bis-e:   * The minimal memory size of QoE paused measurements report is 64KB   However, the agreements above have not been caputured in stage 2 and stage 3. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The following are added to support NR QoE:  - Add clarification that if the UE supports RAN visible QoE capabilities, it shall also support relevant application layer QoE capabilities.   * Add the requirement of minimum memory size for QoE paused measurement reports. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The requirement and definition for QoE are incomplete. | | | | | | | | |
| ***r*** | |  | | | | | | | | |
| ***Clauses affected:*** | | 4.2.20, 6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | |  | | --- | |  | | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

START OF CHANGES

### 4.2.20 QoE measurement parameters

| Definitions for parameters | Per | M | FDD-TDD DIFF | FR1-FR2 DIFF |
| --- | --- | --- | --- | --- |
| ***qoe-Streaming-MeasReport-r17***  Indicates whether the UE supports NR QoE Measurement Collection for streaming services, see TS 26.247 [29]. | UE | No | No | No |
| ***qoe-MTSI-MeasReport-r17***  Indicates whether the UE supports NR QoE Measurement Collection for MTSI services, see TS 26.114 [30]. | UE | No | No | No |
| ***qoe-VR-MeasReport-r17***  Indicates whether the UE supports NR QoE Measurement Collection for VR services, see TS 26.118 [31]. | UE | No | No | No |
| ***ran-VisibleQoE-Streaming-MeasReport-r17***  Indicates whether the UE supports RAN visible QoE Measurement Collection for streaming services. A UE supporting this feauture shall also support *qoe-Streaming-MeasReport-r17* | UE | No | No | No |
| ***ran-VisibleQoE-VR-MeasReport-r17***  Indicates whether the UE supports RAN visible QoE Measurement Collection for VR services. A UE supporting this feauture shall also support *qoe-VR-MeasReport-r17* | UE | No | No | No |
| ***ul-MeasurementReportAppLayer-Seg-r17***  Indicates whether the UE supports RRC segmentation of the MeasurementReportAppLayer message in UL, as specified in TS 38.331 [9]. | UE | No | No | No |

NEXT CHANGES

# 6 Conditionally mandatory features without UE radio access capability parameters

| Features | Condition |
| --- | --- |
| Acquisition of SI messages with explicit SI window positions | It is mandatory to support acquisition of SI messages with explicit SI window positions for UEs which support the SIB types in *schedulingInfoList2* as specified in TS 38.331 [9]. |
| AS layer memory size for QoE paused measurement reports | It is mandatory to support the minimum AS layer memory size of 64KB for QoE paused measurement reports for UEs which support *qoe-Streaming-MeasReport-r17*, *qoe-MTSI-MeasReport-r-17* or *qoe-VR-MeasReport-r17*. |
| Downlink SDAP header | Either NAS reflective QoS or *as-ReflectiveQoS* is supported. |
| IMS emergency call | It is mandatory to support IMS emergency call over PLMN for UEs which are IMS voice capable in NR.  It is mandatory to support IMS emergency call over SNPN for UEs that are SNPN capable and IMS voice capable over SNPNs. |
| Logged MDT measurement suspension due to IDC interference | It is mandatory to support Logged MDT measurement suspension due to IDC interference for UEs which are supporting logged measurements in RRC\_IDLE and RRC\_INACTIVE upon request from the network and in-device coexistence indication as specified in TS 38.331 [9]. |
| MAC subheaders with one-octet eLCID field | It is mandatory to support MAC subheaders with one-octet eLCID field for UEs/IAB-MTs supporting MAC CEs using extended LCID values as specified in TS 38.321 [8]. |
| Skipping UL configured grant if no data to transmit. | Either configuredUL-GrantType1 or configuredUL-GrantType2 is supported. |

END OF CHANGES

# Annex A: R2 feature list for this CR

### 4.2.x NR\_QoE-Core

Table 4.2.X-1: Layer-2 and Layer-3 feature list for NR\_QoE-Core

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Features | Index | Feature group | Components | Prerequisite feature groups | Field name in TS 38.331 | Parent IE in TS 38.331 [2] | Need of FDD/TDD differentiation | Need of FR1/FR2 differentiation | Note | Mandatory/Optional |
| X. NR\_QoE-Core | X-1 | NR QoE measurement collection | Indicates whether the UE supports NR QoE Measurement Collection for streaming services. |  | *qoe-Streaming-MeasReport-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |
| X-2 | NR QoE measurement collection | Indicates whether the UE supports NR QoE Measurement Collection for MTSI services. |  | *qoe-MTSI-* *MeasReport-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |
| X-3 | NR QoE measurement collection | Indicates whether the UE supports NR QoE Measurement Collection for VR services. |  | *qoe-VR-* *MeasReport-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |
| X-4 | RAN visible QoE measurement collection | Indicates whether the UE supports RAN visible QoE Measurement Collection for streaming services. A UE supporting this feauture shall also support *qoe-Streaming-MeasReport-r17* |  | *ran-VisibleQoE-Streaming-MeasReport-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |
| X-5 | RAN visible QoE measurement collection | Indicates whether the UE supports RAN visible QoE Measurement Collection for VR services. A UE supporting this feauture shall also support *qoe-VR-MeasReport-r17* |  | *ran-VisibleQoE-VR-MeasReport-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |
| X-6 | NR QoE measurement collection | Indicates whether the UE supports RRC segmentation of the MeasurementReportAppLayer message in UL. |  | *ul-MeasurementReportAppLayer-Seg-r17* | *qoe-Parameters-r17* | No | No |  | Optional with capability signalling |