**3GPP TSG-RAN WG3 Meeting #123 *R3-240940***

**Athens, Greece, 26 February – 1 March, 2024**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.473** | **CR** | **1300** | **rev** | **1** | **Current version:** | **18.0.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | Corrections on QoE enhancements | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh-Core | | | | |  | ***Date:*** | | | 2024-02-26 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Incomplete procedural text for QMC Information Transfer Control procedure, CHOICE alternatives are partly described by semantics description and partly described in procedural text. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Added procedural text description of gNB-CU behaviour upon reception of Deactivate ALL choice alternative. Removed corresponding semantics description from the tabular.  Editorial correction. | | | | | | | | |
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| ***Consequences if not approved:*** | | Inconsistent description of QoE information transfer deactivation. | | | | | | | | |
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| ***Clauses affected:*** | | 8.16.2.2, 9.2.16.1, 9.2.16.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | r1: merging from R3-24…  r0: submitted to RAN3#123 | | | | | | | | |

### 8.16.2 QoE Information Transfer Control

#### 8.16.2.1 General

The purpose of the QoE Information Transfer Control procedure is to control the RAN visible QoE information transfer from the gNB-CU to the gNB-DU. The procedure uses non-UE associated signalling.

#### 8.16.2.2 Successful operation



Figure 8.16.2.2-1: QoE Information Transfer Control procedure.

The gNB-DU initiates the procedure by sending the QOE INFORMATION TRANSFER CONTROL message to the gNB-CU.

If the *Deactivation Indication* IE is present in the message and set to ‘Per UE’, the gNB-CU shall, if supported, deactivate the QoE information transfer from gNB-CU to gNB-DU for the UEs indicated in the *Deactivation Indication List* IE.

If the *Deactivation Indication* IE is present in the message and set to ‘Deactivate ALL’, the gNB-CU shall, if supported, deactivate the QoE information transfer from gNB-CU to gNB-DU for all UEs served by the gNB-DU.

#### 8.16.2.3 Abnormal Conditions

Not applicable.

#### 9.2.16.1 QOE INFORMATION TRANSFER

This message is sent by a gNB-CU to a gNB-DU, to indicate information related to RAN visible QoE.

Direction: gNB-CU → gNB-DU.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Message Type | M |  | 9.3.1.1 |  | YES | ignore |
| gNB-CU UE F1AP ID | M |  | 9.3.1.4 |  | YES | reject |
| gNB-DU UE F1AP ID | M |  | 9.3.1.5 |  | YES | reject |
| **QoE Information List** |  | *0..1* |  |  | YES | ignore |
| **>QoE Information Item** |  | *1..<maxnoofQoEInformation>* |  |  | EACH | ignore |
| >>QoE Metrics | O |  | 9.3.1.260 |  | - | - |
| **>>DRB List** |  | *0..1* |  |  | YES | ignore |
| **>>>DRB List Item** |  | *1 .. <maxnoofDRBs>* |  | The List of DRBs corresponding to the QoE Information. |  |  |
| >>>>DRB ID | M |  | 9.3.1.8 |  |  |  |

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| Range bound | Explanation |
| maxnoofQoEInformation | Maximum no. of QoE information for one UE, the maximum value is 16. |
| maxnoofDRBs | Maximum no. of DRBs allowed towards one UE, the maximum value is 64. |

#### 9.2.16.2 QOE INFORMATION TRANSFER CONTROL

This message is sent by a gNB-DU to the gNB-CU, to control the QoE information transfer.

Direction: gNB-DU  gNB-CU

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| Message Type | M |  | 9.3.1.1 |  | YES | ignore |
| Transaction ID | M |  | 9.3.1.23 |  | YES | reject |
| CHOICE *Deactivation Indication* | O |  |  |  | YES | ignore |
| >*Per UE* |  |  |  |  |  |  |
| **>>Deactivation Indication List** |  | *1* |  |  | YES | ignore |
| **>>>Deactivation Indication Item** |  | *1..<maxnoofUEsInQMCTransferControlMessage>* |  |  | - |  |
| >>>> gNB-CU UE F1AP ID | M |  | 9.3.1.4 |  | - |  |
| >>>>gNB-DU UE F1AP ID | M |  | 9.3.1.5 |  | - |  |
| >*Deactivate ALL* |  |  | NULL |  |  |  |

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| --- | --- |
| Range bound | Explanation |
| maxnoofUEsInQMCTransferControlMessage | Maximum no. of UEs for which QoE transfer control information is received, the maximum value is 512. |