**3GPP TSG-RAN WG3 #116-eR3-224020**

**Online, 9th - 19th May 2022 was R3-223378**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0806** | **rev** | **1** | **Current version:** |  |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2022-04-25 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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:*** | | 1/ In §9.2.3.109, the size of the *PC5 QoS Flow List* IE is defined to be 2048 (*maxnoofPC5QoSFlows*). However, ASN.1 defines *maxnoofPC5QoSFlows* to be 2064. This discrepancy needs to be resolved.  2/ misspelling in ASN.1 for pre-emption-capability and reflectiveQoS  3/ 9.2.3.46 contains a reference to Annex “XX” of TS 38.300 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1/ A NOTE is added to both, the tabular and the ASN.1 definition of the *PC5 QoS Flow List* IE to say that the size of the List shall never exceed 2048 items.  2/ misspelling in ASN.1 for corrected  3/ in 9.2.3.46 reference to “Annex XX” in TS 38.300 was changed to “Annex F”. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | 1/ The discrepancy between ASN.1 and tabular definition of the *PC5 QoS Flow List* IE would remain.  2/ misspellings in ASN.1 would remain  3/ unresolved reference to an Annex in 38.300 would remain | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.2.3.46, 9.2.3.109, 9.3.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | |  | **X** | Test specifications | | | |  | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | r1: including an additional correction in 9.2.3.46  r0: submitted to R3-223378 | | | | | | | | |

<<<<<<<<<<<<<<<<<<<< First Change >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.46 I-RNTI

The I-RNTI is defined for allocation in an NR or E-UTRA serving cell as a reference to a UE Context within an NG-RAN node. The I-RNTI is partitioned into two parts, the first part identifies the NG-RAN node that allocated the I-RNTI and the second part identifies the UE context stored in this NG-RAN node, refer to Annex C in TS 38.300 [9], or the I-RNTI is partitioned into three parts, the first part indicates the length of NG-RAN Node ID part of the NG-RAN Node that allocated the I-RNTI, the second part identifies the NG-RAN node that allocated the I-RNTI and the third part identifies the UE context stored in this NG-RAN node, refer to Annex F in TS 38.300[9].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CHOICE *I-RNTI* |  |  |  |  |
| >*I-RNTI full* |  |  |  |  |
| >>I-RNTI full | M |  | BIT STRING (SIZE (40)) | This IE is used to identify the suspended UE context of a UE in RRC\_INACTIVE using 40 bits (refer to *I-RNTI-Value* IE in TS 38.331 [10] and *I-RNTI* IE in TS 36.331 [14]). |
| >*I-RNTI short* |  |  |  |  |
| >>I-RNTI short | M |  | BIT STRING (SIZE (24)) | This IE is used to identify the suspended UE context of a UE in RRC\_INACTIVE using 24 bits (refer to *ShortI-RNTI-Value* IE in TS 38.331 [10] and *ShortI-RNTI* IE in TS 36.331 [14]). |

<<<<<<<<<<<<<<<<<<<< Next Change >>>>>>>>>>>>>>>>>>>>

#### 9.2.3.109 PC5 QoS Parameters

This IE provides information on the PC5 QoS parameters of the UE’s sidelink communication for NR PC5.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| **PC5 QoS Flow List** |  | *1* |  |  |
| **>PC5 QoS Flow Item** |  | *1..<maxnoofPC5QoSFlows>* |  |  |
| >>PQI | M |  | INTEGER (0..255, …) | PQI is a special 5QI as specified in TS 23.501 [7]. |
| **>>PC5 Flow Bit Rates** | O |  |  | Only applies for GBR QoS Flows. |
| >>>Guaranteed Flow Bit Rate | M |  | Bit Rate  9.2.3.4 | Guaranteed Bit Rate for the PC5 QoS flow. Details in TS 23.501 [7]. |
| >>>Maximum Flow Bit Rate | M |  | Bit Rate  9.2.3.4 | Maximum Bit Rate for the PC5 QoS flow. Details in TS 23.501 [7]. |
| >>Range | O |  | ENUMERATED (m50, m80, m180, m200, m350, m400, m500, m700, m1000, …) | Only applies for groupcast. |
| PC5 Link Aggregate Bit Rates | O |  | Bit Rate  9.2.3.4 | Only applies for non-GBR QoS Flows. |

|  |  |
| --- | --- |
| Range bound | Explanation |
| *maxnoofPC5QoSFlows* | Maximum no. of PC5 QoS flows allowed towards one UE. Value is 2048.  NOTE: ASN.1 value definition of the *maxnoofPC5QoSFlows* is 2064. The size of the PC5 QoS Flow List shall not exceed 2048 items. |

#### 9.2.3.110 UE History Information from the UE

This IE contains information about mobility history report for a UE.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CHOICE *UE History Information from the UE* | M |  |  |  |
| >*NR* |  |  |  |  |
| >>NR Mobility History Report | M |  | OCTET STRING | *VisitedCellInfoList* contained in the *UEInformationResponse* message (TS 38.331 [10]). |

<<<<<<<<<<<<<<<<<<<< Next Change >>>>>>>>>>>>>>>>>>>>

### 9.3.5 Information Element definitions

-- ASN1START

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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-- Information Element Definitions

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-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

XnAP-IEs {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-access (22) modules (3) xnap (2) version1 (1) xnap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

AllocationandRetentionPriority ::= SEQUENCE {

priorityLevel INTEGER (0..15,...),

pre-emption-capability ENUMERATED {shall-not-trigger-preemption, may-trigger-preemption, ...},

pre-emption-vulnerability ENUMERATED {not-preemptable, preemptable, ...},

iE-Extensions ProtocolExtensionContainer { {AllocationandRetentionPriority-ExtIEs} } OPTIONAL,

...

}

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

PC5QoSFlowList ::= SEQUENCE (SIZE(1..maxnoofPC5QoSFlows)) OF PC5QoSFlowItem

-- The size of the PC5 QoS Flow List shall not exceed 2048 items.

PC5QoSFlowItem::= SEQUENCE {

pQI FiveQI,

pc5FlowBitRates PC5FlowBitRates OPTIONAL,

range Range OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { PC5QoSFlowItem-ExtIEs} } OPTIONAL,

...

}

PC5QoSFlowItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

<<<<<<<<<<<<<<<<<<<< Unmodified Text Omitted >>>>>>>>>>>>>>>>>>>>

QoSFlowLevelQoSParameters ::= SEQUENCE {

qos-characteristics QoSCharacteristics,

allocationAndRetentionPrio AllocationandRetentionPriority,

gBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

reflectiveQoS ReflectiveQoSAttribute OPTIONAL,

additionalQoSflowInfo ENUMERATED {more-likely, ...} OPTIONAL,

iE-Extensions ProtocolExtensionContainer { {QoSFlowLevelQoSParameters-ExtIEs} } OPTIONAL,

...

}

QoSFlowLevelQoSParameters-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ID id-QoSMonitoringRequest CRITICALITY ignore EXTENSION QosMonitoringRequest PRESENCE optional}|

{ID id-QosMonitoringReportingFrequency CRITICALITY ignore EXTENSION QosMonitoringReportingFrequency PRESENCE optional}|

{ID id-QoSMonitoringDisabled CRITICALITY ignore EXTENSION QoSMonitoringDisabled PRESENCE optional},

...

}

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>>