**3GPP TSG-RAN WG3 Meeting #120 *R3-233333***

**Incheon, KR, 22 May – 26 May, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.463** | **CR** | **0719** | **rev** | **2** | **Current version:** | 16.13.0 |  |
|  | | | | | | | | |
| *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:*** | Correction of Paging Priority Indicator in QoS Flow Level QoS Parameters | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Deutsche Telekom, Orange, BT, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_CPUP\_Split-Core | | | | |  | ***Date:*** | | | 2023-05-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **A** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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:*** | | The *Paging Priority Indicator (PPI)* IE is included in the 9.3.1.26 *QoS Flow Level QoS Parameters* IE (see the agreed CR in R3-193005), and in the DL DATA NOTIFICATION message respectively. Its IE type is given as INTEGER (0.. 7, …).  However, in ASN.1, the paging-Policy-Indicator is defined as INTERGET (1..8) in the QoSFlowLevelQoSParameters. While it is correctly defined for the DLDataNotification message.  For this *Paging Priority Indicator (PPI)* IE included in the QoS Flow Level QoS Parameters IE, it was initially removed from the Tabular in the agreed CR in R3-185358 since it was agreed to add the PPI field into the DL PDU SESSION INFORMATION frame of TS 38.415, but kept intact in the ASN.1 (see the agreed CR in R3-185127). Afterwards this IE was added back to the Tabular in the R3-193005 to align with the ASN.1. Given the above analysis, it should clarify that this IE is not used in this version of the specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | For the *Paging Priority Indicator (PPI)* IE included in the *QoS Flow Level QoS Parameters* IE   * Update IE name to Paging Priority Index, and update the IE type to be the same as the definition in ASN.1; * Update the semantics description so that this IE is not used in this version of the specification.   Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has isolated impact with the previous version of the specification (same release).  The impact can be considered isolated because the change only affects the Paging Priority Indicator in the QoS Flow Level QoS Parameters IE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Not aligned between the Tabular and the ASN.1 for the *Paging Priority Indicator (PPI)* IE.  The *Paging Priority Indicator (PPI)* IE may be erroneously used by the gNB-CU-UP upon received. | | | | | | | | |
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| ***Clauses affected:*** | | 9.3.1.26, 9.4.5 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | | Rev0: R3-231749  Rev1: R3-232838  Minor update the coverage page.  Rev2: R3-233333  Remove the newly added IE, update the Paging Priority Indicator (PPI) IE name, and update the semantics description, and the cover page etc. | | | | | | | | |

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| **Change Begins** |

**<Unchanged Text Omitted>**

#### 9.3.1.26 QoS Flow Level QoS Parameters

This IE defines the QoS parameters to be applied to a QoS Flow.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| CHOICE *QoS Characteristics* | M |  |  |  | - |  |
| >*Non-dynamic 5QI* |  |  |  |  |  |  |
| >>Non Dynamic 5QI Descriptor | M |  | 9.3.1.27 |  | - |  |
| >*Dynamic 5QI* |  |  |  |  |  |  |
| >>Dynamic 5QI Descriptor | M |  | 9.3.1.28 |  | - |  |
| NG-RAN Allocation and Retention Priority | M |  | 9.3.1.29 |  | - |  |
| GBR QoS Flow Information | O |  | 9.3.1.30 | This IE shall be present for GBR QoS Flows and is ignored otherwise. | - |  |
| Reflective QoS Attribute | O |  | ENUMERATED (subject to, …) | Details in TS 23.501 [20]. This IE applies to Non-GBR flows only and is ignored otherwise. | - |  |
| Additional QoS Flow Information | O |  | ENUMERATED (more likely, …) | This IE indicates that traffic for this QoS flow is likely to appear more often than traffic for other flows established for the PDU Session. | - |  |
| Paging Priority Index | O |  | INTEGER  (1.. 8, …) | This IE is not used in this version of the specification. | - |  |
| RDI | O |  | ENUMERATED (enabled, …) | Indicates whether Reflective QoS flow to DRB mapping should be applied. | - |  |
| QoS Monitoring Request | O |  | ENUMERATED (UL, DL, Both, …) | Indicates to measure UL, or DL, or both UL/DL delays for the associated QoS flow. | YES | ignore |
| MCG Offered GBR QoS Flow Information | O |  | GBR QoS Flow Information 9.3.1.30 | This IE contains M-Node offered GBR QoS Flow Information. | YES | ignore |
| QoS Monitoring Reporting Frequency | O |  | INTEGER (1..1800, …) | Indicates the Reporting Frequency for RAN part delay for Qos monitoring.  Units: second | YES | ignore |
| QoS Monitoring Disabled | O |  | ENUMERATED (true, ...) | Indicates to stop the QoS monitoring. | YES | ignore |
| Data Forwarding Source IP Address | O |  | Transport Layer Address  9.3.2.4 | Identifies the TNL address used by the source node for data forwarding. | YES | ignore |

**<For Information Only>**

#### 9.3.1.55 Paging Priority Indicator (PPI)

The Paging Policy Indicator is used for paging policy differentiation (see details in TS 23.501 [20]).

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| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| PPI | M |  | INTEGER  (0.. 7, …) |  |

**<Unchanged Text Omitted>**

### 9.4.5 Information Element Definitions

-- ASN1START

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-- Information Element Definitions

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E1AP-IEs {

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

ngran-access (22) modules (3) e1ap (5) version1 (1) e1ap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

**<Unchanged Text Omitted>**

QoSFlowLevelQoSParameters ::= SEQUENCE {

qoS-Characteristics QoS-Characteristics,

nGRANallocationRetentionPriority NGRANAllocationAndRetentionPriority,

gBR-QoS-Flow-Information GBR-QoSFlowInformation OPTIONAL,

reflective-QoS-Attribute ENUMERATED {subject-to, ...} OPTIONAL,

additional-QoS-Information ENUMERATED {more-likely, ...} OPTIONAL,

paging-Policy-Index INTEGER (1..8, ...) OPTIONAL,

reflective-QoS-Indicator ENUMERATED {enabled, ...} OPTIONAL,

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

}

QoSFlowLevelQoSParameters-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

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

{ID id-MCG-OfferedGBRQoSFlowInfo CRITICALITY ignore EXTENSION GBR-QoSFlowInformation PRESENCE optional}|

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

{ID id-QoSMonitoringDisabled CRITICALITY ignore EXTENSION QosMonitoringDisabled PRESENCE optional}|

{ID id-DataForwardingSourceIPAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional},

...

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**<Unchanged Text Omitted>**

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| **Change Ends** |