**3GPP TSG-RAN WG3 Meeting #119bis-e *R3-231927***

**Electronic meeting, 17 Apr – 26 Apr, 2023**

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **37.483** | **CR** | **0059** | **rev** | **1** | **Current version:** | 17.4.0 |  |
|  | | | | | | | | |
| *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 Priority Level | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei, Deutsche Telekom, Orange, BT, Nokia, Nokia Shanghai Bell | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core, TEI17 | | | | |  | ***Date:*** | | | 2023-04-17 |
|  |  | | | |  | |  | | |  |
| ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The *priority level* IE included in the *Non Dynamic 5QI Descriptor* IE and *Dynamic 5QI Descriptor* IE is used to indicate the priority level for a QoS flow, with its IE type as Integer (1..127). However, in the ASN.1, its value range starts from 0, as shown as follows.  QoSPriorityLevel ::= INTEGER (0..127, ...)  And in the NGAP and XnAP, it is correctly specified that its value starts from 1.  In addition, the *priority level* IE included in *NG-RAN Allocation and Retention Priority* IE is used to indicate the ARP priority, with the IE type as INTEGER (1..15). But in the ASN.1, its value range starts from 0 as shown as follows.  PriorityLevel ::= INTEGER { spare (0), highest (1), lowest (14), no-priority (15) } (0..15) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | To have backward compatible change,   * for 9.3.1.51 *priority level* IE included in the *Non Dynamic 5QI Descriptor* IE and *Dynamic 5QI Descriptor* IE, add texts in the semantics description that the value 0 is not used in this version of the specification. * for the 9.3.1.29 *NG-RAN Allocation and Retention Priority* IE, update the priority level starting from 0.     Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has isolated with the previous version of the specification (same release).  This CR has an impact under protocol point of view.  The impact cannot be considered isolated because the change affects priority level included in the ARP and the QoS parameters. | | | | | | | | |
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| ***Consequences if not approved:*** | | Value 0 for *priority level* IE included in the *Non Dynamic 5QI Descriptor* IE and *Dynamic 5QI Descriptor* IE may be erroneously used in the specification.  Not aligned between the Tabular and the ASN.1 for the priority level IE included in the *Non Dynamic 5QI Descriptor* IE and *Dynamic 5QI Descriptor* IE, and included in the *NG-RAN Allocation and Retention Priority* IE. | | | | | | | | |
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| ***Clauses affected:*** | | 9.3.1.29, 9.3.1.51 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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: R3-231665  Rev1: R3-231927  Update based on online comments,   * update the cover page (category, summary of change etc) * update the semantics descriptions for 9.3.1.51 Priority Level * revert the changes in the semantics descriptions for Priority Level in 9.3.1.29 NG-RAN Allocation and Retention Priority. | | | | | | | | |

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| **Change Begins** |

**<Unchanged Text Omitted>**

#### 9.3.1.29 NG-RAN Allocation and Retention Priority

This IE specifies the relative importance of a QoS flow compared to other QoS flows for allocation and retention of NG-RAN resources.

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| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| Priority Level | M |  | INTEGER (0..15) | **Desc**.: This IE defines the relative importance of a resource request (see TS 23.501 [20]).  **Usage**: Values are ordered in decreasing order of priority, i.e., with 1 as the highest priority and 15 as the lowest priority. Further usage is defined in TS 23.501 [20]. |
| Pre-emption Capability | M |  | ENUMERATED (shall not trigger pre-emption, may trigger pre-emption) | **Desc.:** This IE indicates the pre-emption capability of the request on other QoS flows.  **Usage**: The QoS flow shall not pre-empt other QoS flows or, the QoS flow may pre-empt other QoS flows.  Specified in TS 23.501 [20]  NOTE: The Pre-emption Capability indicator applies to the allocation of resources for a QoS flow and as such it provides the trigger to the pre-emption procedures/processes of the NG-RAN node. |
| Pre-emption Vulnerability | M |  | ENUMERATED (not pre-emptable, pre-emptable) | **Desc.**: This IE indicates the vulnerability of the QoS flow to pre-emption of other QoS flows.  **Usage**: The QoS flow shall not be pre-empted by other QoS flows or the QoS flow may be pre-empted by other QoS flows. Specified in TS 23.501 [20]  NOTE: The Pre-emption Vulnerability indicator applies for the entire duration of the QoS flow, unless modified and as such indicates whether the QoS flow is a target of the pre-emption procedures/processes of the NG-RAN node. |

**<Unchanged Text Omitted>**

#### 9.3.1.51 Priority Level

This IE indicates the Priority Level for a QoS Flow.

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| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| Priority Level | M |  | INTEGER (0..127, …) | Values ordered in decreasing order of priority i.e. with 1 as the highest priority and 127 as the lowest priority.  The value 0 is not used in this version of specification. |

**<Unchanged Text Omitted>**

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### 9.4.5 Information Element Definitions

-- ASN1START

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-- Information Element Definitions

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

**<Below is provided for reference without changes>**

PLMN-Identity ::= OCTET STRING (SIZE(3))

PortNumber ::= BIT STRING (SIZE(16))

PPI ::= INTEGER (0..7, ...)

PriorityLevel ::= INTEGER { spare (0), highest (1), lowest (14), no-priority (15) } (0..15)

**<Below is provided for reference without changes>**

QoS-Flow-Mapping-Indication ::= ENUMERATED {ul, dl, ...}

QoS-Flows-DRB-Remapping ::= ENUMERATED {update, source-configuration, ...}

QoS-Parameters-Support-List ::= SEQUENCE {

eUTRAN-QoS-Support-List EUTRAN-QoS-Support-List OPTIONAL,

nG-RAN-QoS-Support-List NG-RAN-QoS-Support-List OPTIONAL,

iE-Extensions ProtocolExtensionContainer { { QoS-Parameters-Support-List-ItemExtIEs} } OPTIONAL,

...

}

QoS-Parameters-Support-List-ItemExtIEs E1AP-PROTOCOL-EXTENSION ::= {

...

}

QoSPriorityLevel ::= INTEGER (0..127, ...)

**<Unchanged Text Omitted>**

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| **Change Ends** |