**3GPP TSG-RAN WG3 Meeting #128R3-25xxxx**

**Malta, MT, 19 - 23 May, 2025**

Agenda Item: 21.3

Source: Ericsson, China Telecom

Title: [TP to XR BL CR for 38.413] Update on XR NGAP issues

Document for: Other

# 1 Introduction

This TP adds the following changes:

1. **Capture that the NG-RAN node ignores the PSDB and PSER in AQP by adding semantics description in the 9.3.1.151 Alternative QoS Parameters Set List.**
2. **define available bitrate and threshold as a 32-bit integer with unit kbps.**
3. **Use value “8” for maxnoofThresholds for available data rate reporting**
4. **Remove FFS on MMSID octet string size.**

This annex below provides the TP to BLCR for TS38.413.

# TP to BL CR for TS 38.413

***-----------------Start of the Changes-------------------***

#### 9.3.1.12 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 |  | 9.3.1.28 |  | - |  |
| *>Dynamic 5QI* |  |  |  |  |  |  |
| >>Dynamic 5QI Descriptor | M |  | 9.3.1.18 |  | - |  |
| Allocation and Retention Priority | M |  | 9.3.1.19 |  | - |  |
| GBR QoS Flow Information | O |  | 9.3.1.10 | 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 [9]. This IE may be present in case of Non-GBR QoS flows 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.  This IE may be present in case of Non-GBR QoS flows and is ignored otherwise. | - |  |
| QoS Monitoring Request | O |  | ENUMERATED (UL, DL, Both, …, stop) | Indicates to measure UL, or DL, or both UL/DL delays for the associated QoS flow or stop the corresponding QoS monitoring. | 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 |
| **PDU Set QoS Parameters** |  | *0..1* |  |  | YES | ignore |
| >UL PDU Set QoS Information | O |  | PDU Set QoS Information  9.3.1.264 |  | - |  |
| >DL PDU Set QoS Information | O |  | PDU Set QoS Information  9.3.1.264 |  | - |  |
| DL PDU Set Information Marking Support Indication | O |  | ENUMERATED (true, …) |  | YES | ignore |
| Monitoring Request on Available Data Rate |  | 0..1 |  |  | YES | ignore |
| >Monitoring Request | M |  | ENUMERATED (ul, dl, both, stop, …) | Indicates to monitor and report UL, or DL, or both UL/DL available data rate for the associated QoS flow as specified in TS 23.501 [9], or stop the corresponding QoS monitoring. | - | ignore |
| >DL Available Data Rate Report Thresholds | C-ifReportDL |  | Available Data Rate Report Threshold List  9.3.1.x |  | - | ignore |
| >UL Available Data Rate Report Thresholds | C-ifReportUL |  | Available Data Rate Report Threshold List  9.3.1.x |  | - | ignore |
| MMSID | O |  | OCTET STRING (SIZE(1)) | Multi-modal service ID from the application, used to indicate QoS flows are related to a multi-modal service, as specified in TS 23.501 [9] and TS 38.300 [8]. | YES | ignore |
| Indication of Bitrate Adaptation | O |  | ENUMERATED (uplink, …) | Indicates that the QoS Flow allows rate adaptation in the indicated direction. | YES | ignore |

|  |  |
| --- | --- |
| Condition | Explanation |
| ifReportDL | This IE shall be present if the *Monitoring Request* IE is set to the value “dl” or “both”. |
| ifReportUL | This IE shall be present if the Monitoring Request IE is set to the value “ul” or “both”. |

***-----------------Next Changes-------------------***

9.3.1.151 Alternative QoS Parameters Set List

This IE contains alternative sets of QoS parameters which the NG-RAN node can indicate to be fulfilled when notification control is enabled and it cannot fulfil the requested list of QoS parameters.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| **Alternative QoS Parameters Set Item** |  | *1..<maxnoofQoSparaSets>* |  |  |  |  |
| >Alternative QoS Parameters Set Index | M |  | 9.3.1.152 |  | - |  |
| >Guaranteed Flow Bit Rate Downlink | O |  | Bit Rate  9.3.1.4 |  | - |  |
| >Guaranteed Flow Bit Rate Uplink | O |  | Bit Rate  9.3.1.4 |  | - |  |
| >Packet Delay Budget | O |  | 9.3.1.80 |  | - |  |
| >Packet Error Rate | O |  | 9.3.1.81 |  | - |  |
| >Maximum Data Burst Volume | O |  | 9.3.1.83 | Maximum Data Burst Volume is specified in TS 23.501 [9].  This IE is included if the *Delay Critical* IE is set to "delay critical" and is ignored otherwise. | YES | ignore |
| >PDU Set Delay Budget Downlink | O |  | 9.3.1.135 | This IE is included if the *PDU Set Packet Delay Budget* IE in the *DL PDU Set QoS Information* IE is present and is ignored otherwise. | YES | ignore |
| >PDU Set Delay Budget Uplink | O |  | 9.3.1.135 | This IE is included if the *PDU Set Packet Delay Budget* IE in the *UL PDU Set QoS Information* IE is present and is ignored otherwise. | YES | ignore |
| >PDU Set Error Rate Downlink | O |  | 9.3.1.81 | This IE is included if the *PDU Set Error Rate* IE in the *DL PDU Set QoS Information* IE is present and is ignored otherwise. | YES | ignore |
| >PDU Set Error Rate Uplink | O |  | 9.3.1.81 | This IE is included if the *PDU Set Error Rate* IE in the *UL PDU Set QoS Information* IE is present and is ignored otherwise. | YES | ignore |

***-----------------Next Changes-------------------***

9.3.1.x Available Data Rate Report Threshold List

This IE contains a list of available data rate report thresholds. It is used for available data rate report for UL and DL as specified in TS 23.501 [9].

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** |
| **Available Data Rate Report Threshold Item** |  | *1..<maxnoofThresholds>* |  |  |
| >Reporting Threshold | M |  | INTEGER (0..4000000000) | This IE indicates the Reporting threshold as specified in TS 23.501 [9]. The unit is Kbps. |

|  |  |
| --- | --- |
| **Range bound** | **Explanation** |
| maxnoofThresholds | Maximum no. of thresholds allowed to be provided by the SMF. Value is 8. |

***-----------------Next Changes-------------------***

///////////////////////////////////////////////////////////////////////skip unrelated////////////////////////////////////////////////////////////////////////

***-----------------Next Changes-------------------***

}

<<<<<<<<<<<<<<<<<<<< Unaffected part is skipped >>>>>>>>>>>>>>>>>>>>

MDT-Location-Info-ExtIEs NGAP-PROTOCOL-EXTENSION ::= {

...

}

MDT-Location-Information::= BIT STRING (SIZE (8))

MMSID ::= OCTET STRING (SIZE (1))

<<<<<<<<<<<<<<<<<<<< Unaffected part is skipped >>>>>>>>>>>>>>>>>>>>

<<<<<<<<<<<<<<<<<<<< Unaffected part is skipped >>>>>>>>>>>>>>>>>>>>

ReportArea ::= ENUMERATED {

cell,

...

}

ReportingThreshold ::= INTEGER (0.. 4000000000)

RepetitionPeriod ::= INTEGER (0..131071)

***-----------------Next Changes-------------------***

9.4.7 Constant Definitions

-- ASN1START

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

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-- Constant definitions

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

<<<<<<<<<<<<<<<<<<<< Unaffected part is skipped >>>>>>>>>>>>>>>>>>>>

maxnoofPartiallyAllowedS-NSSAIs INTEGER ::= 8

maxnoofRSPPQoSFlows INTEGER ::= 2048

maxnoofThresholds INTEGER ::= 8

***-----------------End of the Changes-------------------***