**3GPP TSG- Meeting #R3-240891**

**, , 26 Feb. – 1 Mar. 2024**

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | 0104 | **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)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | Introduction of separate uplink and downlink PDU set QoS parameters |
|  |  |
| ***Source to WG:*** | Samsung, Ericsson, Nokia, Nokia Shanghai Bell, Qualcomm Inc., Xiaomi, China Telecom, ZTE, Huawei |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_XR\_enh-Core |  | ***Date:*** | 2024-02-19 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***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 canbe 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:*** | Based on the SA2 reply LS in R3-240021 on RAN3’s previous LS in R3-235891 on UL and DL PDU Set QoS parameters, SA2 has agreed to introduce separate DL and UL PDU Set QoS parameters in the QoS flow QoS Parameters received by NG-RAN from 5GC. |
|  |  |
| ***Summary of change:*** | Add separate UL and DL PDU Set QoS parameters in the QoS Flow QoS Parameters IE. |
|  |  |
| ***Consequences if not approved:*** | Cannot support separate DL and UL PDU Set QoS Parameters. |
|  |  |
| ***Clauses affected:*** | 9.3.1.26, 9.3.1.143, ASN.1 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.300 CRTS 38.413 CR 1085TS 38.423 CR 1149TS 38.473 CR 1278 |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

#### 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 Address9.3.2.4 | Identifies the TNL address used by the source node for data forwarding. | YES | ignore |
| PDU Set QoS Parameters |  | *0..1* |  |  | YES | ignore |
| >UL PDU Set QoS Information | O |  | PDU Set QoS Information9.3.1.143 |  | - |  |
| >DL PDU Set QoS Information | O |  | PDU Set QoS Information9.3.1.143 |  | - |  |

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

#### 9.3.1.143 PDU Set QoS Information

This IE defines PDU Set QoS information to be applied to a QoS flow.

| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| --- | --- | --- | --- | --- |
| PDU Set Delay Budget | O |  | Extended Packet Delay Budget9.3.1.79  | The PDU Set Delay Budget is specified in TS 23.501 [20]. |
| PDU Set Error Rate | O |  | Packet Error Rate9.3.1.48  | The PDU Set Error Rate is specified in TS 23.501 [20]. |
| PDU Set Integrated Handling Information | O |  | ENUMERATED (true, false, …) | The PDU Set Integrated Handling Information is specified in TS 23.501 [20]. |

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

PrivacyIndicator ::= ENUMERATED {

 immediate-MDT,

 logged-MDT,

 ...

}

PDUSetQoSParameters ::= SEQUENCE {

 ulPDUSetQoSInformation PDUsetQoSInformation OPTIONAL,

 dlPDUSetQoSInformation PDUsetQoSInformation OPTIONAL,

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

}

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

 ...

 }

PDUSetQoSInformation ::= SEQUENCE {

 pduSetDelayBudget ExtendedPacketDelayBudget OPTIONAL,

 pduSetErrorRate PacketErrorRate OPTIONAL,

 pduSetIntegratedHandlingInformation ENUMERATED {true, false, ...} OPTIONAL,

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

}

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

 ...

}

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<<<<<<<<<<<<<<<<<<<< End of Change >>>>>>>>>>>>>>>>>>>>