3GPP TSG-RAN WG3 Meeting #109-e R3-20xxxx

**Online, 17th – 27th August 2020**

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| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **38.423** | **CR** | **<CR#>** | **rev** | **-** | **Current version:** | **15.8.0** |  |
|  |
| *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:***  | Missing QoS Flow Mapping Indication IE in PDU Session Resource Modification Info – SN terminated IE. |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | NR\_newRAT-Core |  | ***Date:*** | 2020-08-06 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-15 |
|  | *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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | The tabular representation of the *PDU Session Resource Modification Info – SN terminated* IE is missing the *QoS Flow Mapping Indication* IE in the *QoS Flows To Be Setup List* IE, which does not align with ASN.1.Further, the *Additional UL NG-U UP TNL Information at UPF List* IE is misplaced in the *PDU Session Resources To Be Setup List* IE |
|  |  |
| ***Summary of change:*** | The *QoS Flow Mapping Indication* IE was added to the the *QoS Flows To Be Setup List* IE in the tabular representation of the *PDU Session Resource Modification Info – SN terminated* IE to align with ASN.1.The *Additional UL NG-U UP TNL Information at UPF List* IE was put in the right order within the *PDU Session Resources To Be Setup List* IE in order to align with the order in ASN.1Impact 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) because it corrects the tabular representation of the *PDU Session Resource Modification Info – SN terminated* IE, used in MR-DC signalling on Xn.The impact can be considered isolated because the change affects a subset of MR-DC functions only.The CR has no impact on ASN.1. |
|  |  |
| ***Consequences if not approved:*** | Tabular and ASN.1 would not be aligned. |
|  |  |
| ***Clauses affected:*** | 9.2.1.9 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.423 CR ... Rel-16 |
| ***affected:*** |  | **X** |  Test specifications |  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications |  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

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

#### 9.2.1.1 PDU Session Resources To Be Setup List

This IE contains PDU session resource related information used at UE context transfer between NG-RAN nodes.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| **PDU Session Resources To Be Setup List** |  | *1* |  |  | – |  |
| **>PDU Session Resources To Be Setup Item** |  | *1 .. <maxnoof PDU sessions >* |  |  | – |  |
| >>PDU Session ID | M |  | 9.2.3.18 |  | – |  |
| >>S-NSSAI | M |  | 9.2.3.21 |  | – |  |
| >>PDU Session Resource Aggregate Maximum Bitrate | O |  | PDU Session Aggregate Maximum Bit Rate9.2.3.69 | This IE shall be present when at least one Non-GBR QoS Flow has been setup. | – |  |
| >>UL NG-U UP TNL Information at UPF  | M |  | UP Transport Layer Information 9.2.3.30 | UPF endpoint of the NG-U transport bearer. For delivery of UL PDUs | – |  |
|  |  |  |  |  |  |  |
| >>Source DL NG-U TNL Information  | O |  | UP Transport Layer Information 9.2.3.30 | Indicates the possibility to keep the NG-U GTP-U tunnel termination point at the target NG-RAN node. | – |  |
| >>Security Indication | O |  | 9.2.3.52 |  | – |  |
| >>PDU Session Type | M |  | 9.2.3.19 |  | – |  |
| >>Network Instance | O |  | 9.2.3.85 | This IE is ignored if the *Common Network Instance* IE is present. | – |  |
| **>>QoS Flows To Be Setup List** |  | *1* |  |  | – |  |
| **>>>QoS Flows To Be Setup Item** |  | *1 .. <maxnoofQoSFlows>* |  |  | – |  |
| >>>>QoS Flow Identifier | M |  | 9.2.3.10 |  | – |  |
| >>>>QoS Flow Level QoS Parameters  | M |  | 9.2.3.5 |  | – |  |
| >>>>E-RAB ID | O |  | INTEGER (0..15, …) |  | – |  |
| >>Data Forwarding and Offloading Info from source NG-RAN node | O |  | 9.2.1.17 |  | – |  |
| >>Additional UL NG-U UP TNL Information at UPF List | O |  | Additional UP Transport Layer Information 9.2.1.32 | Additional UPF endpoint of the NG-U transport bearer. For delivery of UL PDUs | YES | ignore |
| >> Common Network Instance | O |  | 9.2.3.92 |  | YES | ignore |

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| --- | --- |
| Range bound | Explanation |
| maxnoofPDUSessions | Maximum no. of PDU sessions. Value is 256 |
| maxnoofQoSFlows | Maximum no. of QoS flows allowed within one PDU session. Value is 64. |

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

#### 9.2.1.9 PDU Session Resource Modification Info – SN terminated

This IE contains information related to a PDU session resource for an M-NG-RAN node initiated request to modify DRBs configured with an SN terminated bearer option.

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| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| UL NG-U UP TNL Information at UPF | O |  | UP Transport Layer Information 9.2.3.30 | UPF endpoint of the NG-U transport bearer. For delivery of UL PDUs | – |  |
| Network Instance | O |  | 9.2.3.85 | This IE shall be ignored if the *Common Network Instance* IE is present. | – |  |
| **QoS Flows To Be Setup List** |  | *0..1* |  |  | – |  |
| **>QoS Flows To Be Setup Item** |  | *1 .. <maxnoofQoSFlows>* |  |  | – |  |
| >>QoS Flow Identifier  | M |  | 9.2.3.10 |  | – |  |
| >>QoS Flow Level QoS Parameters  | M |  | 9.2.3.5 | For GBR QoS flows, this IE contains GBR QoS flow information as received at NG-C  | – |  |
| >>Offered GBR QoS Flow Information  | O |  | GBR QoS Flow Information9.2.3.6 | This IE contains M-Node offered GBR QoS Flow Information.  | – |  |
| >>QoS Flow Mapping Indication | O |  | 9.2.3.79 |  | – |  |
| Data Forwarding and Offloading Info from source NG-RAN node | O |  | 9.2.1.17 | Applicable for the QoS flows contained in the *QoS Flows To Be Setup List* IE. | – |  |
| **QoS Flows To Be Modified List** |  | *0..1* |  |  | – |  |
| **>QoS Flows To Be Modified Item** |  | *1 .. <maxnoofQoSFlows>* |  |  | – |  |
| >>QoS Flow Identifier  | M |  | 9.2.3.10 |  | – |  |
| >>QoS Flow Level QoS Parameters  | O |  | 9.2.3.5 | For GBR QoS flows, this IE contains GBR QoS flow information as received at NG-C  | – |  |
| >>Offered GBR QoS Flow Information  | O |  | GBR QoS Flow Information9.2.3.6 | This IE contains M-Node offered GBR QoS Flow Information.  | – |  |
| QoS Flows To Be Released List |  | *0..1* | QoS Flow List with Cause9.2.1.4 |  | – |  |
| **DRBs To Be Modified List** |  | *0..1* |  |  | – |  |
| **>DRBs to Be Modified Item** |  | *1 .. <maxnoofDRBs>* |  |  | – |  |
| >>DRB ID | M |  | 9.2.3.33 |  | – |  |
| >>MN DL CG UP TNL Information | O |  | UP Transport Parameters 9.2.3.76 | M-NG-RAN node GTP-U endpoint(s) of a DRB’s Xn transport bearer at its lower layer CG resource. For delivery of DL PDUs. | – |  |
| >>secondary MN DL CG UP TNL Information | O |  | UP Transport Parameters 9.2.3.76 | M-NG-RAN node GTP-U endpoint(s) of a DRB’s Xn transport bearer at its lower layer CG resource. For delivery of DL PDUs in case of PDCP duplication. | – |  |
| >>LCID | O |  | 9.2.3.70 | LCID for primary path if PDCP duplication is applied | – |  |
| >>RLC Status | O |  | 9.2.3.80 |  | – |  |
| DRBs To Be Released List | O |  | DRB List with Cause9.2.1.28 |  | – |  |
| Common Network Instance | O |  | 9.2.3.92 |  | YES | ignore |
| Default DRB Allowed | O |  | 9.2.3.93 |  | YES | ignore |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoofQoSFlows | Maximum no. of QoS flows. Value is 64. |

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

<<<<<<<<<<<<<<<<<<<< begin of ASN.1 quote for information only >>>>>>>>>>>>>>>>>>>>

### 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

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-- PDU Session Resources To Be Setup List

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

PDUSessionResourcesToBeSetup-List ::= SEQUENCE (SIZE(1..maxnoofPDUSessions)) OF PDUSessionResourcesToBeSetup-Item

PDUSessionResourcesToBeSetup-Item ::= SEQUENCE {

 pduSessionId PDUSession-ID,

 s-NSSAI S-NSSAI,

 pduSessionAMBR PDUSessionAggregateMaximumBitRate OPTIONAL,

 uL-NG-U-TNLatUPF UPTransportLayerInformation,

 source-DL-NG-U-TNL-Information UPTransportLayerInformation OPTIONAL,

 securityIndication SecurityIndication OPTIONAL,

 pduSessionType PDUSessionType,

 pduSessionNetworkInstance PDUSessionNetworkInstance OPTIONAL,

 qosFlowsToBeSetup-List QoSFlowsToBeSetup-List,

 dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {PDUSessionResourcesToBeSetup-Item-ExtIEs} } OPTIONAL,

 ...

}

PDUSessionResourcesToBeSetup-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-Additional-UL-NG-U-TNLatUPF-List CRITICALITY ignore EXTENSION Additional-UL-NG-U-TNLatUPF-List PRESENCE optional}|

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

 ...

}

<<<<<<<<<<<<<<<<<<<< Unmodified Text omitted >>>>>>>>>>>>>>>>>>>>

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

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-- PDU Session Resource Modification Info - SN terminated

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

PDUSessionResourceModificationInfo-SNterminated ::= SEQUENCE {

 uL-NG-U-TNLatUPF UPTransportLayerInformation OPTIONAL,

 pduSessionNetworkInstance PDUSessionNetworkInstance OPTIONAL,

 qosFlowsToBeSetup-List QoSFlowsToBeSetup-List-Setup-SNterminated OPTIONAL,

 dataforwardinginfofromSource DataforwardingandOffloadingInfofromSource OPTIONAL,

 qosFlowsToBeModified-List QoSFlowsToBeSetup-List-Modified-SNterminated OPTIONAL,

 qoSFlowsToBeReleased-List QoSFlows-List-withCause OPTIONAL,

 drbsToBeModifiedList DRBsToBeModified-List-Modified-SNterminated OPTIONAL,

 dRBsToBeReleased DRB-List-withCause OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {PDUSessionResourceModificationInfo-SNterminated-ExtIEs} } OPTIONAL,

 ...

}

PDUSessionResourceModificationInfo-SNterminated-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

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

 {ID id-DefaultDRB-Allowed CRITICALITY ignore EXTENSION DefaultDRB-Allowed PRESENCE optional},

 ...

}

QoSFlowsToBeSetup-List-Modified-SNterminated ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF QoSFlowsToBeSetup-List-Modified-SNterminated-Item

QoSFlowsToBeSetup-List-Modified-SNterminated-Item ::= SEQUENCE {

 qfi QoSFlowIdentifier,

 qosFlowLevelQoSParameters QoSFlowLevelQoSParameters OPTIONAL,

 offeredGBRQoSFlowInfo GBRQoSFlowInfo OPTIONAL,

 qosFlowMappingIndication QoSFlowMappingIndication OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {QoSFlowsToBeSetup-List-Modified-SNterminated-Item-ExtIEs} } OPTIONAL,

 ...

}

DRBsToBeModified-List-Modified-SNterminated ::= SEQUENCE (SIZE(1..maxnoofDRBs)) OF DRBsToBeModified-List-Modified-SNterminated-Item

DRBsToBeModified-List-Modified-SNterminated-Item ::= SEQUENCE {

 drb-ID DRB-ID,

 mN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

 secondary-MN-DL-SCG-UP-TNLInfo UPTransportParameters OPTIONAL,

 lCID LCID OPTIONAL,

 rlc-status RLC-Status OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {DRBsToBeModified-List-Modified-SNterminated-Item-ExtIEs} } OPTIONAL,

 ...

}

DRBsToBeModified-List-Modified-SNterminated-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

<<<<<<<<<<<<<<<<<<<< end of ASN.1 quote for information only >>>>>>>>>>>>>>>>>>>>