3GPP TSG-RAN WG3 #116-e R3-223905

**Electronic Meeting, 9th – 19th May 2022 Online**

|  |
| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.463** | **CR** | **0694** | **rev** | **1** | **Current version:** | **16.9.0** |  |
|  |
| *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 |  |

|  |
| --- |
|  |
| ***Title:***  | Extended PDCP Discard Timer over E1 interface |
|  |  |
| ***Source to WG:*** | China Telecom, ZTE,CATT,Huawei,Nokia, Nokia Shanghai Bell, Intel Corporation |
| ***Source to TSG:*** | RAN3 |
|  |  |
| ***Work item code:*** | NR\_NewRAT-Core, TEI16 |  | ***Date:*** | 2022-04-18 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***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 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:*** | In Rel-16, a new IE *DiscardtimerExt* was introduced in TS 38.331 to support URLLC enhancement. However, this IE is not supported in E1AP. |
|  |  |
| ***Summary of change:*** | a new IE *DiscardtimerExt* was introduced in PDCP configuration to support smaller values for PDCP discard timer.Impact assessment towards the previous version of the specification (same release):This CR has an isolated impact towards the previous version of the specification (same release). |
|  |  |
| ***Consequences if not approved:*** | The CU-UP could not be configured with smaller values for PDCP discard timer. And some URLLC use cases such as motion control could not be supported in CP/UP split architecture. |
|  |  |
| ***Clauses affected:*** | 9.3.1.x, 9.3.1.38, 9.4.5, 9.4.7 |
|  |  |
|  | **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:*** | V1: ASN.1 and new IE name update |

////////////////////////////////////////////////////////////////////////start of change ////////////////////////////////////////////////////////////////////////

#### 9.3.1.38 PDCP Configuration

This IE carries the PDCP configuration.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| PDCP SN UL Size | M |  | PDCP SN Size9.3.1.61 | Indicates the PDCP SN UL size in bits. For more information see *PDCP-Config IE* in TS 38.331 [10]. Is ignored if received through *DRB To Modify List* IE in the BEARER CONTEXT MODIFICATION REQUEST message. | - | - |
| PDCP SN DL Size | M |  | PDCP SN Size9.3.1.61 | Indicates the PDCP SN DL size in bits. For more information see *PDCP-Config IE* in TS 38.331 [10]. Is ignored if received through *DRB To Modify List* IE in the BEARER CONTEXT MODIFICATION REQUEST message. | - | - |
| RLC mode | M |  | ENUMERATED (RLC-TM, RLC-AM, RLC-UM-Bidirectional, RLC-UM-Unidirectional-UL, RLC-UM-Unidirectional-DL, …) | Indicates the RLC mode for the DRB. For more information see *PDCP-Config IE* in TS 38.331 [10]. Is ignored if received through *DRB To Modify List* IE in the BEARER CONTEXT MODIFICATION REQUEST message. | - | - |
| ROHC Parameters | O |  | 9.3.1.40 |  | - | - |
| T-Reordering Timer | O |  | 9.3.1.41 |  | - | - |
| Discard Timer | O |  | 9.3.1.42 | This IE is ignored if the *Discard Timer Extended* IE is present. | - | - |
| UL Data Split Threshold | O |  | 9.3.1.43 |  | - | - |
| PDCP Duplication  | O |  | ENUMERATED (True, …) | Indicates whether PDCP duplication is to be configured for the DRB. This IE is ignored when the “*Additional PDCP duplication Information*” IE is present. | - | - |
| PDCP Re-establishment | O |  | ENUMERATED (true,…) | Indicates PDCP entity re-establishment to be triggered as defined in TS 38.323 [17] | - | - |
| PDCP Data Recovery | O |  | ENUMERATED (true,…) | Indicates PDCP data recovery to be triggered as defined in TS 38.323 [17] | - | - |
| Duplication Activation | O |  | ENUMERATED (Active, Inactive, …)  | Information on the initial state of DL PDCP duplication | - | - |
| Out Of Order Delivery | O |  | ENUMERATED (true,…) | Indicates whether or not outOfOrderDelivery specified in TS 38.323 [17] is configured. Out of order delivery is configured only when the radio bearer is established. | - | - |
| PDCP Status Report Indication | O |  | ENUMERATED (downlink, uplink, both, …) | For AM DRB, “downlink” indicates that the PDCP entity is configured to send PDCP status report(s) to the UE, and “uplink” indicates that the UE is configured to send PDCP status report(s), as specified in TS 38.323 [17]. “both” indicates that both “downlink” and “uplink” should be applied. | YES | ignore |
| Additional PDCP duplication Information | O |  | ENUMERATED (three, four, …) | Indicates the number of PDCP duplication configured when it is more than 2 for the DRB | YES | ignore |
| EHC Parameters | O |  | 9.3.1.90 |  | YES | ignore |
| Discard Timer Extended | O |  | 9.3.1.x |  | YES | reject |

////////////////////////////////////////////////////////////////////////skip unchanged////////////////////////////////////////////////////////////////////////

#### 9.3.1.x Discard Timer Extended

This IE indicates the extended PDCP discard timer.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** |
| Discard Timer Extended | M |  | ENUMERATED (0.5, 1, 2, 4, 6, 8, …) | Indicates the PDCP discard timer. The values are expressed in *ms*. For more information see *DiscardTimerExt-r16* in *PDCP-Config* IE in TS 38.331 [10]. |

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### 9.4.5 Information Element Definitions

-- ASN1START

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

--

-- 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

IMPORTS

 id-CommonNetworkInstance,

 id-SNSSAI,

 id-OldQoSFlowMap-ULendmarkerexpected,

 id-DRB-QoS,

 id-endpoint-IP-Address-and-Port,

 id-NetworkInstance,

 id-QoSFlowMappingIndication,

 id-TNLAssociationTransportLayerAddressgNBCUUP,

 id-Cause,

 id-QoSMonitoringRequest,

 id-QosMonitoringReportingFrequency,

 id-QoSMonitoringDisabled,

 id-PDCP-StatusReportIndication,

 id-RedundantCommonNetworkInstance,

 id-redundant-nG-UL-UP-TNL-Information,

 id-redundant-nG-DL-UP-TNL-Information,

 id-RedundantQosFlowIndicator,

 id-TSCTrafficCharacteristics,

 id-ExtendedPacketDelayBudget,

 id-CNPacketDelayBudgetDownlink,

 id-CNPacketDelayBudgetUplink,

 id-AdditionalPDCPduplicationInformation,

 id-RedundantPDUSessionInformation,

 id-RedundantPDUSessionInformation-used,

 id-QoS-Mapping-Information,

 id-MDTConfiguration,

 id-TraceCollectionEntityURI,

 id-EHC-Parameters,

 id-DAPSRequestInfo,

 id-EarlyForwardingCOUNTReq,

 id-EarlyForwardingCOUNTInfo,

 id-AlternativeQoSParaSetList,

 id-MCG-OfferedGBRQoSFlowInfo,

 id-Number-of-tunnels,

 id-DataForwardingtoE-UTRANInformationList,

 id-DataForwardingtoNG-RANQoSFlowInformationList,

 id-MaxCIDEHCDL,

 id-ignoreMappingRuleIndication,

 id-EarlyDataForwardingIndicator,

 id-QoSFlowsDRBRemapping,

 id-SecurityIndicationModify,

 id-DataForwardingSourceIPAddress,

 id-DiscardTimerExtended,

 maxnoofQoSParaSets,

 maxnoofErrors,

 maxnoofSliceItems,

 maxnoofEUTRANQOSParameters,

 maxnoofNGRANQOSParameters,

 maxnoofDRBs,

 maxnoofPDUSessionResource,

 maxnoofQoSFlows,

 maxnoofUPParameters,

 maxnoofCellGroups,

 maxnooftimeperiods,

 maxnoofNRCGI,

 maxnoofTLAs,

 maxnoofGTPTLAs,

 maxnoofSPLMNs,

 maxnoofMDTPLMNs,

 maxnoofExtSliceItems,

 maxnoofDataForwardingTunneltoE-UTRAN,

 maxnoofExtNRCGI

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-- D

DAPSRequestInfo ::= SEQUENCE {

 dapsIndicator ENUMERATED {daps-HO-required, ...},

 iE-Extensions ProtocolExtensionContainer { {DAPSRequestInfo-ExtIEs} } OPTIONAL,

 ...

}

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

 ...

}

Data-Forwarding-Information-Request ::= SEQUENCE {

 data-Forwarding-Request Data-Forwarding-Request,

 qoS-Flows-Forwarded-On-Fwd-Tunnels QoS-Flow-Mapping-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { Data-Forwarding-Information-Request-ExtIEs } } OPTIONAL,

 ...

}

Data-Forwarding-Information-Request-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 ...

}

Data-Forwarding-Information ::= SEQUENCE {

 uL-Data-Forwarding UP-TNL-Information OPTIONAL,

 dL-Data-Forwarding UP-TNL-Information OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { Data-Forwarding-Information-ExtIEs } } OPTIONAL,

 ...

}

Data-Forwarding-Information-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 {ID id-DataForwardingtoNG-RANQoSFlowInformationList CRITICALITY ignore EXTENSION DataForwardingtoNG-RANQoSFlowInformationList PRESENCE optional},

 ...

}

Data-Forwarding-Request ::= ENUMERATED {

 uL,

 dL,

 both,

 ...

}

DataForwardingtoE-UTRANInformationList ::= SEQUENCE (SIZE(1.. maxnoofDataForwardingTunneltoE-UTRAN)) OF DataForwardingtoE-UTRANInformationListItem

DataForwardingtoE-UTRANInformationListItem ::= SEQUENCE {

 data-forwarding-tunnel-information  UP-TNL-Information,

 qoS-Flows-to-be-forwarded-List QoS-Flows-to-be-forwarded-List,

 iE-Extensions ProtocolExtensionContainer { { DataForwardingtoE-UTRANInformationListItem-ExtIEs} } OPTIONAL,

 ...

}

DataForwardingtoE-UTRANInformationListItem-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 ...

}

Data-Usage-per-PDU-Session-Report ::= SEQUENCE {

 secondaryRATType ENUMERATED {nR, e-UTRA, ...},

 pDU-session-Timed-Report-List SEQUENCE (SIZE(1..maxnooftimeperiods)) OF MRDC-Data-Usage-Report-Item,

 iE-Extensions ProtocolExtensionContainer { { Data-Usage-per-PDU-Session-Report-ExtIEs} } OPTIONAL,

...

}

Data-Usage-per-PDU-Session-Report-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 ...

}

Data-Usage-per-QoS-Flow-List ::= SEQUENCE (SIZE(1..maxnoofQoSFlows)) OF Data-Usage-per-QoS-Flow-Item

Data-Usage-per-QoS-Flow-Item ::= SEQUENCE {

 qoS-Flow-Identifier QoS-Flow-Identifier,

 secondaryRATType ENUMERATED {nR, e-UTRA, ...},

 qoS-Flow-Timed-Report-List SEQUENCE (SIZE(1..maxnooftimeperiods)) OF MRDC-Data-Usage-Report-Item,

 iE-Extensions ProtocolExtensionContainer { { Data-Usage-per-QoS-Flow-Item-ExtIEs} } OPTIONAL,

...

}

Data-Usage-per-QoS-Flow-Item-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 ...

}

Data-Usage-Report-List ::= SEQUENCE (SIZE(1.. maxnoofDRBs)) OF Data-Usage-Report-Item

Data-Usage-Report-Item ::= SEQUENCE {

 dRB-ID DRB-ID,

 rAT-Type RAT-Type,

 dRB-Usage-Report-List DRB-Usage-Report-List,

 iE-Extensions ProtocolExtensionContainer { { Data-Usage-Report-ItemExtIEs } } OPTIONAL,

 ...

}

Data-Usage-Report-ItemExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 ...

}

DefaultDRB ::= ENUMERATED {

 true,

 false,

 ...

}

DirectForwardingPathAvailability ::= ENUMERATED {

 inter-system-direct-path-available,

 ...,

 intra-system-direct-path-available

}

DiscardTimer ::= ENUMERATED {ms10, ms20, ms30, ms40, ms50, ms60, ms75, ms100, ms150, ms200, ms250, ms300, ms500, ms750, ms1500, infinity}

DiscardTimerExtended ::= ENUMERATED {ms0dot5, ms1, ms2, ms4, ms6, ms8,... }

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-- P

PacketDelayBudget ::= INTEGER (0..1023, ...)

PacketErrorRate ::= SEQUENCE {

 pER-Scalar PER-Scalar,

 pER-Exponent PER-Exponent,

 iE-Extensions ProtocolExtensionContainer { {PacketErrorRate-ExtIEs} } OPTIONAL,

 ...

}

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

 ...

}

PER-Scalar ::= INTEGER (0..9, ...)

PER-Exponent ::= INTEGER (0..9, ...)

PDCP-Configuration ::= SEQUENCE {

 pDCP-SN-Size-UL PDCP-SN-Size,

 pDCP-SN-Size-DL PDCP-SN-Size,

 rLC-Mode RLC-Mode,

 rOHC-Parameters ROHC-Parameters OPTIONAL,

 t-ReorderingTimer T-ReorderingTimer OPTIONAL,

 discardTimer DiscardTimer OPTIONAL,

 uLDataSplitThreshold ULDataSplitThreshold OPTIONAL,

 pDCP-Duplication PDCP-Duplication OPTIONAL,

 pDCP-Reestablishment PDCP-Reestablishment OPTIONAL,

 pDCP-DataRecovery PDCP-DataRecovery OPTIONAL,

 duplication-Activation Duplication-Activation OPTIONAL,

 outOfOrderDelivery OutOfOrderDelivery OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { PDCP-Configuration-ExtIEs } } OPTIONAL,

 ...

}

PDCP-Configuration-ExtIEs E1AP-PROTOCOL-EXTENSION ::= {

 {ID id-PDCP-StatusReportIndication CRITICALITY ignore EXTENSION PDCP-StatusReportIndication PRESENCE optional}|

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

 { ID id-EHC-Parameters CRITICALITY ignore EXTENSION EHC-Parameters PRESENCE optional}|

 { ID id-DiscardTimerExtended CRITICALITY reject EXTENSION DiscardTimerExtended PRESENCE optional},

 ...

}

////////////////////////////////////////////////////////////////////////skip unchanged////////////////////////////////////////////////////////////////////////

### 9.4.7 Constant Definitions

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

--

-- Constant definitions

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

////////////////////////////////////////////////////////////////////////skip unchanged////////////////////////////////////////////////////////////////////////

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

--

-- IEs

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

id-Cause ProtocolIE-ID ::= 0

id-CriticalityDiagnostics ProtocolIE-ID ::= 1

id-gNB-CU-CP-UE-E1AP-ID ProtocolIE-ID ::= 2

id-gNB-CU-UP-UE-E1AP-ID ProtocolIE-ID ::= 3

id-ResetType ProtocolIE-ID ::= 4

id-UE-associatedLogicalE1-ConnectionItem ProtocolIE-ID ::= 5

id-UE-associatedLogicalE1-ConnectionListResAck ProtocolIE-ID ::= 6

id-gNB-CU-UP-ID ProtocolIE-ID ::= 7

id-gNB-CU-UP-Name ProtocolIE-ID ::= 8

id-gNB-CU-CP-Name ProtocolIE-ID ::= 9

id-CNSupport ProtocolIE-ID ::= 10

id-SupportedPLMNs ProtocolIE-ID ::= 11

id-TimeToWait ProtocolIE-ID ::= 12

id-SecurityInformation ProtocolIE-ID ::= 13

id-UEDLAggregateMaximumBitRate ProtocolIE-ID ::= 14

id-System-BearerContextSetupRequest ProtocolIE-ID ::= 15

id-System-BearerContextSetupResponse ProtocolIE-ID ::= 16

id-BearerContextStatusChange ProtocolIE-ID ::= 17

id-System-BearerContextModificationRequest ProtocolIE-ID ::= 18

id-System-BearerContextModificationResponse ProtocolIE-ID ::= 19

id-System-BearerContextModificationConfirm ProtocolIE-ID ::= 20

id-System-BearerContextModificationRequired ProtocolIE-ID ::= 21

id-DRB-Status-List ProtocolIE-ID ::= 22

id-ActivityNotificationLevel ProtocolIE-ID ::= 23

id-ActivityInformation ProtocolIE-ID ::= 24

id-Data-Usage-Report-List ProtocolIE-ID ::= 25

id-New-UL-TNL-Information-Required ProtocolIE-ID ::= 26

id-GNB-CU-CP-TNLA-To-Add-List ProtocolIE-ID ::= 27

id-GNB-CU-CP-TNLA-To-Remove-List ProtocolIE-ID ::= 28

id-GNB-CU-CP-TNLA-To-Update-List ProtocolIE-ID ::= 29

id-GNB-CU-CP-TNLA-Setup-List ProtocolIE-ID ::= 30

id-GNB-CU-CP-TNLA-Failed-To-Setup-List ProtocolIE-ID ::= 31

id-DRB-To-Setup-List-EUTRAN ProtocolIE-ID ::= 32

id-DRB-To-Modify-List-EUTRAN ProtocolIE-ID ::= 33

id-DRB-To-Remove-List-EUTRAN ProtocolIE-ID ::= 34

id-DRB-Required-To-Modify-List-EUTRAN ProtocolIE-ID ::= 35

id-DRB-Required-To-Remove-List-EUTRAN ProtocolIE-ID ::= 36

id-DRB-Setup-List-EUTRAN ProtocolIE-ID ::= 37

id-DRB-Failed-List-EUTRAN ProtocolIE-ID ::= 38

id-DRB-Modified-List-EUTRAN ProtocolIE-ID ::= 39

id-DRB-Failed-To-Modify-List-EUTRAN ProtocolIE-ID ::= 40

id-DRB-Confirm-Modified-List-EUTRAN ProtocolIE-ID ::= 41

id-PDU-Session-Resource-To-Setup-List ProtocolIE-ID ::= 42

id-PDU-Session-Resource-To-Modify-List ProtocolIE-ID ::= 43

id-PDU-Session-Resource-To-Remove-List ProtocolIE-ID ::= 44

id-PDU-Session-Resource-Required-To-Modify-List ProtocolIE-ID ::= 45

id-PDU-Session-Resource-Setup-List ProtocolIE-ID ::= 46

id-PDU-Session-Resource-Failed-List ProtocolIE-ID ::= 47

id-PDU-Session-Resource-Modified-List ProtocolIE-ID ::= 48

id-PDU-Session-Resource-Failed-To-Modify-List ProtocolIE-ID ::= 49

id-PDU-Session-Resource-Confirm-Modified-List ProtocolIE-ID ::= 50

id-DRB-To-Setup-Mod-List-EUTRAN ProtocolIE-ID ::= 51

id-DRB-Setup-Mod-List-EUTRAN ProtocolIE-ID ::= 52

id-DRB-Failed-Mod-List-EUTRAN ProtocolIE-ID ::= 53

id-PDU-Session-Resource-Setup-Mod-List ProtocolIE-ID ::= 54

id-PDU-Session-Resource-Failed-Mod-List ProtocolIE-ID ::= 55

id-PDU-Session-Resource-To-Setup-Mod-List ProtocolIE-ID ::= 56

id-TransactionID ProtocolIE-ID ::= 57

id-Serving-PLMN ProtocolIE-ID ::= 58

id-UE-Inactivity-Timer ProtocolIE-ID ::= 59

id-System-GNB-CU-UP-CounterCheckRequest ProtocolIE-ID ::= 60

id-DRBs-Subject-To-Counter-Check-List-EUTRAN ProtocolIE-ID ::= 61

id-DRBs-Subject-To-Counter-Check-List-NG-RAN ProtocolIE-ID ::= 62

id-PPI ProtocolIE-ID ::= 63

id-gNB-CU-UP-Capacity ProtocolIE-ID ::= 64

id-GNB-CU-UP-OverloadInformation ProtocolIE-ID ::= 65

id-UEDLMaximumIntegrityProtectedDataRate ProtocolIE-ID ::= 66

id-PDU-Session-To-Notify-List ProtocolIE-ID ::= 67

id-PDU-Session-Resource-Data-Usage-List ProtocolIE-ID ::= 68

id-SNSSAI ProtocolIE-ID ::= 69

id-DataDiscardRequired ProtocolIE-ID ::= 70

id-OldQoSFlowMap-ULendmarkerexpected ProtocolIE-ID ::= 71

id-DRB-QoS ProtocolIE-ID ::= 72

id-GNB-CU-UP-TNLA-To-Remove-List ProtocolIE-ID ::= 73

id-endpoint-IP-Address-and-Port ProtocolIE-ID ::= 74

id-TNLAssociationTransportLayerAddressgNBCUUP ProtocolIE-ID ::= 75

id-RANUEID ProtocolIE-ID ::= 76

id-GNB-DU-ID ProtocolIE-ID ::= 77

id-CommonNetworkInstance ProtocolIE-ID ::= 78

id-NetworkInstance ProtocolIE-ID ::= 79

id-QoSFlowMappingIndication ProtocolIE-ID ::= 80

id-TraceActivation ProtocolIE-ID ::= 81

id-TraceID ProtocolIE-ID ::= 82

id-SubscriberProfileIDforRFP ProtocolIE-ID ::= 83

id-AdditionalRRMPriorityIndex ProtocolIE-ID ::= 84

id-RetainabilityMeasurementsInfo ProtocolIE-ID ::= 85

id-Transport-Layer-Address-Info ProtocolIE-ID ::= 86

id-QoSMonitoringRequest ProtocolIE-ID ::= 87

id-PDCP-StatusReportIndication ProtocolIE-ID ::= 88

id-gNB-CU-CP-Measurement-ID ProtocolIE-ID ::= 89

id-gNB-CU-UP-Measurement-ID ProtocolIE-ID ::= 90

id-RegistrationRequest ProtocolIE-ID ::= 91

id-ReportCharacteristics ProtocolIE-ID ::= 92

id-ReportingPeriodicity ProtocolIE-ID ::= 93

id-TNL-AvailableCapacityIndicator ProtocolIE-ID ::= 94

id-HW-CapacityIndicator ProtocolIE-ID ::= 95

id-RedundantCommonNetworkInstance ProtocolIE-ID ::= 96

id-redundant-nG-UL-UP-TNL-Information ProtocolIE-ID ::= 97

id-redundant-nG-DL-UP-TNL-Information ProtocolIE-ID ::= 98

id-RedundantQosFlowIndicator ProtocolIE-ID ::= 99

id-TSCTrafficCharacteristics ProtocolIE-ID ::= 100

id-CNPacketDelayBudgetDownlink ProtocolIE-ID ::= 101

id-CNPacketDelayBudgetUplink ProtocolIE-ID ::= 102

id-ExtendedPacketDelayBudget ProtocolIE-ID ::= 103

id-AdditionalPDCPduplicationInformation ProtocolIE-ID ::= 104

id-RedundantPDUSessionInformation ProtocolIE-ID ::= 105

id-RedundantPDUSessionInformation-used ProtocolIE-ID ::= 106

id-QoS-Mapping-Information ProtocolIE-ID ::= 107

id-DLUPTNLAddressToUpdateList ProtocolIE-ID ::= 108

id-ULUPTNLAddressToUpdateList ProtocolIE-ID ::= 109

id-NPNSupportInfo ProtocolIE-ID ::= 110

id-NPNContextInfo ProtocolIE-ID ::= 111

id-MDTConfiguration ProtocolIE-ID ::= 112

id-ManagementBasedMDTPLMNList ProtocolIE-ID ::= 113

id-TraceCollectionEntityIPAddress ProtocolIE-ID ::= 114

id-PrivacyIndicator ProtocolIE-ID ::= 115

id-TraceCollectionEntityURI ProtocolIE-ID ::= 116

id-URIaddress ProtocolIE-ID ::= 117

id-EHC-Parameters ProtocolIE-ID ::= 118

id-DRBs-Subject-To-Early-Forwarding-List ProtocolIE-ID ::= 119

id-DAPSRequestInfo ProtocolIE-ID ::= 120

id-CHOInitiation ProtocolIE-ID ::= 121

id-EarlyForwardingCOUNTReq ProtocolIE-ID ::= 122

id-EarlyForwardingCOUNTInfo ProtocolIE-ID ::= 123

id-AlternativeQoSParaSetList ProtocolIE-ID ::= 124

 id-ExtendedSliceSupportList ProtocolIE-ID ::= 125

id-MCG-OfferedGBRQoSFlowInfo ProtocolIE-ID ::= 126

id-Number-of-tunnels ProtocolIE-ID ::= 127

id-DRB-Measurement-Results-Information-List ProtocolIE-ID ::= 128

id-Extended-GNB-CU-CP-Name ProtocolIE-ID ::= 129

id-Extended-GNB-CU-UP-Name ProtocolIE-ID ::= 130

id-DataForwardingtoE-UTRANInformationList ProtocolIE-ID ::= 131

id-QosMonitoringReportingFrequency ProtocolIE-ID ::= 132

id-QoSMonitoringDisabled ProtocolIE-ID ::= 133

id-AdditionalHandoverInfo ProtocolIE-ID ::= 134

id-Extended-NR-CGI-Support-List ProtocolIE-ID ::= 135

id-DataForwardingtoNG-RANQoSFlowInformationList ProtocolIE-ID ::= 136

id-MaxCIDEHCDL ProtocolIE-ID ::= 137

id-ignoreMappingRuleIndication ProtocolIE-ID ::= 138

id-DirectForwardingPathAvailability ProtocolIE-ID ::= 139

id-EarlyDataForwardingIndicator ProtocolIE-ID ::= 140

id-QoSFlowsDRBRemapping ProtocolIE-ID ::= 141

id-DataForwardingSourceIPAddress ProtocolIE-ID ::= 142

id-SecurityIndicationModify ProtocolIE-ID ::= 143

id-IAB-Donor-CU-UPPSKInfo ProtocolIE-ID ::= 144

id-DiscardTimerExtended ProtocolIE-ID ::= xxx

END

-- ASN1STOP

////////////////////////////////////////////////////////////////////////end of change////////////////////////////////////////////////////////////////////////