**3GPP TSG-RAN WG3 Meeting #117bis-eR3-22xxxx**

**Online,10th Oct. – 18th Oct., 2022**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.423** | **CR** |  | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](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:*** | XnAP Corrections related to Excess Packet Delay | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | |
| ***Source to WG:*** | CATT | | | | | | | | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh-Core | | | | | | | | |  | ***Date:*** | | | 2022-08-15 | | | |
|  |  | | | | |  | | | | |  | | |  | | | |
| ***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:*** | | During the previous RAN3#115-e meeting it has been agreed to change the current M6 configuration IE over the NGAP by introducing the M6 Delay Threshold IE to enable the calculation of the PDCP Excess Packet Delay in the UL. However, this addition does not reflect the specification of Excess Packet Delay in RAN2 and it needs to be corrected. The corrected addition shall also be added over the XnAP. | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | |
| ***Summary of change:*** | | The Excess Packet Delay Threshold IE is introduced. This IE is a list of multiple values to reflect RAN2´s specifications.  Impact analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has a impact on the protocol.  This CR has functionality impact.  This CR impact can be considered isolated. | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | |
| ***Consequences if not approved:*** | | The RAN2 and RAN3 specifications are not in sync while RAN3 specification will fail to provide functionality already assumed by agreed RAN2 specifications | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | |
| ***Clauses affected:*** | | 9.2.3.131, 9.2.3.x, 9.3.5, 9.3.7 | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | |
|  | | **Y** | | **N** |  | | | | | | |  | | | | | |
| ***Other specs*** | |  | | **X** | Other core specifications | | | | | | | TS38.413 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:*** | |  | | | | | | | | | | | | | | | |

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<<<<<<<<<<<<<<<<<<<< Start of 1st set of Changes >>>>>>>>>>>>>>>>>>>>

9.2.3.131 M6 Configuration

This IE defines the parameters for M6 measurement collection.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** | **Criticality** | **Assigned Criticality** |
| M6 Report Interval | M |  | ENUMERATED (ms120,ms240,ms480,ms640,ms1024, ms2048, ms5120, ms10240, ms20480,ms40960,min1,min6,min12,min30, …) |  | – |  |
| M6 Links to log | M |  | ENUMERATED(uplink, downlink, both-uplink-and-downlink, …) |  | – |  |
| M6 Report Amount | O |  | ENUMERATED (1, 2, 4, 8, 16, 32, 64, infinity …) | Number of reports. | YES | ignore |
| Excess Packet Delay Threshold | O |  | 9.2.3.x | Indicates the excess packet delay threshold, as specified in TS 38.314 [42] | YES | ignore |

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9.2.3.x Excess Packet Delay Threshold

This IE defines the parameters for Excess Packet Delay Threshold configuration to support the calculation of the PDCP Excess Packet Delay in the UL per DRB as specified in TS 38.314 [42].

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| --- | --- | --- | --- | --- |
| **IE/Group Name** | **Presence** | **Range** | **IE type and reference** | **Semantics description** |
| **Excess Packet Delay Threshold Item** |  | *1..<maxnoofThresholds>* |  |  |
| >Excess Packet Delay Threshold Value | M |  | ENUMERATED (ms0.25, ms0.5, ms1, ms2, ms4, ms5, ms10, ms20, ms30, ms40, ms50, ms60, ms70, ms80, ms90, ms100, ms150, ms300,ms500, …) |  |

|  |  |
| --- | --- |
| **Range bound** | **Explanation** |
| maxnoofThresholds | Maximum no. of Thresholds allowed within one PDU session. Value is 255. |

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9.3.5 Information Element definitions

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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

IMPORTS

**-- TEXT OMITTED –**

id-Local-NG-RAN-Node-Identifier,

id-Neighbour-NG-RAN-Node-List,

id-FiveGProSeUEPC5AggregateMaximumBitRate,

id-Redcap-Bcast-Information,

id-UESliceMaximumBitRateList,

id-PositioningInformation,

id-ServedCellSpecificInfoReq-NR,

id-ExcessPacketDelayThreshold,

maxEARFCN,

maxnoofAllowedAreas,

maxnoofAMFRegions,

maxnoofAoIs,

-------Text no need to change omitted-------

maxnoofSNSSAIforQMC,

maxnoofCellIDforQMC,

maxnoofPLMNforQMC,

maxnoofTAforQMC,

maxnoofMTCItems,

maxnoofCSIRSconfigurations,

maxnoofCSIRSneighbourCells,

maxnoofCSIRSneighbourCellsInMTC,

maxnoofNeighbour-NG-RAN-Nodes,

maxnoofSRBs,

maxnoofSMBR,

maxnoofThresholds

-------Text no need to change omitted-------

**-- TEXT OMITTED –**

M6Configuration ::= SEQUENCE {

m6report-Interval M6report-Interval,

m6-links-to-log Links-to-log,

iE-Extensions ProtocolExtensionContainer { { M6Configuration-ExtIEs} } OPTIONAL,

...

}

M6Configuration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-M6ReportAmount CRITICALITY ignore EXTENSION M6ReportAmountMDT PRESENCE optional }|

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

...

}

ExcessPacketDelayThreshold ::= SEQUENCE (SIZE(1..maxnoofThresholds)) OF ExcessPacketDelay-thresholdItem

ExcessPacketDelay-thresholdItem ::= SEQUENCE {

excessPacketDelay-thresholdValue ExcessPacketDelay-thresholdValue,

iE-Extensions ProtocolExtensionContainer { { ExcessPacketDelay-thresholdItem-ExtIEs} } OPTIONAL,

...

}

ExcessPacketDelay-thresholdItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

ExcessPacketDelay-thresholdValue ::= ENUMERATED {

ms0.25, ms0.5, ms1, ms2, ms4, ms5, ms10, ms20, ms30, ms40, ms50, ms60, ms70, ms80, ms90, ms100, ms150, ms300, ms500,

...

}

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9.3.7 Constant Definitions

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--

-- Constant definitions

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

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

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-- Lists

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**-- TEXT OMITTED –**

maxnoofNeighbour-NG-RAN-Nodes INTEGER ::= 256

maxnoofSRBs INTEGER ::= 5

maxnoofSMBR INTEGER ::= 8

maxnoofThresholds INTEGER ::= 255

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

--

-- IEs

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

**-- TEXT OMITTED –**

ProtocolIE-ID ::= 353

id-SDTPartialUEContextInfo ProtocolIE-ID ::= 354

id-SDTDataForwardingDRBList ProtocolIE-ID ::= 355

id-PagingCause ProtocolIE-ID ::= 356

id-PEIPSassistanceInformation ProtocolIE-ID ::= 357

id-UESliceMaximumBitRateList ProtocolIE-ID ::= 358

id-S-NG-RANnodeUE-Slice-MBR ProtocolIE-ID ::= 359

id-PositioningInformation ProtocolIE-ID ::= 360

id-UEAssistantIdentifier ProtocolIE-ID ::= 361

id-ManagementBasedMDTPLMNModificationList ProtocolIE-ID ::= 362

id-F1-terminatingIAB-donorIndicator ProtocolIE-ID ::= 363

id-ExcessPacketDelayThreshold ProtocolIE-ID ::= xxx

END

-- ASN1STOP

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