**3GPP TSG-RAN WG3 Meeting #117bis-eR3-226037**

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

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| --- |
| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
|  |
|  | **38.413** | **CR** | **0900** | **rev** | **-** | **Current version:** | **17.2.0** |  |
|  |
| *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 | **X** |

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|  |
| ***Title:***  | NGAP Corrections related to Excess Packet Delay |
|  |  |
| ***Source to WG:*** | CATT |
| ***Source to TSG:*** | R3  |
|  |  |
| ***Work item code:*** | NR\_ENDC\_SON\_MDT\_enh-Core |  | ***Date:*** | 2022-10-14 |
|  |  |  |  |  |
| ***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 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:*** | During the previous RAN3#115-e meeting it has been agreed to change the current M6 configuration IE 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. |
|  |  |
| ***Summary of change:*** | The M6 Delay Threshold IE is renamed to Excess Packet Delay Threshold IE. This IE is changed from single enumerated value to a list of multiple values to align with 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.This CR is NBC |
|  |  |
| ***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:*** | 9.3.1.174, 9.3.1.x, 9.4.5, 9.4.7 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS38.423 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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9.3.1.174 M6 Configuration

This IE defines the parameters for M6 measurement collection.

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| **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 |  | 9.3.1.x  | Indicates the excess packet delay threshold, as specified in TS 38.314 [42] | YES | ignore |

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9.3.1.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 [48].

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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, …) |  |

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| --- | --- |
| **Range bound** | **Explanation** |
|  maxnoofThresholds | Maximum no. of Thresholds allowed for a UE. Value is 255. |

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9.4.5 Information Element Definitions

-- ASN1START

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

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-- Information Element Definitions

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

NGAP-IEs {

itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)

ngran-Access (22) modules (3) ngap (1) version1 (1) ngap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

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

 id-M4ReportAmount,

 id-M5ReportAmount,

 id-M6ReportAmount,

 id-ExcessPacketDelayThreshold,

 id-M7ReportAmount,

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

 maxnoofTargetS-NSSAIs,

 maxnoofTimePeriods,

 maxnoofTNLAssociations,

 maxnoofUEAppLayerMeas,

 maxnoofUEsforPaging,

 maxnoofWLANName,

 maxnoofXnExtTLAs,

 maxnoofXnGTP-TLAs,

 maxnoofXnTLAs,

 maxnoofThresholds

**-- TEXT OMITTED –**

M6Configuration ::= SEQUENCE {

 m6report-Interval M6report-Interval,

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

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

 ...

}

M6Configuration-ExtIEs NGAP-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 NGAP-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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9.4.7 Constant Definitions

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--

-- Constant definitions

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

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

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-- Lists

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

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 maxnoofPLMNforQMC INTEGER ::= 16

 maxnoofUEAppLayerMeas INTEGER ::= 16

 maxnoofSNSSAIforQMC INTEGER ::= 16

 maxnoofTAforQMC INTEGER ::= 8

 maxnoofThresholds INTEGER ::= 255

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

--

-- IEs

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

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 id-IncludeBeamMeasurementsIndication ProtocolIE-ID ::= 340

 id-ExcessPacketDelayThreshold ProtocolIE-ID ::= 341

 id-PagingCause ProtocolIE-ID ::= 342

 id-PagingCauseIndicationForVoiceService ProtocolIE-ID ::= 343

 id-PEIPSassistanceInformation ProtocolIE-ID ::= 344

 id-FiveG-ProSeAuthorized ProtocolIE-ID ::= 345

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