**3GPP TSG-RAN WG3 #114-e R3-216163**

**1-11 Nov 2021**

**Online**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.413** | **CR** | **0644** | **rev** | **2** | **Current version:** | **16.7.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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:*** | Value range misalignment for Report Interval IE of MDT M1 configuration (NGAP) [TEI16] | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | ZTE, Lenovo, Motorola Mobility, China Unicom, China Telecom, CATT, CMCC | | | | | | | | | |
| ***Source to TSG:*** | R3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2021-10-12 |
|  |  | | | |  | |  | | |  |
| ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | *M1 Configuration* IE is designed for MDT M1 measurement collection and was introduced in Rel-16. The IE contains a Report Interval sub IE for M1 Periodic Reporting. The value range of the IE includes ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, min1, min6, min12, min30, min60. And in semantics description,it states that the IE refer to TS38.331.  However, in TS 38.331,the value range of ReportInterval can be found below:  ReportInterval ::= ENUMERATED {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1,min6, min12, min30 }  There would be misalignment existing for value range in Uu and NGAP. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Introduce a new IE named “Extended Report Interval” in the M1 configuration to add the two values (i.e. ms20480, ms40960,...) as the extension of *Report Interval* IE in *M1 Configuration* IE.  Add a note in semantics description that if the value min60 is received, it shall be ignored at least in this version of the specification.  Add a note in semantics description to clarify that if Extended Report Interval IE is present, the Report Interval IE is ignored.  Impact Analysis:  Impact assessment towards the previous version of the specification (same release):  This CR has limited impact with the previous version of the specification.  The ASN.1 impact is backward compatible. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | MDT function can not work in the case that misalignment exists for report interval value (e.g. min60 ) configured for a UE. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 9.3.1.171, 9.4.5, 9.4.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | | **X** |  | Other core specifications | | | | TS 38.423 CR 0651 | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | This CR is the revision of R3-213802 | | | | | | | | |

*Changes Start*

#### 9.3.1.171 M1 Configuration

This IE defines the parameters for M1 measurement collection.

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| --- | --- | --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description | Criticality | Assigned Criticality |
| M1 Reporting Trigger | M |  | ENUMERATED (periodic, A2event-triggered, A2event-triggered periodic, …) |  | – | – |
| M1 Threshold Event A2 | C-ifM1A2trigger |  |  |  | – | – |
| >CHOICE *Threshold Type* | M |  |  |  | – | – |
| >>*RSRP* |  |  |  |  |  |  |
| >>>Threshold RSRP | M |  | INTEGER (0..127) | This IE is defined in TS 38.331 [18]. | – | – |
| >>*RSRQ* |  |  |  |  |  |  |
| >>>Threshold RSRQ | M |  | INTEGER (0..127) | This IE is defined in TS 38.331 [18]. | – | – |
| *>>SINR* |  |  |  |  |  |  |
| >>>Threshold SINR | M |  | INTEGER (0..127) | This IE is defined in TS 38.331 [18]. | – | – |
| M1 Periodic Reporting | C-ifperiodicMDT |  |  |  | – | – |
| >Report Interval | M |  | ENUMERATED (ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, min1, min6, min12, min30, min60) | This IE is defined in TS 38.331 [18]. If the value min60 is received, it shall be ignored at least in this version of the specification. | – | – |
| >Report Amount | M |  | ENUMERATED (1, 2, 4, 8, 16, 32, 64, infinity) | Number of reports. | – | – |
| >Extended Report Interval | O |  | ENUMERATED (ms20480, ms40960,...) | This IE is the extension of Report Interval IE. If this IE is present, the Report Interval IE is ignored. | YES | Ignore |

*Next Change*

### 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

id-AdditionalDLForwardingUPTNLInformation,

id-AdditionalULForwardingUPTNLInformation,

------unchanged part omitted--------

id-DirectForwardingPathAvailability,

id-DL-NGU-UP-TNLInformation,

id-EndpointIPAddressAndPort,

id-ExtendedPacketDelayBudget,

id-ExtendedRATRestrictionInformation,

id-ExtendedReportIntervalMDT,

id-ExtendedSliceSupportList,

id-ExtendedTAISliceSupportList,

id-ExtendedUEIdentityIndexValue,

id-GlobalCable-ID,

id-GlobalRANNodeID,

id-GlobalTNGF-ID,

id-GlobalTWIF-ID,

id-GlobalW-AGF-ID,

------unchanged part omitted--------

M1PeriodicReporting ::= SEQUENCE {

reportInterval ReportIntervalMDT,

reportAmount ReportAmountMDT,

iE-Extensions ProtocolExtensionContainer { { M1PeriodicReporting-ExtIEs} } OPTIONAL,

...

}

M1PeriodicReporting-ExtIEs NGAP-PROTOCOL-EXTENSION ::= {

{ID id-ExtendedReportIntervalMDT CRITICALITY ignore EXTENSION ExtendedReportInterval PRESENCE optional},

...

}

------unchanged part omitted--------

ReportIntervalMDT ::= ENUMERATED {

ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, min1, min6, min12, min30, min60

}

ExtendedReportIntervalMDT ::= ENUMERATED {

ms20480, ms40960,...

}

------unchanged part omitted--------

*Next Change*

### 9.4.7 Constant Definitions

-- ASN1START

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

--

-- Constant definitions

--

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

NGAP-Constants {

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

ngran-Access (22) modules (3) ngap (1) version1 (1) ngap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

--

-- IE parameter types from other modules.

--

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

IMPORTS

ProcedureCode,

ProtocolIE-ID

FROM NGAP-CommonDataTypes;

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

--

-- Elementary Procedures

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

------unchanged part omitted-------

id-Extended-AMFName ProtocolIE-ID ::= 274

id-GlobalCable-ID ProtocolIE-ID ::= 275

id-QosMonitoringReportingFrequency ProtocolIE-ID ::= 276

id-QosFlowParametersList ProtocolIE-ID ::= 277

id-QosFlowFeedbackList ProtocolIE-ID ::= 278

id-BurstArrivalTimeDownlink ProtocolIE-ID ::= 279

id-ExtendedUEIdentityIndexValue ProtocolIE-ID ::= 280

id-PduSessionExpectedUEActivityBehaviour ProtocolIE-ID ::= 281

id-MicoAllPLMN ProtocolIE-ID ::= 282

id-QosFlowFailedToSetupList ProtocolIE-ID ::= 283

id-ExtendedReportIntervalMDT ProtocolIE-ID ::= xxx

END

-- ASN1STOP

*End of Change*