**3GPP TSG-SA5 Meeting #155 *S5-243353***

**Jeju, South Korea, 27 - 31 May 2024**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **28.622** | **CR** | **0383** | **rev** | **1** | **Current version:** | **18.6.0** |  |
|  |
| *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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Rel-18 CR 28.622 Clarification on usage of reportAmount attributes in ImmediateMdtConfig |
|  |  |
| ***Source to WG:*** | Nokia, Nokia Shanghai Bell |
| ***Source to TSG:*** | S5 |
|  |  |
| ***Work item code:*** | 5GMDT\_Ph2 |  | ***Date:*** | 2024-05-16 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | Unclarity on how to apply recently introduces attributes "reportAmountM4NR", "reportAmountM5NR", "reportAmountM6NR", "reportAmountM7NR", "reportAmountM4LTE", "reportAmountM5LTE", "reportAmountM6LTE" and "reportAmountM7LTE" in "ImmediateMdtConfig" dataType |
|  |  |
| ***Summary of change:*** | * Enhance Definition clause of "ImmediateMdtConfig" to explain usage of attributes "reportAmountM4NR", "reportAmountM5NR", "reportAmountM6NR", "reportAmountM7NR", "reportAmountM4LTE", "reportAmountM5LTE", "reportAmountM6LTE" and "reportAmountM7LTE"
* Delete attribute constraint "MDT is supported and the jobType attribute is set to Immediate MDT or combined Trace and Immediate MDT“ for attributes of "ImmediateMdtConfig" because the attribute "immediateMdtConfig" of data type "ImmediateMdtConfig" is only present if these constraints are fulfilled
 |
|  |  |
| ***Consequences if not approved:*** | Usage of attributes "reportAmountM4NR", "reportAmountM5NR", "reportAmountM6NR", "reportAmountM7NR", "reportAmountM4LTE", "reportAmountM5LTE", "reportAmountM6LTE" and "reportAmountM7LTE" in data type "ImmediateMdtConfig" is unclear. |
|  |  |
| ***Clauses affected:*** | 4.3.59.1, 4.3.59.3 |
|  |  |
|  | **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:*** |  |

***First change***

### 4.3.59 ImmediateMdtConfig <<dataType>>

#### 4.3.59.1 Definition

This <<dataType>> defines the configuration parameters of IOC TraceJob which are specific for Immediate MDT or combine Trace and Immediate MDT.

The optional attribute positioningMethod allows to specify the positioning methods to use.

The following attributes are conditional available based on the measurements configured in listOfMeasurements:

- reportInterval: conditional for M1 in LTE or NR and M1/M2 in UMTS,

- reportAmount: conditional for M1/M2 in UMTS,

- reportAmountM1LTE (conditional for M1 in LTE),

- reportAmountM4LTE (conditional for M4 in LTE),

- reportAmountM5LTE (conditional for M5 in LTE),

- reportAmountM6LTE (conditional for M6 in LTE),

- reportAmountM7LTE (conditional for M7 in LTE),

- reportAmountM1NR (conditional for M1 in NR),

- reportAmountM4NR (conditional for M4 in NR),

- reportAmountM5NR (conditional for M5 in NR),

- reportAmountM6NR (conditional for M6 in NR),

- reportAmountM7NR (conditional for M7 in NR),

- reportingTrigger: conditional for M1 in LTE or NR and M1/M2 in UMTS,

- eventThreshold: conditional for A2 event reporting or A2 event triggered periodic reporting,

- collectionPeriodRrmNR: conditional for M4 and M5 in NR,

- collectionPeriodM6NR: conditional for M6 in NR,

- collectionPeriodM7NR: conditional for M7 in NR,

- collectionPeriodRrmLte (conditional for M3 in LTE),

- measurementPeriodLTE (conditional for M4 and M5 in LTE),

- collectionPeriodM6Lte (conditional for M6 in LTE),

- collectionPeriodM7Lte (conditional for M7 in LTE),

- collectionPeriodRrmUmts (conditional for M4 and M5 in UMTS),

- measurementPeriodUmts (conditional for M6 and M7 in UMTS),

- measurementQuantity (conditional for 1F event reporting).

- beamLevelMeasurement (conditional for M1 in NR),

- excessPacketDelayThresholds (conditional for M6 UL measurement in NR).

For immediate MDT, the measurement reporting is dependent on the configured measurements:

- For measurement M1 in LTE or NR, it is possible to select between periodical, event triggered, event triggered periodic reporting or reporting according to all configured RRM event triggers. For M1 and M2 measurement in UMTS, it is possible to select between periodical, event triggered reporting or reporting according to all configured RRM event triggers. Parameter reportingTrigger determines which of the reporting methods is selected and in case of event triggered or event-triggered periodic, which is the decisive event type. For periodical reporting, parameter reportInterval and one of reportAmount, reportAmountM1LTE and reportAmountM1NR, for UMTS, LTE or NR, respectively, determine the interval between two successive reports and the number of reports. This means the periodical reporting terminates after reportAmount, reportAmountM1LTE or reportAmountM1NR reports have been sent as long as the corresponding attribute is configured with a value different from infinity. For event-triggered periodic reporting, these two parameters apply in addition to parameter eventThreshold which determines the threshold of the event. In this case up to reportAmountM1LTE or reportAmountM1NR reports are sent with a periodicity of reportInterval after the entering condition is fulfilled. The reporting is stopped, if the leaving condition is fulfulled and is restarted if the configured event reoccurs. For event based reporting, there is only one report sent after the event occurs. The parameters to configure are reportingTrigger and eventThreshold. In case of UMTS and 1f event reporting, additionally parameter measurementQuantity is necessary in order to determine for which measurement(s) the event threshold is applicable. Parameter beamLevelMeasurement determines whether beam level measurements shall be included in case of NR.

- For measurement M2 in NR or LTE, reporting is according to RRM configuration, see TS 38.321 [36], TS 36.321 [37] and TS 38.331 [38], TS 36.331 [39].

- For measurement M3 in UMTS, the reporting is done upon availability, see TS 37.320 [43].

-

- For measurements M4, M5, M6 and M7 in NR, for measurements M3, M4, M5, M6 and M7 in LTE and for measurements M5, M6 and M7 in UMTS periodical reporting is applied. The configurable parameter is the interval between two measurements (collectionPeriodRrmNr, collectionPeriodM6NR, collectionPeriodM7Nr, collectionPeriodRrmLte, measurementPeriodLte, collectionPeriodM6Lte, collectionPeriodM7Lte, collectionPeriodRrmUmts, measurementPeriodUmts) and the number of reports (reportAmountM4NR, reportAmountM5NR, reportAmountM6NR, reportAmountM7NR, reportAmountM4LTE, reportAmountM5LTE, reportAmountM6LTE, reportAmountM7LTE). If no collection period is configured for M5 in UMTS, all available measurements are logged according to RRM configuration.

- Measurements M8 and M9 in NR or LTE are reported according to configured M1 and/or M6 related UE measurement reporting.

#### 4.3.59.2 Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | S | isReadable | isWritable | isInvariant | isNotifyable |
| listOfMeasurements | M | T | T | F | T |
| reportingTrigger | CM | T | T | F | T |
| reportInterval | CM | T | T | F | T |
| reportAmount | CM | T | T | F | T |
| eventThreshold | CM | T | T | F | T |
| collectionPeriodRrmNr | CM | T | T | F | T |
| collectionPeriodM6Nr | CM | T | T | F | T |
| collectionPeriodM7Nr | CM | T | T | F | T |
| collectionPeriodRrmLte | CM | T | T | F | T |
| measurementPeriodLte | CM | T | T | F | T |
| collectionPeriodM6Lte | CM | T | T | F | T |
| collectionPeriodM7Lte | CM | T | T | F | T |
| eventThresholdUphUmts | CO | T | T | F | T |
| collectionPeriodRrmUmts | CM | T | T | F | T |
| measurementPeriodUmts | CM | T | T | F | T |
| measurementQuantity | CM | T | T | F | T |
| beamLevelMeasurement | CM | T | T | F | T |
| positioningMethod | O | T | T | F | T |
| excessPacketDelayThresholds | CO | T | T | F | T |
| reportAmountM1LTE | CM | T | T | F | T |
| reportAmountM4LTE | CM | T | T | F | T |
| reportAmountM5LTE | CM | T | T | F | T |
| reportAmountM6LTE | CM | T | T | F | T |
| reportAmountM7LTE | CM | T | T | F | T |
| reportAmountM1NR | CM | T | T | F | T |
| reportAmountM4NR | CM | T | T | F | T |
| reportAmountM5NR | CM | T | T | F | T |
| reportAmountM6NR | CM | T | T | F | T |
| reportAmountM7NR | CM | T | T | F | T |

***End of changes***