**3GPP TSG- Meeting #126**

**Fukuoka, Japan, 20th – 24th May 2024**

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| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **4707** | **rev** | **2** | **Current version:** |  |  |
|  |
| *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 | **X** | Radio Access Network | **X** | Core Network |  |

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|  |
| ***Title:***  | Clarification on CIO configured within ReportConfig [CIO\_in\_ReportConfig] |
|  |  |
| ***Source to WG:*** | Ericsson, NTT DOCOMO, INC., Qualcomm Incorporated |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | TEI18 |  | ***Date:*** | 2024-05-10 |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | RAN2 has agreed to allow the network to configure CIO value for measurement events, in addition to per measurement object. This means that with the new introduced CIO values, there is a scenario where the UE can be configured with two set of CIO values, one within the reporting configuration and one within the measurement object. According to this, it would be good to clarify that if the UE receives a set of CIO values within the measurement reporting configuration, the UE should ignore the CIO value which are present measurement object.Further, about the parameter cellIndividualOffset-r18, the configuration of cell individual offset (CIO) per PCI was introduced in V18.0.0 (CR in R2-2313958) and clarifications are added in V18.1.0 (CR in R2-2401939). This CR is to make two changes about CIO. Considering that multiple different frequencies can be configured for the same PCI, the frequency to apply the CIO should be also indicated on top of the PCI in ReportConfigInter-RAT and ReportConfigNR. |
|  |  |
| ***Summary of change:*** | Section 5.5.4.7- The text related to the new CIO has been added to the right part of the text.Section 6.3.2- Clarified that if UE receives cellIndividualOffsetList within ReportConfigNR or ReportConfigInterRAT, the UE should ignore the cellIndividualOffsetList received within measObject.- Added a field carrierFreq-r18 to IEs ReportConfigInterRAT and ReportConfigNR. |
|  |  |
| ***Consequences if not approved:*** | If the CR is not approved, it would not be clear for the UE which set of CIO values to use. |
|  |  |
| ***Clauses affected:*** | 5.5.4.7, 6.3.2 |
|  |  |
|  | **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:*** |  |

*START OF CHANGES*

#### 5.5.4.7 Event A6 (Neighbour becomes offset better than SCell)

The UE shall:

1> consider the entering condition for this event to be satisfied when condition A6-1, as specified below, is fulfilled;

1> consider the leaving condition for this event to be satisfied when condition A6-2, as specified below, is fulfilled;

1> for this measurement, consider the (secondary) cell corresponding to the *measObjectNR* associated to this event to be the serving cell.

NOTE: The reference signal(s) of the neighbour(s) and the reference signal(s) of the SCell are both indicated in the associated *measObjectNR*.

Inequality A6-1 (Entering condition)

*Mn + Ocn – Hys > Ms + Ocs + Off*

Inequality A6-2 (Leaving condition)

*Mn + Ocn + Hys < Ms + Ocs + Off*

The variables in the formula are defined as follows:

***Mn*** is the measurement result of the neighbouring cell, not taking into account any offsets.

***Ocn*** is the cell specific offset of the neighbour cell (i.e. *cellIndividualOffset* as defined within the associated *measObjectNR*, or *cellIndividualOffset* as defined within *reportConfigNR*), and set to zero if not configured for the neighbour cell.

***Ms*** is the measurement result of the serving cell, not taking into account any offsets.

***Ocs*** is the cell specific offset of the serving cell (i.e. *cellIndividualOffset* as defined within the associated *measObjectNR*), and is set to zero if not configured for the serving cell.

***Hys*** is the hysteresis parameter for this event (i.e. *hysteresis* as defined within *reportConfigNR* for this event).

***Off*** is the offset parameter for this event (i.e. *a6-Offset* as defined within *reportConfigNR* for this event).

***Mn, Ms*** are expressed in dBm in case of RSRP, or in dB in case of RSRQ and RS-SINR.

***Ocn, Ocs, Hys, Off*** are expressed in dB.

*END OF CHANGES*

*START OF CHANGES*

### 6.3.2 Radio resource control information elements

#### *– ReportConfigInterRAT*

The IE *ReportConfigInterRAT* specifies criteria for triggering of an inter-RAT measurement reporting event, or an L2 U2N relay measurement reporting event. The inter-RAT measurement reporting events for E-UTRA and UTRA-FDD are labelled B*N* with *N* equal to 1, 2 and so on. The measurement reporting events for L2 U2N relay UE are labelled Y*N* with *N* equal to 1, 2 and so on, and Z1.

Event B1: Neighbour becomes better than absolute threshold;

Event B2: PCell becomes worse than absolute threshold1 AND Neighbour becomes better than another absolute threshold2;

Event Y1: PCell becomes worse than absolute threshold1 AND candidate L2 U2N Relay UE becomes better than another absolute threshold2;

Event Y2: Candidate L2 U2N Relay UE becomes better than absolute threshold;

Event Z1: Serving L2 U2N Relay UE becomes worse than absolute threshold1 AND candidate L2 U2N Relay UE becomes better than another absolute threshold2;

*ReportConfigInterRAT* information element

-- ASN1START

-- TAG-REPORTCONFIGINTERRAT-START

ReportConfigInterRAT ::= SEQUENCE {

 reportType CHOICE {

 periodical PeriodicalReportConfigInterRAT,

 eventTriggered EventTriggerConfigInterRAT,

 reportCGI ReportCGI-EUTRA,

 ...,

 reportSFTD ReportSFTD-EUTRA

 }

}

ReportCGI-EUTRA ::= SEQUENCE {

 cellForWhichToReportCGI EUTRA-PhysCellId,

 ...,

 [[

 useAutonomousGaps-r16 ENUMERATED {setup} OPTIONAL -- Need R

 ]]

}

ReportSFTD-EUTRA ::= SEQUENCE {

 reportSFTD-Meas BOOLEAN,

 reportRSRP BOOLEAN,

 ...

}

EventTriggerConfigInterRAT ::= SEQUENCE {

 eventId CHOICE {

 eventB1 SEQUENCE {

 b1-ThresholdEUTRA MeasTriggerQuantityEUTRA,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 ...

 },

 eventB2 SEQUENCE {

 b2-Threshold1 MeasTriggerQuantity,

 b2-Threshold2EUTRA MeasTriggerQuantityEUTRA,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 ...

 },

 ...,

 [[

 eventB1-UTRA-FDD-r16 SEQUENCE {

 b1-ThresholdUTRA-FDD-r16 MeasTriggerQuantityUTRA-FDD-r16,

 reportOnLeave-r16 BOOLEAN,

 hysteresis-r16 Hysteresis,

 timeToTrigger-r16 TimeToTrigger,

 ...

 },

 eventB2-UTRA-FDD-r16 SEQUENCE {

 b2-Threshold1-r16 MeasTriggerQuantity,

 b2-Threshold2UTRA-FDD-r16 MeasTriggerQuantityUTRA-FDD-r16,

 reportOnLeave-r16 BOOLEAN,

 hysteresis-r16 Hysteresis,

 timeToTrigger-r16 TimeToTrigger,

 ...

 }

 ]],

 [[

 eventY1-Relay-r17 SEQUENCE {

 y1-Threshold1-r17 MeasTriggerQuantity,

 y1-Threshold2-Relay-r17 SL-MeasTriggerQuantity-r16,

 reportOnLeave-r17 BOOLEAN,

 hysteresis-r17 Hysteresis,

 timeToTrigger-r17 TimeToTrigger,

 ...

 },

 eventY2-Relay-r17 SEQUENCE {

 y2-Threshold-Relay-r17 SL-MeasTriggerQuantity-r16,

 reportOnLeave-r17 BOOLEAN,

 hysteresis-r17 Hysteresis,

 timeToTrigger-r17 TimeToTrigger,

 ...

 }

 ]],

 [[

 eventZ1-Relay-r18 SEQUENCE {

 z1-Threshold1-Relay-r18 SEQUENCE {

 sl-RSRP-r18 SL-MeasTriggerQuantity-r16,

 sd-RSRP-r18 SL-MeasTriggerQuantity-r16 OPTIONAL -- Need S

 },

 z1-Threshold2-Relay-r18 SL-MeasTriggerQuantity-r16,

 reportOnLeave-r18 BOOLEAN,

 hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 ...

 }

 ]]

 },

 rsType NR-RS-Type,

 reportInterval ReportInterval,

 reportAmount ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 reportQuantity MeasReportQuantity,

 maxReportCells INTEGER (1..maxCellReport),

 ...,

 [[

 reportQuantityUTRA-FDD-r16 MeasReportQuantityUTRA-FDD-r16 OPTIONAL -- Need R

 ]],

 [[

 includeCommonLocationInfo-r16 ENUMERATED {true} OPTIONAL, -- Need R

 includeBT-Meas-r16 SetupRelease {BT-NameList-r16} OPTIONAL, -- Need M

 includeWLAN-Meas-r16 SetupRelease {WLAN-NameList-r16} OPTIONAL, -- Need M

 includeSensor-Meas-r16 SetupRelease {Sensor-NameList-r16} OPTIONAL -- Need M

 ]],

 [[

 reportQuantityRelay-r17 SL-MeasReportQuantity-r16 OPTIONAL -- Need R

 ]],

 [[

 cellIndividualOffsetList-r18 SEQUENCE (SIZE (1..maxCellMeasEUTRA)) OF CellIndividualOffsetList-EUTRA-r18 OPTIONAL -- Need R

 ]]

}

PeriodicalReportConfigInterRAT ::= SEQUENCE {

 reportInterval ReportInterval,

 reportAmount ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 reportQuantity MeasReportQuantity,

 maxReportCells INTEGER (1..maxCellReport),

 ...,

 [[

 reportQuantityUTRA-FDD-r16 MeasReportQuantityUTRA-FDD-r16 OPTIONAL -- Need R

 ]],

 [[

 includeCommonLocationInfo-r16 ENUMERATED {true} OPTIONAL, -- Need R

 includeBT-Meas-r16 SetupRelease {BT-NameList-r16} OPTIONAL, -- Need M

 includeWLAN-Meas-r16 SetupRelease {WLAN-NameList-r16} OPTIONAL, -- Need M

 includeSensor-Meas-r16 SetupRelease {Sensor-NameList-r16} OPTIONAL -- Need M

 ]],

 [[

 reportQuantityRelay-r17 SL-MeasReportQuantity-r16 OPTIONAL -- Need R

 ]]

}

MeasTriggerQuantityUTRA-FDD-r16 ::= CHOICE{

 utra-FDD-RSCP-r16 INTEGER (-5..91),

 utra-FDD-EcN0-r16 INTEGER (0..49)

}

MeasReportQuantityUTRA-FDD-r16 ::= SEQUENCE {

 cpich-RSCP BOOLEAN,

 cpich-EcN0 BOOLEAN

}

CellIndividualOffsetList-EUTRA-r18 ::= SEQUENCE {

 physCellId-r18 EUTRA-PhysCellId,

 cellIndividualOffset-r18 EUTRA-Q-OffsetRange,

 carrierFreq-r18 ARFCN-ValueEUTRA OPTIONAL -- Need R

}

-- TAG-REPORTCONFIGINTERRAT-STOP

-- ASN1STOP

|  |
| --- |
| *ReportConfigInterRAT field descriptions* |
| ***reportType***Type of the configured measurement report. In (NG)EN-DC, and NR-DC, network does not configure report of type *ReportCGI-EUTRA* for SCG. |

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| *ReportCGI-EUTRA field descriptions* |
| ***useAutonomousGaps***Indicates whether or not the UE is allowed to use autonomous gaps in acquiring system information from the E-UTRAN neighbour cell. When the field is included, the UE applies the corresponding value for T321. |

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| *EventTriggerConfigInterRAT* field descriptions |
| ***b2-Threshold1***NR threshold to be used in inter RAT measurement report triggering condition for event B2. |
| ***bN-ThresholdEUTRA***E-UTRA threshold value associated with the selected trigger quantity (RSRP, RSRQ, SINR) to be used in inter RAT measurement report triggering condition for event number bN. In the same *eventB2*, the network configures the same CHOICE name (*rsrp*, *rsrq* or *sinr*) for the *MeasTriggerQuantity* of the *b2-Threshold1* and for the *MeasTriggerQuantityEUTRA* of the *b2-Threshold2EUTRA*. |
| ***eventId***Choice of inter RAT event triggered reporting criteria. |
| ***maxReportCells***Max number of non-serving cells/candidate L2 U2N Relay UEs to include in the measurement report. |
| ***reportAmount****Number* of measurement reports applicable for *eventTriggered* as well as for *periodical* report types |
| ***reportOnLeave***Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a cell in *cellsTriggeredList*, as specified in 5.5.4.1. |
| ***reportQuantity, reportQuantityUTRA-FDD***The cell measurement quantities to be included in the measurement report. If the field *eventB1-UTRA-FDD* or *eventB2-UTRA-FDD* is present, the UE shall ignore the value(s) provided in *reportQuantity*. |
| ***reportQuantityRelay***The L2 U2N Relay UE measurement quantity to be included in measuremet report. |
| ***timeToTrigger***Time during which specific criteria for the event needs to be met in order to trigger a measurement report. |
| ***bN-ThresholdUTRA-FDD***UTRA-FDD threshold value associated with the selected trigger quantity (RSCP, EcN0) to be used in inter RAT measurement report triggering condition for event number bN.*utra-FDD-RSCP* corresponds to CPICH\_RSCP in TS 25.133 [46] for FDD. *utra-FDD-EcN0* corresponds to CPICH\_Ec/No in TS 25.133 [46] for FDD.For *utra-FDD-RSCP*: The actual value is field value – 115 dBm.For *utra-FDD-EcN0*: The actual value is (field value – 49)/2 dB. |
| ***y1-Threshold1***NR threshold to be used in measurement report triggering condition for event Y1. |
| ***y1-Threshold2-Relay***L2 U2N Relay threshold value associated with the selected trigger quantity (i.e. RSRP) to be used in measurement report triggering condition for event Y1. |
| ***y2-Threshold-Relay***L2 U2N Relay threshold value associated with the selected trigger quantity (i.e. RSRP) to be used in measurement report triggering condition for event Y2. |
| ***z1-Threshold1-Relay***L2 U2N Relay threshold value associated with the selected trigger quantity (i.e. SL-RSRP and/or SD-RSRP) to be used in measurement report triggering condition for serving Relay UE in event Z1. If the field sd-RSRP is not included, the UE considers it to be equal to sl-RSRP. |
| ***z1-Threshold2-Relay***L2 U2N Relay threshold value associated with the selected trigger quantity (i.e. SD-RSRP) to be used in measurement report triggering condition for candidate Relay UE in event Z1. |

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| *PeriodicalReportConfigInterRAT* field descriptions |
| ***maxReportCells***Max number of non-serving cells/candidate L2 U2N Relay UEs to include in the measurement report. |
| ***reportAmount***Number of measurement reports applicable for *eventTriggered* as well as for *periodical* report types |
| ***reportQuantity, reportQuantityUTRA-FDD***The cell measurement quantities to be included in the measurement report. If the field *reportQuantityUTRA-FDD* is present, the UE shall ignore the value(s) provided in *reportQuantity*. |

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| *CellIndividualOffsetList-EUTRA* field descriptions |
| ***carrierFreq***Indicates the EUTRA frequency for which *cellIndividualOffset* is applicable. If the field is not configured, the EUTRA frequency indicated by *carrierFreq* within the *MeasObjectEUTRA* of the *measID* associated with this *ReportConfigInterRAT* applies. |
| ***cellIndividualOffset***Cell individual offsets applicable to a specific measurement event. If this field is present, the UE, for the same cell, shall ignore the cell individual offset configured within the *MeasObjectEUTRA* of the *measID* associated with this *ReportConfigInterRAT*. |
| ***physCellId***Physical cell identity of a E-UTRAN cell in the cell list. |

#### – *ReportConfigNR*

The IE *ReportConfigNR* specifies criteria for triggering of an NR measurement reporting event or of a CHO, CPA or CPC event or of an L2 U2N relay measurement reporting event. For events labelled AN with N equal to 1, 2 and so on, measurement reporting events and CHO, CPA or CPC events are based on cell measurement results, which can either be derived based on SS/PBCH block or CSI-RS.

Event A1: Serving becomes better than absolute threshold;

Event A2: Serving becomes worse than absolute threshold;

Event A3: Neighbour becomes amount of offset better than PCell/PSCell;

Event A4: Neighbour becomes better than absolute threshold;

Event A5: PCell/PSCell becomes worse than absolute threshold1 AND Neighbour/SCell becomes better than another absolute threshold2;

Event A6: Neighbour becomes amount of offset better than SCell;

Event D1: Distance between UE and a reference location *referenceLocation1* becomes larger than configured threshold *distanceThreshFromReference1* and distance between UE and a reference location *referenceLocation2* becomes shorter than configured threshold *distanceThreshFromReference2*;

Event D2: Distance between UE and a moving reference location based on *movingReferenceLocation* and its corresponding satellite ephemeris and epoch time broadcast in *SIB19* for the serving cell becomes larger than configured threshold *distanceThreshFromReference1* and distance between UE and a moving reference location determined based on *referenceLocation2* becomes shorter than configured threshold *distanceThreshFromReference2*;

CondEvent A3: Conditional reconfiguration candidate becomes amount of offset better than PCell/PSCell;

CondEvent A4: Conditional reconfiguration candidate becomes better than absolute threshold where *condEventA4* can also be used for current PSCell (i.e., in case it is configured as candidate PSCell for CondEvent A4 evaluation) for CHO with candidate SCG(s) case;

CondEvent A5: PCell/PSCell becomes worse than absolute threshold1 AND Conditional reconfiguration candidate becomes better than another absolute threshold2;

CondEvent D1: Distance between UE and a reference location *referenceLocation1* becomes larger than configured threshold *distanceThreshFromReference1* and distance between UE and a reference location *referenceLocation2* of conditional reconfiguration candidate becomes shorter than configured threshold *distanceThreshFromReference2*;

CondEvent D2: Distance between UE and a moving reference location determined based on *movingReferenceLocation* and its corresponding satellite ephemeris and epoch time broadcast in *SIB19* for the serving cell becomes larger than configured threshold *distanceThreshFromReference1* and distance between UE and a moving reference location determined based on *referenceLocation2* of conditional reconfiguration candidate becomes shorter than configured threshold *distanceThreshFromReference2*;

CondEvent T1: Time measured at UE becomes more than configured threshold *t1-Threshold* but is less than *t1-Threshold + duration*;

Event X1: Serving L2 U2N Relay UE becomes worse than absolute threshold1 AND NR Cell becomes better than another absolute threshold2;

Event X2: Serving L2 U2N Relay UE becomes worse than absolute threshold;

For event I1, measurement reporting event is based on CLI measurement results, which can either be derived based on SRS-RSRP or CLI-RSSI.

Event I1: Interference becomes higher than absolute threshold;

The reporting events concerning Aerial UE altitude are labelled H*N* with *N* equal to 1 and 2. Additionally, the reporting events concerning Aerial UE altitude and the neighboring cell measurements simultaneously are labelled A*M*H*N* with *M* equal to 3, 4, 5 and *N* equal to 1, 2.

Event H1: Aerial UE altitude becomes higher than a threshold;

Event H2: Aerial UE altitude becomes lower than a threshold;

Event A3H1: Neighbour becomes offset better than SpCell and the Aerial UE altitude becomes higher than a threshold;

Event A3H2: Neighbour becomes offset better than SpCell and the Aerial UE altitude becomes lower than a threshold;

Event A4H1: Neighbour becomes better than threshold1 and the Aerial UE altitude becomes higher than a threshold2;

Event A4H2: Neighbour becomes better than threshold1 and the Aerial UE altitude becomes lower than a threshold2;

Event A5H1: SpCell becomes worse than threshold1 and neighbour becomes better than threshold2 and the Aerial UE altitude becomes higher than a threshold3;

Event A5H2: SpCell becomes worse than threshold1 and neighbour becomes better than threshold2 and the Aerial UE altitude becomes lower than a threshold3.

*ReportConfigNR* information element

-- ASN1START

-- TAG-REPORTCONFIGNR-START

ReportConfigNR ::= SEQUENCE {

 reportType CHOICE {

 periodical PeriodicalReportConfig,

 eventTriggered EventTriggerConfig,

 ...,

 reportCGI ReportCGI,

 reportSFTD ReportSFTD-NR,

 condTriggerConfig-r16 CondTriggerConfig-r16,

 cli-Periodical-r16 CLI-PeriodicalReportConfig-r16,

 cli-EventTriggered-r16 CLI-EventTriggerConfig-r16,

 rxTxPeriodical-r17 RxTxPeriodical-r17,

 reportOnScellActivation-r18 ReportOnScellActivation-r18

 }

}

ReportCGI ::= SEQUENCE {

 cellForWhichToReportCGI PhysCellId,

 ...,

 [[

 useAutonomousGaps-r16 ENUMERATED {setup} OPTIONAL -- Need R

 ]]

}

ReportSFTD-NR ::= SEQUENCE {

 reportSFTD-Meas BOOLEAN,

 reportRSRP BOOLEAN,

 ...,

 [[

 reportSFTD-NeighMeas ENUMERATED {true} OPTIONAL, -- Need R

 drx-SFTD-NeighMeas ENUMERATED {true} OPTIONAL, -- Need R

 cellsForWhichToReportSFTD SEQUENCE (SIZE (1..maxCellSFTD)) OF PhysCellId OPTIONAL -- Need R

 ]]

}

CondTriggerConfig-r16 ::= SEQUENCE {

 condEventId CHOICE {

 condEventA3 SEQUENCE {

 a3-Offset MeasTriggerQuantityOffset,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger

 },

 condEventA5 SEQUENCE {

 a5-Threshold1 MeasTriggerQuantity,

 a5-Threshold2 MeasTriggerQuantity,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger

 },

 ...,

 condEventA4-r17 SEQUENCE {

 a4-Threshold-r17 MeasTriggerQuantity,

 hysteresis-r17 Hysteresis,

 timeToTrigger-r17 TimeToTrigger

 },

 condEventD1-r17 SEQUENCE {

 distanceThreshFromReference1-r17 INTEGER(0.. 65525),

 distanceThreshFromReference2-r17 INTEGER(0.. 65525),

 referenceLocation1-r17 ReferenceLocation-r17,

 referenceLocation2-r17 ReferenceLocation-r17,

 hysteresisLocation-r17 HysteresisLocation-r17,

 timeToTrigger-r17 TimeToTrigger

 },

 condEventT1-r17 SEQUENCE {

 t1-Threshold-r17 INTEGER (0..549755813887),

 duration-r17 INTEGER (1..6000)

 },

 condEventD2-r18 SEQUENCE {

 distanceThreshFromReference1-r18 INTEGER(0.. 65535),

 distanceThreshFromReference2-r18 INTEGER(0.. 65535),

 referenceLocation2-r18 ReferenceLocation-r17,

 hysteresisLocation-r18 HysteresisLocation-r17,

 timeToTrigger-r18 TimeToTrigger

 }

 },

 rsType-r16 NR-RS-Type,

 ...,

 [[

 nesEvent-r18 ENUMERATED {true} OPTIONAL -- Need R

 ]]

}

EventTriggerConfig ::= SEQUENCE {

 eventId CHOICE {

 eventA1 SEQUENCE {

 a1-Threshold MeasTriggerQuantity,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger

 },

 eventA2 SEQUENCE {

 a2-Threshold MeasTriggerQuantity,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger

 },

 eventA3 SEQUENCE {

 a3-Offset MeasTriggerQuantityOffset,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 useAllowedCellList BOOLEAN

 },

 eventA4 SEQUENCE {

 a4-Threshold MeasTriggerQuantity,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 useAllowedCellList BOOLEAN

 },

 eventA5 SEQUENCE {

 a5-Threshold1 MeasTriggerQuantity,

 a5-Threshold2 MeasTriggerQuantity,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 useAllowedCellList BOOLEAN

 },

 eventA6 SEQUENCE {

 a6-Offset MeasTriggerQuantityOffset,

 reportOnLeave BOOLEAN,

 hysteresis Hysteresis,

 timeToTrigger TimeToTrigger,

 useAllowedCellList BOOLEAN

 },

 ...,

 [[

 eventX1-r17 SEQUENCE {

 x1-Threshold1-Relay-r17 SL-MeasTriggerQuantity-r16,

 x1-Threshold2-r17 MeasTriggerQuantity,

 reportOnLeave-r17 BOOLEAN,

 hysteresis-r17 Hysteresis,

 timeToTrigger-r17 TimeToTrigger,

 useAllowedCellList-r17 BOOLEAN

 },

 eventX2-r17 SEQUENCE {

 x2-Threshold-Relay-r17 SL-MeasTriggerQuantity-r16,

 reportOnLeave-r17 BOOLEAN,

 hysteresis-r17 Hysteresis,

 timeToTrigger-r17 TimeToTrigger

 },

 eventD1-r17 SEQUENCE {

 distanceThreshFromReference1-r17 INTEGER(1.. 65525),

 distanceThreshFromReference2-r17 INTEGER(1.. 65525),

 referenceLocation1-r17 ReferenceLocation-r17,

 referenceLocation2-r17 ReferenceLocation-r17,

 reportOnLeave-r17 BOOLEAN,

 hysteresisLocation-r17 HysteresisLocation-r17,

 timeToTrigger-r17 TimeToTrigger

 }

 ]],

 [[

 eventH1-r18 SEQUENCE {

 h1-Threshold-r18 Altitude-r18,

 h1-Hysteresis-r18 HysteresisAltitude-r18,

 reportOnLeave-r18 BOOLEAN,

 timeToTrigger-r18 TimeToTrigger,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventH2-r18 SEQUENCE {

 h2-Threshold-r18 Altitude-r18,

 h2-Hysteresis-r18 HysteresisAltitude-r18,

 reportOnLeave-r18 BOOLEAN,

 timeToTrigger-r18 TimeToTrigger,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA3H1-r18 SEQUENCE {

 a3-Offset-r18 MeasTriggerQuantityOffset,

 reportOnLeave-r18 BOOLEAN,

 a3-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h1-Threshold-r18 Altitude-r18,

 h1-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA3H2-r18 SEQUENCE {

 a3-Offset-r18 MeasTriggerQuantityOffset,

 reportOnLeave-r18 BOOLEAN,

 a3-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h2-Threshold-r18 Altitude-r18,

 h2-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA4H1-r18 SEQUENCE {

 a4-Threshold-r18 MeasTriggerQuantity,

 reportOnLeave-r18 BOOLEAN,

 a4-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h1-Threshold-r18 Altitude-r18,

 h1-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA4H2-r18 SEQUENCE {

 a4-Threshold-r18 MeasTriggerQuantity,

 reportOnLeave-r18 BOOLEAN,

 a4-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h2-Threshold-r18 Altitude-r18,

 h2-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA5H1-r18 SEQUENCE {

 a5-Threshold1-r18 MeasTriggerQuantity,

 a5-Threshold2-r18 MeasTriggerQuantity,

 reportOnLeave-r18 BOOLEAN,

 a5-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h1-Threshold-r18 Altitude-r18,

 h1-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventA5H2-r18 SEQUENCE {

 a5-Threshold1-r18 MeasTriggerQuantity,

 a5-Threshold2-r18 MeasTriggerQuantity,

 reportOnLeave-r18 BOOLEAN,

 a5-Hysteresis-r18 Hysteresis,

 timeToTrigger-r18 TimeToTrigger,

 useAllowedCellList-r18 BOOLEAN,

 h2-Threshold-r18 Altitude-r18,

 h2-Hysteresis-r18 HysteresisAltitude-r18,

 includeAltitudeUE-r18 BOOLEAN,

 simulMultiTriggerSingleMeasReport-r18 BOOLEAN

 },

 eventD2-r18 SEQUENCE {

 distanceThreshFromReference1-r18 INTEGER(1.. 65535),

 distanceThreshFromReference2-r18 INTEGER(1.. 65535),

 referenceLocation2-r18 ReferenceLocation-r17,

 reportOnLeave-r18 BOOLEAN,

 hysteresisLocation-r18 HysteresisLocation-r17,

 timeToTrigger-r18 TimeToTrigger

 }

 ]]

 },

 rsType NR-RS-Type,

 reportInterval ReportInterval,

 reportAmount ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 reportQuantityCell MeasReportQuantity,

 maxReportCells INTEGER (1..maxCellReport),

 reportQuantityRS-Indexes MeasReportQuantity OPTIONAL, -- Need R

 maxNrofRS-IndexesToReport INTEGER (1..maxNrofIndexesToReport) OPTIONAL, -- Need R

 includeBeamMeasurements BOOLEAN,

 reportAddNeighMeas ENUMERATED {setup} OPTIONAL, -- Need R

 ...,

 [[

 measRSSI-ReportConfig-r16 MeasRSSI-ReportConfig-r16 OPTIONAL, -- Need R

 useT312-r16 BOOLEAN OPTIONAL, -- Need M

 includeCommonLocationInfo-r16 ENUMERATED {true} OPTIONAL, -- Need R

 includeBT-Meas-r16 SetupRelease {BT-NameList-r16} OPTIONAL, -- Need M

 includeWLAN-Meas-r16 SetupRelease {WLAN-NameList-r16} OPTIONAL, -- Need M

 includeSensor-Meas-r16 SetupRelease {Sensor-NameList-r16} OPTIONAL -- Need M

 ]],

 [[

 coarseLocationRequest-r17 ENUMERATED {true} OPTIONAL, -- Need R

 reportQuantityRelay-r17 SL-MeasReportQuantity-r16 OPTIONAL -- Need R

 ]],

 [[

 numberOfTriggeringCells-r18 INTEGER (2..maxCellReport) OPTIONAL, -- Need R

 cellIndividualOffsetList-r18 SEQUENCE (SIZE (1..maxNrofCellMeas)) OF CellIndividualOffsetList-r18 OPTIONAL, -- Need R

 eventX1-SD-Threshold1-r18 SL-MeasTriggerQuantity-r16 OPTIONAL, -- Need S

 eventX2-SD-Threshold-r18 SL-MeasTriggerQuantity-r16 OPTIONAL -- Need S

-- Editor’s Note: FFS if this is proper place for Event X1 thresolds.

 ]]

}

PeriodicalReportConfig ::= SEQUENCE {

 rsType NR-RS-Type,

 reportInterval ReportInterval,

 reportAmount ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 reportQuantityCell MeasReportQuantity,

 maxReportCells INTEGER (1..maxCellReport),

 reportQuantityRS-Indexes MeasReportQuantity OPTIONAL, -- Need R

 maxNrofRS-IndexesToReport INTEGER (1..maxNrofIndexesToReport) OPTIONAL, -- Need R

 includeBeamMeasurements BOOLEAN,

 useAllowedCellList BOOLEAN,

 ...,

 [[

 measRSSI-ReportConfig-r16 MeasRSSI-ReportConfig-r16 OPTIONAL, -- Need R

 includeCommonLocationInfo-r16 ENUMERATED {true} OPTIONAL, -- Need R

 includeBT-Meas-r16 SetupRelease {BT-NameList-r16} OPTIONAL, -- Need M

 includeWLAN-Meas-r16 SetupRelease {WLAN-NameList-r16} OPTIONAL, -- Need M

 includeSensor-Meas-r16 SetupRelease {Sensor-NameList-r16} OPTIONAL, -- Need M

 ul-DelayValueConfig-r16 SetupRelease { UL-DelayValueConfig-r16 } OPTIONAL, -- Need M

 reportAddNeighMeas-r16 ENUMERATED {setup} OPTIONAL -- Need R

 ]],

 [[

 ul-ExcessDelayConfig-r17 SetupRelease { UL-ExcessDelayConfig-r17 } OPTIONAL, -- Need M

 coarseLocationRequest-r17 ENUMERATED {true} OPTIONAL, -- Need R

 reportQuantityRelay-r17 SL-MeasReportQuantity-r16 OPTIONAL -- Need R

 ]]

}

NR-RS-Type ::= ENUMERATED {ssb, csi-rs}

MeasTriggerQuantity ::= CHOICE {

 rsrp RSRP-Range,

 rsrq RSRQ-Range,

 sinr SINR-Range

}

MeasTriggerQuantityOffset ::= CHOICE {

 rsrp INTEGER (-30..30),

 rsrq INTEGER (-30..30),

 sinr INTEGER (-30..30)

}

MeasReportQuantity ::= SEQUENCE {

 rsrp BOOLEAN,

 rsrq BOOLEAN,

 sinr BOOLEAN

}

MeasRSSI-ReportConfig-r16 ::= SEQUENCE {

 channelOccupancyThreshold-r16 RSSI-Range-r16 OPTIONAL -- Need R

}

CLI-EventTriggerConfig-r16 ::= SEQUENCE {

 eventId-r16 CHOICE {

 eventI1-r16 SEQUENCE {

 i1-Threshold-r16 MeasTriggerQuantityCLI-r16,

 reportOnLeave-r16 BOOLEAN,

 hysteresis-r16 Hysteresis,

 timeToTrigger-r16 TimeToTrigger

 },

 ...

 },

 reportInterval-r16 ReportInterval,

 reportAmount-r16 ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 maxReportCLI-r16 INTEGER (1..maxCLI-Report-r16),

 ...

}

CLI-PeriodicalReportConfig-r16 ::= SEQUENCE {

 reportInterval-r16 ReportInterval,

 reportAmount-r16 ENUMERATED {r1, r2, r4, r8, r16, r32, r64, infinity},

 reportQuantityCLI-r16 MeasReportQuantityCLI-r16,

 maxReportCLI-r16 INTEGER (1..maxCLI-Report-r16),

 ...

}

RxTxPeriodical-r17 ::= SEQUENCE {

 rxTxReportInterval-r17 RxTxReportInterval-r17 OPTIONAL, -- Need R

 reportAmount-r17 ENUMERATED {r1, infinity, spare6, spare5, spare4, spare3, spare2, spare1},

 ...

}

RxTxReportInterval-r17 ::= ENUMERATED {ms80,ms120,ms160,ms240,ms320,ms480,ms640,ms1024,ms1280,ms2048,ms2560,ms5120,spare4,spare3,spare2,spare1}

MeasTriggerQuantityCLI-r16 ::= CHOICE {

 srs-RSRP-r16 SRS-RSRP-Range-r16,

 cli-RSSI-r16 CLI-RSSI-Range-r16

}

MeasReportQuantityCLI-r16 ::= ENUMERATED {srs-rsrp, cli-rssi}

ReportOnScellActivation-r18 ::= SEQUENCE {

 rsType NR-RS-Type,

 reportQuantityRS-Indexes MeasReportQuantity,

 maxNrofRS-IndexesToReport INTEGER (1..maxNrofIndexesToReport),

 includeBeamMeasurements BOOLEAN

}

CellIndividualOffsetList-r18 ::= SEQUENCE {

 physCellId-r18 PhysCellId,

 cellIndividualOffset-r18 Q-OffsetRangeList,

 ssbFrequency-r18 ARFCN-ValueNR OPTIONAL -- Need R

}

-- TAG-REPORTCONFIGNR-STOP

-- ASN1STOP

|  |
| --- |
| *CondTriggerConfig* field descriptions |
| ***a3-Offset***Offset value(s) to be used in NR conditional reconfiguration triggering condition for cond event a3. The actual value is field value \* 0.5 dB. |
| ***a4-Threshold***Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR conditional reconfiguration triggering condition for cond event a4. |
| ***a5-Threshold1/ a5-Threshold2***Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR conditional reconfiguration triggering condition for cond event a5. In the same *condeventA5*, the network configures the same quantity for the *MeasTriggerQuantity* of the *a5-Threshold1* and for the *MeasTriggerQuantity* of the *a5-Threshold2*. |
| ***condEventId***Choice of NR conditional reconfiguration event triggered criteria. |
| ***distanceThreshFromReference1, distanceThreshFromReference2***Distance from a fixed reference location configured with *referenceLocation1* or *referenceLocation2* or a moving reference location determined by the UE based on the serving cell *movingReferenceLocation* broadcast in *SIB19* or *referenceLocation2* and their corresponding satellite ephemeris and epoch time. Each step represents 50m. |
| ***duration***This field is used for defining the leaving condition T1-2 for conditional HO event *condEventT1*. Each step represents 100ms. |
| ***nesEvent***Indicates the event is a NES-specific CHO event and the event is only considered to be satisfied if indication from lower layers is received indicating the applicability of NES-specific CHO event and the related entry condition(s) is fulfilled. This field can only be configured for *condEventA3*, *condEventA4* or *condEventA5*. This field cannot be configured for CPAC. |
| ***referenceLocation1, referenceLocation2***For *condEventD1*, the r*eferenceLocation1* is associated to serving cell and *referenceLocation2* is associated to candidate target cell. For *condEventD2*, the *refereceLocation2* is associated to candidate target cell. |
| ***t1-Threshold***The field counts the number of UTC seconds in 10 ms units since 00:00:00 on Gregorian calendar date 1 January, 1900 (midnight between Sunday, December 31, 1899 and Monday, January 1, 1900). |
| ***timeToTrigger***Time during which specific criteria for the event needs to be met in order to execute the conditional reconfiguration evaluation. |

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| *ReportConfigNR* field descriptions |
| ***reportType***Type of the configured measurement report. In MR-DC, network does not configure report of type *reportCGI* using SRB3. The *condTriggerConfig is* used for CHO, CPA or CPC configuration. |

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| *ReportCGI* field descriptions |
| ***useAutonomousGaps***Indicates whether or not the UE is allowed to use autonomous gaps in acquiring system information from the NR neighbour cell. When the field is included, the UE applies the corresponding value for T321. |

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| *EventTriggerConfig* field descriptions |
| ***a3-Offset/a6-Offset***Offset value(s) to be used in NR measurement report triggering condition for event a3/a6. The actual value is field value \* 0.5 dB. |
| ***aN-ThresholdM***Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR measurement report triggering condition for event number aN. If multiple thresholds are defined for event number aN, the thresholds are differentiated by M. In the same *eventA5*, *eventA5H1, eventA5H2,* the network configures the same quantity for the *MeasTriggerQuantity* of the *a5-Threshold1* and for the *MeasTriggerQuantity* of the *a5-Threshold2*. |
| ***channelOccupancyThreshold***RSSI threshold which is used for channel occupancy evaluation. |
| ***coarseLocationRequest***This field is used to request UE to report coarse location information. |
| ***distanceThreshFromReference1, distanceThreshFromReference2***Threshold value associated to the distance from a reference location configured with *referenceLocation1* or *referenceLocation2.* Each step represents 50m. |
| ***eventId***Choice of NR event triggered reporting criteria. |
| ***eventXN-SD-Threshold***Indicates the SD-RSRP threshold value for the serving L2 U2N Relay UE in event *XN* (*N* equals 1 or 2). If this field is not included, the UE considers the SD-RSRP threshold value equals to the one indicated by *x1-Threshold1-Relay*/ *x2-Threshold-Relay*. |
| ***includeAltitudeUE***This field is used to request UE to report altitude information. |
| ***maxNrofRS-IndexesToReport***Max number of RS indexes to include in the measurement report for A1-A6 events. |
| ***maxReportCells***Max number of non-serving cells to include in the measurement report. |
| ***numberOfTriggeringCells***Indicates the number of cells detected that are required to fulfill an event for a measurement report to be triggered. This field is applicable only for the events concerning neighbor cells, i.e. *eventA3*, *eventA4, eventA5, eventA3H1, eventA3H2, eventA4H1, eventA4H2, eventA5H1, eventA5H2*. |
| ***referenceLocation1, referenceLocation2***For *eventD1*, the *referenceLocation1* is associated to serving cell and *referenceLocation2* is associated to neighbour cell. For *eventD2*, the *refereceLocation2* is associated to neighbour cell. |
| ***reportAddNeighMeas***Indicates that the UE shall include the best neighbour cells per serving frequency. |
| ***reportAmount***Number of measurement reports applicable for *eventTriggered* as well as for *periodical* report types. |
| ***reportOnLeave***Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a cell in *cellsTriggeredList*, as specified in 5.5.4.1.Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met if configured in *eventD1*, *eventD2*, *eventH1*, *eventH2* as specified in 5.5.4.1. |
| ***reportQuantityCell***The cell measurement quantities to be included in the measurement report. |
| ***reportQuantityRS-Indexes***Indicates which measurement information per RS index the UE shall include in the measurement report. |
| ***simulMultiTriggerSingleMeasReport***Indicates when multiple events with the same *eventID* satisfy the entering condition(s), whether to consider only the event with the smallest value between the altitude of the UE and the configured altitude threshold. |
| ***timeToTrigger***Time during which specific criteria for the event needs to be met in order to trigger a measurement report. |
| ***useAllowedCellList***Indicates whether only the cells included in the allow-list of the associated measObject are applicable as specified in 5.5.4.1. |
| ***useT312***If value *TRUE* is configured, the UE shall use the timer T312 with the value *t312* as specified in the corresponding *measObjectNR*. If value FALSE is configured, the timer T312 is considered as disabled. Network configures value *TRUE* only if *reportType* is set to *eventTriggered*. |
| ***xN-ThresholdM***Threshold value associated to the selected trigger quantity (e.g. RSRP, RSRQ, SINR) per RS Type (e.g. SS/PBCH block, CSI-RS) to be used in NR measurement report triggering condition for event xN. If multiple thresholds are defined for event number xN, the thresholds are differentiated by M. *x1-Threshold1* and *x2-Threshold* indicates the threshold value for the serving L2 U2N Relay UE, *x1-Threshold2* indicates the threshold value for the NR Cells. |

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| *CLI-EventTriggerConfig* field descriptions |
| ***i1-Threshold***Threshold value associated to the selected trigger quantity (e.g. SRS-RSRP, CLI-RSSI) to be used in CLI measurement report triggering condition for event i1. |
| ***eventId***Choice of CLI event triggered reporting criteria. |
| ***maxReportCLI***Max number of CLI measurement resource to include in the measurement report. |
| ***reportAmount****Number* of measurement reports. |
| ***reportOnLeave***Indicates whether or not the UE shall initiate the measurement reporting procedure when the leaving condition is met for a CLI measurement resource in *srsTriggeredList* or *rssiTriggeredList*, as specified in 5.5.4.1. |
| ***timeToTrigger***Time during which specific criteria for the event needs to be met in order to trigger a measurement report. |

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| *CLI-PeriodicalReportConfig* field descriptions |
| ***maxReportCLI***Max number of CLI measurement resource to include in the measurement report. |
| ***reportAmount****Number* of measurement reports. |
| ***reportQuantityCLI***The CLI measurement quantities to be included in the measurement report. |

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| *PeriodicalReportConfig* field descriptions |
| ***coarseLocationRequest***This field is used to request UE to report coarse location information. |
| ***maxNrofRS-IndexesToReport***Max number of RS indexes to include in the measurement report. |
| ***maxReportCells***Max number of non-serving cells to include in the measurement report. |
| ***reportAddNeighMeas***Indicates that the UE shall include the best neighbour cells per serving frequency. |
| ***reportAmount****Number* of measurement reports applicable for *eventTriggered* as well as for *periodical* report types |
| ***reportQuantityCell***The cell measurement quantities to be included in the measurement report. |
| ***reportQuantityRS-Indexes***Indicates which measurement information per RS index the UE shall include in the measurement report. |
| ***ul-DelayValueConfig***If the field is present, the UE shall perform the actual UL PDCP Packet Average Delay measurement per DRB as specified in TS 38.314 [53] and the UE shall ignore the fields *reportQuantityCell* and *maxReportCells*. The applicable values for the corresponding *reportInterval* are (one of the) {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1,min6, min12, min30}. The *reportInterval* indicates the periodicity for performing and reporting of UL PDCP Packet Average Delay per DRB measurement as specified in TS 38.314 [53]. |
| ***ul-ExcessDelayConfig***If the field is present, the UE shall perform the actual UL PDCP Excess Packet Delay per DRB measurement as specified in TS 38.314 [53] and the UE shall ignore the fields *reportQuantityCell* and *maxReportCells*. The applicable values for the corresponding *reportInterval* are (one of the) {ms120, ms240, ms480, ms640, ms1024, ms2048, ms5120, ms10240, ms20480, ms40960, min1,min6, min12, min30}. The *reportInterval* indicates the periodicity for performing and reporting of UL PDCP Excess Packet Delay per DRB measurement as specified in TS 38.314 [53]. |
| ***useAllowedCellList***Indicates whether only the cells included in the allow-list of the associated measObject are applicable as specified in 5.5.4.1. |

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| *ReportSFTD-NR* field descriptions |
| ***cellForWhichToReportSFTD***Indicates the target NR neighbour cells for SFTD measurement between PCell and NR neighbour cells. |
| ***drx-SFTD-NeighMeas***Indicates that the UE shall use available idle periods (i.e. DRX off periods) for the SFTD measurement in NR standalone. The network only includes *drx-SFTD-NeighMeas* field when *reprtSFTD-NeighMeas* is set to true. |
| ***reportSFTD-Meas***Indicates whether UE is required to perform SFTD measurement between PCell and NR PSCell in NR-DC. |
| ***reportSFTD-NeighMeas***Indicates whether UE is required to perform SFTD measurement between PCell and NR neighbour cells in NR standalone. The network does not include this field if *reportSFTD-Meas* is set to *true*. |
| ***reportRSRP***Indicates whether UE is required to include RSRP result of NR PSCell or NR neighbour cells in SFTD measurement result, derived based on SSB. If it is set to true, the network should ensure that *ssb-ConfigMobility* is included in the measurement object for NR PSCell or NR neighbour cells. |

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| *RxTxPeriodical field descriptions* |
| ***reportAmount***This field indicates the number of UE Rx-Tx time difference measurement reports. If configured to *r1,* the network does not configure *rxTxReportInterval* and only one measurement is reported. If configured to *infinity*, UE periodically reports measurements according to the periodicity configured by *rxTxReportInterval*. |
| ***rxTxReportInterval***This field indicates the measurement reporting periodicity of UE Rx-Tx time difference. |

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| otherfield descriptions |
| ***MeasTriggerQuantity***SINR is applicable only for CONNECTED mode events. |

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| *ReportOnScellActivation* field descriptions |
| ***rsType***Indicates which RS is used to provide the measurement result. Only value *ssb* can be set in this release. |
| ***reportQuantityRS-Indexes***Indicates which measurement information per RS index is used to sort the reported measurement results and is included in the measurement report. |
| ***maxNrofRS-IndexesToReport***Max number of RS indexes to include in the measurement report. |
| ***includeBeamMeasurements***Indicates whether to include the measurement result per RS index in the measurement report. |

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| --- |
| *CellIndividualOffsetList* field descriptions |
| ***ssbFrequency***Indicates the NR frequency of SS for which *cellIndividualOffset* is applicable. If the field is not configured, the NR frequency of SS indicated by *ssbFrequency* indicated within the *MeasObjectNR* of the *measID* associated with this *ReportConfigNR* applies. |
| ***cellIndividualOffset***Cell individual offsets applicable to a specific measurement event. If this field is present, the UE, for the same cell, shall ignore the cell individual offset configured within the *MeasObjectNR* of the *measID* associated with this *ReportConfigNR*. |
| ***physCellId***Physical cell identity of a cell in the cell list. |

*END OF CHANGES*