**3GPP TSG-RAN WG3 Meeting #126 *R3-247779***

**Orlando, US, 18 - 22 Nov, 2024**

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.455** | **CR** | **0169** | **rev** | **2** | **Current version:** | **18.3.0** |  |
|  |
| *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:***  | Correction of UE Rx-Tx Time difference measurement |
|  |  |
| ***Source to WG:*** | Ericsson, Polaris Wireless, CATT, Huawei, ZTE, China Telecom, Nokia |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** | TEI18 |  | ***Date:*** | 2024-11-07 |
|  |  |  |  |  |
| ***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-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19) Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | RAN3 agreed to reuse PDC’s UE Rx-Tx Time Difference measurement in NRPPa also for positioning purpose. UE Rx-Tx Time Difference as specified in RRC can be configured to be reported using either CSI-RS for tracking or PRS. However, these information are not currently captured in NRPPa.The IE *MeasObjectRxTxDiff* is used to configure the measurement object for UE Rx-Tx time difference measurement.***MeasObjectRxTxDiff* information element**-- ASN1START-- TAG-MEASOBJECTRXTXDIFF-STARTMeasObjectRxTxDiff-r17 ::= SEQUENCE { dl-Ref-r17 CHOICE { prs-Ref-r17 NULL, csi-RS-Ref-r17 NULL, ... } OPTIONAL, -- Need R ...}-- TAG-MEASOBJECTRXTXDIFF-STOP-- ASN1STOP

|  |
| --- |
| ***MeasObjectRxTxDiff field descriptions*** |
| ***dl-Ref***configures the DL references signals to measure Rx-Tx time difference. *prs-Ref-r17* indicates PRS is chosen, and *csi-RS-Ref-r17* indicates that CSI-RS for tracking is chosen.Only one PRS resource set is configured by the network. Only one *NZP-CSI-RS-ResourceSet* can be configured with *pdc-Info-r17* set to *true* and it is used for UE Rx-Tx time difference measurement. Only reference signals from the PCell of the MCG can be configured by the network. |

 It is useful for LMF to know the reference signal used for the measurement; especially since LMF knows the source of the signal for all measurements currently reported in E-CID. For example, if the UE reports a UE Rx-Tx time difference using CSI-RS, LMF therefore knows that this signal comes from a narrower beam than the PRS and can correlate the CSI-RS RSRP/RSRQ measurements, if present, and UE Rx-Tx measurements together to determine the accuracy of the measurements and derive the UE's location uncertainty when reporting the result to the LCS client. |
|  |  |
| ***Summary of change:*** | Include the missing information needed for UE Rx-Tx time difference measurement by indicating which reference signal was used for measuring the UE Rx-Tx.**Impact Analysis**Impact assessment towards the previous version of the specification (same release): This CR has isolated impact with the previous version of the specification (same release) because it is only adding the reference signal type for UE Rx-Tx time difference measurement in the E-CID measurement result.This CR has functional and protocol impact. |
|  |  |
| ***Consequences if not approved:*** | LMF cannot know the reference signal that was used for measuring UE Rx-Tx time difference. |
|  |  |
| ***Clauses affected:*** | 9.2.5, 9.3.5, 9.3.7 |
|  |  |
|  | **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:*** | Rev1: resubmission to RAN3#126 meetingRev2: Update of ASN.1 (DL-reference-signal-UERxTx**-TD**), update of cover page with missing CR number and addition of co-signers |

*Beginning of Changes*

### 9.2.5 E-CID Measurement Result

The purpose of the E-CID Measurement Result information element is to provide the E-CID measurement result.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
| --- | --- | --- | --- | --- | --- | --- |
| Serving Cell ID | M |  | NG-RAN CGI9.2.6 | NG-RAN Cell Identifier of the serving cell | - |  |
| Serving Cell TAC | M |  | TAC9.2.11 | Tracking Area Code of the serving cell | - |  |
| NG-RAN Access Point Position | O |  | 9.2.10 | The configured estimated geographical position of the antenna of the cell.If the *Geographical Coordinates* IE is used, the *NG-RAN Access Point Position* IE shall be ignored. | - |  |
| **Measured Results** |  | *0..1* |  | Measurement results of the serving RAT. | - |  |
| >CHOICE *Measured Results Value* |  | *1 ..<maxnoMeas>* |  |  | - |  |
| *>>Value Angle of Arrival EUTRA* |  |  | INTEGER (0..719) | According to mapping in TS 36.133 [9] |  |  |
| *>>Value Timing Advance Type 1 EUTRA* |  |  | INTEGER (0..7690) | As defined in TS 36.214 [17] |  |  |
| *>>Value Timing Advance Type 2 EUTRA* |  |  | INTEGER (0..7690) | As defined in TS 36.214 [17] |  |  |
| *>>Result RSRP EUTRA* |  |  |  |  |  |  |
| **>>>Result RSRP EUTRA Item** |  | *1 .. <maxCellReport>* |  |  | - |  |
| >>>>PCI EUTRA | M |  | INTEGER (0..503, …) | Physical Cell Identifier of the reported E-UTRA cell | - |  |
| >>>>EARFCN | M |  | INTEGER (0.. 262143, …) | Corresponds to NDL for FDD and NDL/UL for TDD in ref. TS 36.104 [7] | - |  |
| >>>>CGI EUTRA | O |  | 9.2.7 | Cell Global Identifier of the reported E-UTRA cell | - |  |
| >>>>Value RSRP EUTRA | M |  | INTEGER (0..97, …) |  | - |  |
| *>>Result RSRQ EUTRA* |  |  |  |  |  |  |
| **>>>Result RSRQ EUTRA Item** |  | *1 .. <maxCellReport>* |  |  | - |  |
| *>>>>PCI EUTRA* | M |  | INTEGER (0..503, …) | Physical Cell Identifier of the reported E-UTRA cell | - |  |
| *>>>>EARFCN* | M |  | INTEGER (0..262143, …) | Corresponds to NDL for FDD and NDL/UL for TDD in ref. TS 36.104 [7] | - |  |
| *>>>>CGI EUTRA* | O |  | 9.2.7 | Cell Global Identifier of the reported E-UTRA cell | - |  |
| *>>>>Value RSRQ EUTRA* | M |  | INTEGER (0..34, …) |  | - |  |
| *>>Result SS-RSRP* |  |  |  |  | YES | ignore |
| **>>>Result SS-RSRP Item** |  | *1 .. <maxCellReportNR>* |  |  | - |  |
| >>>>NR PCI | M |  | INTEGER (0..1007) |  | - |  |
| >>>>NR ARFCN | M |  | INTEGER (0..3279165) |  | - |  |
| >>>>NR CGI | O |  | 9.2.9 |  | - |  |
| >>>>Value SS-RSRP Cell | O |  | INTEGER (0..127) | SS-RSRP measurement aggregated at cell level | - |  |
| **>>>>SS-RSRP per SSB Resource** |  | *0..1* |  |  | - |  |
| **>>>>>SS-RSRP per SSB Resource Item** |  | *1 .. <maxIndexesReport>* |  |  | - |  |
| >>>>>>SSB Index | M |  | INTEGER (0..63) |  | - |  |
| >>>>>>Value SS-RSRP | M |  | INTEGER (0..127) | SS-RSRP measurement per SSB resource | - |  |
| *>>Result SS-RSRQ* |  |  |  |  | YES | ignore |
| **>>>ResultSS-RSRQ-Item** |  | *1 .. <maxCellReportNR>* |  |  | - |  |
| >>>>NR PCI | M |  | INTEGER (0..1007) |  | - |  |
| >>>>NR ARFCN | M |  | INTEGER (0..3279165) |  | - |  |
| >>>>NR CGI | O |  | 9.2.9 |  | - |  |
| >>>>Value SS-RSRQ Cell | O |  | INTEGER (0..127) | SS-RSRQ measurement aggregated at cell level | - |  |
| **>>>>SS-RSRQ per SSB Resource** |  | *0..1* |  |  | - |  |
| **>>>>>SS-RSRQ PerSSB Resource Item** |  | *1 .. <maxIndexesReport>* |  |  | - |  |
| >>>>>>SSB Index | M |  | INTEGER (0..63) |  | - |  |
| >>>>>>Value SS-RSRQ | M |  | INTEGER (0..127) | SS-RSRQ measurement per SSB resource | - |  |
| *>>Result CSI-RSRP* |  |  |  |  | YES | ignore |
| **>>>Result CSI-RSRP Item** |  | *1 .. <maxCellReportNR>* |  |  | - |  |
| >>>>NR PCI | M |  | INTEGER (0..1007) |  | - |  |
| >>>>NR ARFCN | M |  | INTEGER (0..3279165) |  | - |  |
| >>>>NR CGI | O |  | 9.2.9 |  | - |  |
| >>>>Value CSI-RSRP Cell | O |  | INTEGER (0..127) | CSI-RSRP measurement aggregated at cell level | - |  |
| **>>>>CSI-RSRP per CSI-RS Resource** |  | *0..1* |  |  | - |  |
| **>>>>>CSI-RSRP per CSI-RS Resource Item** |  | *1.. <maxIndexesReport>* |  |  | - |  |
| >>>>>>CSI-RS Index | M |  | INTEGER (0..95) |  | - |  |
| >>>>>>Value CSI-RSRP | M |  | INTEGER (0..127) | CSI-RSRP measurement per CSI-RS resource | - |  |
| *>>Result CSI-RSRQ* |  |  |  |  | YES | ignore |
| >>>Result CSI-RSRQ Item |  | *1 .. <maxCellReportNR>* |  |  | - |  |
| >>>>NR PCI | M |  | INTEGER (0..1007) |  | - |  |
| >>>>NR ARFCN | M |  | INTEGER (0..3279165) |  | - |  |
| >>>>NR CGI | O |  | 9.2.9 |  | - |  |
| >>>>Value CSI-RSRQ Cell | O |  | INTEGER (0..127) | CSI-RSRQ measurement aggregated at cell level | - |  |
| **>>>>CSI-RSRQ per CSI-RS Resource** |  | *0..1* |  |  | - |  |
| **>>>>>CSI-RSRQ per CSI-RS Resource Item** |  | *1 .. <maxIndexesReport>* |  |  | - |  |
| >>>>>>CSI-RS Index | M |  | INTEGER (0..95) |  | - |  |
| >>>>>>Value CSI-RSRQ | M |  | INTEGER (0..127) | CSI-RSRQ measurement per CSI-RS resource | - |  |
| *>>Angle of Arrival NR* |  |  | UL Angle of Arrival9.2.38 |  | YES | ignore |
| *>>Value Timing Advance NR* |  |  | INTEGER (0.. 7690) | Report mapping as defined in TS 38.133 [16] | YES | ignore |
| *>>Value UE Rx-Tx Time Difference* |  |  | INTEGER (0.. 61565) | As defined in TS 38.215 [19] | YES | ignore |
| Geographical Coordinates | O |  | 9.2.46 |  | YES | ignore |
| Mobile Access Point Location Information | O |  | Mobile TRP Location Information9.2.88 | The location information of the mobile access point of the cell that is associated to the mobile TRP. | YES | ignore |
| **Measured Results Associated Information List** |  | *0..1* |  | The *Measured Results* *Associated Information Item* IEs are in the same order as the *Measured Results* IEs. | YES | ignore |
| **>Measured Results Associated Information Item** |  | *1..<maxnoMeas>* |  |  | - |  |
| >>Time Stamp | O |  | 9.2.42 | Time Stamp of the corresponding measured result. | - |  |
| >>Measurement Quality | O |  | 9.2.43 | Measurement Quality of the corresponding measured result. | - |  |
| >>DL Reference Signal for UE Rx-Tx Time Difference | O |  | ENUMERATED (csi-rs, prs, …) | Indicates the reference signal used for the UE Rx-Tx Time Difference measurement. | - |  |

|  |  |
| --- | --- |
| Range bound | Explanation |
| maxnoMeas | Maximum no. of measured quantities that can be configured and reported with one message. Value is 64. |
| maxCellReport | Maximum no. of cells that can be reported with one message. Value is 9. |
| maxCellReportNR | Maximum no. of NR cells that can be reported with one message. Value is 9. |
| maxIndexesReport | Maximum no. of beam level measurement results that can be reported with one message. Value is 64. |

*Next Change*

9.3.5 Information Element definitions

-- ASN1START

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-- Information Element Definitions

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

NRPPA-IEs {

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

ngran-access (22) modules (3) nrppa (4) version1 (1) nrppa-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

 id-MeasurementQuantities-Item,

 id-CGI-NR,

 id-SFNInitialisationTime-NR,

 id-GeographicalCoordinates,

 id-ResultSS-RSRP,

 id-ResultSS-RSRQ,

 id-ResultCSI-RSRP,

 id-ResultCSI-RSRQ,

 id-AngleOfArrivalNR,

 id-ResultNR,

 id-ResultEUTRA,

 maxCellinRANnode,

 maxCellReport,

 maxNrOfErrors,

 maxNoMeas,

 maxnoOTDOAtypes,

 maxServCell,

 id-OtherRATMeasurementQuantities-Item,

 id-WLANMeasurementQuantities-Item,

 maxGERANMeas,

 maxUTRANMeas,

 maxWLANchannels,

 maxnoFreqHoppingBandsMinusOne,

 id-TDD-Config-EUTRA-Item,

 maxNrOfPosSImessage,

 maxnoAssistInfoFailureListItems,

 maxNrOfSegments,

 maxNrOfPosSIBs,

 maxnoPosMeas,

 maxnoTRPs,

 maxnoTRPInfoTypes,

 maxNoOfMeasTRPs,

 maxNoPath,

 maxnoofAngleInfo,

 maxnolcs-gcs-translation,

 maxnoBcastCell,

 maxnoSRSTriggerStates,

 maxnoSpatialRelations,

 maxNRMeas,

 maxEUTRAMeas,

 maxIndexesReport,

 maxCellReportNR,

 maxnoSRS-Carriers,

 maxnoSCSs,

 maxnoSRS-Resources,

 maxnoSRS-PosResources,

 maxnoSRS-ResourceSets,

 maxnoSRS-ResourcePerSet,

 maxnoSRS-PosResourceSets,

 maxnoSRS-PosResourcePerSet,

 maxPRS-ResourceSets,

 maxPRS-ResourcesPerSet,

 maxNoSSBs,

 maxnoofPRSresourceSet,

 maxnoofPRSresource,

 maxnoofULAoAs,

 maxNoPathExtended,

 maxnoARPs,

 maxnoTRPTEGs,

 maxnoUETEGs,

 maxFreqLayers,

 maxnoPRSTRPs,

 maxNumResourcesPerAngle,

 maxnoAzimuthAngles,

 maxnoElevationAngles,

 maxnoVACell,

 maxnoaggregatedPosSRS-Resources,

 maxnoaggregatedPosSRS-ResourceSets,

 maxnoAggPosPRSResourceSets,

 maxnoofTimeWindowSRS,

 maxnoofTimeWindowMeas,

 maxnoPreconfiguredSRS,

 maxnoofHopsMinusOne,

 maxnoAggCombinations,

 maxnoAggregatedPosSRSCombinations,

 id-Cell-ID,

 id-TRPInformationTypeItem,

 id-SrsFrequency,

 id-TRPType,

 id-SRSSpatialRelationPerSRSResource,

 id-PRS-Resource-ID,

 id-OnDemandPRS,

 id-AoA-SearchWindow,

 id-ZoA,

 id-MultipleULAoA,

 id-UL-SRS-RSRPP,

 id-SRSResourcetype,

 id-ExtendedAdditionalPathList,

 id-ARPLocationInfo,

 id-ARP-ID,

 id-LoS-NLoSInformation,

 id-NumberOfTRPRxTEG,

 id-NumberOfTRPRxTxTEG,

 id-TRPTxTEGAssociation,

 id-TRPTEGInformation,

 id-TRP-Rx-TEGInformation,

 id-TRPBeamAntennaInformation,

 id-NR-TADV,

 id-pathPower,

 id-SRSPortIndex,

 id-UETxTimingErrorMargin,

 id-nrofSymbolsExtended,

 id-repetitionFactorExtended,

 id-StartRBHopping,

 id-StartRBIndex,

 id-transmissionCombn8,

 id-ExtendedResourceSymbolOffset,

 id-Mobile-TRP-LocationInformation,

 id-Mobile-IAB-MT-UE-ID,

 id-MobileAccessPointLocation,

 id-CommonTAParameters,

 id-UE-Rx-Tx-Time-Diff,

 id-SCS-480,

 id-SCS-960,

 id-UL-RSCPMeas,

 id-Bandwidth-Aggregation-Request-Indication,

 id-PosSRSResourceSet-Aggregation-List,

 id-ReportingGranularitykminus1,

 id-ReportingGranularitykminus2,

 id-ReportingGranularitykminus3,

 id-ReportingGranularitykminus4,

 id-ReportingGranularitykminus5,

 id-ReportingGranularitykminus6,

 id-SymbolIndex,

 id-TimingReportingGranularityFactorExtended,

 id-PosValidityAreaCellList,

 id-PRSBWAggregationRequestIndication,

 id-AggregatedPosSRSResourceID-List,

 id-AggregatedPRSResourceSetList,

 id-TRPPhaseQuality,

 id-ValidityAreaSpecificSRSInformation,

 id-TxHoppingConfiguration,

 id-MeasuredFrequencyHops,

 id-ReportingGranularitykminus1AdditionalPath,

 id-ReportingGranularitykminus2AdditionalPath,

 id-ReportingGranularitykminus3AdditionalPath,

 id-ReportingGranularitykminus4AdditionalPath,

 id-ReportingGranularitykminus5AdditionalPath,

 id-ReportingGranularitykminus6AdditionalPath,

 id-MeasuredResultsAssociatedInfoList,

 id-PointA,

 id-NR-PCI,

 id-SCS-SpecificCarrier,

 id-MeasBasedOnAggregatedResources,

 id-UEReportingInterval-milliseconds,

 id-DL-reference-signal-UERxTx-TD

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-- D

DL-Bandwidth-EUTRA ::= ENUMERATED {

 bw6,

 bw15,

 bw25,

 bw50,

 bw75,

 bw100,

 ...

}

DL-PRS ::= SEQUENCE {

 prsid PRS-ID,

 dl-PRSResourceSetID PRS-Resource-Set-ID,

 dl-PRSResourceID PRS-Resource-ID OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {DL-PRS-ExtIEs} } OPTIONAL,

 ...

}

DL-PRS-ExtIEs NRPPA-PROTOCOL-EXTENSION ::= {

 ...

}

DL-PRSMutingPattern ::= CHOICE {

 two BIT STRING (SIZE(2)),

 four BIT STRING (SIZE(4)),

 six BIT STRING (SIZE(6)),

 eight BIT STRING (SIZE(8)),

 sixteen BIT STRING (SIZE(16)),

 thirty-two BIT STRING (SIZE(32)),

 choice-extension ProtocolIE-Single-Container { { DL-PRSMutingPattern-ExtIEs } }

}

DL-PRSMutingPattern-ExtIEs NRPPA-PROTOCOL-IES ::= {

 ...

}

DLPRSResourceCoordinates ::= SEQUENCE {

 listofDL-PRSResourceSetARP SEQUENCE (SIZE(1.. maxPRS-ResourceSets)) OF DLPRSResourceSetARP,

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

 ...

}

DLPRSResourceCoordinates-ExtIEs NRPPA-PROTOCOL-EXTENSION ::= {

 ...

}

DLPRSResourceSetARP ::= SEQUENCE {

 dl-PRSResourceSetID PRS-Resource-Set-ID,

 dL-PRSResourceSetARPLocation DL-PRSResourceSetARPLocation,

 listofDL-PRSResourceARP SEQUENCE (SIZE(1.. maxPRS-ResourcesPerSet)) OF DLPRSResourceARP,

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

 ...

}

DLPRSResourceSetARP-ExtIEs NRPPA-PROTOCOL-EXTENSION ::= {

 ...

}

DL-PRSResourceSetARPLocation ::= CHOICE {

 relativeGeodeticLocation RelativeGeodeticLocation,

 relativeCartesianLocation RelativeCartesianLocation,

 choice-Extension ProtocolIE-Single-Container { { DL-PRSResourceSetARPLocation-ExtIEs } }

}

DL-PRSResourceSetARPLocation-ExtIEs NRPPA-PROTOCOL-IES ::= {

 ...

}

DLPRSResourceARP ::= SEQUENCE {

 dl-PRSResourceID PRS-Resource-ID,

 dL-PRSResourceARPLocation DL-PRSResourceARPLocation,

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

 ...

}

DLPRSResourceARP-ExtIEs NRPPA-PROTOCOL-EXTENSION ::= {

 ...

}

DL-PRSResourceARPLocation ::= CHOICE {

 relativeGeodeticLocation RelativeGeodeticLocation,

 relativeCartesianLocation RelativeCartesianLocation,

 choice-Extension ProtocolIE-Single-Container { { DL-PRSResourceARPLocation-ExtIEs } }

}

DL-PRSResourceARPLocation-ExtIEs NRPPA-PROTOCOL-IES ::= {

 ...

}

DL-reference-signal-UERxTx-TD ::= ENUMERATED {csirs, prs, ...}

//SKIPPED TEXT UNCHANGED//

MeasuredResultsAssociatedInfoList ::= SEQUENCE (SIZE (1..maxNoMeas)) OF MeasuredResultsAssociatedInfoItem

MeasuredResultsAssociatedInfoItem ::= SEQUENCE {

 timeStamp TimeStamp OPTIONAL,

 measurementQuality TrpMeasurementQuality OPTIONAL,

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

 ...

}

MeasuredResultsAssociatedInfoItem-ExtIEs NRPPA-PROTOCOL-EXTENSION ::= {

 { ID id-DL-reference-signal-UERxTx-TD CRITICALITY ignore EXTENSION DL-reference-signal-UERxTx-TD PRESENCE optional},

 ...

}

//NEXT CHANGE//

9.3.7 Constant definitions

-- ASN1START

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

--

-- Constant definitions

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

NRPPA-Constants {

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

ngran-access (22) modules (3) nrppa (4) version1 (1) nrppa-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

 ProcedureCode,

 ProtocolIE-ID

FROM NRPPA-CommonDataTypes;

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id-SymbolIndex ProtocolIE-ID ::= 127

id-PosValidityAreaCellList ProtocolIE-ID ::= 128

id-SRSReservationType ProtocolIE-ID ::= 129

id-PRSBWAggregationRequestIndication ProtocolIE-ID ::= 130

id-AggregatedPosSRSResourceID-List ProtocolIE-ID ::= 131

id-AggregatedPRSResourceSetList ProtocolIE-ID ::= 132

id-TRPPhaseQuality ProtocolIE-ID ::= 133

id-NewCellIdentity ProtocolIE-ID ::= 134

id-ValidityAreaSpecificSRSInformation ProtocolIE-ID ::= 135

id-RequestedSRSPreconfigurationCharacteristics-List ProtocolIE-ID ::= 136

id-SRSPreconfiguration-List ProtocolIE-ID ::= 137

id-SRSInformation ProtocolIE-ID ::= 138

id-TxHoppingConfiguration ProtocolIE-ID ::= 139

id-MeasuredFrequencyHops ProtocolIE-ID ::= 140

id-ReportingGranularitykminus1 ProtocolIE-ID ::= 141

id-ReportingGranularitykminus2 ProtocolIE-ID ::= 142

id-ReportingGranularitykminus3 ProtocolIE-ID ::= 143

id-ReportingGranularitykminus4 ProtocolIE-ID ::= 144

id-ReportingGranularitykminus5 ProtocolIE-ID ::= 145

id-ReportingGranularitykminus6 ProtocolIE-ID ::= 146

id-ReportingGranularitykminus1AdditionalPath ProtocolIE-ID ::= 147

id-ReportingGranularitykminus2AdditionalPath ProtocolIE-ID ::= 148

id-ReportingGranularitykminus3AdditionalPath ProtocolIE-ID ::= 149

id-ReportingGranularitykminus4AdditionalPath ProtocolIE-ID ::= 150

id-ReportingGranularitykminus5AdditionalPath ProtocolIE-ID ::= 151

id-ReportingGranularitykminus6AdditionalPath ProtocolIE-ID ::= 152

id-MeasuredResultsAssociatedInfoList ProtocolIE-ID ::= 153

id-PointA ProtocolIE-ID ::= 154

id-NR-PCI ProtocolIE-ID ::= 155

id-SCS-SpecificCarrier ProtocolIE-ID ::= 156

id-MeasBasedOnAggregatedResources ProtocolIE-ID ::= 157

id-UEReportingInterval-milliseconds ProtocolIE-ID ::= 158

id-DL-reference-signal-UERxTx-TD ProtocolIE-ID ::= XXX