3GPP TSG-RAN WG3 #129-bis R3-25xxxx

Prague, Czech Republic, 13-17 October 2025

|  |
| --- |
| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.423** | **CR** | **-** | **rev** | **-** | **Current version:** | **19.0.0** |  |
|  |
| *For* [***HELP***](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 |  |

|  |
| --- |
|  |
| ***Title:***  | Removal of CSI-RS resource configuration to release list |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** | R3 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2025-10-14 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-19 |
|  | *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:*** | Once the CSI-RS resource configuration cannot be released before the cell switch, the IE should not be included in the CSI-RS resource configuration.  |
|  |  |
| ***Summary of change:*** | * Remove the *CSI-RS Resource Configuration to Release List, CSI-RS Resource Set to Release List, CSI-IM Resource to Release List*, and *CSI-IM Resource Set to Release List* in the *CSI-RS Resource Configuration* IE.
 |
|  |  |
| ***Consequences if not approved:*** | No signaling support exists for the CSI-RS resource configurations to be released. |
|  |  |
| ***Clauses affected:*** |  |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** | **X** |  |  Other core specifications  | TS 38.473 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 >>>>>>>>>>>>>>>>>>>

#### 9.2.3.224 CSI-RS Resource Configuration

This IE contains the CSI resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| Periodic NZP CSI-RS Resource Configuration | O |  | NZP CSI-RS Resource Configuration9.2.3.225 |  |
| Semi-Persistent NZP CSI-RS Resource Configuration | O |  | NZP CSI-RS Resource Configuration9.2.3.225 |  |
| Periodic NZP CSI-RS Resource Set Configuration | O |  | NZP CSI-RS Resource Set Configuration9.2.3.226 |  |
| Semi-Persistent NZP CSI-RS Resource Set Configuration | O |  | NZP CSI-RS Resource Set Configuration9.2.3.226 |  |
| CSI-IM Resource Configuration | O |  | 9.2.3.227 |  |

#### 9.2.3.225 NZP CSI-RS Resource Configuration

This IE contains the CSI-RS resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-RS Resource to AddMod List | O |  | OCTET STRING | Includes the*ltm-NZP-CSI-RS-ResourceToAddModList* as defined in TS 38.331 [10]. |
|  |  |  |  |  |

#### 9.2.3.226 NZP CSI-RS Resource Set Configuration

This IE contains the CSI-RS resource set configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-RS Resource Set to AddMod List | O |  | OCTET STRING | Includes *ltm-NZP-CSI-RS-ResourceSetToAddModList* contained in the *LTM-Config* IE as defined in TS 38.331 [10]. |
|  |  |  |  |  |

#### 9.2.3.227 CSI-IM Resource Configuration

This IE contains the CSI-IM resource configuration used for LTM.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IE/Group Name | Presence | Range | IE type and reference | Semantics description |
| CSI-IM Resource to AddMod List | O |  | OCTET STRING | Includes *ltm-CSI-IM-ResourceToAddModList* contained in the *LTM-Config* IE as defined in TS 38.331 [10]. |
|  |  |  |  |  |
| CSI-IM ResourceSet to AddMod List | O |  | OCTET STRING | Includes *ltm-CSI-IM-*ResourceSetToAddModList contained in the *LTM-Config* IE as defined in TS 38.331 [10]. |
|  |  |  |  |  |

<<<<<<<<<<<<<<<<<<<< Next Change >>>>>>>>>>>>>>>>>>>

<<<<<<<<<<<<<<<<<<<< Next Change >>>>>>>>>>>>>>>>>>>

### 9.3.5 Information Element definitions

-- ASN1START

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

--

-- Information Element Definitions

--

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

XnAP-IEs {

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

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS

 id-CNTypeRestrictionsForEquivalent,

 id-CNTypeRestrictionsForServing,

 id-Additional-UL-NG-U-TNLatUPF-List,

 id-ConfiguredTACIndication,

 id-AlternativeQoSParaSetList,

 id-CurrentQoSParaSetIndex,

 id-DefaultDRB-Allowed,

 id-DLCarrierList,

 id-EndpointIPAddressAndPort,

 id-ExtendedReportIntervalMDT,

 id-ExtendedTAISliceSupportList,

 id-FiveGCMobilityRestrictionListContainer,

 id-SecondarydataForwardingInfoFromTarget-List,

 id-LastE-UTRANPLMNIdentity,

 id-LTEA2XUEPC5AggregateMaximumBitRate,

<<<<<<<<<<<<<<<<<<<< skip unchanged >>>>>>>>>>>>>>>>>>>

-- C

CAG-Identifier ::= BIT STRING (SIZE (32))

CandidateRelayUEInfoList ::= SEQUENCE (SIZE(1..maxnoofCandidateRelayUEs)) OF CandidateRelayUEInfoItem

CandidateRelayUEInfoItem ::= SEQUENCE {

 candidateRelayUEID BIT STRING(SIZE(24)),

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

 ...

}

CandidateRelayUEInfoItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CapacityValue ::= INTEGER (0..100)

CapacityValueInfo ::= SEQUENCE {

 capacityValue CapacityValue,

 ssbAreaCapacityValueList SSBAreaCapacityValue-List OPTIONAL,

 iE-Extension ProtocolExtensionContainer { {CapacityValueInfo-ExtIEs} } OPTIONAL,

 ...

}

CapacityValueInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

Cause ::= CHOICE {

 radioNetwork CauseRadioNetworkLayer,

 transport CauseTransportLayer,

 protocol CauseProtocol,

 misc CauseMisc,

 choice-extension ProtocolIE-Single-Container { {Cause-ExtIEs} }

}

Cause-ExtIEs XNAP-PROTOCOL-IES ::= {

 ...

}

CauseRadioNetworkLayer ::= ENUMERATED {

 cell-not-available,

 handover-desirable-for-radio-reasons,

 handover-target-not-allowed,

 invalid-AMF-Set-ID,

 no-radio-resources-available-in-target-cell,

 partial-handover,

 reduce-load-in-serving-cell,

 resource-optimisation-handover,

 time-critical-handover,

 tXnRELOCoverall-expiry,

 tXnRELOCprep-expiry,

 unknown-GUAMI-ID,

 unknown-local-NG-RAN-node-UE-XnAP-ID,

 inconsistent-remote-NG-RAN-node-UE-XnAP-ID,

 encryption-and-or-integrity-protection-algorithms-not-supported,

 not-used-causes-value-1,

 multiple-PDU-session-ID-instances,

 unknown-PDU-session-ID,

 unknown-QoS-Flow-ID,

 multiple-QoS-Flow-ID-instances,

 switch-off-ongoing,

 not-supported-5QI-value,

 tXnDCoverall-expiry,

 tXnDCprep-expiry,

 action-desirable-for-radio-reasons,

 reduce-load,

 resource-optimisation,

 time-critical-action,

 target-not-allowed,

 no-radio-resources-available,

 invalid-QoS-combination,

 encryption-algorithms-not-supported,

 procedure-cancelled,

 rRM-purpose,

 improve-user-bit-rate,

 user-inactivity,

 radio-connection-with-UE-lost,

 failure-in-the-radio-interface-procedure,

 bearer-option-not-supported,

 up-integrity-protection-not-possible,

 up-confidentiality-protection-not-possible,

 resources-not-available-for-the-slice-s,

 ue-max-IP-data-rate-reason,

 cP-integrity-protection-failure,

 uP-integrity-protection-failure,

 slice-not-supported-by-NG-RAN,

 mN-Mobility,

 sN-Mobility,

 count-reaches-max-value,

 unknown-old-NG-RAN-node-UE-XnAP-ID,

 pDCP-Overload,

 drb-id-not-available,

 unspecified,

 ...,

 ue-context-id-not-known,

 non-relocation-of-context,

 cho-cpc-resources-tobechanged,

 rSN-not-available-for-the-UP,

 npn-access-denied,

 report-characteristics-empty,

 existing-measurement-ID,

 measurement-temporarily-not-available,

 measurement-not-supported-for-the-object,

 ue-power-saving,

 not-existing-NG-RAN-node2-Measurement-ID,

 insufficient-ue-capabilities,

 normal-release,

 value-out-of-allowed-range,

 scg-activation-deactivation-failure,

 scg-deactivation-failure-due-to-data-transmission,

 ssb-not-available,

 lTM-triggered,

 no-Backhaul-Resource,

 mIAB-node-not-authorized,

 iAB-not-authorized

}

CauseTransportLayer ::= ENUMERATED {

 transport-resource-unavailable,

 unspecified,

 ...

}

CauseProtocol ::= ENUMERATED {

 transfer-syntax-error,

 abstract-syntax-error-reject,

 abstract-syntax-error-ignore-and-notify,

 message-not-compatible-with-receiver-state,

 semantic-error,

 abstract-syntax-error-falsely-constructed-message,

 unspecified,

 ...

}

CauseMisc ::= ENUMERATED {

 control-processing-overload,

 hardware-failure,

 o-and-M-intervention,

 not-enough-user-plane-processing-resources,

 unspecified,

 ...

}

CellAssistanceInfo-NR ::= CHOICE {

 limitedNR-List SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF NR-CGI,

 full-List ENUMERATED {all-served-cells-NR, ...},

 choice-extension ProtocolIE-Single-Container { {CellAssistanceInfo-NR-ExtIEs} }

}

CellAssistanceInfo-NR-ExtIEs XNAP-PROTOCOL-IES ::= {

 ...

}

CellAndCapacityAssistanceInfo-NR ::= SEQUENCE {

 maximumCellListSize MaximumCellListSize OPTIONAL,

 cellAssistanceInfo-NR CellAssistanceInfo-NR OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellAndCapacityAssistanceInfo-NR-ExtIEs} } OPTIONAL,

 ...

}

CellAndCapacityAssistanceInfo-NR-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellAndCapacityAssistanceInfo-EUTRA ::= SEQUENCE {

 maximumCellListSize MaximumCellListSize OPTIONAL,

 cellAssistanceInfo-EUTRA CellAssistanceInfo-EUTRA OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellAndCapacityAssistanceInfo-EUTRA-ExtIEs} } OPTIONAL,

 ...

}

CellAndCapacityAssistanceInfo-EUTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellAssistanceInfo-EUTRA ::= CHOICE {

 limitedEUTRA-List SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF E-UTRA-CGI,

 full-List ENUMERATED {all-served-cells-E-UTRA, ...},

 choice-extension ProtocolIE-Single-Container { {CellAssistanceInfo-EUTRA-ExtIEs} }

}

CellAssistanceInfo-EUTRA-ExtIEs XNAP-PROTOCOL-IES ::= {

 ...

}

CellBasedMDT-NR::= SEQUENCE {

 cellIdListforMDT-NR CellIdListforMDT-NR,

 iE-Extensions ProtocolExtensionContainer { {CellBasedMDT-NR-ExtIEs} } OPTIONAL,

 ...

}

CellBasedMDT-NR-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellIdListforMDT-NR ::= SEQUENCE (SIZE(1..maxnoofCellIDforMDT)) OF NR-CGI

CellBasedQMC::= SEQUENCE {

 cellIdListforQMC CellIdListforQMC,

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

 ...

}

CellBasedQMC-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellIdListforQMC ::= SEQUENCE (SIZE(1..maxnoofCellIDforQMC)) OF GlobalNG-RANCell-ID

CellBasedMDT-EUTRA::= SEQUENCE {

 cellIdListforMDT-EUTRA CellIdListforMDT-EUTRA,

 iE-Extensions ProtocolExtensionContainer { {CellBasedMDT-EUTRA-ExtIEs} } OPTIONAL,

 ...

}

CellBasedMDT-EUTRA-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellIdListforMDT-EUTRA ::= SEQUENCE (SIZE(1..maxnoofCellIDforMDT)) OF E-UTRA-CGI

CellCapacityClassValue ::= INTEGER (1..100,...)

CellDeploymentStatusIndicator ::= ENUMERATED {pre-change-notification, ...}

CellGroupID ::= INTEGER (0..maxnoofSCellGroups)

CellMeasurementResult ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CellMeasurementResult-Item

CellMeasurementResult-Item ::= SEQUENCE {

 cell-ID GlobalNG-RANCell-ID,

 radioResourceStatus RadioResourceStatus OPTIONAL,

 tNLCapacityIndicator TNLCapacityIndicator OPTIONAL,

 compositeAvailableCapacityGroup CompositeAvailableCapacityGroup OPTIONAL,

 sliceAvailableCapacity SliceAvailableCapacity OPTIONAL,

 numberofActiveUEs NumberofActiveUEs OPTIONAL,

 rRCConnections RRCConnections OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellMeasurementResult-Item-ExtIEs} } OPTIONAL,

 ...

}

CellMeasurementResult-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-NR-U-Channel-List CRITICALITY ignore EXTENSION NR-U-Channel-List PRESENCE optional },

 ...

}

CellReplacingInfo ::= SEQUENCE {

 replacingCells ReplacingCells,

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

 ...

}

CellReplacingInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellToReport ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CellToReport-Item

CellToReport-Item ::= SEQUENCE {

 cell-ID GlobalNG-RANCell-ID,

 sSBToReport-List SSBToReport-List OPTIONAL,

 sliceToReport-List SliceToReport-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellToReport-Item-ExtIEs} } OPTIONAL,

 ...

}

CellToReport-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellToReportForDataCollection-List ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CellToReportForDataCollection-Item

CellToReportForDataCollection-Item ::= SEQUENCE {

 cell-ID GlobalNG-RANCell-ID,

 iE-Extensions ProtocolExtensionContainer { { CellToReportForDataCollection-Item-ExtIEs} } OPTIONAL,

 ...

}

CellToReportForDataCollection-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-SliceToReportForDataCollection-List CRITICALITY ignore EXTENSION SliceToReportForDataCollection-List PRESENCE optional },

 ...

}

CellBasedUETrajectoryPrediction ::= SEQUENCE (SIZE(1..maxnoofCellsTrajectoryPredict)) OF PredictedUETrajectory-Item

CellMeasurementInitiationResult-List ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CellMeasurementInitiationResult-Item

CellMeasurementInitiationResult-Item ::= SEQUENCE {

 cellID GlobalNG-RANCell-ID,

 cellMeasurementFailureCause-List CellMeasurementFailureCause-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellMeasurementInitiationResult-Item-ExtIEs} } OPTIONAL,

 ...

}

CellMeasurementInitiationResult-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-SliceMeasurementInitiationResult CRITICALITY reject EXTENSION SliceMeasurementInitiationResult PRESENCE optional},

 ...

}

CLI-MeasurementResult-List ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CLI-MeasurementResult-Item

CLI-MeasurementResult-Item ::= SEQUENCE {

 cellID GlobalNG-RANCell-ID,

 ssbIndex INTEGER(0..63,...) OPTIONAL,

 nZP-CSI-RS-ResourceIndication INTEGER(1..64,...) OPTIONAL,

 cLI-MitigationIndication CLI-MitigationIndication OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {CLI-MeasurementResult-Item-ExtIEs} } OPTIONAL,

 ...

}

CLI-MeasurementResult-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CLI-MitigationIndication ::= ENUMERATED {true,...}

CellMeasurementResultForDataCollection-List ::= SEQUENCE (SIZE(1..maxnoofCellsinNG-RANnode)) OF CellInfoResultForDataCollection-Item

CellInfoResultForDataCollection-Item ::= SEQUENCE {

 cellID GlobalNG-RANCell-ID,

 predictedRadioResourceStatus RadioResourceStatus OPTIONAL,

 predictedNumberofActiveUEs NumberofActiveUEs OPTIONAL,

 predictedRRCConnections RRCConnections OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {CellInfoResultForDataCollection-Item-ExtIEs} } OPTIONAL,

 ...

}

CellInfoResultForDataCollection-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-PredictedSliceAvailableCapacity CRITICALITY ignore EXTENSION PredictedSliceAvailableCapacityGroup PRESENCE optional},

 ...

}

Cell-Type-Choice ::= CHOICE {

 ng-ran-e-utra E-UTRA-Cell-Identity,

 ng-ran-nr NR-Cell-Identity,

 e-utran E-UTRA-Cell-Identity,

 choice-extension ProtocolIE-Single-Container { { Cell-Type-Choice-ExtIEs} }

}

Cell-Type-Choice-ExtIEs XNAP-PROTOCOL-IES ::= {

 ...

}

CellMeasurementFailureCause-List ::= SEQUENCE (SIZE(1..maxFailedCellMeasObjects)) OF CellMeasurementFailureCause-Item

CellMeasurementFailureCause-Item ::= SEQUENCE {

 cellmeasurementFailedReportCharacteristics BIT STRING(SIZE(32)),

 cause Cause,

 iE-Extensions ProtocolExtensionContainer { { CellMeasurementFailureCause-Item-ExtIEs} } OPTIONAL,

 ...

}

CellMeasurementFailureCause-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CHOConfiguration ::= SEQUENCE {

 choCandidateCell-List CHOCandidateCell-List,

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

 ...

}

CHOConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CHOCandidateCell-List ::= SEQUENCE (SIZE(1..maxnoofCellsinCHO)) OF CHOCandidateCell-Item

CHOCandidateCell-Item ::= SEQUENCE {

 choCandidateCellID GlobalNG-RANCell-ID,

 choExecutionCondition-List CHOExecutionCondition-List,

 iE-Extensions ProtocolExtensionContainer { { CHOCandidateCell-Item-ExtIEs} } OPTIONAL,

 ...

}

CHOCandidateCell-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CHOExecutionCondition-List ::= SEQUENCE (SIZE(1..maxnoofCHOexecutioncond)) OF CHOExecutionCondition-Item

CHOExecutionCondition-Item ::= SEQUENCE { measObjectContainer MeasObjectContainer,

 reportConfigContainer ReportConfigContainer,

 iE-Extensions ProtocolExtensionContainer { { CHOExecutionCondition-Item-ExtIEs} } OPTIONAL,

 ...

}

CHOExecutionCondition-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ClockQualityAcceptanceCriteria ::= SEQUENCE {

 synchronisationState BIT STRING (SIZE(8, ...)) OPTIONAL,

 traceabletoUTC ENUMERATED {true, ...} OPTIONAL,

 traceabletoGNSS ENUMERATED {true, ...} OPTIONAL,

 clockFrequencyStability BIT STRING (SIZE(16)) OPTIONAL,

 clockAccuracy INTEGER (1..40000000, ...) OPTIONAL,

 parentTimeSource BIT STRING (SIZE(16, ...)) OPTIONAL,

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

 ...

}

ClockQualityAcceptanceCriteria-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ClockQualityReportingControlInfo ::= SEQUENCE {

 clockQualityDetailLevel ClockQualityDetailLevel,

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

 ...

}

ClockQualityReportingControlInfo-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ClockQualityDetailLevel ::= CHOICE {

 clockQualityMetrics NULL,

 acceptanceIndication ClockQualityAcceptanceCriteria,

 choice-extension ProtocolIE-Single-Container { {ClockQualityDetailLevel-ExtIEs} }

}

ClockQualityDetailLevel-ExtIEs XNAP-PROTOCOL-IES ::= {

 ...

}

CapabilityForBATAdaptation ::= ENUMERATED {true, ...}

CompositeAvailableCapacityGroup ::= SEQUENCE {

 compositeAvailableCapacityDownlink CompositeAvailableCapacity,

 compositeAvailableCapacityUplink CompositeAvailableCapacity,

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

 ...

}

CompositeAvailableCapacityGroup-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-CompositeAvailableCapacitySupplementaryUplink CRITICALITY ignore EXTENSION CompositeAvailableCapacity PRESENCE optional },

 ...

}

CompositeAvailableCapacity ::= SEQUENCE {

 cellCapacityClassValue CellCapacityClassValue OPTIONAL,

 capacityValueInfo CapacityValueInfo, -- this IE represents the IE "CapacityValue" in 9.2.2.52, it’s used to distinguish the "CapacityValue" in 9.2.2.54

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

 ...

}

CompositeAvailableCapacity-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ControlPlaneTrafficType ::= INTEGER (1..3, ...)

CHO-MRDC-EarlyDataForwarding ::= ENUMERATED {stop, ...}

CHO-MRDC-Indicator ::= ENUMERATED {true, ..., coordination-only }

CHOtrigger ::= ENUMERATED {

 cho-initiation,

 cho-replace,

 ...

}

CHOinformation-Req ::= SEQUENCE {

 cho-trigger CHOtrigger,

 targetNG-RANnodeUEXnAPID NG-RANnodeUEXnAPID OPTIONAL

 -- This IE shall be present if the *CHO Trigger* IE is present and set to "CHO-replace" --,

 cHO-EstimatedArrivalProbability CHO-Probability OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CHOinformation-Req-ExtIEs} } OPTIONAL,

 ...

}

CHOinformation-Req-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 {ID id-CHOTimeBasedInformation CRITICALITY reject EXTENSION CHOTimeBasedInformation PRESENCE optional}|

 { ID id-CHO-Maxnoof-CondReconfig CRITICALITY reject EXTENSION CHO-Maxnoof-CondReconfig PRESENCE optional },

 ...

}

CHOTimeBasedInformation ::= SEQUENCE {

 cHO-HOWindowStart CHO-HandoverWindowStart,

 cHO-HOWindowDuration CHO-HandoverWindowDuration,

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

 ...

}

CHOTimeBasedInformation-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CHOinformation-Ack ::= SEQUENCE {

 requestedTargetCellGlobalID Target-CGI,

 maxCHOoperations MaxCHOpreparations OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CHOinformation-Ack-ExtIEs} } OPTIONAL,

 ...

}

CHOinformation-Ack-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 { ID id-CHO-CPAC-Info CRITICALITY reject EXTENSION CHO-CPAC-Information PRESENCE optional },

 ...

}

CHOinformation-AddReq ::= SEQUENCE {

 source-M-NGRAN-node-ID GlobalNG-RANNode-ID,

 source-M-NGRAN-node-UE-XnAP-ID NG-RANnodeUEXnAPID,

 cHO-EstimatedArrivalProbability CHO-Probability OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CHOinformation-AddReq-ExtIEs} } OPTIONAL,

 ...

}

CHOinformation-AddReq-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CHOinformation-AddReqAck ::= SEQUENCE {

 pCell-ID GlobalNG-RANCell-ID OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CHOinformation-AddReqAck-ExtIEs} } OPTIONAL,

 ...

}

CHOinformation-AddReqAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CHOinformation-ModReq ::= SEQUENCE {

 conditionalReconfig ENUMERATED {intra-mn-cho, ...},

 cHO-EstimatedArrivalProbability CHO-Probability OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CHOinformation-ModReq-ExtIEs} } OPTIONAL,

 ...

}

CHOinformation-ModReq-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CHO-Maxnoof-CondReconfig ::= INTEGER (1..8,...)

CHO-CPAC-Information ::= SEQUENCE {

 cHO-CPAC-config-indicator CHO-CPAC-Config-Indicator OPTIONAL,

 cHO-target-SN-node-list CHO-target-SN-node-list,

 iE-Extensions ProtocolExtensionContainer { {CHO-CPAC-Information-ExtIEs}} OPTIONAL,

 ...

}

CHO-CPAC-Information-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CHO-CPAC-Config-Indicator ::= ENUMERATED {

 cho-only-not-prepared,

 ...

}

CHO-Probability ::= INTEGER (1..100)

CHO-HandoverWindowStart ::= INTEGER (0.. 549755813887)

CHO-HandoverWindowDuration ::= INTEGER (1..6000)

CHO-target-SN-node-list ::= SEQUENCE (SIZE(1.. maxnoofTargetSNs)) OF CHO-target-SN-node-Item

CHO-target-SN-node-Item ::= SEQUENCE {

 target-S-NG-RANnodeID GlobalNG-RANNode-ID,

 pduSessionResourcesAdmittedList PDUSessionResourcesAdmitted-List,

 cho-Candidate-PSCells-list CHO-Candidate-PSCells-list,

 iE-Extensions ProtocolExtensionContainer { {CHO-target-SN-node-Item-ExtIEs}} OPTIONAL,

 ...

}

CHO-target-SN-node-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CHO-Candidate-PSCells-list ::= SEQUENCE (SIZE(1..maxnoofPSCellCandidates)) OF CHO-Candidate-PSCells-Item

CHO-Candidate-PSCells-Item ::= SEQUENCE {

 pscell-id NR-CGI,

 target2source-NG-RANNode-Container OCTET STRING,

 iE-Extensions ProtocolExtensionContainer { {CHO-Candidate-PSCells-Item-ExtIEs}} OPTIONAL,

 ...

}

CHO-Candidate-PSCells-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

Circle ::= SEQUENCE {

 referenceLocation OCTET STRING,

 distanceRadius INTEGER(1..65535, ...),

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

 ...

}

Circle-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CNsubgroupID ::= INTEGER (0..7, ...)

CompleteCandidateConfig-Indicator ::= ENUMERATED {complete-candidate-config, ...}

Conditional-Reconfig-List ::= SEQUENCE (SIZE(1..maxnoofPSCellCandidates)) OF Conditional-Reconfig-Item

Conditional-Reconfig-Item ::= SEQUENCE {

 pCell-ID Target-CGI,

 pSCell-ID NR-CGI OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {Conditional-Reconfig-Item-ExtIEs} } OPTIONAL,

 ...

}

Conditional-Reconfig-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ConfiguredTACIndication ::= ENUMERATED {

 true,

 ...

}

Connectivity-Support ::= SEQUENCE {

 eNDC-Support ENUMERATED {supported, not-supported, ...},

 iE-Extensions ProtocolExtensionContainer { {Connectivity-Support-ExtIEs} } OPTIONAL,

 ...

}

Connectivity-Support-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

ContainerAppLayerMeasConfig ::= OCTET STRING (SIZE (1..8000))

COUNT-PDCP-SN12 ::= SEQUENCE {

 pdcp-SN12 INTEGER (0..4095),

 hfn-PDCP-SN12 INTEGER (0..1048575),

 iE-Extensions ProtocolExtensionContainer { {COUNT-PDCP-SN12-ExtIEs} } OPTIONAL,

 ...

}

COUNT-PDCP-SN12-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

COUNT-PDCP-SN18 ::= SEQUENCE {

 pdcp-SN18 INTEGER (0..262143),

 hfn-PDCP-SN18 INTEGER (0..16383),

 iE-Extensions ProtocolExtensionContainer { {COUNT-PDCP-SN18-ExtIEs} } OPTIONAL,

 ...

}

COUNT-PDCP-SN18-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CoverageModificationCause ::= ENUMERATED {

 coverage,

 cell-edge-capacity,

 ...,

 network-energy-saving}

Coverage-Modification-List ::= SEQUENCE (SIZE (0..maxnoofCellsinNG-RANnode)) OF Coverage-Modification-List-Item

Coverage-Modification-List-Item ::= SEQUENCE {

 globalNG-RANCell-ID GlobalCell-ID,

 cellCoverageState INTEGER (0..63, ...),

 cellDeploymentStatusIndicator CellDeploymentStatusIndicator OPTIONAL,

 cellReplacingInfo CellReplacingInfo OPTIONAL,

-- This IE shall be present if the *Cell Deployment Status Indicator* IE is present.

 sSB-Coverage-Modification-List SSB-Coverage-Modification-List,

 iE-Extension ProtocolExtensionContainer { { Coverage-Modification-List-Item-ExtIEs} } OPTIONAL,

 ...

}

Coverage-Modification-List-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

{ ID id-CoverageModificationCause CRITICALITY ignore EXTENSION CoverageModificationCause PRESENCE optional},

 ...

}

CPTransportLayerInformation ::= CHOICE {

 endpointIPAddress TransportLayerAddress,

 choice-extension ProtocolIE-Single-Container { {CPTransportLayerInformation-ExtIEs} }

}

CPTransportLayerInformation-ExtIEs XNAP-PROTOCOL-IES ::= {

 { ID id-EndpointIPAddressAndPort CRITICALITY reject TYPE EndpointIPAddressAndPort PRESENCE mandatory},

 ...

}

CPACcandidatePSCells-list ::= SEQUENCE (SIZE(1..maxnoofPSCellCandidates)) OF CPACcandidatePSCells-item

CPACcandidatePSCells-item ::= SEQUENCE {

 pscell-id NR-CGI,

 iE-Extensions ProtocolExtensionContainer { {CPACcandidatePSCells-item-ExtIEs}} OPTIONAL,

 ...

}

CPACcandidatePSCells-item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPACcandidatePSCells-wotherInfo-list ::= SEQUENCE (SIZE(1..maxnoofPSCellCandidates)) OF CPACcandidatePSCells-wotherInfo-item

CPACcandidatePSCells-wotherInfo-item ::= SEQUENCE {

 pscell-id NR-CGI,

 s-CPAC-CompleteCandidateConfig-Indicator CompleteCandidateConfig-Indicator OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { {CPACcandidatePSCells-wotherInfo-item-ExtIEs}} OPTIONAL,

 ...

}

CPACcandidatePSCells-wotherInfo-item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPACConfiguration ::= SEQUENCE {

 cpacCandidateCell-List CPACCandidateCell-List,

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

 ...

}

CPACConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPACCandidateCell-List ::= SEQUENCE (SIZE(1..maxnoofPSCellsinCPAC)) OF CPACCandidateCell-Item

CPACCandidateCell-Item ::= SEQUENCE {

 cpacCandidateCellID GlobalNG-RANCell-ID,

 cpacExecutionCondition-List CPACExecutionCondition-List,

 iE-Extensions ProtocolExtensionContainer { { CPACCandidateCell-Item-ExtIEs} } OPTIONAL,

 ...

}

CPACCandidateCell-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPACExecutionCondition-List ::= SEQUENCE (SIZE(1..maxnoofCPACexecutioncond)) OF CPACExecutionCondition-Item

CPACExecutionCondition-Item ::= SEQUENCE {

 measObjectContainer MeasObjectContainer,

 reportConfigContainer ReportConfigContainer,

 iE-Extensions ProtocolExtensionContainer { { CPACExecutionCondition-Item-ExtIEs} } OPTIONAL,

 ...

}

CPACExecutionCondition-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPCindicator ::= ENUMERATED {cpc-initiation, cpc-modification, cpc-cancellation, ...}

CPAInformationRequest ::= SEQUENCE {

 max-no-of-pscells INTEGER (1..maxnoofPSCellCandidates, ...),

 cpac-EstimatedArrivalProbability CHO-Probability OPTIONAL,

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

 ...

}

CPAInformationRequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-S-CPAC-Request-Info CRITICALITY reject EXTENSION S-CPAC-Request-Info PRESENCE optional}|

 { ID id-S-CPAC-ReferenceConfigRequest CRITICALITY ignore EXTENSION S-CPAC-ReferenceConfig-Request PRESENCE optional},

 ...

}

CPAInformationAck ::= SEQUENCE {

 candidate-pscells CPACcandidatePSCells-list,

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

 ...

}

CPAInformationAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-CPACcandidatePSCells-wotherInfo-list CRITICALITY reject EXTENSION CPACcandidatePSCells-wotherInfo-list PRESENCE optional},

 ...

}

CPCInformationRequired::= SEQUENCE {

 cpc-target-sn-required-list CPC-target-SN-required-list,

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

 ...

}

CPCInformationRequired-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-S-CPAC-Request CRITICALITY reject EXTENSION S-CPAC-Request PRESENCE optional},

 ...

}

CPC-target-SN-required-list ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF CPC-target-SN-required-list-Item

CPC-target-SN-required-list-Item ::= SEQUENCE {

 target-S-NG-RANnodeID GlobalNG-RANNode-ID,

 cpc-indicator CPCindicator,

 max-no-of-pscells INTEGER (1..maxnoofPSCellCandidates, ...),

 cpac-EstimatedArrivalProbability CHO-Probability OPTIONAL,

 sN-to-MN-Container OCTET STRING,

 iE-Extensions ProtocolExtensionContainer { { CPC-target-SN-required-list-Item-ExtIEs} } OPTIONAL,

 ...

}

CPC-target-SN-required-list-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPCInformationConfirm ::= SEQUENCE {

 cpc-target-sn-confirm-list CPC-target-SN-confirm-list,

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

 ...

}

CPCInformationConfirm-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPC-target-SN-confirm-list ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF CPC-target-SN-confirm-list-Item

CPC-target-SN-confirm-list-Item ::= SEQUENCE {

 target-S-NG-RANnodeID GlobalNG-RANNode-ID,

 candidate-pscells CPACcandidatePSCells-list,

 iE-Extensions ProtocolExtensionContainer { { CPC-target-SN-confirm-list-Item-ExtIEs} } OPTIONAL,

 ...

}

CPC-target-SN-confirm-list-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-CPAC-Preparation-Type CRITICALITY ignore EXTENSION CPAC-Preparation-Type PRESENCE optional},

 ...

}

CPAInformationModReq ::= SEQUENCE {

 max-no-of-pscells INTEGER (1..8, ...) OPTIONAL,

 cpac-EstimatedArrivalProbability CHO-Probability OPTIONAL,

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

 ...

}

CPAInformationModReq-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-S-CPAC-Request-Info CRITICALITY reject EXTENSION S-CPAC-Request-Info PRESENCE optional}|

 { ID id-S-CPAC-ReferenceConfigRequest CRITICALITY ignore EXTENSION S-CPAC-ReferenceConfig-Request PRESENCE optional}|

 { ID id-S-CPAC-InterSN-ExecutionNotify CRITICALITY reject EXTENSION S-CPAC-InterSN-ExecutionNotify PRESENCE optional},

 ...

}

CPAInformationModReqAck ::= SEQUENCE {

 candidate-pscells CPACcandidatePSCells-list,

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

 ...

}

CPAInformationModReqAck-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-CPACcandidatePSCells-wotherInfo-list CRITICALITY reject EXTENSION CPACcandidatePSCells-wotherInfo-list PRESENCE optional},

 ...

}

CPC-DataForwarding-Indicator ::= ENUMERATED {triggered, early-data-transmission-stop, ..., coordination-only}

CPAC-Preparation-Type ::= ENUMERATED {s-cpac, ...}

CPACInformationModRequired ::= SEQUENCE {

 candidate-pscells CPACcandidatePSCells-list,

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

 ...

}

CPACInformationModRequired-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 { ID id-CPACcandidatePSCells-wotherInfo-list CRITICALITY reject EXTENSION CPACcandidatePSCells-wotherInfo-list PRESENCE optional},

 ...

}

CPCInformationUpdate::= SEQUENCE {

 cpc-target-sn-list CPC-target-SN-mod-list,

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

 ...

}

CPCInformationUpdate-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPC-target-SN-mod-list ::= SEQUENCE (SIZE(1..maxnoofTargetSNs)) OF CPC-target-SN-mod-item

CPC-target-SN-mod-item ::= SEQUENCE {

 target-S-NG-RANnodeID GlobalNG-RANNode-ID,

 candidate-pscells CPCInformationUpdatePSCells-list,

 iE-Extensions ProtocolExtensionContainer { {CPC-target-SN-mod-item-ExtIEs} } OPTIONAL,

 ...

}

CPC-target-SN-mod-item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CPCInformationUpdatePSCells-list ::= SEQUENCE (SIZE(1..maxnoofPSCellCandidates)) OF CPCInformationUpdatePSCells-item

CPCInformationUpdatePSCells-item ::= SEQUENCE {

 pscell-id NR-CGI,

 iE-Extensions ProtocolExtensionContainer { {CPCInformationUpdatePSCells-item-ExtIEs}} OPTIONAL,

 ...

}

CPCInformationUpdatePSCells-item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CriticalityDiagnostics ::= SEQUENCE {

 procedureCode ProcedureCode OPTIONAL,

 triggeringMessage TriggeringMessage OPTIONAL,

 procedureCriticality Criticality OPTIONAL,

 iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,

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

 ...

}

CriticalityDiagnostics-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF

 SEQUENCE {

 iECriticality Criticality,

 iE-ID ProtocolIE-ID,

 typeOfError TypeOfError,

 iE-Extensions ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,

 ...

}

CriticalityDiagnostics-IE-List-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

C-RNTI ::= BIT STRING (SIZE(16))

CSI-RS-MTC-Configuration-List ::= SEQUENCE (SIZE(1..maxnoofCSIRSconfigurations)) OF CSI-RS-MTC-Configuration-Item

CSI-RS-MTC-Configuration-Item ::= SEQUENCE {

 csi-RS-Index INTEGER(0..95),

 csi-RS-Status ENUMERATED {activated, deactivated, ...},

 csi-RS-Neighbour-List CSI-RS-Neighbour-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RS-MTC-Configuration-Item-ExtIEs} } OPTIONAL,

 ...

}

CSI-RS-MTC-Configuration-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RS-Neighbour-List ::= SEQUENCE (SIZE(1..maxnoofCSIRSneighbourCells)) OF CSI-RS-Neighbour-Item

CSI-RS-Neighbour-Item ::= SEQUENCE {

 nr-cgi NR-CGI,

 csi-RS-MTC-Neighbour-List CSI-RS-MTC-Neighbour-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RS-Neighbour-Item-ExtIEs} } OPTIONAL,

 ...

}

CSI-RS-Neighbour-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RS-MTC-Neighbour-List ::= SEQUENCE (SIZE(1..maxnoofCSIRSneighbourCellsInMTC)) OF CSI-RS-MTC-Neighbour-Item

CSI-RS-MTC-Neighbour-Item ::= SEQUENCE {

 csi-RS-Index INTEGER(0..95),

 iE-Extensions ProtocolExtensionContainer { { CSI-RS-MTC-Neighbour-Item-ExtIEs} } OPTIONAL,

 ...

}

CSI-RS-MTC-Neighbour-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CyclicPrefix-E-UTRA-DL ::= ENUMERATED {

 normal,

 extended,

 ...

}

CyclicPrefix-E-UTRA-UL ::= ENUMERATED {

 normal,

 extended,

 ...

}

CSI-RSTransmissionIndication ::= ENUMERATED {

 activated,

 deactivated,

 ...

}

CAGListforMDT ::= SEQUENCE (SIZE(1.. maxnoofCAGforMDT))OF CAGListforMDTItem

CAGListforMDTItem ::= SEQUENCE {

 plmnID PLMN-Identity,

 cAGID CAG-Identifier,

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

 ...

}

CAGListforMDTItem-ExtIEs XNAP-PROTOCOL-EXTENSION ::={

 ...

}

CSIResourceConfiguration ::= SEQUENCE {

 cSIResourceConfigurationToAddModList OCTET STRING OPTIONAL,

 cSIResourceConfigurationToReleaseList OCTET STRING OPTIONAL,

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

 ...

}

CSIResourceConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CompleteCandidateConfigurationIndicator ::= ENUMERATED {complete, ...}

CSI-RSResourceConfiguration ::= SEQUENCE {

 periodicNZP-CSI-RS-ResourceConfiguration NZP-CSI-RS-ResourceConfiguration OPTIONAL,

 semiPersistentNZP-CSI-RS-ResourceConfiguration NZP-CSI-RS-ResourceConfiguration OPTIONAL,

 periodicNZP-CSI-RS-ResourceSetConfiguration NZP-CSI-RS-ResourceSetConfiguration OPTIONAL,

 semiPersistentNZP-CSI-RS-ResourceSetConfiguration NZP-CSI-RS-ResourceSetConfiguration OPTIONAL,

 periodicCSI-IM-ResourceConfiguration CSI-IM-ResourceConfiguration OPTIONAL,

 semiPersistentCSI-IM-ResourceConfiguration CSI-IM-ResourceConfiguration OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RSResourceConfiguration-ExtIEs} } OPTIONAL,

 ...

}

CSI-RSResourceConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

NZP-CSI-RS-ResourceConfiguration ::= SEQUENCE { cSI-RSResourceToAddModList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { NZP-CSI-RS-ResourceConfiguration-ExtIEs} } OPTIONAL,

 ...

}

NZP-CSI-RS-ResourceConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

NZP-CSI-RS-ResourceSetConfiguration ::= SEQUENCE { -- This IE may need to be refined.

 cSI-RSResourceSetToAddModList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { NZP-CSI-RS-ResourceSetConfiguration-ExtIEs} } OPTIONAL,

...

}

NZP-CSI-RS-ResourceSetConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

...

}

CSI-IM-ResourceConfiguration ::= SEQUENCE { -- This IE may need to be refined.

 cSI-IMResourceToAddModList OCTET STRING OPTIONAL,

 cSI-IMResourceSetToAddModList OCTET STRING OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-IM-ResourceConfiguration-ExtIEs} } OPTIONAL,

...

}

CSI-IM-ResourceConfiguration-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CellSwitchTAInformation-List ::= SEQUENCE (SIZE (1.. maxnoofTAList)) OF CellSwitchTAInformation-Item

CellSwitchTAInformation-Item ::= SEQUENCE {

 candidateCellID NR-CGI,

 tAValue TAValue,

 tagIDPointer TagIDPointer OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CellSwitchTAInformation-List-ExtIEs } } OPTIONAL,

 ...

}

CellSwitchTAInformation-List-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RSCoordinationRequest ::= SEQUENCE {

 layer1MeasurementRequest-List Layer1MeasurementRequest-List OPTIONAL,

 cSI-RSAcquisitionRequest-List CSI-RSAcquisitionRequest-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RSCoordinationRequest-ExtIEs } } OPTIONAL,

 ...

}

-- This IE may need to be refined.

CSI-RSCoordinationRequest-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RSAcquisitionRequest-List ::= SEQUENCE (SIZE(1..maxnoofCSIResourceConfigurationsPlus1)) OF CSI-RSAcquisitionRequest-Item

CSI-RSAcquisitionRequest-Item ::= SEQUENCE {

 requestForSemiPersistentCSI-RSResources ENUMERATED {activate, deactivate,...},

 cSIResourceConfigurationID CSIResourceConfigurationID,

 iE-Extensions ProtocolExtensionContainer { {CSI-RSAcquisitionRequest-Item-ExtIEs} } OPTIONAL,

 ...

}

CSI-RSAcquisitionRequest-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RSCoordinationResponse ::= SEQUENCE {

 layer1MeasurementResponse-List Layer1MeasurementResponse-List OPTIONAL,

 cSI-RSAcquisitionResponse-List CSI-RSAcquisitionResponse-List OPTIONAL,

 iE-Extensions ProtocolExtensionContainer { { CSI-RSCoordinationResponse-ExtIEs } } OPTIONAL,

 ...

}

-- This IE may need to be refined.

CSI-RSCoordinationResponse-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSI-RSAcquisitionResponse-List ::= SEQUENCE (SIZE(1..maxnoofCSIResourceConfigurationsPlus1)) OF CSI-RSAcquisitionResponse-Item

CSI-RSAcquisitionResponse-Item ::= SEQUENCE {

 semiPersistentCSI-RSResourceResponse ENUMERATED {activated, deactivated,...},

 cSIResourceConfigurationID CSIResourceConfigurationID,

 iE-Extensions ProtocolExtensionContainer { {CSI-RSAcquisitionResponse-Item-ExtIEs} } OPTIONAL,

 ...

}

CSI-RSAcquisitionResponse-Item-ExtIEs XNAP-PROTOCOL-EXTENSION ::= {

 ...

}

CSIResourceConfigurationID ::= INTEGER (0..111, ...)

-- D

<<<<<<<<<<<<<<<<<<<< End of Changes >>>>>>>>>>>>>>>>>>>